Gabriela Tejada
Uttam Bhattacharya
Binod Khadria
Christiane Kuptsch *Editors*

Indian Skilled Migration and Development

To Europe and Back

Springer

Dynamics of Asian Development

For further volumes:
http://www.springer.com/series/13342

Gabriela Tejada · Uttam Bhattacharya
Binod Khadria · Christiane Kuptsch
Editors

Indian Skilled Migration and Development

To Europe and Back

Springer

Editors
Gabriela Tejada
Cooperation and Development Center
EPFL
Lausanne
Switzerland

Uttam Bhattacharya
Institute of Development Studies
Kolkata
West Bengal
India

Binod Khadria
School of Social Sciences
Zakir Husain Centre for Educational
    Studies
Jawaharlal Nehru University
New Delhi
India

Christiane Kuptsch
International Migration Programme
    (MIGRANT)
International Labour Organization
Geneva
Switzerland

Foreword

The human world has always been on the move; from the time the descendants of Lucy moved from Africa to Eurasia and Australia, and a branch of migrants to Northeastern Eurasia walked or waded across the Bering Strait to North America and down to Tierra del Fuego and Cape Horn, the southernmost tip of South America. The scale and speed of migration has grown tremendously since the late nineteenth century, as transport and communication networks have brought ever larger masses of people together, with interruptions caused by policies of governments, keen to protect their territoriality in the short-term interest of a few privileged groups and with only a dim vision of a common future for humanity.

In the case of citizens of one state, migration is a common affair, with migrants becoming seasonal travellers for work, festivals and pilgrimages. Migrants move between town and country; they choose different places for spending their working lifetime in and for retiring to; they continually experience and absorb the culture or educational and health facilities of host communities, transmitting in turn their own culture and their own expertise to the host communities. This same pattern should apply to the globalised world of today. Migration forms part of being a global citizen—citizens who feel at home anywhere, without losing a sense of where they come from and who are always ready to reinvent themselves as they absorb the wonders of new cultures, new technologies and new ways of being human.

This book is a step towards finding arguments and evidence to help establish such a transnational human community. Global finance is now almost completely deregulated, although even the IMF has called for controls on cross-border movements of capital in the wake of the financial crisis that has radiated from the USA and the UK to most of the other countries of the world. On the other hand, immigration is highly restricted in most countries. Even though some openings are reserved for skilled immigrants, how skills are defined often remains arbitrary and dependent on the political wheeling–dealing of host country governments. As a result, many potential immigrants are shut out, and many documented—and, of course, many undocumented—immigrants lead a highly insecure existence that does no good to the moral fibre of the host or the originating society.

The studies assembled here are the result of a truly transnational project, carried out with scrupulous attention to the relevant evidence. They show how interrelated

the benefits of immigration are to the destination countries and the countries of origin. Those benefits far exceed the remittances that migrants send back to their home countries, or conversely, the exorbitant fees that many European Universities earn from foreign students. I hope the findings will be read by policymakers in both developing and developed countries, and that they will be induced to follow a more sensible and a more humane policy towards these potentially transnational, continually learning, citizens.

The editors of the volume have acknowledged the funding assistance of the Swiss Network for International Studies (SNIS) and the work of the collaborating organisations; the International Labour Office (ILO), Geneva; the Cooperation and Development Center at the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland; the Zakir Husain Centre for Educational Studies of Jawaharlal Nehru University (JNU), New Delhi and the Institute of Development Studies Kolkata (IDSK). On my own behalf, I would like to thank first of all Gabriela Tejada, whose dogged persistence in conceiving and initiating such a project convinced us that it could be carried out to yield both academic insight and informed good policy in the future. I thank Uttam Bhattacharya and Zakaria Siddiqui for manfully shouldering the burden on behalf of IDSK, Binod Khadria for putting his formidable expertise in migration studies at the disposal of the team and Jean-Claude Bolay and Christiane Kuptsch for generously providing the necessary inputs at the European end. May this spirit of transnational solidarity endure in the future.

<div style="text-align: right">

Prof. Amiya Kumar Bagchi
Emeritus Professor, Institute of Development Studies Kolkata
Adjunct Professor, Monash University

</div>

Acknowledgments

Contents

About the Editors

Gabriela Tejada is Senior Scientist at the Cooperation and Development Center (CODEV) at the École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, where she leads the research line on scientific diasporas, migration and development. Her research agenda focuses on the links between skilled migration and home country development and on diaspora transnationalism. She has studied countries such as Colombia, South Africa, India, Moldova and Tunisia. Her research has been funded by grants from institutions such as the Swiss National Science Foundation, the Swiss Agency for Development and Cooperation and the Swiss Network for International Studies. At EPFL, she is involved in the promotion of scientific cooperation activities with emerging and developing countries. She obtained her primary degree in International Relations from the Universidad Iberoamericana in Mexico and she holds a Ph.D. Cum Laude in Political Science from the Universidad Autónoma de Barcelona in Spain.

Uttam Bhattacharya is Associate Professor of Economics at the Institute for Development Studies, Kolkata (IDSK), India. He holds a Ph.D. in Economics from the University of Calcutta. He served as Guest Lecturer with the Department of Economics at Vidyasagar University in Midnapore, West Bengal and at Rabindra Bharati University, Kolkata. Prior to this, he was attached to the Centre for Studies in Social Sciences Calcutta (CSSSC). His current work at the IDSK is on Indian industrial development, Intellectual Property Rights (IPR) and Indian research and development. He is also in the process of editing a book on the development of capital goods in India. His main areas of research include the machine tool industry in India and the scope for self-reliance, IPRs and India, the Indian patent system, Indo-Australian economic relations, migration, child labour and the education of children in India, micro-finance and poverty eradication, local governments and development.

Binod Khadria is Professor of Economics at the Zakir Husain Centre for Educational Studies, School of Social Sciences at Jawaharlal Nehru University (JNU), New Delhi and he is also the Director of the International Migration and Diaspora Studies (IMDS) Project. His published works on migration include *The migration of knowledge workers: second-generation effects of India's brain drain*

(Sage 1999) and several research papers published by the ILO, the OECD, IRD-France, Institute of Developing Economies-Japan External Trade Organisation (IDE-JETRO) and the Global Commission on International Migration (GCIM). He is a member of the editorial boards of several international journals. With the *India Migration Report 2009: Past, Present and the Future Outlook*, he launched the IMR series, followed by *India Migration Report 2010–2011: The Americas*, published in 2012 by Cambridge University Press, New York.

Christiane Kuptsch is Senior Specialist in migration policy at the International Labour Office (ILO) in Geneva, Switzerland. Before taking up this position, she was Senior Research Officer at the ILO's International Institute for Labour Studies and she also worked for the ILO-linked International Social Security Association. She is a political science graduate of the Graduate Institute of International Studies, Geneva, and she also studied law at the University of Hamburg in Germany. Her publications include articles on the migration of students and trainees, the protection of migrant workers, temporary foreign-worker programmes and the effects of the economic crisis on migration policies and she has also edited books on migrant recruitment agents, the increasing competition for global talent and the internationalisation of labour markets. She is the co-author of *Managing Labour Migration in the Twenty-First Century* (Yale University Press, 2006).

Contributors

Umesh L. Bharte School of Social Sciences, Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University, New Delhi, India

Uttam Bhattacharya Institute of Development Studies Kolkata, Kolkata, India

Radha Roy Biswas International Workforce Development Consultant, Kolkata, India

Jean-Claude Bolay Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

Rupa Chanda Professor of Economics and Social Science, Indian Institute of Management Bangalore, Bangalore, India

Metka Hercog International Migration Branch, International Labour Office, Geneva, Switzerland; Cooperation and Development Center, Ecole Polytechnique Fédérale de Lausanne, International Labour Office, Lausanne, Switzerland

Binod Khadria School of Social Sciences, Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University, New Delhi, India

Perveen Kumar SN Degree College, Chheolaha, Fatehpur, India

Jayanti Kumari School of Social Sciences, Zakir Husain Center for Educational Studies, Jawaharlal Nehru University, New Delhi, India

Ana Mosneaga Section for Geography, University of Copenhagen, Copenhagen, Denmark

Deeparghya Mukherjee Indian Institute of Management Bangalore, Bangalore, India; Indian Council for Research on International Economic Relations, New Delhi, India

Jayanta Kr. Nayek Institute of Development Studies Kolkata, Kolkata, India

Rashmi Sharma School of Social Sciences, Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University, New Delhi, India

Md. Zakaria Siddiqui Centre for Regulation and Market Analysis, University of South Australia Business School, Adelaide, Australia and Institute of Development Studies Kolkata, Kolkata, India

Gabriela Tejada Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

Figures

Chapter 13

Tables

Boxes

Part I
Introduction

Chapter 1
Indian Skilled Migration and Development: An Introduction

Gabriela Tejada and Uttam Bhattacharya

1 Migration and Development

Any reflection on the impact of skilled migration must be set against the backdrop of the wider debate on migration and development, in which we must give consideration to the uneven development that results from the current climate of neo-liberal globalisation and the internationalisation of capital (Castles and Delgado Wise 2012; Bagchi 2011; Caloz-Tschopp 2010). According to this perspective, migration is determined by the obstacles to development that are associated with a global economic system that deprives a large part of the population of dignified living and working opportunities, and this manifests itself in the form of the movement of workers from the countries of the South to industrialised centres in the North. Under these circumstances, Castles and Delgado Wise (2012) note that human mobility mainly takes the form of forced population movements that have little to do with free choice.

In this global scenario, international migration has intensified and it has become increasingly complex, and one of its dominant characteristics is the migration of highly skilled persons (Docquier and Rapoport 2012a; Özden et al. 2011). It takes place within a context that produces risks and opportunities as an effect, among other factors, of the transformation of countries into knowledge-based economies, the internationalisation of higher education and the various migratory policies of

G. Tejada (✉)
Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
e-mail: gabriela.tejada@epfl.ch

U. Bhattacharya
Institute of Development Studies Kolkata, Kolkata, India
e-mail: uttam.bhattacharya@gmail.com

the countries of destination that facilitate the entry of highly skilled workers. Other influential factors are related to the socio-economic context of the countries of origin as well as personal options, such as limited professional and educational opportunities in the local context or an interest to grow personally and professionally by spending some time abroad. Favell et al. (2007) state that the mobility of skilled individuals is mostly associated with personal choices, professional careers and educational prospects.

The various perspectives of the effects of human capital mobility within the migratory and development processes have not been free of the tensions that result from the nature of the exchanges and the unequal power relationships that are to be found in both the circulation of world knowledge and in its production, appropriation and use (Caloz-Tschopp 2010; Hollanders and Soete 2010). In fact, the emigration of skilled professionals and scientists from developing countries to industrialised economies has long been a controversial issue, and it has generated a myriad of questions. Firstly, it has economic and social implications for the developing countries of origin whose bank of human capital is limited. Secondly, skilled migrants establish linkages with the host countries, the main focus of which is on the demand for their skills and their integration into labour markets.

In this context, there has been a resurgence of the migration and development nexus in recent research and policy discussions, and one of the main focus of attention is now directed towards the positive effects of skilled migration. This is not a new topic, but it has gained relevance in recent times, with migrants now being considered as a potential leverage tool for development (Lowell and Gerova 2004; de Haas 2006; Katseli et al. 2006) who act as bridges between the home and the host countries. This has changed the dominant vision from the decades between 1960 and 1980 which focused on the negative effects migration had on the development of the countries of origin as a result of the transfer of valuable human resources to the productive systems of the countries of destination. Accordingly, it has been recognised that globalisation and technological advances enable the emergence of new dimensions and opportunities for cooperation between the countries of origin and those of destination (Tejada 2012). This has inspired countries to negotiate new policy options with the intention of finding ways that can allow them to take advantage of the potential benefits of their overseas-based communities for their national development. In practice, diverse studies have shown how skilled migrants can contribute to their countries of origin through transnational diaspora networks, business and investments links, scientific cooperation and eventual return to the home country (Agunias and Newland 2012; Tejada and Bolay 2010; Katseli et al. 2006; Lowell and Gerova 2004).

The relationship between skilled migration and socio-economic development is not a simple one, and indeed, several experiences have shown that the society in the country of origin does not always benefit from brain gain practices. Furthermore, the potential for a positive impact on the various levels of the actual development process (micro, meso or macro) is not the same for all cases as it depends on both the particular characteristics of the migrants, and the contexts of

the countries in which their migratory projects are carried out (de Haas 2008, 2012; Kapur 2010). Therefore, the structural context of the country in question matters as a result of its influence on the possibility of having an impact on development. As Kapur (2010) points out, while international migration is a cause and a consequence of globalisation, its effects in the countries of origin depend above all on internal factors in those countries.

1.1 Uneven Development in India

India represents a good case in point because of the strong presence of Indian skilled professionals, engineers, scientists and students in Western countries, which has long been a cause of national pride as well as a matter of general concern. In recent years, India's gains in the form of reverse flows of expertise, investment and business leads, knowledge and technology and the world's highest financial remittances, have resulted in a more positive view of the influence that foreign-based Indians can have on the economic progress of India and its integration in the world economy (Kapur and McHale 2005; Kapur 2010).

In development terms, India is a paradigmatic case since it has managed to position itself as one of the most dynamic countries in transition in the last two decades, boasting one of the highest rates of economic growth—registering GDP increases of 6 % in real terms during the 1990s and 7 % in the last decade—thereby becoming the second fastest growing large economy in the world after China (D'Costa and Bagchi 2012; Drèze and Sen 2013). However, achieving high growth should be judged in terms of the impact that such economic growth has on the quality of life and the social advancement of people, the expansion of their human capacities and their basic liberties (Drèze and Sen 2013; D'Costa and Bagchi 2012; Sen 1999). It is precisely in this aspect where India still has a long way to go. Drèze and Sen (2013) suggest that there is an urgent need for those who dream of making India a super economic power to reconsider not only the extent of their understanding of the mutual relationship between growth and development, but also their assessment of the demands of social justice, which are integrally linked to the expansion of human liberties. The authors highlight the deficiencies, especially in terms of basic services and gender equality, and they argue that highly privatised health and educational systems offer different opportunities for different social groups, and this has resulted in the huge social disparities being perpetuated rather than reduced or curtailed. Similarly, D'Costa and Bagchi (2012) stress that India's economic transition and high growth encompass deep rural poverty, underdevelopment and unprecedented forms of social and economic inequality.

As India has attained a relevant position on the world stage in terms of its economic growth, technological innovation and competence, the increased demand for a skilled labour force resulting from its modernisation process has intensified the pressure to produce human capital of high quality. Even though the

educational system is a key element in the definition of the quality and magnitude of the human capital available, India is faced with a lack of skilled human capital as a result of a deficient educational system and other serious problems that prevent the vast majority of the population not only from benefitting from economic progress but from participating in it as well. The fact that only the Indian elites have the chance to attain an excellent level of training (including the possibility of studying abroad) is the consequence of a complex structural problem that divides a privileged social group from the rest of society (Drèze and Sen 2013; Mehra and Pohit 2013; D'Costa and Bagchi 2012).

The low level of social and human development attained by the majority of its population has seen India fall behind in the various international rankings on prosperity. In the 2012 UNDP Human Development Index (HDI) (UNDP 2013), the country ranked 136th worldwide among the 187 countries included, sharing that position with Equatorial Guinea. India performs worse than other rapid emerging economies such as Russia, Brazil, China and South Africa, and its HDI average is below that of those countries, and it lags behind in all HDI component indicators[1] and in terms of its overall position (136th while Russia ranks 55th, Brazil 85th, China 101st and South Africa 121st). In the 2012 Gender Inequality Index (GII),[2] it ranked 132nd out of 148 countries, showing for example that 26.6 % of adult women have reached a secondary level of education compared to 50.4 % for men and that female participation in the labour market is 29 % compared to 80.7 % for their male counterparts (UNDP 2013). Notwithstanding the modest progress made in the last few decades, these data show that the country still has a very long way to go towards effective poverty eradication and a balanced and more inclusive broad-based development.

Since the gains from migration contribute to the discourse on the economic growth of India, it is necessary to look at the options that help channel possible benefits towards the neediest sectors of the population and also to assess the effects of skilled migration from a broad perspective that considers the implications for human development and people's quality of life. All of this is done on the basis that the consequences of skilled migration in the form of transnational diaspora links, knowledge and experience flows, transfers of financial remittances or return migration are neither a panacea nor the way forward for the development of the countries of origin.

---

[1] The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life (measured by life expectancy), access to knowledge (measured by the level of education attained) and a decent standard of living (measured by Gross National Income per capita) (UNDP 2013).

[2] The GII reflects gender-based inequalities in three dimensions: reproductive health, empowerment and economic activity (UNDP 2013).

2 Conceptual Evolution of Skilled Migration in the Migration and Development Nexus

As a response to the intensification of international migration in terms of its scale, scope and complexity, and also driven by an interest in reducing the risks and increasing the potential gains for both the migrants and the countries involved, academic research and policy discussions have evolved towards new approaches in the last few decades. As far as skilled migration in particular is concerned, new studies on the factors that influence the mobility of human capital between countries—between the most industrialised countries and developing countries for the most part—the various ways in which they manifest themselves and their effects at different levels have given rise to a variety of possible lines of study. As Castles and Miller (2009) argue, this shows that skilled migration should be seen as a significant component of a complex and multidimensional phenomenon that is part of the current social transformation processes.

The emigration of skilled professionals from developing countries, who go abroad in search of better professional and career prospects as well as an improved quality of life in more advanced countries, has been a traditional and major concern for the countries of origin. However, two main issues have recently influenced the emergence of new alternative ways of assessing and interpreting international skilled migration. Firstly, the consideration of skilled migrants as an irreversible loss for the developing countries of origin and an exclusive gain for the rich countries of destination, which was the basis of the nationalist perspective of the brain drain/brain gain debates of the 1960s and subsequent decades, was not sufficient to allow a move from the general discourse to the implementation of specific policy options that could manage this phenomenon. Even though this view saw return to the home country as the only possible alternative in terms of recovering lost capacities, more often than not, the repatriation programmes were not successful when they were implemented due to various factors that were often related to structural aspects of the countries concerned. Only a small number of countries in South Asia, such as the Republic of Korea and China, experienced satisfactory return practices at a certain level as a response to suitable scientific and technological structures, incentives policies and conducive domestic environments (Yoon 1992; Song 1992; Saxenian 2005), whereas other world regions were unable to reproduce this model.

Secondly, the analysis of the behaviours and experiences of skilled migrants in the destination countries showed that they, as transnational actors (Glick-Schiller et al. 1992; Portes 2001), do not have an exclusive affiliation that automatically links them to the particular geographical place where they are physically located, but rather they have the capacity to hold multiple identities and to feel a simultaneous attachment to their host and home countries (Levitt and Glick-Schiller 2004). This led to a new vision, which replaced the classical emphasis on permanent loss and undefined return with a feasible alternative of long-distance association and multiple connections (Meyer 2001). No longer viewed exclusively

as holders of valuable human capital that needed to be repatriated, this perspective mostly sees skilled migrants as carriers of social capital that is waiting to be organised and harnessed for the benefit of the home country (Tejada 2012).

With this paradigm change, transnationalism has become a popular theoretical framework in the most recent studies of the migration and development nexus and as Faist and Fauser (2011) argue, this has led to the rise of a new agent in the development discourse: migrants, diasporas or transnational communities. Transnationalism understands individuals as belonging to several places at the same time as they establish and promote cross-border links (Portes 2001; Vertovec 2004; Levitt and Glick-Schiller 2004). Diasporas or transnational communities (Wickramasekara 2010) consist of communities established in diverse places outside the country of origin, which create networks and connections with their co-nationals located both in the home country and in other parts of the world. A shared national identity and a collective feeling of loyalty towards the home country are additional core features of diasporas (Sheffer 1986; Cohen 1997; Butler 2001).

At a policy level, establishing a connection with the diaspora has become an alternative to promoting physical return, and as a result, the possibilities of countries of origin being able to take advantage of the resources and experiences of their foreign-based skilled people for the benefit of their development processes have been boosted in recent years as part of what is referred to as the *diaspora option* (Meyer 2001; de Haas 2006; Merz et al. 2009). The diaspora option promotes interconnections between home and host countries, enabling the transfer of knowledge, skills and further financial and social capital, with migrants acting as carriers. The concept of *scientific diasporas* grew out of such an understanding, and this term refers to groups, networks or associations of emigrated scientists, engineers and skilled professionals, who are involved in producing and circulating new knowledge and creating transnational cooperation links with their home country (Barré et al. 2003; Tejada and Bolay 2010).

The recognition of the significant role that diasporas can play in the development of the countries of origin has gained relevance in the global discussion of international migration, especially with regard to the link between migration and development. In this regard, emphasis has been placed on the various ways in which migrant communities have the capacity to make contributions. For example, in its time, the Global Commission on International Migration (GCIM) looked at the question of diasporas and the need to promote their participation in development through transnational knowledge networks (GCIM 2005). For its part, the Global Forum on Migration and Development (GFMD) has repeatedly raised the question of diaspora contributions since its first meeting in 2007. More recently, the International Organisation for Migration (IOM) organised the Diaspora Ministerial Conference (DMC) in 2013 as the first high-level event dedicated to the question of diasporas, and there were calls for strategies at both a local and a global level aimed at taking advantage of their potential.

Concurrent with this change of paradigm, return skilled migration has gained prominence in scholarly research in recent years, and this is mainly due to two reasons. Firstly, the study of skilled migration and its implications cannot consider emigration as a permanent decision. In fact, in contrast to low-skilled migration, skilled migration is characterised by its temporariness, and therefore, we cannot overlook the fact that in reality many migrants do eventually return to their home country, having been driven by different factors. Secondly, return skilled migration is recognised as being beneficial for the development of the countries of origin, and this view is based on the assumption that the skills heading back home will compensate for the outflows. Evidence has shown that while the effects of return migration are context specific insofar as they depend on the nature of the environments to which migrants return, they are also associated with individual factors such as the migrants' age and activity profile, the length of stay abroad and the type and nature of their return (Wickramasekara 2003; Kapur and McHale 2005). The most documented issues influencing the possibility of applying the knowledge and expertise of migrants to the local context of their home country after their return include the sector of activity, the type of professional engagement (self-employed or employees), the match between qualifications and labour market requirements and the particular location that migrants return to (King 2000; Iredale et al. 2003; Cassarino 2004; Chacko 2007).

Both the framework of diaspora contributions and the return channel have gained relevance in the study of skilled migration, and diverse practical examples indicate that home countries can simultaneously gain benefits through transnational diaspora links and through physical return to the home country (Agunias and Newland 2012). However, there is a common understanding which recognises that the extent to which migrants can make positive contributions to their home country hinges on wide structural settings, and this has influenced the change in conceptual methods from a focus on individual behaviour to an interpretation of migrants' decisions, strategies and consequences as influenced by broader transformation and development processes (de Haas 2008, 2012). As a result, current approaches stress the agency role of migrants, highlighting the influence of the structures and environments that stimulate their actions, including their mobility decisions, in both the home and the host countries.

3 The Relevance of India as a Case Study

Within the field of migration and its linkages to development, India is a relevant case for a number of reasons that are related to the specificities of the migration process from the subcontinent and its characteristics.

3.1 The Scale and Scope of Indian Skilled Migration

The magnitude and scope of Indian international migration is one of the main motives that have inspired this study. According to recent data from the United Nations, India is the major country of origin of international migrants, and their stocks had accounted for more than 14 million by mid-2013 (UN-DESA 2013). The Indian government estimated the total number of Indian migrants including both non-resident Indians (NRIs) and foreign citizens or persons of Indian origin (PIOs) to be about 20 million at the turn of the twenty-first century, and it is believed that this figure had risen to 25 million by 2012 (MOIA 2012).

While the scale of the Indian diaspora is important, it is equally relevant to note the diversity of profiles among its members. As the Indian government pointed out in the Report of the High-Level Committee on the Indian Diaspora (HLCID), this reflects '*the full multiplicity and variety of the rich social, ethnic, religious and cultural tapestry of the land of its origin*' (Government of India 2001). The high quality of Indian human resources and the low cost of labour have made the country an important source of both highly skilled and low-skilled workers who emigrate with their families to almost every country in the world. While considerable numbers of low-skilled workers have emigrated to the Gulf and the countries of the Middle East over the past few decades, highly skilled Indians have chosen the USA and other industrialised countries such as the UK, Canada and Australia as their most important and attractive destinations (Khadria 2006). For such countries, India is an important source country for skilled migrants mostly in the Information Technologies (IT) sector, engineering and health care.

More recently, industrialised countries in continental Europe have emerged as new destinations for highly skilled Indians. The demand for highly skilled migrants in these countries has been rising because of the increasing specialisation in human capital-intensive activities and their interest in increasing their stock of global talent to improve their competitiveness within settings with a skill-biased technological change and limits on labour force training in specific sectors. As a result, European countries have redesigned their immigration schemes, making them more skill-selective, and all this has had an extensive influence on the flows of highly skilled people (Brücker et al. 2012; Wiesbrock and Hercog 2012; Buga and Meyer 2012; Tejada et al. 2014). This has created new relocation opportunities for skilled Indian professionals especially in IT, finance and management and the academic and research sectors.

Within the EU-27 region, we can see that Indian nationals were the third largest group of non-EU immigrants in 2008 after Morocco and China, with a total of 93,000 Indian immigrants arriving that year. According to Eurostat estimates,[3] there were 512,000 Indian citizens in the EU-27 countries, and they accounted for about 2 % of the total foreign population in the EU-27 region in 2008. Docquier and Rapoport (2012a, b) show Indian skilled migrants totalling more than one

---

[3] European Commission, Eurostat, http://ec.europa.eu/eurostat (Accessed 16 August 2013).

million worldwide in 2000, and this figure places India in second place among developing countries, after the Philippines. In fact, the emigration rate of the highly skilled from India is estimated at 3.2 % (UN-UNDESA and OECD 2013). More recent data show that about 240,000 Indians emigrated to OECD countries in 2011, representing nearly 5 % of the total immigrant population (OECD 2013). The same source shows that in 2011, a total of 2 million Indians, representing 60 % of the total of 3.4 million Indians living in OECD countries had third-level education. With this figure, India ranks as the leading source of skilled migrants in the OECD countries among developing countries, ahead of China (1.7 million) and the Philippines (1.4 million). Taken together, these three top countries accounted for one-fifth of all tertiary-educated immigrants in OECD countries in 2010/11 (UN-UNDESA and OECD 2013).

While these data on the magnitude and scope of Indian international migration speak for themselves, it should be noted that even though there are sizeable flows of different kinds of labour from India and a large Indian diaspora, available data still remain scattered and imprecise, and this limits more accurate analyses.

3.2 Indian Student Mobility

Education plays a pivotal role in the development of a country, and it is seen as a powerful tool for economic growth and the wellbeing of the population. With the current world trend of knowledge-based economies, the demand for higher education and specialised knowledge is seen as essential. In this context, the rising numbers of international Indian students is another reason for the increased interest in Indian migration. This is mostly the result of the growing global demand for international students and the intensification in the globalisation of higher education that has taken place over the last decade. In fact, increasing demand for skilled work force intensifies the pressure to produce manpower of a higher quality (Mehra and Pohit 2013).

There are also some contextual and structural factors at play in India that influence the supply of international students. The demand for higher education in India has made this country one of the main targets for the world's leading higher education institutions, given the weakness of the educational infrastructure and the low level of government expenditure on education which has resulted in a shortage of recognised institutions at a local level (Mehra and Pohit 2013; Drèze and Sen 2013; Mukherjee and Chanda 2012). Although there are some specialised institutions of recognised quality, such as the Indian Institutes of Technology (IITs) as well as other research centres and some prestigious public universities, the higher educational system has significant deficiencies, which reveal a broader and more complex problem, which in turn is related to social inequality and opportunities. Addressing the latter, Drèze and Sen (2013) argue that the fact that the Indian educational system ensures that only a few young people out of a huge number can achieve an excellent level of education, including the possibility of studying

abroad, is associated with the general division between the privileged and the rest of Indian society. According to the authors, this division is not the effect of specific ends but rather it is linked to the economic and social inequality related to class, caste, gender and social standing. Furthermore, Khadria (2007) stresses that the high emigration of Indian highly educated, skilled professionals and students is associated with the expansion of Western education through the English language and mass graduate unemployment in India without any state policy for the recruitment of human resources.

Additional factors influencing Indian skilled mobility include the motivation that Indians feel to pursue higher education and further specialisation abroad, the prevalent view within society of the value that a foreign degree has in terms of offering better employment prospects, as well as increased earning levels of middle-class families and assistance from formal financial institutions, have made overseas education a possible and achievable option (Mukherjee and Chanda 2012). However, as Drèze and Sen (2013) point out, the option of a private education and education abroad is simply beyond the reach of poor families and less well-off communities, offering further proof of the social inequality between 'the privileged and the rest'.

The magnitude of Indian student migration is significant, and India is now the second most important country of origin of international students. Estimates from the UNESCO Institute of Statistics (UIS) placed the total figure at 200,000 in 2010. In the last decade, the share of Indian students has almost doubled, rising from 3 % in 2000 to 5.6 % in 2010. In absolute figures, this represents an increase from 53,000 to 200,000 and an annual growth rate of 7 %.[4] While Indian students mostly tend to continue their higher or specialised education in academic and research institutions in the USA and the UK as well as in Australia, Canada and New Zealand, increasing numbers have been moving to other destinations in continental Europe including Germany, France, Switzerland, the Netherlands, Denmark and Sweden. The share of Indian students among all foreign students registered in third-level education in OECD countries increased from 4 % in 2001 to about 7 % in 2009, and Indians are now the second biggest group of students from non-member countries, exceeded only by the Chinese (OECD 2011).

It is interesting to note the two main arguments for the inclusion of students-'*the semi-finished human capital*' (Khadria 2003)—within the context of skilled migration; first, student migration is often a precursor to labour migration as more and more students from the academic stream enter the labour force in the countries of destination once they graduate (Kumar et al. 2009). The retention of third-country students as long-term skilled workers for national labour markets is appreciable in European destination countries, which tend to hold on to these students by adapting their labour migration policies as part of their strategy to attract skilled personnel from third countries in the global competition for talent

---

[4] See http://www.uis.unesco.org/EDUCATION/Pages/international-student-flow-viz.aspx (Accessed 16 August 2013).

(Kuptsch 2006; Brücker et al. 2012; Tejada et al. 2014); second, the experiences accumulated by students in the countries of destination, ranging from education and further specialisation to their professional working life, represent an interesting collection of valuable resources in the form of skills, professional networks and contacts and the additional social capital gained, which help to shape their migration paths and influence their experiences upon their return.

4 Earlier Research on Indian Skilled Migration and Development

In the recent past, many studies of Indian migration were motivated by an interest in the socio-economic development contributions of the Indian diaspora. One such contribution, probably the most tangible of all, was in the form of financial remittances, which represent a clear link between migration and development, and many studies have highlighted the specific benefits for recipients (Guha 2011; Afram 2012; Rajan 2012). The total amount of remittances has not only made India the world's top recipient but this amount has increased considerably over the past few decades. Data from the World Bank show that remittances from India grew sixfold between 1990 and 2000, rising from $2.1 billion to $12.3 billion, and they increased almost fivefold in the last decade, reaching $55 billion in 2010 (World Bank 2011).

Research has shown how the Indian diaspora has affected the home country in other ways, and a significant part of this research has focused on the development impact of Indian skilled professionals, engineers and scientists who are based abroad. The frameworks of the studies from the 1960s to 1970s were mostly based on the brain drain approach, with most analyses emphasising the loss of human capital and the detrimental cost of public investment in higher education (Johnson 1967; Bhagwati 1976; Borjas 1987). Bhagwati (1976) proposed the idea of taxing brain drain and compensating the losers by giving a share of the sum collected to the home countries. However, over the last two decades, the focus has shifted towards a study of the transfer of knowledge, expertise and social capital gained by Indians overseas that may result in beneficial outcomes. By emphasising the possible benefits for India through the possibility of human capital transfers to the home country without people having to physically return there, Khadria (1999) contributed to a change of viewpoint. All in all, diaspora contributions and return migration became more relevant as attempts were made to understand the impact of Indian skilled migration (Kapur and McHale 2005).

In this fashion, several recent studies illustrate the important role that transnational diaspora networks have played in helping innovation and entrepreneurship in India. Saxenian (2005, 2006) highlights the collective action of the Indian engineers and technicians who mobilised many of their fellow nationals into active associations and networks in the Silicon Valley region of the USA during the late 1990s,

contributing to a reinforcement of India's scientific and technological capacities through knowledge and technology transfers as well as in the form of investment, and entrepreneurial and business linkages. Nanda and Khanna (2010) studied the links between the Indian diaspora and local entrepreneurs in the software industry in India, and they found that relying on diaspora networks for business leads and financing is something associated with better performing firms, especially those based in smaller cities with weaker institutional and financial environments.

A more recent study by Docquier and Rapoport (2012a) analyses the various channels through which Indian skilled migrants have contributed to the Indian economy. Firstly, their presence in the host countries has encouraged business links and they have provided foreign investors with information on the Indian labour force and this has generated demand for both Indian specialists in the IT sector and for IT services exported from India. Secondly, Indian skilled migration has helped to transfer knowledge and technology through diverse channels, including return and circular migration. Thirdly, Indian skilled migrants have played an important role as advisors, helping to improve the settings for entrepreneurship and venture capital in India, and they have also been actively involved in strategic decision-making. The authors show how highly skilled migration can generate positive network externalities and create winners, instead of simply depleting a country's human capital.

While Kapur (2002, 2010) singles out the determining role of the Indian diaspora in India's rise in the global IT sector during the 1990s and after, Chanda and Sreenivasan (2006) show its importance for the national economy, within IT and business process outsourcing. These studies show how Indian IT professionals have attracted significant attention as they have come to be seen as a transnational class of professionals actively engaged in building an India that is global in scope. All these and further studies suggest the strong connections that skilled Indians based overseas maintain with people back in India, and they also show their systematic exchanges of information on jobs, business and investments prospects, science, technology and innovation, which result in beneficial contributions in the form of business and investment links, the expansion of entrepreneurship, the promotion of trade and scientific cooperation. At a policy level, it is noticeable that the Indian government has begun to appreciate these benefits, and it has recently implemented a number of policies aimed at harnessing the resources of skilled migrants.

Beyond diaspora contributions, return migration is seen as another powerful tool for development in India. In recent years, the country has experienced an increase in the number of skilled professionals returning home from the USA, UK and other European countries. It has been documented that these returnees are pulled by the economic, career, entrepreneurial and business opportunities that they see in India and by the chance to access local markets. Diverse research shows that together with family ties, a feeling of patriotism acts as an additional driving force motivating their return (Chacko 2007; Finegold et al. 2011). There are also some push factors at play and these include economic downturn in the

destination countries which results in job insecurity, and the end of temporary contracts (Chanda and Sreenivasan 2006).

Several studies see returning Indian professionals and entrepreneurs as having an important role to play in the socio-economic development of India, and these studies emphasise the transfer of advanced technical skills, managerial know-how and financial assets which they deploy in their professional activities, entrepreneurial ventures and investments, and in the creation of jobs (Kapur 2002; Saxenian 2005, 2006; Chacko 2007). Nanda and Khanna (2010) show how overseas experience allows Indian entrepreneurs to gain access to business and financial opportunities. Taking examples of selected European countries, Rothgang and Schmidt (2003), discuss the issues of return skilled migration and the brain gain effect. They stress the role of disseminating knowledge and the positive economic externalities arising from return migration. They also refer to the benefits that the IT sector in India had gained from such return migration.

More recent research has shown the influence that structures and environments in the home and host countries have on the return plans and mobility decisions of skilled Indians based in developed countries. Finegold et al. (2011) studied Indian students in the US. On the basis of a survey of skilled migrants, they noted that Indian students were potentially prepared to return to India if they could be guaranteed a good quality of life and a good career; Indian students in the USA would become potential returnees if there were good research opportunities and fewer hurdles in the forms of corruption and bureaucratic red tape in the home country. In relation to this point, Dustmann et al. (2011) used the help of a dynamic model to explain how migration decisions often respond to the opportunity and efficiency of skills acquisition (including skills that are applicable to the home country). According to their view, skills are generally acquired where the cost of acquiring them is low and skills will go to the places where they can be applied with the best chance of a high return. The authors argue that there is scope for brain gain through return migration if opportunities exist to apply the acquired skills and if the skills are more valued in the home country.

5 New Research on Indian Skilled Migration, Diasporas and Return

While the earlier mentioned aspects of Indian skilled migration have attracted plenty of interest within the academic literature, there are still some important topics that are far from being conclusive and accordingly they merit further exploration. This volume contributes to the advancement of knowledge to fill some of the existing gaps.

5.1 The 'Migration, Scientific Diasporas and Development' Project

This volume is the result of the research project 'Migration, scientific diasporas and development: Impact of skilled return migration on development in India'.[5] The objective of this project was to widen the knowledge base on skilled return migration and its impact on development and to explore strategies and measures for leveraging the potential of scientific diasporas.[6] The study examines the case of Indian skilled migration and it identifies the factors, at both an individual and a structural level in the home and the host countries, that influence the propensity of skilled Indians to deploy their foreign-earned knowledge and skills in the Indian socio-economic context, both through their physical return to the home country and through transnational diaspora actions.

By offering new empirical evidence on Indian skilled migration, this study attempts to fill two gaps in the literature. Firstly, it contributes to a better understanding of the activities of Indian skilled professionals and students in continental Europe, concretely in four countries of destination: France, Germany, the Netherlands and Switzerland. This is a rather recent phenomenon and one that has been particularly under-researched. The topic is an important one since the institutional settings of host countries are not only significant in terms of their attractiveness for skilled migrants but also in how they facilitate the exchange of knowledge between migrants and the home country and influence their mobility plans, including those related to possible return. The four countries selected have become increasingly important destinations for Indian skilled professionals and students, and they have adapted their migration policies to attract skilled people as part of the global competition for talent (Tejada et al. 2014). Secondly, it offers an analysis of Indian skilled return migration and the circumstances under which it takes place. It also examines the experiences of returnees by focusing on their ability to transfer the knowledge and skills they have gained abroad to the local context and the impact generated on their immediate surroundings. In the case of

---

[5] The project was coordinated by the Cooperation and Development Center (CODEV) of the École Polytechnique Fédérale de Lausanne (EPFL) and it was implemented in collaboration with the Institute of Development Studies Kolkata (IDSK), the International Migration and Diasporas Studies Project of the Zakir Husain Center for Educational Studies at Jawaharlal Nehru University (JNU), and the International Migration Branch of the International Labour Office (ILO). The project ran from January 2011 until March 2013 and it was funded by the Swiss Network for International Studies (SNIS) in Switzerland. The main findings are included in the final research report (CODEV-EPFL, IDSK, JNU and ILO 2013).

[6] The research draws on qualitative and quantitative research methods consisting of policy analyses, in-depth interviews with key experts and skilled migrants and two major data sets collected between the years 2011 and 2012 using two complementary survey questionnaires. On the one hand, we examined skilled Indians in four selected European countries, while on the other we studied skilled Indian returnees in six Indian cities. Four sectors were chosen in order to improve the representativeness of the sample: IT; finance and management; biotechnology and the pharmaceutical industry; and research and academia.

India, the factors required for actual development leverage from return skilled migration have not been thoroughly explored. In addition, the influence of institutional settings in the host countries and the experiences of skilled Indians including students there on their mobility plans and return intentions have still not been fully understood.

There are three aspects which make this study innovative and worthwhile. The first is the twofold approach employed: a study through the prism of the country of origin and the countries of destination. This approach allows us to simultaneously observe the impact of return migration on the country of origin and to see how skilled diaspora resources can be mobilised in new destination countries. Secondly, the study concurrently uses three sample types: (1) Indian migrants in Europe, (2) Indian migrant returnees and (3) Indians who have never migrated. The third important aspect is the partnership structure that was implemented, bringing together academic institutions in the North (EPFL in Switzerland) and the South (IDSK and JNU in India), and one international organisation (ILO). This provided a unique opportunity to address research issues from a Northern, Southern and global perspective and to jointly discuss the policy options.

5.2 Main Research Findings

From our study, we observed that Indian skilled migration offers several beneficial impacts for the economy and for society. Going beyond the traditional negative perspective of skilled migration from developing to developed countries, the findings offer a more nuanced picture, which shows how both the countries of origin and those of destination can benefit from skilled migration if it is adequately managed. We see that Indian skilled professionals, scientists and students can contribute to both countries while they are abroad or after they physically return to India. We identified four major channels through which we can estimate and perceive the impact that skilled migration has on development: physical return, remittances and investment, knowledge transfer and social impact. The different facets of this development impact across the specific sectors of IT, financial and management, biotechnology and pharmaceuticals, and research and academia are explained further. Even though knowledge transfer is the most important type of contribution, we must not ignore other effects related to economic, social and cultural changes.

The reasons why skilled Indians emigrate are often based on job requirements and better educational, training and career prospects in the destination countries. The part of the research carried out in Europe shows that Indian students and skilled professionals rank the local living environment and the amenities in the destination countries very highly, and they are satisfied with the existing infrastructure and working conditions. Several different factors influence their decisions to return to India. Besides those cases where migrants return after the completion of a job assignment or the expiry of a job contract, the desire to take advantage of

employment opportunities in the home country in emerging sectors such as IT and biotechnology and the desire to be with their families in the home country are major determinants in return plans, as are recession and rigid immigration policies in the host countries.

We observed that while the desire to contribute to the development of the home country is quite strong among all Indian skilled migrants, a higher propensity of participation is associated with disadvantageous identities related to gender, caste and religion. The fact that socially disadvantaged people such as women, dalits and Muslims feel more strongly about contributing might be the consequence of the difference they experience between a situation of deprivation and social disparity in the home country, and the freedom and rights they enjoyed in the host countries, and this might leverage their motivation to work for greater social equality in India.

We see also that development aspirations of skilled people are linked to their return plans. As the bearers of cross-frontier knowledge and the holders of innovative skills and a suitable attitude towards enterprise, skilled migrant returnees often facilitate the transfer of skills and knowledge, and they also help to inspire a work culture that is suitable for development. Our study shows that socially underprivileged people register the greatest positive effects in terms of social position, and they also manage to attain a more influential role in society as a result of their foreign exposure. However, the research shows that in the Indian context, barriers related to institutional factors, bureaucratic red tape, a lack of proper health and educational facilities for the return migrants and their dependents, and insufficient professional prospects can all damage the potential of return skilled migration. The development impact of return depends on returnees being able to cope with the local system and reach their objectives or goals, as well as their own capacities to adjust to the two different worlds—one with modern facilities and the other where these are lacking. Our study shows that the extent to which the resources and improved level of knowledge and expertise gained by skilled migrants are utilised or internalised largely depends on the availability of infrastructure, a good work environment, future prospects and social security as well as suitable governance. The same reasons play a major role in the choice of a particular city when they return to India. The research also highlights the specific challenges that skilled Indian women returnees face in the workplace or within their families and communities and which limit their potential contributions to the local context.

The findings suggest that migrants' personal enthusiasm and efforts need to be complemented with an enabling environment and supportive policies from both the destination and the home countries. In fact, we can see that in order to use the potential of skilled migration, India has implemented specific policies both to encourage return and to increase cooperation and interactions with the diaspora and capitalise on its accumulated resources and expertise. From their side, the destination countries are interested in attracting skilled migrants in specific emerging sectors to help them increase their competitiveness, and they try to provide an adequate environment to facilitate their settlement and promote their

transnational activities. However, it has been observed that such efforts are still insufficient and there is plenty of scope to increase awareness and foster initiatives that can enable the satisfactory use of the human capital in the interest of the two sides—the home and the host countries—whilst respecting the rights of individual migrants. This last point is important because, as stated by Bagchi (2011), there is a lack of an enforcing mechanism to protect human capabilities and basic human rights within the arena of human migration. Bagchi emphasises the increasing intensity of dehumanised behaviour in the context of human migration during the current age of finance-led globalisation.

6 Objective and Organisation of this Volume

The primary objective of this volume is to shed light on a few of the critical issues related to Indian skilled migration and its development impact, by providing new empirical evidence intensively collected from both the European countries of destination (France, Germany, the Netherlands and Switzerland) and the home country (India). The studies included here use an interdisciplinary and multi-level analysis offering nuanced insights into the dynamics of skilled migration and its home country effects. Because of the various dimensions of the subject matter, we do not claim to have produced a comprehensive, all-embracing study. In fact, the studies show that the issue of skilled migration and the subsequent development prospects, whether real or potential, is an area that deserves to be researched further across geographical and time zones. If the knowledge included in this volume can help policymakers in India and Europe to formulate an effective skilled migration policy that will establish a sustainable environment to benefit all the parties concerned, then we will have achieved the purpose of our study.

The content of this volume is organised in the following way. Part 1 is an introductory section. Part 2, *Context and Trends*, provides a framework of reference and an analysis of new issues in skilled migration that are related to its characteristics and effects as well as the types of public intervention and structures, both from the perspectives of India as a country of origin and Europe as a destination.

In Chap. 2, Binod Khadria offers an overview of two different groups from the Indian diaspora who both share the positive common trait of contributing to Indian economic development, notwithstanding the fact that they are very different from each other in terms of skills and educational level. While low-skilled labour migrants to the Gulf are viewed as India's main source of financial remittances, highly skilled knowledge workers contribute to the nation through their specialised technical skills and by making investments and transferring technology. However, the two groups remain quite different and separate from each other. This calls for public policies in India that can recognise the value of both groups as development agents and also appreciate their complementarities. The author believes that it is necessary to encourage cooperation between both diaspora groups and to bridge their divisions with a long-term holistic policy aimed at establishing India's links

with the Indian diaspora as a constituency that can be tapped into for the benefit of the socio-economic development of the country.

Chapter 3 by Rupa Chanda and Deeparghya Mukherjee analyses skilled labour mobility between India and the EU in the context of bilateral investments flows. It shows that mobility from India to the EU is mainly driven by the need to address skill shortages in the EU countries, and to facilitate the offshoring of client processes to India. Taking the form of business visits, intra-corporate transferees and professionals working for the Indian subsidiaries of European firms, this type of mobility is mostly short-term. In an attempt to produce a better understanding of the investment and labour mobility linkages between India and the EU, the authors examine immigration regulations and entry schemes for skilled professionals to the EU and they present a detailed analysis of country-specific visa regimes for India and the EU together with their respective problems and advantages. Even though India and the EU have both liberalised their investment regulations, the authors argue that both sides need to take further steps in order to facilitate increased skilled migration and business-related flows.

Migration and its linkages with socio-economic development in the countries of origin have become increasingly important in the development cooperation schemes of European countries. Chapter 4 by Metka Hercog focuses on host country policies and environments in four European countries (France, Germany, the Netherlands and Switzerland), and she seeks to identify major issues in the evolution of the official discourses on migration and development linkages. In the context of skilled migration and development, this is important in the sense that institutional structures and environments in host countries influence the opportunities that diasporas have to gain relevant expertise as well as their ability to mobilise and engage in home country development. While all the studied countries have experienced considerable progress in their policy options in the area of migration and development since the late 1990s, all of them are still at a testing phase and they have not developed a consistent approach as yet. The author argues that national interest is often at the centre of the policies of the host countries.

Chapter 5 by Ana Mosneaga focuses on international student migration, which is increasingly regarded as a sub-class of talent mobility within a globalising knowledge economy in which a highly educated workforce is seen as a prerequisite for sustained growth. Focusing on European destination countries within the supra-national contexts of the OECD and the EU, the author examines the processes that shape international student migration as the nexus point where the tri-juncture of the globalisation of higher education, the global competition for talent and national migration management practices all converge. The chapter outlines a wider context in which the empirical findings related to the migration and mobility of international students should be placed, within the framework of the current understanding and discussions about the trends that make up this tri-juncture. The author highlights the inconsistent policy outcomes that are the result of deep-rooted tensions in the interaction between the different agendas of higher education globalisation, talent attraction and migration management.

Part 3 of the volume, *Empirical Evidence and Policy Implications*, presents new systematised empirical evidence on Indian skilled migration and development, from both the diaspora based in European destination countries and returnees back in India. This part analyses areas such as migration policies and management; knowledge transfer mechanisms; host country environments and return plans; development aspirations and impact; return migrants' entrepreneurship; gender migration, return and development. The chapters included in this part provide specific policy recommendations for the countries concerned.

The complexities of migration research make it necessary for scholars to adhere to a diverse range of methods when approaching their topics of interest. Umesh Bharte's chapter (Chap. 6) provides an overview of the methods used in India and Europe for our research project on Indian skilled migration. It discusses the characteristics of the sample and the sampling procedure and tools used in the study; it explains how the data were collected in Europe and in India. The author shows the original nature of this investigation given that it offers a complementary twofold perspective—country of origin and countries of destination—in one single study, and it simultaneously observes three sets of highly skilled Indians: diaspora, returnees and non-migrants.

Chapter 7 by Umesh Bharte and Rashmi Sharma looks at the different programmes and policies that the Indian government has implemented to encourage engagement by the Indian diaspora in national development strategies. At an empirical level, the authors observe the views and suggestions of both skilled Indians abroad and returnees in terms of what needs to be done in order to create an enabling setting for diaspora engagement. They conclude that the Indian government needs to build a relationship of trust with the diaspora and to create an environment that can harness the positive impacts.

Focusing on the significance of world knowledge and the relevance of scientific cooperation for the advancement of science and technological innovation in developing countries, the chapter by Jean-Claude Bolay and Gabriela Tejada (Chap. 8) analyses the opportunities and uncertainties of globalisation in terms of the factors that limit the distribution and fair use of knowledge between the North and the South. The authors place scientific diasporas at the centre of the discussion, and they take the case of India and its relationship with Europe as an example. The chapter includes a qualitative empirical analysis of the experiences and views of Indian students and researchers in Europe and of those who have returned to India, as well as the views of some key informants. This helps to shed light on some of the specific mechanisms that can be used to channel knowledge transfer and identify some of the factors that are necessary to provide benefits for India.

In Chap. 9, Metka Hercog and Md. Zakaria Siddiqui examines individual and host country factors that influence the return plans of Indian skilled migrants living in four European continental countries: France, Germany, the Netherlands and Switzerland, whose institutional settings, language and culture are very different from those of the usual Anglo-Saxon destinations. This original focus is important as returnees from these countries can bring new information and skills that can help diversify the Indian economy. Using primary data from Indian skilled

professionals and students based in the observed countries, the authors aim to discern the influence that migrant's position and experiences in the host country have on return plans. They conclude that return is not associated with dissatisfaction with working and pay conditions abroad but rather it is a sign of unsuccessful integration in the host society at the social level. An important implication of this result, with special relevance for the studied host countries, is that economic opportunities alone cannot foster the retention of skilled migrants.

Chapter 10 by Gabriela Tejada and Md. Zakaria Siddiqui looks at the institutional factors and mechanisms that encourage motivated skilled returnees and diaspora members to effectively share their experience and knowledge for the broad-based development of India. Using a quantitative and qualitative analysis of the perceptions and expectations of skilled Indians, the authors identify the individual and home country factors that influence both their development aspirations and the changes to their social and professional position once they return to India. The study shows that the desire to contribute to development is associated with several disadvantageous identities and that socially underprivileged people register the greatest positive effects in terms of social position. They also manage to attain a more influential role in society as a result of their foreign exposure.

Chapter 11 written by Perveen Kumar, Uttam Bhattacharya and Jayanta Kumar Nayek focuses on the transfer of knowledge, skills and financial resources, and it examines the contributions that skilled Indian returnees make to the development of India. Based on an empirical analysis of the experiences of skilled Indian returnees, the authors observe that their overseas exposure has significant implications at both an individual level, in terms of personal development and living standards, and at a professional level, through the contributions they make to their organisations within the specific sectors observed by the study. The authors argue that while the opportunities offered by India do play a significant role in attracting skilled Indians back, actual development leverage requires a channelling of the knowledge and expertise gained overseas into the local production processes and the provision of an adequate infrastructure.

In the last decade, India has seen many highly skilled workers returning to take up jobs in the country, but there is also a smaller but still relevant group of people who have returned to start businesses in the home country. The chapter by Radha Roy Biswas (Chap. 12) offers a qualitative study of Indian skilled migrant professionals who have become entrepreneurs in Kolkata and Bangalore since returning from the USA and the UK. These reverse migrant entrepreneurs bring with them a unique combination of transnational knowledge and assets, which they deploy in these entrepreneurial ventures, thereby helping to create jobs and generate other economic activity in India. Due to the high level of personal and professional investment they bring to their decision to return and start a business in India, they are likely to see this decision as a permanent one. The study provides a better understanding of the motivations, trajectories and experiences of these entrepreneurs and it highlights the enablers and difficulties of their resettlement processes.

In Chap. 13, Jayanti Kumari and Rashmi Sharma look at migration from a gender perspective and they focus on the particular characteristics and trajectories of female international migration with special reference to India. They present an empirical study of skilled Indian women who have returned to India from developed countries, examining their specific migratory behaviours and experiences. The authors provide empirical evidence to show that female returnees are more willing to participate in development activities after their return to India than their male counterparts. However, they also show the perceptions and anxiety of both foreign-educated and foreign-trained Indian women professionals who want to serve in the home country, and who simultaneously face many challenges in the workplace or within their families or societies.

References

Afram, G. G. (2012). *The remittance market in India: Opportunities, challenges and policy options*. Washington: The World Bank.

Agunias, D. R., & Newland, K. (2012). *Developing a road map for engaging diasporas in development: A handbook for policymakers and practitioners in home and host countries*. Geneva and Washington D.C: International Organisation for Migration and Migration Policy Institute.

Bagchi, A. K. (2011). Migration and morality: Sovereign finance and dehumanize immigrants. IMDS Working Paper Series, Zakir Husain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi, Working Paper Nos. 31–33, 1–22.

Barré, R., Hernández, V., Meyer, J.-B., & Vinck, D. (2003). *Scientific diasporas: How can developing countries benefit from their expatriate scientists and engineers?*. Paris: Institute de la Recherche pour le Développement.

Bhagwati, J. (Ed.). (1976). *The brain drain and taxation II: Theory and empirical analysis*. Amsterdam: North Holland.

Borjas, G. (1987). Self–selection and the earnings of immigrants. *The American Economic Review, 77*, 531–553.

Brücker, H., Bertoli, S., Facchini, G., Mayda, A. M., & Peri, G. (2012). Understanding highly skilled migration in developed countries: The upcoming battle for brains. In T. Boeri, H. Brücker, F. Docquier, & H. Rapoport (Eds.), *Brain drain and brain gain: The global competition to attract high-skilled migrants* (pp. 15–198). Oxford: Oxford University Press.

Buga, N., & Meyer, J-B. (2012). Indian human resources mobility: Brain drain versus brain gain. CARIM-India Research Report 2012/04. Robert Schuman Centre for Advanced Studies, European University Institute.

Butler, K. (2001). Defining diaspora, refining a discourse. *Diaspora. A Journal of Transnational Studies, 10*(2), 189–219.

Caloz-Tschopp, M. C. (2010). Scientific diasporas, migration and development. A perspective from philosophy and political theory. In G. Tejada & J. C. Bolay (Eds.), *Scientific diasporas as development partners. Skilled migrants from Colombia, India and South Africa in Switzerland: Empirical evidence and policy responses* (pp. 21–136). Bern: Peter Lang.

Cassarino, J. P. (2004). Theorising return migration: A conceptual approach to return migrants revisited. *International Journal on Multicultural Societies, 6*(2), 253–279.

Castles, S., & Miller, M. J. (2009). *The age of migration*. UK: Palgrave-Macmillan.

Castles, S., & Delgado Wise, R. (2012). Notes for a strategic vision on development, migration and human rights. *Migration and Development, 10*(18), 173–178.

Chacko, E. (2007). From brain drain to brain gain: Reverse migration to Bangalore and Hyderabad, India's globalizing high tech cities. *Geo Journal, 68*(2/3), 131–140.

Chanda, R., & Sreenivasan, N. (2006). India's experience with skilled migration. In Ch. Kuptsch & E. F. Pang (Eds.), *Competing for global talent* (pp. 215–256). Geneva: ILO.

CODEV-EPFL, IDSK, JNU, & ILO. (2013). Migration, scientific diasporas and development: Impact of skilled return migration on development in India. Final research report. Available at: http://infoscience.epfl.ch/record/188059/files/CahierCoop8-2013.pdf

Cohen, R. (1997). *Global diasporas: An introduction*. London: UCL Press.

D'Costa, A. P., & Bagchi, A. K. (2012). Transformation and development: A critical introduction to India and China. In A. K. Bagchi & A. P. D'Costa (Eds.), *Transformation and development: The political economy of transition in India and China* (pp. 1–28). New Delhi: Oxford University Press.

Docquier, F., & Rapoport, H. (2012a). Globalization, brain drain and development. *Journal of Economic Literature, 50*(3), 681–730.

Docquier, F., & Rapoport, H. (2012b). Quantifying the impact of highly skilled emigration on developing countries. In T. Boeri, H. Brücker, F. Docquier, & H. Rapoport (Eds.), *Brain drain and brain gain: The global competition to attract high-skilled migrants* (pp. 209–289). Oxford: Oxford University Press.

Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. New Delhi: Penguin.

Dustmann, C., Itzhak, F., & Weiss, Y. (2011). Return migration, human capital accumulation and the brain drain. *Journal of Development Economics, 95*, 58–67.

Faist, T., & Fauser, M. (2011). The migration-development nexus: Toward a transnational perspective. In T. Faist, M. Fauser, & P. Kivisto (Eds.), *The migration-development nexus* (pp. 1–26). Basingstoke: Palgrave Macmillan.

Favell, A., Feldblum, M., & Smith, M. (2007). The human face of global mobility: A research agenda. *Society, 2*(44), 15–25.

Finegold, D., Venkatesh, K., Winkler, A., & Argod, V. (2011). Why they return? Indian students in the United States. *Economic and Political Weekly, 46*(21), 21–25.

GCIM—Global Commission on International Migration. (2005). *Migration in an interconnected world: new directions for action. Report of the Global Commission on International Migration*. Geneva: GCIM.

Glick-Schiller, N., Basch, L. G., & Szanton Blanc, C. (1992). Transnationalism: A new analytic framework for understanding migration. In N. Glick-Schiller, L. G. Basch, & C. Blanc-Szanton (Eds.), *Towards a transnational perspective on migration: Race, ethnicity, and nationalism reconsidered* (pp. 1–24). New York: New York Academy of Sciences.

Government of India. (2001). Report of the High Level Committee on the Indian Diaspora. Available at: http://moia.gov.in/services.aspx?ID1=63&id=m9&idp=59&mainid=23. Accessed on 21 August 2013

Guha, P. (2011). Measuring international remittances in India: Concepts and empirics. ProGlo Working Paper Series, Working Paper No. 1. Amsterdam: National Institute of Advanced Studies and University of Amsterdam.

de Haas, H. (2006). Engaging diasporas. How governments and development agencies can support diasporas involvement in the development of origin countries. A study for Oxfam Novib. Oxford: University of Oxford, International Migration Institute.

de Haas, H. (2008). Migration and development: A theoretical perspective. Working Paper 9. Oxford: University of Oxford, International Migration Institute. Available at: http://www.imi.ox.ac.uk/pdfs/imi-working-papers/WP9%20Migration%20and%20development%20theory%20HdH.pdf. Accessed on 13 March 2013

de Haas, H. (2012). The migration and development pendulum: A critical view on research and policy. *International Migration, 50*(3), 8–25. doi:10.1111/j.1468-2435.2012.00755.x

Hollanders, H., & Soete, L. (2010) The growing role of knowledge in the global economy. *UNESCO Science Report 2010* (pp. 1–27). Paris: UNESCO.

Iredale, R., Guo, F., & Rozario, S. (2003). *Return migration in the Asia Pacific*. Cheltenham and Northampton: Edward Elgar Publishing.

Johnson, H. (1967). Some economic aspects of brain drain. *Pakistan Development Review, 3*, 379–411.

Kapur, D. (2002). The causes and consequences of India's IT boom. *India Review, 1*(2), 91–110.

Kapur, D. (2010). *Diaspora, development, and democracy: The domestic impact of international migration from India*. Princeton and Oxford: Princeton University Press.

Kapur, D., & McHale, J. (2005). *Give us your best and brightest. The global hunt for talent and its impact on the developing world*. Baltimore: Brookings Institution Press.

Katseli, L., Lucas, R., & Xenogiani, T. (2006). Effects of migration on sending countries: What do we know? Working Paper 250. Paris: OECD Development Centre.

Khadria, B. (1999). *The migration of knowledge workers: Second-generation effects of India's brain drain*. New Delhi: Sage Publications.

Khadria, B. (2003). Case study of the Indian scientific diaspora. In R. Barré, V. Hernández, J.-B. Meyer, & D. Vinck (Eds.), *Scientific diasporas: How can developing countries benefit from their expatriate scientists and engineers?*. Paris: Institute de la Recherche pour le Développement. (Chap. 9).

Khadria, B. (2006). India: Skilled migration to developed countries, labour migration to the Gulf. *Migration and Development, 7*(2), 4–37.

Khadria, B. (2007). Tracing the genesis of brain drain in India through state policy and civil society. In N. L. Green & F. Weil (Eds.), *Citizenship and those who leave: The politics of emigration and expatriation* (pp. 265–282). Urbana and Chicago: University of Illinois.

King, R. (2000). Generalizations from the history of return migration. In B. Ghosh (Ed.), *Return migration: Journey of hope or despair?* (pp. 7–56). Geneva: International Organization for Migration.

Kumar, P., Sarkar, S., & Sharma, R. (2009). Migration and diaspora formation: Mobility of Indian students to developed countries. IMDS Working Paper Series, Working Paper No. 7–9, 29–45.

Kuptsch, C. (2006). Students and talent flow—the case of Europe: From castle to harbour? In Ch. Kuptsch & E. F. Pang (Eds.), *Competing for global talent* (pp. 33–61). Geneva: ILO.

Levitt, P., & Glick-Schiller, N. (2004). Conceptualizing simultaneity: A transnational social field perspective on society. *International Migration Review, 38*(3), 1002–1039.

Lowell, L., & Gerova, S. G. (2004). *Diasporas and economic development: State of knowledge*. Washington D.C.: Georgetown University, Institute for the Study of International Migration.

Mehra, K., & Pohit, S. (Eds.) (2013). *India. Science and technology* (Vol. 2), National Institute of Science, Technology and Development Studies. New-Delhi: Cambridge University Press.

Merz, B. J., Chen, L. C., & Geithner, P. J. (Eds.). (2009). *Diasporas and development*. Hyderabad: Orient Black Swan.

Meyer, J. B. (2001). Network approach versus brain drain: Lessons from the diaspora. *International Migration, 39*(5), 91–110.

MOIA. (2012). *Annual report 2011–12, Ministry of Overseas Indian Affairs*. New Delhi: Government of India.

Mukherjee, S., & Chanda, R. (2012). Indian student mobility to selected European countries: An overview. Working Paper No. 365. Bangalore: Indian Institute of Management Bangalore.

Nanda, P., & Khanna, T. (2010). Diasporas and domestic entrepreneurs: Evidence from the Indian software industry. *Journal of Economics and Management Strategy, 19*(4), 991–1012.

OECD. (2011). *Education at a glance*. OECD Indicators. http://dx.doi.org/10.1787/eag-2011-en. Accessed 18 August 2013

OECD. (2013). *International migration outlook 2013*. Paris: OECD. http://dx.doi.org/10.1787/migr_outlook-2013-en. Accessed 18 August 2013

Özden, C., Parsons, Ch., Schiff, M., & Walmsley, T. L. (2011). Where on earth is everybody? The evolution of global bilateral migration 1960–2000. *The World Bank Economic Review, 25*(1), 12–56.

Portes, A. (2001). The debates and significance of immigrant transnationalism. *Global Networks, 1*(3), 181–194.

Rajan, S. I. (Ed.). (2012). *India migration report 2012: Global financial crisis, migration and remittances*. London: Routledge.

Rothgang, M., & Schmidt, C. M. (2003). The new economy, the impact of immigration, and the brain drain. In D. C. Jones (Ed.), *New Economy Handbook* (pp. 585–625). Amsterdam: Academic Press.

Saxenian, A.-L. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development, 40*(2), 35–61.

Saxenian, A.-L. (2006). *The new Argonauts: Regional advantage in a global economy*. Cambridge: Harvard University Press.

Sen, A. (1999). *Development as freedom*. New Delhi: Oxford University Press.

Sheffer, G. (1986). *Diasporas in international relations*. New York: St Martin's Press.

Song, H. (1992). From brain drain to reverse brain drain: Three decades of Korean experience. *Science Technology & Society, 2*(2), 317–345.

Tejada, G. (2012). Mobility, knowledge and cooperation: Scientific diasporas as agents of development. *Migration and Development, 10*(18), 59–92.

Tejada, G., & Bolay, J.-C. (Eds.). (2010). *Scientific diasporas as development partners: Skilled migrants from Colombia, India and South Africa in Switzerland: Empirical evidence and policy responses*. Bern: Peter Lang.

Tejada, G., Hercog, M., Kuptsch, Ch., & Bolay, J.-C. (2014). The link with a home country: A comparative analysis of host country environments for diaspora engagement. In S. Sahoo & B. K. Pattanaik (Eds.), *Global diasporas and development: Socio-economic, cultural, and policy perspectives* (pp. 39–68). New Delhi: Springer.

United Nations, Department of Economic and Social Affairs (UN-DESA). (2013). Trends in International Migrant Stock: Migrants by destination and origin (United Nations database, POP/DB/MIG/Stock/Rev.2013).

United Nations, Department of Economic and Social Affairs (UN-DESA), & OECD. (2013). World migration in figures. http://www.oecd.org/els/mig/World-Migration-in-Figures.pdf. Accessed 18 November 2013

UNDP. (2013). *Human development report 2013. The rise of the South: Human progress in a diverse world*. New York: UNDP.

Vertovec, S. (2004). Migrant transnationalism and modes of transformation. *International Migration Review, 38*(3), 970–1001.

Wickramasekara, P. (2003). *Policy responses to skilled migration: Retention, return and circulation. Perspectives on labour migration*. Geneva: International Labour Office.

Wickramasekara, P. (2010). Transnational communities: Reflections on definitions, measurement and contributions. In G. Tejada & J.-C. Bolay (Eds.), *Scientific diasporas as development partners: Skilled migrants from Colombia, India and South Africa in Switzerland: Empirical evidence and policy responses* (pp. 137–178). Bern: Peter Lang.

Wiesbrock, A., & Hercog, M. (2012). Making Europe more attractive to Indian highly-skilled migrants? The Blue Card directive and national law in Germany and the Netherlands. CARIM-India Research Report 2012/09. Robert Schuman Centre for Advanced Studies. European University Institute.

World Bank. (2011). *Migration and remittances factbook 2011*. Washington D.C.: World Bank.

Yoon, B.-S. (1992). Reverse brain drain in South Korea: State-led model. *Studies in comparative international development, 17*(1), 4–26.

Part II
Context and Trends

Chapter 2
The Dichotomy of the Skilled and Unskilled Among Non-resident Indians and Persons of Indian Origin: Bane or Boon for Development in India?

Binod Khadria

Abstract The public perception of highly educated and skilled knowledge workers supposedly 'deserting' India seems to have undergone a radical transformation in the twenty-first century. Indifference towards large-scale labour migration to the Gulf region has also waned. Professional skilled Indian emigrants are now seen as agents of development, offering a perfected image of transnational 'global Indian citizens', capable not only of bringing investment and technology to India but also of returning themselves to the country in a circulatory mode of migration. On the other hand, the large numbers of low-, semi- and un-skilled labour migrants to the Gulf are also optimistically viewed as India's main source of remittances. However, notwithstanding this positive commonality, the two groups have remained clearly different and separate from each other. A new international context now poses a 'double challenge' for public policy in India as a sending country: firstly, in terms of redefining the national development strategy with a two-way transnational participation that includes both the skilled and the unskilled diasporas; and secondly, with regard to inventing and convincing the two different sub-diasporas of the strategic importance that inter-diasporic complementarities and cooperation have for the development of India. A number of dichotomies underlie the differences between skilled and unskilled migration, and the predictions are that these differences will crystallise over the course of the twenty-first century.

B. Khadria (✉)
Zakir Husain Centre for Educational Studies, School of Social Sciences,
Jawaharlal Nehru University, New Delhi, India
e-mail: bkhadria@mail.jnu.ac.in

1 Introduction

There were approximately 20 million Indian migrants at the turn of the century—divided almost equally between nonresident Indian (NRI) citizens and foreign citizens or 'persons' of Indian origin (PIO). In 1979, the Indian Ministry of External Affairs estimated that 10.7 million people of Indian extraction were residing abroad (Weiner 1982, 32, cited in Kosinski and Elahi 1985: 4). This figure appears impressive but it represented a mere 1.6 % of the national population at the time (rising to 2 % of an estimated population of 1 billion in the 2001 Census). Referred to as the 'Indian diaspora' today, these people have formed the migration *flows* of unskilled, semi-skilled and highly skilled workers and their respective families from India for at least one and three quarters of a century. In 2006, it was estimated that the Indian diaspora had increased to 25 million. By and large, a separation prevails among two subgroups in the Indian diaspora—the skilled diaspora in the West, wooed for their skills and knowledge, and the unskilled diaspora in the Middle East who are allowed entry for their labour. This has given rise to what may be called a dichotomy in relation to their potential or actual contribution to the development of India.

The early migrants who laid the foundations of the so-called Indian diaspora in the nineteenth century were mostly 'cheap' manual workers. After the British abolished slavery in 1834, they migrated to the colonies, mainly as contract labourers to meet the massive unmet demand in the plantations and mines of the Caribbean (Guyana, Jamaica, Trinidad), the Pacific (Fiji), the Indian Ocean (Mauritius, South Africa, and East Africa) and South-East Asia (Malaysia, Singapore) as well as neighbouring South Asian countries (Sri Lanka and Burma), resulting in what has sometimes been referred to as the 'brawn drain'. 'Brain drain', on the other hand—the exodus of India's highly skilled professionals and knowledge workers to developed countries—involving doctors, engineers, scientists, teachers, architects and entrepreneurs—appeared a century-and-a-quarter later in the twentieth century independent India (Khadria 1999: 62–64). This migration of highly skilled persons to developed countries gathered momentum as 'brain drain' in the mid-1960s and became prominent with the more recent migration of IT workers and nurses that has continued into the twenty-first century. This has led to a concentration of highly skilled Indian migrants in the US, Canada, the UK and other European countries, Australia and New Zealand. In addition to skilled migration to developed countries, the twentieth century also witnessed the large-scale migration of unskilled and semi-skilled Indian labour to the Gulf countries in West Asia, which began in the wake of the oil boom of the 1970s.

By the beginning of the twenty-first century, public perception of highly educated and skilled knowledge workers supposedly 'deserting' India seemed to have undergone a radical transformation. Similarly, public indifference to the large-scale labour migration to the Gulf region (the origins of the indifference lay in the

formative periods of the Indian diaspora in other destinations such as the Caribbean, and South Africa and East Africa) has also waned. Skilled professional emigrants from India are now looked upon as 'angels' and offer a perfected image of transnational 'global Indian citizens', and they are seen as being capable not only of bringing investment and technology to India but also of returning themselves in a circulatory mode of migration, whereas the large number of low-, semi- and un-skilled labour migrants in the Gulf are viewed as the main source of remittances to India, contributing to the increase in the country's foreign exchange reserves.

However, and notwithstanding this positive commonality, the two groups have remained distinctly different and separate from each other. A new international context poses a 'double challenge' for public policy in India as a sending country: the first challenge involves the need to redefine the national development strategy with a two-way transnational participation of the diaspora that includes both the skilled and the unskilled; and the second refers to the need to invent and convince the two distinctly different sub-diasporas of the strategic importance of inter-diasporic complementarities and cooperation for the development of India and Indians (Khadria 2012). The genesis of this novel context lies in a new roadmap for action, drawn up by the Global Commission on International Migration Report entitled *Migration in an Interconnected World: New Directions for Action* (GCIM 2005), although the report also concludes that '*the international community has failed* to capitalise on the opportunities and meet the challenges associated with international migration, and therefore *new approaches are required* to correct the situation' (emphasis added). It stated that '*the traditional distinction between skilled and unskilled workers is in certain respects an unhelpful one, as it fails to do justice to the complexity of international migration*'.

Underlying the divisions between the skilled 'knowledge workers' and unskilled 'service workers', we find the dichotomies between skilled and unskilled migration that can be deconstructed into a number of differences expected to crystallise in the twenty-first century. For instance, while the migration of unskilled/semi-skilled service workers for employment abroad is still largely supply driven, the mobility of highly skilled knowledge workers is now largely demand-driven. Within the international labour market, this has led to a dichotomy between a 'work-seeking mode' for unskilled migrants and a 'worker-seeking mode' for prospective employers in search of available skilled migrants.

2 The Migration of Highly Skilled Indians to the Developed Countries

The fact that the 'worker-seeking' demand for skilled Indians has become a determining factor in migration is reflected in the socioeconomic profile of the skilled Indian diaspora in developed countries. Within the European Union

(EU)—the largest economic entity in the world today—two-thirds of the entire Indian migrant community is still in the UK. The Indian community is one of the highest-earning and best-educated groups, achieving eminence in business, information technology, the health sector, media, cuisine and the entertainment industries. It is estimated that immigration alone contributed to half of the British population growth during 1991–2001. The new immigrants were, on average, younger and had higher fertility rates. A British government report released in January 2001 stressed that 'migrants were not a drag on welfare, but contribute to its economy and culture' (*The Economist*, March 31—6 April 2001). The UK 2001 Census estimated the population of South Asian nationality in Britain at 2.5 million, including 1 million Indians, with almost half of these (466,416) registered as India-born. This constituted 0.82 % of the British population, the highest share of a single 'born-abroad' ethnic category, except for the Irish. In the UK 2011 Census, India-born residents in England and Wales even overtook the Irish-born. India-born people accounted for 694,000 or 1.2 % of the resident population in 2011, followed by 579,000 Polish-born or 1.0 %, 482,000 (0.9 %) Pakistanis, and then 407,000 (0.7 %) Irish (ONS 2011 Census).

Since the end of the twentieth century, a number of shifts in political positions have reflected the growth in the demand for developing country skills in the UK. For example, in 2000, the British Home Office Minister Barbara Roche gave the 'green light' to immigrants. By positing a 'market-led' loosening up of immigrant legislation, Roche wanted to attract skilled professionals: nurses, doctors, IT experts, customer service and financial personnel (*The Hindustan Times*, Sept/Oct 2000). In 2006, the Home Office website (UK Home Office 2006) included a statement by Home Office Minister Tony McNulty saying that the government was committed to ensuring that persons entering the UK would benefit the UK economy. He pointed out that the government planned a points-based immigration system that would 'allow only those people with the skills the UK needs to come to this country'. This system was subsequently introduced in February 2008 and high-skilled migrant Indians seemed to fit the profile squarely. In the top-ten rankings of the 2011 census, almost 50 % of Indian nationals held top-tiered 'professional, managerial and technical' occupations—a proportion which was only bettered by the nationals of four developed countries—Americans, Germans, French and Irish; education-wise, more than 50 % of Indians holding qualifications at Level 4 and above was matched only by Americans and Nigerians (ONS, Census 2011 figure).

To understand the path to the ranking of Indians in the 2011 Census, it is interesting to look at the British Home Office publication *Control of Immigration: Statistics United Kingdom* 2005, presented in Parliament in August 2006. It provides selected immigration data for Indians (with a regional category for the 'Indian subcontinent' covering two other countries—Pakistan and Bangladesh—as well) for the year 2005 (UK Home Office 2006). Some information and data

extracts are provided below to substantiate the proposition that there was a paradigm shift in Indian immigration to the UK over the decade:

Out of a total of 11,800,000 non-EEA nationals entering the UK in 2005, India with 687,000 persons had the fourth largest number of admissions after the US, Canada and Australia, representing a 12 % increase over 2004. A total of 137,000 migrants were admitted as non-EEA work permit holders together with their dependents (EEA nationals require no such work permit), and 38,200 or 28 % of these were Indian nationals; 19,500 Indians with work permits were granted stay extensions. Indians, with 8,255 extensions granted, were the largest group receiving extensions for 'permit-free employment', followed by Filipinos at 2,155. Stay extensions were granted to 6,005 Indian trainees while 11,315 Indian students were granted extensions to stay in the UK in 2005, second only to the Chinese (25,555). Among the persons granted settlement after completing 4 years' employment (with a work permit for 4,540), Indians (18 %) were the second highest group after Filipinos with 6,300 (25 %); they were followed by 2,635 (10 %) South Africans. In contrast, the number of applications for asylum in the UK submitted in 2005 by Indian nationals, excluding dependents, was only 940 (out of 25,710 applications received from all nationalities), *but no single Indian was granted asylum; of the 935 cases handled for 'initial decision' ,915 were refused and the remaining 20 were given discretionary leave without recognition as 'refugee';* 16,720 Indian nationals were issued a grant of settlement in 2005 compared to an average number of 9,345 per year over the four preceding years, an increase of almost 80 %.

As part of such a paradigm shift, which saw high-skilled free economic migrants overtaking low-skilled refugees and asylum seekers not only in the UK but also in other developed countries as well, including Germany, France and Japan, closely followed by Australia, New Zealand and Singapore, the governments opened up their labour markets to India's highly skilled human capital. In North America, they had a 3 % share in a population of 30 million. In Canada, Indo-Canadians have recorded high achievements in the fields of medicine, academia, management and engineering. The average annual income of Indian immigrants in Canada is almost 20 % higher than the national average, and their educational levels are also higher. In the East, there are 30,000 Indian citizens in Australia, and New Zealand has also witnessed an increase in the number of Indian professional immigrants engaged in the domestic retail trade and in the medical, hospitality, engineering and information technology sectors. Countries such as Japan, Korea and Singapore are also trying to attract Indian talent.

The strong profile of Indian immigrants in the USA supports the proposition that the human capital content of Indian immigrants has been a major determinant in the formation of the highly skilled Indian diaspora there. This is borne out by the geo-economic significance of Indians in the U.S. economy, indexed by their age profile, education, occupation and income rankings, for all of which they have

been at the top from the 1970s up to the present day. These high rankings for Indians in the US hold well not only among Asian nationals but also when compared to the U.S. population in the Censuses of 2000 and 2010.

In addition to becoming a great professional force through diaspora associations, Indians have also become a strong voting force in the United States and Canada. The US-born second generation of Indian-Americans, who are already U.S. citizens, and the number of India-born naturalised American citizens, that comprise no less than one-third of all Indian immigrants, form a formidable voting force in the US. This has resulted in Indian-Americans becoming increasingly involved in the political system of the United States. Indian-Americans have traditionally exercised great political influence through their campaign contributions and they are actively involved in fund-raising for political candidates in federal, state and local elections. In recent years, they have begun to assume a more direct role in politics, while continuing to help with their financial contributions. The trend is the same in Canada, albeit to a lesser extent and in a more obscure manner. The Association of Parliamentarians of Indian origin has several hundred members from developed countries such as Canada, Germany, France, Britain and the United States as well as developing countries such as Malaysia, Trinidad, South Africa, Fiji, Suriname and Guyana, where Indian communities have existed for more than a 100 years. The second generation of overseas Indians have started to take a keen interest in local politics in the developed countries they live in. There are about 40 mayors of Indian origin in Britain where Indians have a longer experience of involvement in politics (*Overseas Indian*, April 2006: 10–11). The proportion of naturalised citizens amongst immigrants in North America will certainly increase in the twenty-first century now that the quasi-dual citizenship (OCI or overseas citizen of India) granted by India has become fully operational, and more and more NRIs amongst the diaspora could choose to become citizens of the country where they live, without having to give up their Indian passports. This had led to an increase in the voting power of the Indian diaspora as a whole in the destination countries, leading to the formation of lobbies that could push for policies that are strategically favourable for India.

3 Unskilled and Low-Skilled Indians in the Gulf Countries

The overall number of Indians remained small in the Gulf countries after oil was discovered in the region during the 1930s, although they occupied clerical and technical positions in the oil companies. An upsurge in the flow of workers began when large-scale development activities started in the Gulf following the surge in oil prices in 1973. During the early 1970s, the large-scale human resource requirements for development activities in agriculture, industry, transport,

communication and infrastructure in the six Gulf Cooperation Council (GCC) countries of Saudi Arabia, Bahrain, Kuwait, Oman, Qatar and the UAE were met primarily by immigrant labour from neighbouring Arab states like Egypt, Jordan, Palestine and Yemen. Gradually, India (and Pakistan) started to supply most of the unskilled labour, registering growth of almost 200 % between 1970 and 1975. In 1975, Indian expatriates constituted 39.1 % of all non-Arab expatriates in the Gulf region (after Pakistanis with 58.1 %), while other Asians accounted for only 2.8 %. Since then, Indian migration has overtaken that of Pakistan, and since the Kuwait war of 1990–1991, Indians have even replaced non-national Arabs in the Gulf (Jordanians, Yemenis, Palestinians and Egyptians). From fewer than 258,000 people in 1975, the work-seeking voluntary migrant Indian population in the Gulf had risen to 3.318 million by 2001 and is now estimated that it exceeds 3.5 million, spread across the entire range of activities from professionals such as doctors and nurses, engineers, architects, accountants and managers to semi-skilled workers including craftsmen, drivers, artisans and other technical workers, taking in unskilled labourers on construction sites, farmlands, livestock ranches, shops and stores and households. Indian migrant workers in the GCC countries are to be found in all three labour categories.

Highly skilled and technically trained professionals remain in great demand in government departments and public sector enterprises, and they also command high salaries. They only account for about 30 % of all Indian workers in these countries. They are also allowed to bring their families, and children are allowed to stay with parents until they complete their school education. Life in general is comfortable for professionals and white-collar workers in the Gulf countries. They are able to keep in contact with compatriots and nationals, form associations and participate in sociocultural activities. Professionals and white-collar Indians have also established a large number of schools in the region and these follow Indian curricula and are affiliated to Indian examination and certification bodies such as the Central Board of Secondary Education. Despite all this, the majority of Indian migrants to the Gulf region are unskilled or semi-skilled workers, and the majority of skilled professionals and managers are in the developed Western countries.

Unskilled and semi-skilled Indians account for about 70 % of Indian migrants in the Gulf region and they are mostly employed people or else they are looking for jobs and therefore supply determined. On the supply side, the monitoring and controlling of the Indian government has been the prime determinant behind the increase in unskilled and semi-skilled labour migration to the Gulf region, and this has increased over the past few years. The demand in the GCC countries for lower skilled workers such as housemaids, cooks, bearers, gardeners, etc. has been significant, and this has spurred the supply even further.

However, local labour laws provide no protection for unskilled and semi-skilled Indian migrant workers. This is particularly true for women working as house-maids or governesses, who face ill-treatment in some Gulf countries and they are

even subjected to sexual abuse at times (GOI 2006). Unskilled and semiskilled workers employed in infrastructural and development projects generally live in miserable conditions and are accommodated in small cramped rooms in labour camps. Toilet and kitchen facilities are often inadequate and working conditions are harsh. The adverse working conditions, unfriendly weather, inability to participate in social and cultural activities and long periods of separation from families and relatives, have led to emotional deprivation, and these factors have been known to have wrecked the lives of low-skilled Indian workers in the Gulf (GOI 2005–2006: 17; GOI 2006).

There is a high turnover rate for unskilled and semi-skilled workers as their contracts are for short periods of employment and work, usually no more than 2 years at a time. They are only accepted for temporary stays and circulatory immigration. Those completing their contracts must return home although a large proportion manages to return with new contracts, which are not made available to them until 1 year has passed. This policy has facilitated the proliferation of recruitment and placement agencies, which sometimes collude with prospective employers, or fake employers in many cases, thus duping the illiterate and vulnerable job seekers. Employees are required to deposit their travel documents and passports with the prospective employer, who is thereby empowered to exercise all kinds of control over the employees, or even violate the contract terms of employment.

There are even cases of fraudulent employers based in the Gulf countries importing workers to hawk or 'body-shop' them to others, in exchange for an attractive commission. The forms of exploiting uneducated and unskilled Indian expatriate workers in the Gulf used by the recruiting agents and prospective employers include refusal to give promised employment, non-payment of promised wages, non-payment of overtime wages, undue deduction of permit fees and other fees from wages, unsuitable transport arrangements, inadequate medical facilities, denial of legal rights to redress complaints, use of migrants as carriers of smuggled goods, victimisation and harassment of women recruits in household jobs such as maids, cooks, governesses. (Overseas Indian 2006, various issues).

In general, Indian migrant communities in the Gulf region maintain close contacts with their kith and kin in India, and they make frequent visits home whenever they have enough savings to do so, or are between contracts in the Gulf. This is because families are not allowed to accompany the unskilled contract workers to the countries they emigrate to. They also keep track of political developments and socioeconomic changes taking place in India through the communication channels of newspapers, radio and television. In times of natural disasters in India, such as earthquakes, the Indian community in the Gulf region responds with donations and deposits in India Development Bonds. Most remittances have come from unskilled workers whose consumption expenses in the Gulf are kept to a minimum as their families are not living with them and are heavily dependent on them for sustenance.

4 The Paradoxes of the Dichotomies

Many medical doctors who have triumphed in their respective fields in the USA emigrated with their first MBBS degree from the All India Institute of Medical Sciences. Similarly, many of the Indian immigrants who sustained the success of Silicon Valley were persons who received their postgraduate education in the USA after obtaining their first engineering degrees from the Indian Institutes of Technology. Engineers from the regional engineering colleges, Banaras Hindu University and other institutions of excellence also followed suit. Likewise, scientists with M.Sc./M.Tech degrees obtained from prestigious universities such as Jawaharlal Nehru University or the University of Delhi, and engineer-managers with degrees in engineering, followed by post-graduate diplomas in business management from the Indian Institutes of Management (IIMs), emigrated to pursue higher studies abroad, and they then entered the world labour market for professionals in the USA. This has often been regarded as brain drain for India.

India faced a serious balance of payments crisis in the middle of 1991. Foreign exchange reserves fell to a level that could barely pay for essential imports that would only cover a few weeks. Indian migrants in developed countries abruptly withdrew their dollar deposits from Indian banks. These problems required immediate action to prevent India from defaulting on its international obligations and to avoid a collapse of its economy for want of critical imports (Kelegana and Parikh 2003: 111). It was the slowly but steadily growing remittances from Indian unskilled workers in the Gulf region that saved the situation for India. Today, India is at the top of the list of countries receiving remittances from its migrants abroad. Almost 10 % of all worldwide remittances sent home by millions of migrants go to India. Kerala's share of remittances from overseas Indian workers has been significant.

The two aforementioned examples of loss and gain or bane and boon, respectively, conceal a number of paradoxes or dichotomies between skilled and unskilled migration.

4.1 The Dichotomy of Gain and Loss

While the volume of remittances from Indian labour migrants in the Gulf has attracted much more attention than those from the West in the form of a boon, in two other areas—technology transfer and return migration—the positive outcome of skilled migration to the developed countries has also been talked about as a boon. However, most studies have not gone beyond the need to assess the quantitative outcomes in terms of volumes of technology collaboration flows. In sharp contrast, return migration has become topical in the context of 'outsourcing'

business processes to India, a process that picked up after the burst of the IT bubble in the USA, although in this case, there is no systematic assessment of the numbers and quality of the returnees, despite the fact that some studies have emphasised that the return to India has been unsustainable because the returnees tend to go back after a short stay in India (Saxenian 2005).

The dichotomy has kept remittances and return as two separate domains—unskilled and highly skilled Indian migrants—completely isolated from one another. What has been overlooked as a result of this dichotomy is that highly skilled migrants to developed countries have made, what I have called 'a silent backwash flow' of remittances from India to countries of destination such as the UK, Australia and the USA, in the form of 'overseas student' fees that the students and their parents pay (Khadria 2009; Khadria and Meyer 2013). The amounts involved have not been estimated or analysed so far and neither has adequate attention been paid to the return migration of the unskilled and the semi-skilled and their impact on development.

4.2 The Dichotomy of Permanent and Temporary Migration

High-skilled migration is largely associated with permanent migration and the reality reflects this too; the primacy of temporary and circulatory migration policies has resulted in families being split. Similarly, whereas low-skilled migrants go on temporary migration, they also re-migrate, thereby maintaining the process of permanent circulation. With respect to the emigration of the unskilled and semi-skilled to the Gulf region, South-East Asia or elsewhere, the government's role has been perceived as that of a facilitator to find gainful employment for a maximum number of persons, now increasingly under the General Agreement on Trade in Services (GATS) of the WTO negotiations.

4.3 The Dichotomy of Civil Rights of Dual Citizenship and Voting

In 2006, the purview of overseas citizenship of India (OCI) was expanded and the privilege was offered in all countries except Bangladesh and Pakistan. Prior to that, India's dual citizenship policy had been driven by a dichotomy of civil rights, as only PIOs in 16 select developed countries were eligible to apply. Of the government measures and programmes in India, the OCI on dual citizenship represents an important landmark for redefining the contours of a migration policy in the new millennium, not just for India but for a transnationally 'interconnected' world that is perceived to be emerging. However, this measure seems to mainly

benefit highly skilled migrants in developed countries as migrants in developing countries suffer a backlash from local regimes that are suspicious of their loyalties. In contrast, under the second measure, Indian citizens abroad would have the right to exercise their votes from abroad; this is primarily aimed at Indian unskilled workers in the Gulf region, those who have no hope of becoming naturalised citizens of those countries because of the restrictive regimes there. However, this dichotomy of dual citizenship for PIOs and voting rights in India for NRIs overlooks the question concerning what will happen if NRIs start to become PIOs *en masse* and are eventually granted voting rights?

5 Conclusion: Bridging the Dichotomies for Development in India

Concern and diplomatic action follows the plight of migrant workers of Indian origin employed abroad whenever a crisis erupts, be it the Gulf war, the Iraq war, the random abductions of Indian truck drivers, the beheading of an Indian engineer by terrorists in Afghanistan or the sudden arrests of Indian IT professionals in Malaysia or the Netherlands (*Hindustan Times, The Times of India, The Straits Times*, April–May, 2006). In terms of the impact on migrant workers themselves in the destination countries (and therefore on their families back in India), commonalities and similarities of exploitation have emerged between unskilled migration to the Gulf and skilled migration to South-East Asia (Khadria and Leclerc 2006). Of course, the dichotomies are such that, while India exerts virtually no control over the migration flows of highly skilled categories, it controls unskilled migration flows only insofar as they fall under the purview of the emigration clearance required (ECR) category of passports. As a result, the possibility that migration itself creates a sense of desperation amongst the low-income Indians who emigrate in pursuit of upward socioeconomic mobility for their families back in India, even braving the risks that accompany migration overseas, has not been looked into. Likewise, in the case of high-skilled migration, there have been no studies of the impact on career and educational choices in India, a country which has seen a lot of choice distortion and inter-generational or even inter-community conflicts over educational choices but which remain un-analysed if not unnoticed (Khadria 2004b; NCAER 2005).

Indian policymakers only became aware of the vulnerability of the workers in the Gulf region and the importance of their remittances to the economy as a result of the warning bell of the Gulf War of 1990–1991. The increase in petrol prices coupled with the fall in remittances from Indian workers in Kuwait and Iraq, and the cost of airlifting Indian citizens from the Gulf region (a feat that saw Air India enter the Guinness Book of Records) put the Indian economy under so much stress that they precipitated a reforms process in the early 1990s. However, with the

shifts in the migration paradigm, the perception of highly skilled emigration to developed countries changed much more dramatically than that of labour migration to the Gulf countries. Accordingly, in the mid-1980s, the political perception of 'brain drain' suddenly gave way to the perception of a 'brain bank' abroad. Throughout the 1990s, the gradual success and achievements of Indian migrants in the USA—particularly those led by the 'body shopping' of software professionals to the USA from India's Silicon Valley in Bangalore and who worked on averting the looming Y2K global crisis—drew real attention in the developed countries in the West and East alike (Van der Veer 2005: 279). What also followed was a change of attitude in India towards its migrants abroad, who were now given a singular identity called the 'Indian diaspora', or even 'Indiaspora' as was once proposed. Accordingly, the paradigm shift in the perception of highly skilled migrants leaving India took place in phases: from the 'brain drain' of the 1960s and the 1970s to the 'brain bank' of the 1980s and 1990s, and subsequently to 'brain gain' in the twenty-first century (Khadria 2006a, b, c, d, e).

What will bridge the dichotomies is the design of an exhaustive generic classification for occupations—ranging from 'manual/unskilled' to 'semi-skilled' and 'skilled' and professional talents (by levels of education and occupation/experience), which would have international recognition as tradable 'services' under Mode 4 of the GATS (Khadria 2004b). Secondly, the various stakeholders need to be distinctly identified: the migrant workers themselves, their spouses and their families, the training/certifying institutions, accrediting agencies, manufacturers using the talent, service consumers and the state itself. Thirdly, the interests inherent in the receiving-country stakes for streamlining the migrant flows needed to be spelt out specifically and explicitly for overseas employment of various types—temporary, circular, and permanent. Fourthly, there is a need to explore schemes and processes for job search, job certification, hedging against uncertainties, compensation mechanisms, return passage—of a preventive as well as a curative nature (such as overseas job insurance schemes)—education/training of children left behind; their health guarantees, channelisation of designated minimum amounts and maximum proportions of remittances to be spent on human capital building activities, with matching grants from the state etc. Finally, there is a need to take into account the apparent tension concerning international migration from India that has intensified in recent years between the various public-service interests of the state and the profit-making interests of the corporate sector. Private multinational enterprises that wish to boost their global competitiveness and expand their markets feel that they must be able to recruit their employees and import them much more freely from India. They moved part or all of their enterprises to India when they were unable to recruit because of the restrictive immigration policies of their own countries. This is because they were able to find the workers they needed in India, and not just the highly skilled but the unskilled as well. This produced a good outcome for India for the most part, as the jobs came to where the workers were or else they came back with those retrenched in the

destination countries. Therefore, the spillover effects of these investments were mostly positive, as what used to be decent jobs in the North were by and large replaced by decent jobs in the South, paving the way for future North–South cooperation.

If the 'average productivity' of unskilled migrant-to-be workers in India can be raised from its present low level in this emerging scenario, then the poorly skilled Indian migrants from the poorer regions of the country would also have a chance to migrate unhindered to the rest of the world or to attract enterprises from abroad, or else to choose an optimum mix of both. The problem would lie in the divisive policies of the developed receiving countries who find the dichotomies between skilled and the unskilled migration very handy in terms of meeting their short-term and long-term objectives. What appears to be a useful policy tool is an 'adversary analysis', whereby the contribution to social and economic development in countries of origin would be assessed from the point of view of the stakeholders in the countries of destination and vice versa (Khadria 2009). In order to do this in a multilateral international relations framework at forums such as the GATS of the WTO, the dichotomies would have to be deconstructed first. The advantages derived by the developed countries of the North—primarily through higher migrant turnover, at least among the newer short-term migrants, if not by replacing existing long-term migrants with short-term migrants—and which are built into the dichotomies are inherent in their objectives to (a) bring in younger migrants to correct the age-composition bias in their ageing population and counterbalance the age structural transformation (AST) that has been taking place in most developed countries because of falling birth rates and rising longevity, (b) keep wages low and pension commitments non-existent by replacing retiring or deceased older cohorts of long-term permanent migrants with younger, short-term temporary migrants, thereby saving on the overall wages-bill, without compromising average worker-productivity, and (c) stockpile the latest vintage of knowledge embodied in younger cohorts of skilled workers respectively, what I stylistically call the 'trinity' of age, wage and vintage (Khadria 2006a: 194).

The counter costs of these to countries of origin like India remain to be explored and judged. The destination countries, in which Indian professional migrants have settled to form a diaspora, are expected to play the role of catalyst in bridging the dichotomies. The opportunity lies partly in the host countries realising that one type of migrants—the suspected 'social parasite'—if given the appropriate help, resources, and local support would transform itself into the other, the social boon, or as someone phrased it, the white West's 'great *off-white* hope'! (Alibinia 2000). The change of values could be brought about by the Indian diaspora itself, which has defied the doomsday predictions with their spectacular economic success in the destination countries, leading to a paradigm shift in the societies and regions where Indians have settled.

However, what is required after the dichotomies have been bridged is a long-term holistic policy (rather than one fragmented into dichotomies), aimed at establishing India's links with the Indian diaspora as a constituency that could be tapped into for the sustainable socioeconomic development of the country. To arrive at a 'win–win' situation in international relations for the trinity of stake-holders—India as a country of origin, the Indian migrants as part of its diaspora and the destination countries of the skilled and unskilled migrants—a set of two specific conditions must be met: a 'necessary condition' of a significant global geo-economic presence of 'Indian workers', whether skilled or unskilled, and a 'sufficient condition' of India deriving *sustainable* developmental benefits from that global geo-economic presence. In terms of the large stocks and flows of Indian skilled and unskilled workers abroad, and migrants establishing excellent records of accomplishment in the labour markets of the destination countries, the first condition is automatically fulfilled. To satisfy the second—the condition of India deriving significant gains from the global geo-economic presence of the Indian migrants—their 'participation' must be directed, not primarily towards trade and business but towards the removal of two kinds of poverty in India—the 'poverty of education' and the 'poverty of health'—areas in which migration has so far failed to change society. Large masses of the illiterate/uneducated population, incapac-itated by their poor health, are the root causes of India having one of the lowest levels of average labour productivity, and therefore, the lowest average wages in the world—a paradoxical dichotomy when Indian diaspora members form, on average, one of the largest contributing ethnic communities in their countries of destination. For example, it is indeed paradoxical to see the average per-hour contribution of each employed worker within India to the production of India's gross domestic product (GDP) amongst the lowest in the world (at a mere 37 cents compared to $37 or 100 times that in the United States). This is naturally ironical, because as mentioned earlier the same average Indian employed abroad contrib-utes a very high average share to the GDP of the country where he/she has settled and works (Khadria 2002).

We encounter a 'double challenge' for development policy in a sending country like India: first of all, it needs to convince its own diaspora community to rethink the development process in India as a 'bottom-up' creation and enhance sustain-able productivities of labour through the development of education and health rather than as a 'top-down' development through participation in business and industry—one comprehensive, the other dispersed; one long-term and visionary about creating an expanding and self-sustaining market by enhancing the average productivity of workers and hence the purchasing power in their pockets, the other immediate and myopic about selling goods and services to an existing, but limited, market of high-income buyers. It is not just a matter of willingness; in many instances, it would entail long periods of struggling to create the decision-making and priority-setting discerning abilities, or *capabilities*, amongst the leaders of the

migrant communities. Secondly, India must be able to convince the countries of destination (and the other countries of origin as well) as to where the dichotomy of distinction between the most 'painful' and the most 'gainful' socioeconomic impacts of the migration of its workers—both skilled and unskilled and both NRIs and PIOs—lies. At multilateral forums the 'adversary analysis' would help a country like India to press for international norms in the Mode 4 negotiations of the GATS, on the issue of the movement of natural persons as service providers under trade, which is just another description for promoting the temporary entry of migrants without GATS defining it as such, but explicitly remaining inapplicable to permanent migration (Martin 2010: 197). At multilateral dialogues, the so-called 'vulnerability of unskilled migrants' and the 'instability of 'skill-points' in immigrant quotas' underlying the 'open-and-shut policy' of the destination countries creates another dichotomy that must be bridged before any impact of migration or return on development is assessed for India.

References

Alibinia, A. (2000). *The great off-white hope*. New Delhi: The Hindustan Times.

British Home Office. (2005). Control of immigration: Statistics United Kingdom 2005.

GCIM. (2005). Migration in an interconnected world: New directions for action. Report of the Global Commission on International Migration, Geneva.

GOI. (2006). *Proceedings of the Conference of the Indian Ambassadors of Gulf Countries, at Doha, Qatar*, March 20–21. New Delhi: Ministry of Overseas Indian Affairs, Government of India (unpublished).

GOI Annual Report 2005–2006. New Delhi: Ministry of Overseas Indian Affairs, Government of India.

Hindustan Times. New Delhi edition. Various issues.

Kelegana, S., & Parikh, K. S. (2003). Political economy of growth and reforms in South Asia. In I. S. Ahluwalia & J. Williamson (Eds.), *The South Asian experience with growth* (pp. 80–145). New Delhi: Oxford University Press.

Khadria, B. (1999). *The migration of knowledge workers: second-generation effects of India's brain drain*. New Delhi: Sage Publications.

Khadria, B. (2002). *Skilled labour migration from developing countries: Study on India*. International Migration Papers 49. Geneva: International Labour Office.

Khadria, B. (2004b). *Human resources in science and technology in India and the international mobility of highly skilled Indians*. STI Working Paper *2004/7*. Paris: OECD.

Khadria, B. (2006a). Post-war migration, the migration of professionals, and business and entrepreneurship. In B. Lal (Ed.), *Encyclopedia of the Indian diaspora (The age of globalization)*. Editions Didier Millet: Singapore.

Khadria, B. (2006b). Embodied and disembodied transfers of knowledge: Geo-politics of economic development. In M. Carton & J.-B. Meyer (Eds.), *Knowledge for development* (pp. 191–203). Paris: Harmattan.

Khadria, B. (2006c). International competition for S&E students and workers: an evaluation of trends and policies in India and Southeast Asia. Paper prepared for a meeting on *International competition for S&E students and workers*. Washington: Institute for the Study of International Migration, Georgetown University, 30–31 March.

Khadria, B. (2006d). Tracing the genesis of brain drain in India through its state policy and civil society. In N. Green & F. Weil (Eds.), *Citizenship and those who leave: the politics of emigration and expatriation*. Illinois: University of Illinois Press.

Khadria, B. (2006e). Uncharted contours of a changing paradigm: skilled migration and brain drain in India. *Harvard International Review, 28*(1), Invited contribution for the Web-exclusive Symposium on featured topic: Immigration, http://hir.harvard.edu/uncharted-contours-of-a-changing-paradigm

Khadria, B. (2009). Adversary analysis and the quest for global development: Optimizing the dynamic conflict of interest in transnational migration. *Social Analysis, 53*(3), 106–122.

Khadria, B. (2012). Migration of health workers and health of international migrants: Framework for bridging some knowledge disjoints between brain drain and brawn drain. *International Journal of Public Policy*, 8(4/5/6), 266–280.

Khadria, B., & Leclerc, E. (2006). Exode des emplois contre exode des cerveaux, les deux faces d'une même pièce ?' *Autrepart: Revue des sciences sociales au sud,* No. 37, Special issue on La Migration des Emplois Vers le Sud, IRD Editions, France.

Khadria, B. & Meyer, J-B. (2013). Restructuring innovation systems in India through migration. *Migration and Development*, 2(2), 213–236.

Kosinski, L. A., & Elahi, K. M. (1985). Introduction. In L. A. Kosinski & K. M. Elahi (Eds.), *Population redistribution and development in South Asia* (pp. 3–14). Dordrecht: D. Reidel Publishing.

Martin, P. (2010). Migrant workers' vs. 'international service providers': Labour markets and the liberalization of trade in services. In C. Kuptsch (Ed.), *The internationalization of labour markets* (pp. 196–229). Paris: ILO and IILS.

NCAER. (2005). *India science report*. New Delhi: National Council of Applied Economic Research.

Office of National Statistics, United Kingdom, http://www.ons.gov.uk

Overseas Indian (2006). Vol. 1, Nos. 1–4, January–April, Monthly publication of the Ministry of Overseas Indian Affairs, Government of India, New Delhi.

Reserve Bank of India. *Report on Currency and Finance.* various years.

Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgradation in India and China. *Studies in Comparative International Development,* Fall.

The Economist. (2001). March 31—April 6.

The Economist. London. various issues.

The Strait Times. Singapore edition. various issues.

The Times of India. New Delhi edition. various issues.

Tinker, H. (1974). *A new system of slavery: Export of Indian labour overseas, 1980–1920*. Oxford: Oxford University Press.

Tinker, H. (1976). *Separate and unequal: India and Indians in the British Commonwealth, 1920–1950*. New Delhi: Vikas.

Tinker, H. (1977). *The Banyan tree: Overseas emigrants from India, Pakistan and Bangladesh*. Oxford: Oxford University Press.

UK Home Office. (2006). *Control of Immigration: Statistics United Kingdom 2005.* London: The Stationery Office, August, http://www.homeoffice.gov.uk/about-us/news/immigration-statistics-05

UK Office of National Statistics. (2006). *Social trends 2006*, No. 36. New York: Palgrave Macmillan.

U.S. Census Bureau. (2004). *We the People—Asians in the United States.* Census 2000 Special Reports CENSR-17, December, Department of Commerce.

U.S. DHS. *Statistical Yearbook,* various years. Washington D.C.: Department of Homeland Security.

U.S. INS. *Statistical Yearbook,* various years. Washington D.C.: Immigration and Naturalization Service, Department of Justice.

Van der Veer, P. (2005). Virtual India: Indian IT labor and the nation-state. In T. B. Hansen & F. Stepputat (Eds.), *Sovereign bodies: Citizens, migrants, and states in the postcolonial world*. Princeton: Princeton University Press.

Weiner, M. (1982). InternationalMigration and Development: Indians in Persian Gulf. *Population and Development Review, 8* (1), 1–36.

World Bank. (2005). *World economic outlook,* Washington D.C.

Chapter 3
Investment and Skilled Mobility Linkages Between India and the EU

Rupa Chanda and Deeparghya Mukherjee

Abstract The migration of skilled labour is a matter of primary significance in the context of India–European Union (EU) relations. Over the past two decades, skilled migration from India to the EU and vice versa has mainly been associated with knowledge transfer to support the operations of EU-based multinational corporations (MNCs) present in India. In recent years, Indian investment in the EU has also gained importance, with leading Indian IT companies establishing a local presence in several EU countries. This investment has been supported by temporary skilled migration from India to the EU. This chapter examines skilled labour mobility between India and the EU in the context of bilateral investment flows. The discussion indicates that there is considerable short-term mobility from India to EU countries of Indian business visitors, intra-corporate transferees and professionals working for the Indian subsidiaries of European firms. There is also movement of skilled Indians, who work for Indian firms in India, to EU-based subsidiaries. In both cases, movement from India to the EU is mainly driven by the need to address skill shortages in the EU countries and to facilitate the offshoring of client processes to India. The significance of the Schengen Treaty and the EU Blue Card scheme is highlighted in this context. We conclude with a summary of

R. Chanda (✉)
Indian Institute of Management, Bangalore, India
e-mail: rupa@iimb.ernet.in

D. Mukherjee
Indian Council for Research on International Economic Relations, New Delhi, India
e-mail: deeparghya@gmail.com

the main factors that affect skilled labour mobility between India and the EU, and we outline the policies that could be undertaken to facilitate these flows and realise greater benefits.

1 Introduction

In the last few decades, the world has witnessed a number of shifts in economic policies that have impacted the investment climate across the globe. Asian economies like India have liberalised their previously protected economies and relaxed their foreign direct investment (FDI) regulations. While India remained closed to foreign investment until 1990, the post-1990 period saw a gradual relaxation of FDI regulations in most sectors. Economic liberalisation supplemented with investor-friendly policies saw India emerge as one of the world's most favourable investment destinations (Ministry of External Affairs 2007). The increased integration of the Indian economy through investment ties has led to a growing need for professionals from India to move to the investor countries and vice versa to ensure the successful implementation of strategies at a company level. Although emigration from India to Western countries for study and work purposes was a known phenomenon, the demand for short-term transfers has increased with globalisation. With the onset of offshoring and the necessity to understand client markets and requirements in order to successfully execute offshoring contracts, the need for short-term inter-country transfers of professionals has increased even further. The emergence of India as an economic power that is now also investing in developed countries has further added to this growing need for employee mobility across geographies.

The growth story of most countries over the last century has taken the route of foreign investments and international trade. Most big firms in the world today are multinational corporations (MNCs) with operations spread across the globe. The importance of foreign investment and trade is also evident from the large number of bilateral investment and trade agreements that have been signed across countries. The North American Free Trade Agreement (NAFTA) between Mexico, Canada and the United States is a classic example of a preferential trade agreement. However, trade agreements or investment agreements alone may be of little consequence in terms of fostering growth if labour mobility arrangements are fragmented. It is especially in this respect that we observe special labour mobility arrangements between the NAFTA countries. The ease of trading services in the present day has further increased the importance of labour mobility in order to allow investment and trade relations to reap the full benefits. Special mention must be made of services trade through modes 3 and 4, which cater to serving a foreign country through a commercial presence and the temporary movement of workers, respectively. It is in this light that studying investment and labour mobility interlinkages and trends becomes important.

India and the member countries of the European Union (EU) have historically fostered long-term economic relations through international trade. Various EU countries such as the UK, Germany, France and Netherlands have historically maintained investment ties with India to avail of India's huge market and also to benefit from the lower labour costs of production there. More recently, many Indian companies have begun to invest in the EU countries in order to better serve the EU markets through a local presence and with the objective of acquiring European companies. In 2010, EU investments in India amounted to €3.0 billion while Indian investments in the EU amounted to €0.6 billion.[1] These investment relations have been accompanied by increasing short-term employee transfers between India and the EU.

The implications of short-term labour mobility for the economic development of a developing country like India can be manifold. Firstly, the mobility of Indian professionals to the EU countries facilitates the skilling of Indians in professional activities and it also provides global exposure, which is valuable in the wake of the changing world order. Indian professionals with international exposure and a knowledge of international practices can not only benefit their own MNC companies in the future but they may also improve the productivity of domestic (Indian) firms in the longer run through inter-firm labour mobility. Secondly, Indian professionals travelling to the EU benefit the EU countries by providing cost-effective solutions to the business problems of the parent firms. This requires mobility of professionals at reasonably higher levels in the corporate hierarchy. Thirdly, EU professionals travelling to India help the firms to adopt superior management techniques and they help train Indian professionals, which improves the skill levels of Indian workers. Finally, Indian professionals working in the EU often transfer significant funds to their families in India as remittances and these add to foreign exchange earnings and facilitate development by increasing the purchasing power of families.

In this chapter, we attempt to understand investment and labour mobility linkages between India and the EU. We follow the respective investment and labour immigration regulations, the statistics on investment as well as short-term and long-term immigration flows between the two sides. In-depth interviews conducted by the authors are used to identify key features of the investment and labour mobility linkages. The Schengen Treaty and the Blue Card scheme for the migration of skilled professionals to the EU are analysed in this context. The interviewees were mostly top-level executives at companies based in France, Germany and the Netherlands which have operations in India. Interviews were also conducted with Indian companies that have operations in the EU countries, especially in the IT sector. We present a detailed analysis of country-specific visa regimes for India and the EU together with their respective problems and advantages with regard to India–EU investment relations.

---

[1] See the European Commission page on Trade for India, http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/india/ (accessed 11th October, 2011).

2 Review of the Literature on Investment and Mobility

The importance of FDI as a mutually beneficial phenomenon for both the home and host countries has been documented extensively in the academic literature. From the standpoint of firms, FDI has had profitability objectives and it has traditionally taken either of two forms: horizontal or vertical. Horizontal FDI has been favoured by firms seeking to replicate production processes across geographies (Markusen 1984). On the other hand, vertical FDI has primarily been undertaken by MNCs to take advantage of lower production costs in host geographies and to integrate the firm vertically, giving rise to intra-firm trade in intermediates (Yeats 2001; Borga and Zeile 2004).

From the point of view of the host countries receiving FDI, the existing literature documents the impact on economic development (Dunning 1981; Gray 1985; Dunning and Cantwell 1990; Ozawa 1982). In particular, FDI-receiving countries have mostly been less developed and emerging economies. These countries have a labour surplus, which attracts foreign investors thanks to lower production costs. Their economies have been capital constrained, and they stand to gain from foreign investment and from associated employment opportunities for their surplus labour force.

In addition to FDI, international labour mobility has been documented as an important way of accelerating development in less developed countries (LDCs). According to Mills (1929[1848]), transferring both labour and capital resources from countries of lower returns to those of higher returns maximises world production. Amidst the 'brain drain' theories of migration (Bhagwati and Hamada 1973), a competing body of literature suggests that a threshold level of emigration does not affect the welfare of the developing country (Johnson 1967; Grubel and Scott 1966).

Some studies such as Mountford (1997) also show that a moderate level of emigration may actually benefit developing countries. These benefits may take various forms, including 'brain circulation' whereby skilled individuals return to the country of origin after working in the foreign country and raise domestic productivity (Johnson and Regets 1998), remittances from skilled and less skilled migrant workers and resulting multiplier effects through increased domestic demand (Taylor and Adleman 1995) and technology transfer (Teferra 2000).

Notwithstanding the many recognised benefits of labour mobility, in practice free labour movement between the developed and developing world remains a problematic and sensitive issue. Walmsley and Winters (2005) empirically estimate the costs of labour immigration quotas by developed countries and argue that labour mobility restrictions impose a far higher cost on the world than trade and capital mobility restrictions do. Clemens (2010) suggests that the developed world needs to consider world immigration policies seriously if meaningful global integration is to be achieved.

The economic literature also documents the complementary nature of foreign investment and labour mobility in terms of facilitating growth and development

(Panagariya 1999; Mody 2004). As Iredale (1999) and Stahl (1993) have noted, much of the international mobility of labour is in effect associated with capital mobility. Iredale (2001) argues that the internationalisation of firms must be supported by the internationalisation of skilled labour. Additionally, a case is made for the mobility of MNC employees for professional training purposes. Nunnenkamp and Pant (2003) suggest the growing need for developing countries to bargain for greater labour mobility in response to demands to relax FDI restrictions and to be granted treatment by the developed countries on par with local entrepreneurs under bilateral investment treaties. Capital mobility has been considered to be as important as labour mobility in economic integration arrangements. Hoekman and Saggi (2000) and Kumar (2001) have highlighted the possibility of an increased asymmetry between the developed and the developing worlds if free capital movement is not matched by the free movement of labour.

The GATS negotiations have also stressed the importance of labour mobility for welfare and as a complement to capital mobility. Young (2000) and Panagariya (1999) have further argued that developing countries should only sign investment agreements with developed countries if the latter are willing to allow easier labour migration from developing countries. To support his argument, Panagariya (1999) used the findings of Hamilton and Walley (1984), who concluded that the gains from labour mobility are far higher than those from any other form of liberalisation.

In her analysis of various regional trade agreements (RTAs), Chanda (2011) states that economic integration arrangements are increasingly addressing the issues of labour mobility, even though they differ in their approach. Two different approaches noted in this regard are as follows: (1) Offering broad mobility but applying special rules to selected sectors or excluding some sectors from the purview of labour mobility provisions; and (2) Limiting labour mobility to certain groups of service suppliers, while covering all sectors. The primary focus remains on mobility that is only related to certain kinds of trade and investment activities. In the context of India and the EU, a Broad-based Trade and Investment Agreement (BTIA) is under negotiation. While the EU has been largely urging India to liberalise trade in goods and services (especially through FDI presence), India has been negotiating for greater labour mobility. Negotiations have been underway since 2005, and about 14 rounds had been completed by February 2012. An agreement is expected to be signed in the near future.

From the literature cited above, one can clearly see the importance of studying investment and associated labour mobility linkages.

3 Investment Flows and Regulations

For a long time, India has been a favourable investment destination for many countries in the EU, the UK being the most predominant of these for historical reasons. Indian investments in the EU have increased in recent times, with various

FDI inflows to India from major EU investors
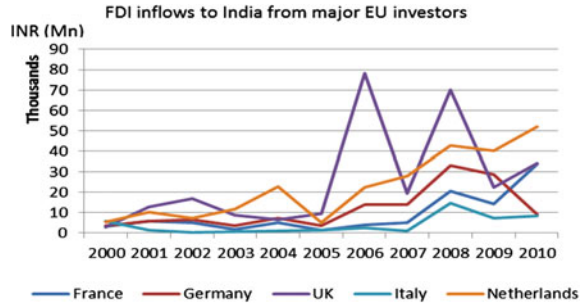
Indian companies, especially those in the IT and ITeS sector, investing in EU countries. Given the role of investments and labour mobility for both developed and developing nations, as we have indicated in the review of academic literature, it is worth studying the role of labour mobility in the shaping of India–EU investment relations in some detail.

On the basis of the latest trends in FDI inflows from EU countries to India, the principal EU investors in India have been Germany, the UK, France, Italy and Belgium. Figure 1 traces the flow of FDI to India made by selected EU countries between 2000 and 2010.[2]

An examination of the sectoral profile of EU companies investing in India indicates that the MNCs primarily belong to the engineering (electronic, electrical, construction), automobile, financial and banking, fast moving consumer goods (FMCG) sectors. These MNCs have had professional relations with India for many years. The extent of EU investments in India has increased significantly since 1991 when India embarked on its economic liberalisation programme, and they were given a further boost in the last decade after the introduction of new reforms and the removal of FDI restrictions in key sectors during the latter half of the 1990s. Some of the biggest EU companies with an investment presence in India include Philips, Siemens, Deutsche Bank, HSBC Bank and Volkswagen.

Over the last two decades, India–EU relations with respect to both investment and short-term labour mobility have developed significantly within the context of the information and communications technology (ICT) sector. Spain, Italy, France, Germany and the UK account for approximately 70 % of total turnover in the EU. In 2010, the EU and India ranked first and second, respectively, as exporters of ICT services among WTO member countries. Their respective shares of world ICT exports stood at 58 and 19 % in 2009 (WTO 2011). The importance of the ICT sector in both India and the EU is also reflected in the growing professional relationships between the two sides in this area, with several EU companies in the

---

[2] An examination of the statistics also shows Cyprus as one of the top investors in terms of total FDI flowing into India from the EU between 2000 and 2010, although this is mainly because of tax incentives for investment from Cyprus and a double taxation treaty between India and Cyprus, which incentivises investment in India. For this reason, it is not included in the graph.

ICT and consulting domains establishing an investment presence in India. Many Indian companies working on IT-related projects for their clients in the EU have set up branches or subsidiaries in the EU to serve their customers better. Given the people and skill-intensive nature of such businesses, the growing investment relationship between India and the EU necessarily has a bearing on the related mobility of professionals and other service providers in order to prospect, execute and carry out business transactions.

4 EU Immigration Regulations

Our next step is to analyse immigration regulations in selected EU countries. Investment-related movements of professionals between India and the EU occur at a company and an individual level. Company-level movements can be classified under the business visitor, intra-corporate transferee and contractual service provider categories of non-immigrant visas/work permits and are short term in nature and respectively aimed at prospecting, supervising or executing the projects. Independent professional mobility is usually for a longer duration and takes place under immigrant visas. Table 1 summarises the salient characteristics of both kinds of movement.

4.1 Work Permits in the EU

This section offers an overview of EU formalities for work permits and residence visas. We adapt a two-level approach for this task. First, we outline the work permit procedures of the most important countries within the realm of India–EU investment and labour mobility relations.

4.1.1 Visa Regulations in Selected EU countries

The two most important visa categories of interest from the perspective of investment presence are as follows:

1. Business visas
2. Work/Employment visas

Most countries require a separate residence permit in addition to a work visa to stay and work in their territory. Within the EU, visa regulations and formalities vary from country to country, and for this reason, we offer a broad view of country-wise visa regulations for some of the main investors. The countries covered below include the following: the United Kingdom, Germany, France, the Netherlands and Italy.

Table 1 Differences between company and individual movement of professionals

Attribute	Company-level movement	Individual-level movement
Categorisation under WTO	Business visitors, Intra-corporate transferees and contractual service suppliers	Independent professionals
Time duration	Short-term	Long-term
Purpose	Company projects	Immigration/Short-term work
Parties responsible for paper and legal work and compensation	Company	Migrating individual
Nature of visa	Non-immigrant visa/short-term work permit	Mostly immigrant visas
Affecting factors	Qualifications of the employee and company and client demand	Qualifications, experience, language skills, work experience, education and age
Job guarantee	100 %	Individual may or may not have a job at the time of migration

Source Reproduced from Table 4 of Satija and Mukherjee (2013)

(1) *United Kingdom* (*UK*)

The UK has a very streamlined procedure for immigration. The number of categories under which visas are available clearly shows the different implications that each category has for the UK. In terms of work visas, the UK offers five tiers with subcategories divided by immigration type. Table 2 offers an overview of the types of visas and the profile of work or business they are related to.

Of the categories outlined in Table 2, the Tier 2 General and intra-company transfers categories are currently those most used to transfer individuals travelling from India to the UK for work purposes.

(2) *Germany*

In the aftermath of the German Immigration Act of 2005, Germany has endorsed a policy to encourage skilled workers from around the world to move to Germany. The professions most in demand are university lecturers, scientists, engineers and high-technology professionals. In terms of visas related to work or business, the following categories of German visas are easily discernible (Table 3).

In addition to this and unlike the UK, Germany is a signatory of the Schengen Agreement (which we will look at in detail later on). This allows professionals holding a Schengen Visa to travel within the Schengen countries primarily for work purpose, normally for a period of up to 90 days.

(3) *France*

France has a host of visa categories for work visas and these help separate visa categories according to the type of work. The Table 4 lists the types of visas and eligible individuals and offers a brief idea of the visa categories:

Table 2 UK visa categories and details

Visa type	Tier	Categories	Eligible individuals
Work/employment	1		Employment-based immigration
			Highly skilled migrants, entrepreneurs, investors and foreign graduates of UK educational institutions
	2	General	Skilled workers coming to the UK with job offers that cannot be filled by existing settled UK employees
	3	Intra-company transfers	Employees of MNCs who are being transferred to a UK-based branch
	4		Unskilled temporary migration
	5		Temporary workers from countries with which the UK has some prior arrangements
Business		Entrepreneurs	
		Investors	
		Sole representative of overseas company	Employers
		Sole representative of overseas company	Employees
		EC association agreement	Only for Bulgaria and Romania

Source Prepared by the authors with inputs from http://www.workpermit.com/uk/uk.htm (accessed 25 March 2013)

Table 3 German visa categories and description

Visa type	Description
General employment work permit	Standard visa issued to individuals with a job offer from a German business
Specialist professional work permit	Visa for skilled professionals including university teachers, individuals with special training, experienced managers, etc
EU nationals work visa	Most EU nationals do not need to apply for a German work visa, with the exception of some EU countries whose nationals do need to apply
'Van Der Elst' work permit	This is similar to the intra-company transfer in the UK. It helps German companies to move staff to Germany for work purposes
Self-employed work permit	For individuals seeking to start a business in Germany. A detailed business plan is required

Source Compiled by the authors with details from http://www.globalvisas.com/germany_visa/german_work_visa.html (accessed 20 March 2013)

It is clear from the above that French work permits are differentiated by the type of work and they even include categories for seasonal work and have separate provisions for senior executives that are distinct from those for the business visa

Table 4 French visa types and description

Visa type	Description
Skills and talent permit	Allows visitors to carry out work as part of their specialised project. This can be used by entrepreneurs who travel for business purposes
Salaried temporary work permit	Applies to individuals from different professions who can apply and obtain a work permit through this scheme
Employee on assignment/ secondment permit	Applies to non-French companies who want to transfer employees to France in order to service clients. Issued for a maximum period of 18 months and may be extended for another 9 months
Employee on assignment card	Applies to senior managers and executives of a French company that is a part of an international group with a minimum salary base. A residence permit of up to 3 years is issued
Seasonal worker permit	Applies to workers engaged in seasonal activities for more than 3 months. A residence permit valid for 3 years is issued and an extension of up to 6 months is possible
Scientific permit	Applies to individuals with a Master's degree who want to pursue research

Source Compiled by the authors with inputs from http://www.globalvisas.com/visa_france/work_visa_france.html and Wise (2013) (accessed 20 March 2013)

category. Reports suggest that entrepreneurs travelling for business reasons may be using the first category 'Skills and Talent Permit' for business purposes, as that offers them the option to bypass the labour office, which has a role to play in the 'other visas' (Wise 2013). France is a signatory of the Schengen Treaty, and, accordingly, individuals with Schengen Visas can work in France in accordance with the visa conditions.

(4) *The Netherlands*

Visa categories in the Netherlands are not as well defined as they are in the other countries described above. It has also been recognised that it is more difficult to obtain work permits in the Netherlands, and any Dutch employer seeking to employ a foreigner must go through the labour office to advertise the position first in most media forums and then apply for a work permit. However, like Germany, the Netherlands also recognises and issues Van der Elst work permits, which allows a Dutch company to transfer foreign employees (who have been with the company in another country for at least 12 months) to the Netherlands for work purposes for a maximum period of 6 months. Additionally, the Netherlands also has working holiday visas, which allow young citizens (18–30 years old) from select countries such as New Zealand, Canada and Australia to stay in the Netherlands for 12 months and they are allowed to work to finance their expenses. Like Germany, France and Italy, the Netherlands is covered by the Schengen Treaty. In 2011, the Highly Skilled Migrants Scheme made a case for allowing highly skilled foreigners to be granted entry if the wages were not exceptionally high for the relevant job. The Modern Migration Policy was drafted in 2010 with the aim of

making the Netherlands more attractive to migrants who could strengthen the Dutch economy, but it has not been implemented yet. This specifically caters to high-skilled workers and foreign investors (EMN 2011).

(5) *Italy*

Immigration to Italy for work is a relatively cumbersome procedure. Work permits may be obtained under two separate categories:

1. Within the quota system and
2. Outside the quota system[3]

Under the quota system, the Italian government fixes the number of work permits that may be issued for a given year. This is true for two categories of workers: (1) Autonomous workers who include professionals working independently or those setting up businesses and (2) Subordinate workers, which includes anyone employed by an Italy-based company for a fixed term or open-term contract or seasonal employment.

Although bound by quotas, certain selected professional categories are allowed work permits outside the mentioned quotas. These include highly qualified managers, university lecturers, foreign workers assigned to an Italian company to carry out specific services in the Italian territory on the basis of a services agreement, artists, news people, etc.

Italian Business visas are available for individuals as self-employed professionals, merchants, artisans, partners and consultants to Italian firms.[4] However the business and work visa categories often tend to intersect. In addition to this, Italy is also covered under the Schengen Agreement as already described for Germany, France and the Netherlands.[5]

4.1.2 The Schengen Treaty

The Schengen Treaty was initially signed by seven countries in June 1985 and it currently includes 25 countries. Ireland and the UK are the only two countries which are a part of the EU and not a part of Schengen. The Schengen Visa allows individuals to travel across the Schengen countries for a period of 90 days during a 6-month period. Visas are issued for specific purposes under the categories outlined in Table 5. Applicants for a Schengen Visa need to apply to the country where they first travel, or the country where they stay for the maximum duration.

---

[3] See the Italian work permit process, http://www.mpimmigration.com/index.php?option=com_content&view=article&id=48&Itemid=27 (accessed 25 September 2011).

[4] See http://www.esteri.it/visti/home_eng.asp (accessed 25th September, 2011).

[5] For a short description of EU immigration regulations for some other EU countries see Mukherjee and Chanda (2012).

Table 5 Schengen visa description

Visa type	Description
A (airport transit visa)	Allows transit through an airport in a Schengen country without entering the territory
B (transit visa)	Allows transit (no more than 5 days) through Schengen countries by car, coach or travel through different airports en route to a non-Schengen country
C (short-stay visa)	Allows visits to the Schengen territory for the purposes of tourism, family or business visits for 90 days within a given 180-day period
C (circulation visa)	Allows short stays (valid for at least a year) for business visits with an invitation letter from a Schengen country, aircrew members or people with a special interest in the Schengen territory
D (long-stay visa)	Allows stays for periods of more than 3 months, especially for study, work or retirement

Source Compiled by the authors with inputs from http://www.immihelp.com/visas/schengenvisa/ (accessed 25 March 2013)

The Schengen Visa requirements are also different for countries around the world, with a few countries receiving preference over the rest in terms of the formalities to be fulfilled. India is listed among the countries whose residents compulsorily require a visa to travel to the Schengen territory. Schengen rules suggest that applicants are required to apply for a Schengen Visa to the first country of visit. However, this is true for short-term stays in the Schengen territory (i.e. 3 months). For longer term stays, the country-specific visa formalities must be followed.

4.1.3 Immigration of High-Skilled Workers: The EU Blue Card Proposal

Most European countries are currently plagued by a common problem: a shortage of skilled professionals in several fields. This problem is expected to increase in the future as the populations of many EU countries age. A number of steps have been envisaged to tackle this problem. There are country-specific initiatives such as the German Immigration Act, 2005 intended to encourage the immigration of skilled professionals, as we noted earlier. The professions most in demand are as follows: lecturers, scientists, engineers and high-technology professionals. Similar initiatives have been undertaken in other EU countries including Belgium and the UK. This subsection analyses the sectors that have seen higher proportions of FDI inflows and projected employment gaps in the EU in the long run in order to assess the likely link between investment flows and the complementary mobility of persons to fill labour market requirements.

In the recent past, the tertiary sector of most EU countries received the largest share of foreign investment. Table 6 shows FDI inflows for selected EU economies during the period 2007–2010.

Table 6 FDI inflows (flow) in selected EU economies

Country	Sector	2010	2009	2008	2007
France	Primary	−648	262.9	988.8	183.4
	Secondary	5,911.70	1,324.10	19,326.90	6,973.40
	Tertiary	−4,574.60	14,435.30	4,356.40	41,042.20
Germany	Primary	176.3	−57	2,217.70	765.1
	Secondary	17,619.90	10,496.50	−5,608.80	7,553.70
	Tertiary	26,415.30	30,301.80	22,410.40	74,110.60
UK	Primary		−6,222.30	1,080.90	1,738.80
	Secondary		8,216.30	34,309.10	23,642.80
	Tertiary		64,806.80	49,848.70	1,61,003.40
Italy	Primary		6,913.80	7,748.90	4,512.50
	Secondary		4,363.00	4,262.60	6,750.30
	Tertiary		16,856.70	16,779.60	21,460.70
Poland	Primary		15.8	159.9	194.9
	Secondary		4,749.60	2,282.10	6,839.00
	Tertiary		8,398.50	12,427.60	15,259.30

Source Compiled by the authors using statistics from International Trade Centre Investment Map http://www.investmentmap.org/, accessed 25 March 2013

The table shows that, by and large, the tertiary sector has consistently attracted a higher proportion of FDI inflows for most EU countries.

Reports on employment projections in the EU confirm that there will be more job vacancies in the finance and business activities segments in the near and long term (EMN 2011). These are also the sectors where the EU has most outward investments, indicating a linkage between sectoral investments, growth and labour requirements. The graph below shows that business and other services have seen greatest growth, confirming this link between investment, growth and labour market needs, and accordingly by inference, immigration requirements across sectors as well (Fig. 2).

Table 7 shows what the estimated employment gap will be by 2050 and the employment rate required to fill the vacancies against a current employment rate of around 63 %. Table 8 shows the number of skilled workers coming to select EU countries in recent years, mostly on short-term visas.

These tables and charts clearly highlight the fact that skill deficits in the EU are a long-term problem and that short-term work permits will not be enough to solve the problem. However, the issuing of long-term permits remain a sensitive issue in the EU, notwithstanding the need for such workers.

In recognition of the shortage of high-skilled workers, the EU Blue Card scheme had been proposed and agreed upon as a way to introduce common rules of immigration for highly skilled workers from outside the EU.[6] However, some

---

[6] See European Union, "EU Blue Card", http://www.apply.eu/BlueCard/ (accessed 2nd August, 2012).

Employment trends by broad sector shares in % EU-25+ Norway and Switzerland
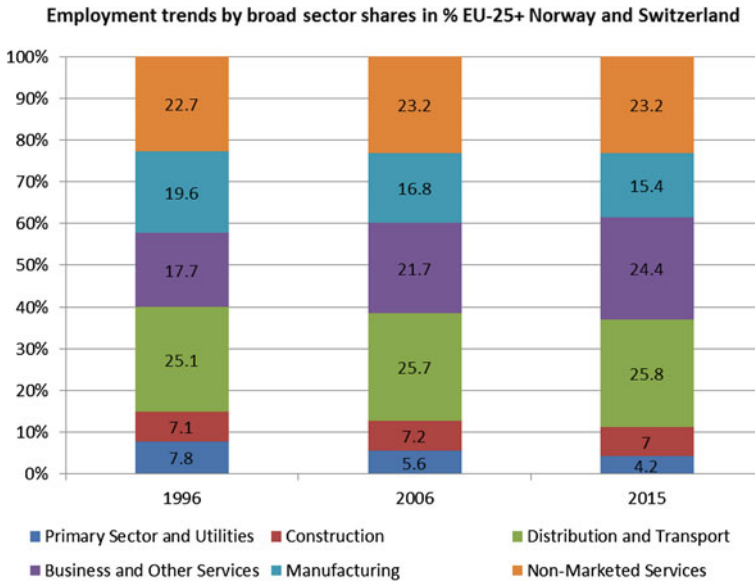
Fig. 2 Employment trends by broad sector shares in % EU-25 + Norway and Switzerland. *Source* Cedefop (2008, Fig. 3: 42). *Note* Figures are as per IER (Warwick) Estimates based on Cambridge Econometrics E3ME model. E3 refers to energy–environment–economy. E3ME models were first constructed to analyse the long-term implications of policies on energy–environment–economy. For more details, see Pollitt (2009)

Table 7 Employment gap in the EU by 2050 (four scenarios)

Scenario	Employment gap (in thousands)	Employment rate needed to close gap (%)
Ageing effect only	30,485	76
Baseline scenario	30,216	76
No migration scenario	20,904	78
Low growth	25,915	75
High growth	36,972	76

Source Cedefop (2009, Table 3.2: 32), http://www.cedefop.europa.eu/EN/Files/5194_en.pdf, accessed 10 June 2012

countries including Denmark, the UK and Ireland remain outside the scope of this scheme. It has been left to the countries to decide whether they wish to participate in the Blue Card scheme or not. The purpose of the scheme is to[7]:

---

[7] See European Union (2009) "Entry and residence of Highly qualified workers (EU Blue Card)" and EC Directive (May 2009), 2009/50/EC http://europa.eu/legislation_summaries/internal_market/living_and_working_in_the_internal_market/l14573_en.htm, accessed 15 November 2011.

Table 8 High-skilled worker entry from non-EU nations

Country	2004	2005	2006	2007	2008	2009
Poland	5,083	4,583	4,046	4,424	4,920	5,697
UK	69,000	52,000	58,000	52,000	50,000	36,000
Spain		8,899	3,462	4,637	9,407	6,568
France	917	981	1,111	1,254	3,124	3,953
Germany				151	221	311

Source European Migration Network (2011), 'Satisfying Labour Demand through Migration', European Commission, Table 8, p. 77, http://ec.europa.eu/home-affairs/policies/immigration/docs/Satisfying_Labour_Demand_Through_Migration_FINAL_20110708.pdf, accessed 15 July 2012

(a) facilitate the admission of these persons by harmonising entry and residence conditions throughout the EU;
(b) simplify admission procedures;
(c) improve the legal status of those already in the EU.

The Blue Card scheme allows highly skilled workers from third countries to work in the EU for an initial period of 4 years if they have a college diploma or have completed 5 years of occupational training.

However, the scheme still has to be implemented by several EU countries that need to approve blue cards for skilled immigrants and their families. It has also faced opposition because of increased unemployment in the EU.

In summary, on the basis of the immigration regulations outlined in this section, we can infer that the norms vary substantially across the EU member countries (indeed, one could design a labour mobility index similar to the one on investment openness[8]). Individual countries also vary in terms of the category of visas they commission. The Schengen Visa facilitates the movement of tourists and professionals to and from the various EU member countries that are signatories to the Schengen Treaty. However, some countries such as the UK are not part of this treaty. Finally, the dearth of skilled professionals in most EU countries has led to special provisions involving more conducive visa regulations for the immigration of skilled professionals to various EU countries. The EU Blue Card Scheme has been envisaged to make it easier for skilled professionals to migrate to the member countries of the EU Blue Card zone. Countries including the UK and Ireland have opted out of this treaty.

The following section highlights the findings from the in-depth interviews that were conducted by the authors. It outlines the characteristics of Indians travelling to the EU and the associated constraints that they face.

---

[8] The design of such an index has not been attempted in this chapter, but it is a matter worth investigating in future research on labour mobility.

5 Labour Mobility from India to the EU[9].

5.1 Profiles of Indian Nationals Visiting the EU

The need for Indian nationals to travel to the EU may be a consequence of either of two types of investment relations:

1. As employees of EU-based MNCs with operations in India

   Employees of MNCs may need to travel to the EU for three primary reasons:

(a) To upgrade their skills
(b) To attend business meetings/conferences
(c) To familiarise themselves with the job requirements for offshore business processes

The first of these is aimed mainly at employees at the lower or middle levels of the corporate hierarchy who need to travel for short periods to upgrade their skills, and they then implement these skills upon their return to India. The second type includes travel by senior corporate managers who need to travel for short periods to attend business meetings or workshops. Finally, the third type—a recent development after the onset of offshoring—mostly includes relatively junior employees, skilled software engineers and analysts, who travel to the EU to understand the job requirements for the EU market. Since the early years of the twenty-first century, many European MNCs have set up teams in India where their employees work, and these employees occasionally travel to the EU for short periods of about 3 months to familiarise themselves with the software and for the purposes of knowledge transfer.

2. As employees of Indian companies with EU engagements

With the rise in offshore outsourcing, many Indian companies—which may or may not have a business presence in the EU—are serving Europe-based client companies. Employees of such companies are required to travel to the EU for reasons that are similar to those mentioned earlier for the offshore employees of MNCs. Statistics on the number of workers travelling to the EU from India are hard to come by, even for the IT sector. Based on the primary surveys of some companies, Satija and Mukherjee (2013) have found that TCS and Infosys apply for 4,800–5,400 visas each year to send employees to the EU. European companies, such as Cognizant Technology Solutions, apply for an annual average of 3,600 visas to send their employees in India to the EU. However, the issues faced by the Indian companies with regard to the short-term transfers of their employees to the EU are quite different from those faced by MNCs with operations in India and which need to send their employees in India to locations within the EU.

---

[9] This section of the chapter draws on a previous study by Chanda (2008)

The following section discusses some features of the immigration policies of EU countries and their bearing on investment-related mobility between India and the EU. These are based on interviews conducted by the authors.

5.2 Features and Implications of Immigration to the EU

Most respondents agreed that although immigration guidelines are unambiguous for the EU, the applicants suffer because of long timelines, cumbersome processes and procedural requirements. Some countries do not have a long-term multiple entry visa system. There are tedious legalisation and attestation requirements. Large variations exist across countries, even for visa renewals and allowing dependants to migrate. A detailed analysis is provided below to highlight the key features.

5.2.1 Work and Business Visa

The key features of work and business visas are listed below:

- Work/employment visas have different procedures for different countries, and the time required to approve a work visa may vary from a few weeks, as in the case of the UK, to about 1–2 months for some other EU countries.
- A business visa is applicable to individuals who wish to visit the particular EU country to start a new business, expand an existing business or attend business meetings.
- Countries like Italy and France have 'self-employed professionals and skills and talent permit' categories, which allow both employers and employees to immigrate, bypassing the work visa formalities.

Respondents complained about thin lines of difference between work and business permits. Ambiguity in the requirements for most countries and vagueness in the definition of visas have resulted in some work individuals travelling to the EU on business visas while business individuals have travelled on work visas in several cases.

Respondents noted that there have been several misunderstandings about the visa categories on the part of both EU and Indian companies. Employees travelling on business visas have ended up doing work that would have qualified them for a work permit. This has led to some legal problems in the past, with Indian nationals facing arrest because they had travelled on an incorrect visa category.[10]

---

[10] The case of I-flex, where the CEO and some company employees were detained in the Netherlands for travelling on business visas when they were working in the country, is an example of the type of problems that can arise due to the thin lines of difference between work and business visas. See *The Indian Express* (30 March 2003).

Some organisations have subsequently put strong policies in place and have obtained work permits for any work done on-site.

Problems also arise with documentation requirements. When applying for a work permit, the applicant needs to show a birth certificate and other original documents. Consulates have occasionally questioned the authenticity of some Indian documents. MNCs, especially those from the EU, have attempted to streamline this process. A few MNCs identify potential resource persons who are likely to travel overseas in the near future, and they help them to organise their documents in advance so that they can apply for a work permit at short notice. For the legalisation process, some companies hire an external agency to verify the documents and get them notarised. In the wake of offshoring, some companies followed this procedure in 2000–2001. There was a significant initial cost for this process, but the investment was nevertheless made to ensure that the right skill sets could move easily when required. It was also observed that Indian employees of EU MNCs find it easier to travel than employees of Indian companies. Some EU MNCs can manage the visa system more efficiently thanks to their established reputation, thereby reducing the total turnaround time for obtaining a visa.

Finally, most respondents said that there was a lack of transparency in the process to decide whether to grant a permit or not, notwithstanding the fact that the procedures used to apply for work permits and business visas have been clearly outlined by the EU countries. There are cases of visas being denied without any specific reason even though all the formalities have been met.

5.2.2 Investment Presence in the EU and Work Permits

Here, we refer to Indian companies with investments in Europe as suppliers of intermediate inputs to EU firms offshore (in India), or as players in the EU market, or which are present in the EU through joint ventures/partnerships. The interviews revealed that the time needed to establish a presence varies from 2 weeks to several months depending on the EU Member State. Employment terms and conditions are also different. In most cases, no distinction is made between high- and low-value investments. The business environment varies across EU Member States as well.

Respondents from the IT sector said that the easiest way to enter and operate in the EU market of any of the countries is to establish a partnership with a local firm. This helps them understand the market better and to cater to market demands more efficiently. For companies which are not in partnership with local firms, having a branch or a subsidiary in the EU helps them establish an identity. Labour mobility is facilitated by a presence in the EU. A company with a branch or subsidiary is a source of employment for EU workers. Since these companies play a role in local employment, they find it easier to obtain short-term work permits for their Indian employees when such requirements arise.

The increase in offshoring has meant that a significant number of Indian IT professionals need to travel to the EU to understand the requirements of their

clients. In some countries, such as the Netherlands, wage laws and the laws for contracting and hiring employees can be complex. Companies also hire locally, and in certain cases, they must abide by local employment regulations in order to set up a commercial presence in the first instance. Labour market tests impose additional hiring costs in certain cases.

However, one of the main problems faced by the Indian companies which have investment presence across several EU countries is that each EU country follows its own independent immigration policy (Chanda 2008: Appendix B). Furthermore, companies face other problems related to overtime payments, which they must abide by because of strict labour laws. In India, most companies do not have to pay overtime to employees. Conditions regarding maximum working hours, leave requirements and dismissing and downsizing costs are other factors that increase operational costs in the EU. Respondents suggested that it would be beneficial for Indian companies with a presence across different EU countries if the formalities were streamlined and standardised.[11]

5.2.3 Schengen Visa

One thing that we have learnt from the interviews is that most of Indian nationals who travel to the Schengen territory in the EU for work purposes avail of the type C short-stay visas that we mentioned earlier. The Schengen Visa is one of the most useful options available to Indian nationals travelling to the EU who need to visit several countries for work purposes. Apart from the benefits of allowing visa holders to work across the Schengen territory, the respondents also said that visa approvals take only 2–10 days.

Some respondents said that the benefits of the Schengen Treaty would be greater if the non-signatories of the Schengen Treaty, especially the UK and Ireland, would consider joining. Broadening the scope of Schengen to include countries such as the UK, which has had long-standing investment ties with India, would undoubtedly facilitate labour mobility and foster greater links between India and the UK.

5.2.4 Totalisation

Most respondents believe that India has had mixed success in its bilateral agreements with various nations. There is no EU-wide policy to facilitate such agreements. Most EU member countries have their own social security policies and this makes it difficult to sign one common treaty and it hinders Brussels from adopting

---

[11] Alternatively, Chanda (2008) specifies that labour mobility from India to the EU would be facilitated if EU member countries recognised similar visa procedural formalities, offered greater flexibility for business visas across member countries and created more precise categories of visas between work and business.

a uniform approach on this issue. However, some interviewees did mention that it could be beneficial for India and the respective EU countries to bilaterally nego-tiate such totalisation agreements by maintaining a model agreement (like the one with Belgium) with those EU countries that are of strategic importance to India in terms of labour mobility.

5.2.5 EU Blue Card

Most respondents said that this scheme is undoubtedly one of the most welcome moves for Indian employees wishing to travel to the EU. The card is most suitable for employees who need to stay in the EU for longer periods (more than 3 months).[12] Family unification problems, which were mentioned for some countries, would also be easier to solve.

6 Conclusion

This chapter has looked at the links between foreign investment and labour mobility in the context of India and the EU. Secondary evidence shows that India and most EU member countries have significantly liberalised their investment regulations. However, immigration statistics and visa regulations for the various EU countries suggest that the incidence of these restrictions in their investment and immigration regulations varies.

The in-depth interviews conducted by the authors highlight the ambiguities associated with differentiating between work and business visas in most EU countries as well as transparency problems linked to the granting of visa requests and the immigration of dependants. Totalisation-related issues are another cause for concern. These are currently dealt with through bilateral social security agreements between India and the respective EU members.

The Schengen Agreement has been a useful development, especially for Indian IT companies that need to move their employees from one European country to another. However, the Schengen Visa would be even more useful if the EU member countries which have not signed the treaty were to join.

The EU Blue Card scheme provides a means for hassle-free immigration of non-EU skilled professionals into the EU. This would benefit most Indian skilled professionals. However, the introduction of the scheme has been delayed in most countries because of protests, mostly due to fears of increased unemployment in EU member countries if the scheme is introduced. Estimates of long-term

---

[12] In the past, workers posted in any EU country would not be allowed to work in another EU country without a separate work permit from the latter. However, with the implementation of the Blue Card, this extra work permit would not be necessary.

shortages of high-skilled employees in Europe also show how important it is for the EU to manage the immigration of skilled professionals in the longer term.

If investment-related mobility is to be facilitated, it is also necessary to look at the factors that impede investment flows. For the IT industry in particular, the prospects for investment flows from EU countries to India could be improved by ensuring data protection through methods such as the 'enforcement' clause in the Information Technology Rules of 2011 and the NASSCOM directives on data security. India is not currently classified as a data secure country by the EU, and it has not yet obtained 'Safe Harbour Nation' Status from the EU. Accordingly, legislation and initiatives at a government and industry association level, aimed at facilitating investment between the two sides, would also help to create opportunities for skilled mobility.

We can sum up by saying that even though India and the EU have both liberalised their investment regulations, further steps still need to be taken by both sides to facilitate skilled migration and business-related flows. On one hand, this will help the EU to address its shortage of skilled manpower, and on the other, it will provide Indian professionals with an opportunity to learn and increase their skills and productivity. India's development efforts would be significantly supplemented by greater short-term mobility; first, by increasing the prospects of Indian professionals at a global level, second, by both increasing the skill levels of individuals who travel abroad as well as the levels of those who work in close coordination with them when they return to India (brain gain), and third, through remittances sent by Indian professionals to their families back in India. Although the Schengen Agreement and the EU Blue Card scheme are welcome steps towards improving investment-associated labour mobility, they have not been fully implemented in all the EU countries as yet. Speedier implementation of such schemes would be beneficial for countries like India.

References

Agreement on Social Security between the Government of Republic of India and the Government of the French Republic, Ministry of Overseas Indian Affairs, Government of India, New Delhi http://moia.gov.in/pdf/SSAFranceEng_versionforIndia.pdf (accessed 20 March 2013).

Bhagwati, J., & Hamada, K. (1973). The brain drain, international integration of markets for professionals and unemployment: A theoretical analysis. *Journal of Development Economics, 1*(1), 19–42.

Borga, M., & Zeile, W. (2004). International Fragmentation of production and intra-firm trade of US multinational companies, *Working Paper No. WP2004-02* Bureau of Economic Analysis, Washington, DC.

Cedefop. (2008). Future skill needs in europe medium term forecast, Luxembourg.

Cedefop. (2009), Skills for Europe's Future: Anticipating occupational skill needs, Cedefop Panorama Series, Luxembourg, http://www.cedefop.europa.eu/EN/Files/5194_en.pdf, accessed on 2 January 2014.

Chanda, R. (2008). Trade in IT and IT-enabled services: Issues and concerns in an India-EU trade and investment agreement, Research Report, Indian Council for Research on International Economic Relations, New Delhi.

Chanda, R. (2011). Labour mobility provisions in RTAs. In International Seminar on Selected Outstanding Issues in Migration, ADB Institute, Manila.

Clemens, M. (2010). A labour mobility agenda for development. Working Paper 201, Centre for Global Development, Washington, DC.

Do you need a Visa? http://www.esteri.it/visti/home_eng.asp (accessed 25 September 2011).

Doing Business 2007—How to reform: comparing regulation in 175 economies. World Bank and the International Finance Corporation, http://www.doingbusiness.org/∼/media/FPDKM/Doing%20Business/Documents/Annual-Reports/English/DB07-FullReport.pdf (22 November 2012).

Doing Business Data, World Bank and International Finance Corporation, http://www.doingbusiness.org/data (accessed 22 November 2012).

Dunning, J. (1981). Explaining the international direct investment position of countries: Toward a dynamic or developmental approach. *Weltwirtschaftliches Archiv, 11*, 30–64.

Dunning, J., & Cantwell, J. (1990). The changing role of multinational enterprises in the international creation, transfer and diffusion of technology. In F. Arcangeli, P. A. David, & G. Dosi (Eds.), *Technology Diffusion and Economic Growth: International and National Policy Perspectives*. Oxford: Oxford University Press.

Emigration Services, Bilateral Agreements, Ministry of Overseas Indian Affairs, Government of India, New Delhi. http://moia.gov.in/services.aspx?id1=81&idp=81&mainid=73 (accessed 20 March 2013).

Eur-Lex. (2009). On the conditions of entry and residence of third-country nationals for the purposes of highly qualified employment, Council Directive 2009/50/EC. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CEL'EX:32009L0050:EN:NOT (accessed 15 July 2012).

Eurofast. (2011). Outbound Indian Investments via Cyprus: The key to the International Market, Nicosia, Cyprus. http://www.eurofast.eu/dev1/phocadownload/articles/ar11_004%20cyprus_outbound%20indian%20investments%20via%20cyprus%20jan%202011.pdf (accessed 20 October 2011).

Europa, Entry and residence of highly qualified workers (EU Blue Card), http://europa.eu/legislation_summaries/internal_market/living_and_working_in_the_internal_market/l14573_en.htm (accessed 20 March 2013).

European Commission, Trade, Countries and Regions—India, http://ec.europa.eu/trade/creating-opportunities/bilateral-relations/countries/india/, Brussels (accessed 20 March 2013).

European Migration Network. (2011). Satisfying labour demand through migration, European Migration Network, European Commission, Brussels.

European Migration Network. (2012). Annual policy report, 2011: Migration and Asylum in the Netherlands, European Migration Network, European Commission, Brussels.

European Union Blue Card Network, EU blue card, http://www.apply.eu/BlueCard/ (accessed 2 August 2012).

German Work Visa http://www.globalvisas.com/germany_visa/german_work_visa.html (accessed 25 September 2011).

Global Visas, Indian Work Permit, http://www.globalvisas.com/india_visas/indian_work_permit.html (accessed 22 November 2011).

Gray, P. (1985). Multinational corporations and global welfare: An extension of Kojima and Ozawa. *Hitotsubashi Journal of Economics, 26*(2), 125–133.

Grubel, H. G., & Scott, A. (1966). The international flow of human capital. *American Economic Review, 56*(1/2), 268–274.

Hamilton, B., & Walley, J. (1984). Efficiency and distributional implications of global restrictions on labor mobility: Calculations and policy implications. *Journal of Development Economics, 14*(1), 61–75.

Hoekman, B., & Saggi, K. (2000). Assessing the case for extending WTO disciplines on investment-related policies. *Journal of Economic Integration, 15*(4), 629–653.

International Trade Centre, Investment Map, http://www.investmentmap.org/ (accessed 15 April 2012).

Investment and Technology Promotion Division. (2007). India—Dynamic Business Partner: Investor friendly Destination, Ministry of External Affairs, Government of India, New Delhi. http://www.indiainbusiness.nic.in/Book.pdf (accessed 7 December 2012).

Iredale, R. (2001). The migration of professionals: Theories and typologies. *International Migration, 39*(5), 7–26.

Iredale, R. (1999). The need to import skilled personnel: Factors favouring and hindering its international mobility. *International Migration, 37*(1), 89–123.

Italian Work Permit Process, http://www.mpimmigration.com/index.php?option=com_content&view=article&id=48&Itemid=27, Milan (accessed 25 September 2011).

Johnson, H. (1967). Some economic aspects of brain drain. *The Pakistan Development Review, 7*(3), 379–411.

Johnson, J. M., & Regets, M. (1998). International mobility of scientists and engineers to the U.S.: Brain drain or brain circulation? National Science Foundation Issue Brief, 98–316. http://www.nsf.gov/statistics/issuebrf/sib98316.htm

Kumar, N. (2001). WTO's emerging investment regime: Way forward for Doha Ministerial Meeting. *Economic and Political Weekly, 36*(33), 3151–3158.

Markusen, J. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics, 16*(3–4), 205–226.

Mills, J. (1929[1848]). *Principles of political economy*. London: Longman.

Ministry of External Affairs. (2007). Dynamic business partner: Investor friendly destination. New Delhi: Government of India, Investment and technology Promotion Division, http://www.indiainbusiness.nic.in/Book.pdf, accessed 7 December 2012.

Mody, A. (2004). Is FDI integrating the world economy? *The World Economy, 27*(8), 1195–1222.

Mountford, A. (1997). Can a brain drain be good for growth in the source economy? *Journal of Development Economics, 53*(2), 287–303.

Mukherjee, D., & Chanda, R. (2012). Investment and migration linkages between India and the EU. Working Paper No. 371, Indian Institute of Management Bangalore, August and CARIM-India Research Report 2012/16, Migration Policy Centre, European University Institute, Florence.

Nunnenkamp, P., & Pant, M. (2003). Why the case for a multilateral agreement on investment is weak. Kiel Discussion Papers, Kiel Institute for World Economics.

OECD. (2010). International migration and the United Kingdom. Report of the United Kingdom SOPEMI correspondent to the OECD, Paris.

Ozawa, T. (1982). A newer type of foreign investment in third world resource development. *Rivista Internazionale di Scienze Economiche e Commerciali, 29*(12), 1133–1151.

Panagariya, A. (1999). The millennium round and developing countries: Negotiating strategies and areas of benefits. In G-24 Discussion Papers 1, United Nations Conference on Trade and Development.

Pollitt, H. (2009). *The E3ME front end*. Cambridge Econometrics, Cambridge.

Satija, D., & Mukherjee, A. (2013). Movement of IT Professionals between India and the EU: Issues and Way Forward, Working Paper No. 391, Indian Institute of Management Bangalore, January and CARIM-India Research Report 2013/04, Migration Policy Institute, European University Institute, Florence.

Schengen Visa, http://www.immihelp.com/visas/schengenvisa /(accessed 1 November 2011).

Stahl, C. (1993). Explaining international migration. In C. W. Stahl, R. Ball, C. Inglis, & P. Gutman (Eds.), *Global population movements and their implications for Australia*. Canberra: Australian Government Publishing Service.

Taylor, J. E., & Adleman, I. (1995). *Village economies: The design, estimation and use of village-wide economic models*. New York: Cambridge Press.

Teferra, D. (2000). Revisiting the brain mobility doctrine in the information ages. Center for International Higher Education, Boston College, Boston.

The Indian Express. (2003). NASSCOM Urges Dutch Government for fast solution of the I-Flex case, March 30, http://www.indianexpress.com/oldStory/21097/(accessed 20 December 2012).

UK Immigration and UK Visa Services http://www.workpermit.com/uk/uk.htm (accessed 25 September 2011).

United Nations. (2001). World Population Prospects 1950–2050, The 2000 Revision, United Nations, New York.

U.S. Government Accountability Office. (2008). Foreign investment laws and policies regulating foreign investment in 10 Countries. Report to the Honorable Richard Shelby, Ranking Member, Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, DC http://www.gao.gov/new.items/d08320.pdf (accessed 18 November 2011).

Walmsley, T., & Winters, L. (2005). Relaxing the restrictions on the temporary movement of natural persons: A Simulation analysis. *Journal of Economic Integration, 20*(4), 688–726.

Wise, H. M. (2013). Coming to work in France: French work visas streamlined, http://www.parislawyer.fr/gifs/pdf/ComingtoWorkinFrance.pdf (accessed 20 March 2013).

Work Visa France http://www.globalvisas.com/visa_france/work_visa_france.html (accessed 25 September 2012).

Worldwide Visa Bureau, India Visa, http://www.visabureau.com/worldwide/india-visa.aspx (accessed 22 November 2011).

WTO. (2011). International trade statistics 2011. http://www.wto.org/english/res_e/statis_e/its2011_e/its2011_e.pdf, accessed on January 2, 2014.

Yeats, A. (2001). Just how big is global production sharing? In S. Arndt & H. Kierzkowski (Eds.), *Fragmentation: New production patterns in the world economy*. USA: Oxford University Press.

Young, A. (2000). What next for labor mobility under GATS? In P. Sauve & R. M. Stern (Eds.), *GATS 2000: New directions in services trade liberalization*. Washington, DC: Brooking Institute Press.

Chapter 4
Migration–Development Links in Selected European Destination Countries

Metka Hercog

Abstract This chapter focuses on host country policies and environments in four European countries, and it seeks to identify major developments in the official discourses regarding the inter-linkages between migration and development. It is based on a comprehensive policy review of France, Germany, the Netherlands and Switzerland and how they officially understand the migration and development nexus, and the type of practices for enabling policies that are employed to achieve socioeconomic development in the countries of origin. This chapter explores structural differences between the host countries and their ability to provide a fruitful environment for diaspora engagement in home country development. Several policy options have been tried since the late 1990s and these have developed significantly, resulting in the current situation where all the studied countries have an overarching strategy in the area of migration and development. The main criticism of the possible instrumentalisation of practices for the purpose of migration control in the interest of host countries is present in all four countries presented.

M. Hercog (✉)
Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
e-mail: hercog@ilo.org

M. Hercog
International Migration Branch, International Labour Office, Geneva, Switzerland

1 Introduction

The increase in international migration flows and their complexity have prompted the interest of policy makers about how to minimise the perceived negative effects and maximise the positive effects of such flows. In the specific case of skilled migration, the existing evidence of the impacts of migration highlights the need to find alternative ways to address the emigration of scientists, professionals and students and to diminish brain drain by promoting the potential of scientific diasporas and returned migrants to helping the development of their country of origin. An optimistic perspective of migration impacts was first alluded to in the academic literature. Positive feedback effects, such as remittances and return migration following skills acquisition abroad, have been presented in the new body of the literature on international migration (Nyberg-Sørensen et al. 2002; Ratha 2003; Lowell and Gerova 2004; de Haas 2005). Discussions of the development potential of migration are mostly focused around the two aforementioned mechanisms and the effects they can have on poverty reduction, the accumulation of human and financial capital and international links between sending and receiving countries. Since the early 2000s, migrants have been increasingly seen as a resource for development (Nyberg-Sørensen et al. 2002), and other extra-economic dimensions of development functions are now taken into account as well. Special attention is now being paid to skilled migrants and the skills and technological aspects of their transfers, as well as the channels used to transfer these resources (Levitt 1998; Kapur 2001; McKinley 2003; de Haas 2006; Tejada and Bolay 2010). At a policy level, the importance of knowledge-based activities in the development process has triggered the interest of home countries as well as host countries. As far back as 2005, a communiqué from the European Commission highlighted clearly the potential of migration for development and the role that policies can play in this linkage: 'Countries and international organizations increasingly perceive migration as a phenomenon whose positive impacts in development terms can be substantial, *provided that appropriate policies are in place*' (emphasis added, European Commission 2005: 1).

Migration has come into the focus of development discussions since then and it is now seen as 'a powerful vehicle for boosting development in both countries of origin and destination' (European Commission 2013). Within the scope of a general consensus that migration from the developing to the developed world has the potential to benefit the development of the poorer countries of origin (Skeldon 2008), many policy options have been tried out since the late 1990s, and these have developed significantly into the current situation in which several countries have an overarching strategy for the area of migration and development. The early discourses on the policy options to manage the link between migration and development are criticised for concentrating predominantly on the poorer countries of origin and for omitting considerations of the destination countries. The current debates are better suited to the long-stated objective of 'triple win' for all involved (countries of destination, countries of origin and the migrants themselves).

The change in attention for destination countries is visible from the aforementioned European Commission communiqué of 2013. Not only do the current debates include the effects of migration on destination countries but they also emphasise the conditions in destination countries that allow migrants to become productively involved in their countries of origin. Indeed, the institutional environment and policies of the migrants' host countries may play a significant role in terms of the opportunities that migrants have to gain relevant expertise and mobilise.

The European countries have led the debates in this area since the late 1990s, and accordingly, they present a pertinent example of current policies and institutional settings relevant to migrants. This chapter looks at four European countries that are important in terms of immigration and in terms of new trends within the field of migration and development. In line with the focus of this book, we pay close attention to the policies and environment that concern skilled migrants from developing countries. On the basis of a comprehensive policy review of France, Germany, the Netherlands and Switzerland, this chapter answers questions on the level of migration and development policies in the studied countries as well as existing activities in this field, and we go on to identify good practices of enabling policies designed to get skilled diasporas involved in the socioeconomic development of their home countries. All four countries are discussed separately and the conclusions in the final part of the chapter summarise the current state of affairs regarding the policy link between migration and development.

2   Country Policies on Migration and Development

2.1   France

French immigration policy is currently framed as a 'chosen immigration' policy (*politique d' immigration choisie*). On the one hand, this basically implies a proactive immigration policy to get a certain group of labour migrants to respond to the pressures of the labour market, while on the other it imposes a restrictive policy for other forms of migration, especially aimed at curbing the continuous persistence of post-colonial family immigration. At present, immigration flows are heavily dominated by family migration (51.9 % in 2008) and only 13.8 % of flows involve labour migrants (OECD 2010). The goal is to decrease family immigration and increase economic immigration and to attain a 50:50 balance between the two types of flows. Several sectors face difficulties to fill vacancies. The Attali Commission (2008) proposed liberalising labour migration completely, based among other things, on warnings of labour force shortages expected after 2015. The ageing population is another argument in favour of a proactive immigration policy. Projections show that the active population will have shrunk by 2 million by 2050

compared to current numbers, and this implies a dependency ratio of 52 % in 2050 (compared to 26 % in 2000) (CAS 2006).

Faced with such trends, France's migration and development policies must be understood within the framework of 'chosen migration'. According to some observers, there is a twofold reason for the original decision to appoint an adviser for integration and co-development and for the need to conceptualise co-development: to find a solution for the French labour market, with its shortages in certain sectors, and to limit the access of immigrants to France (Khoudour-Castéras 2009). Sectoral development assistance in countries with strong emigration to France is seen as an integral part of migration and development policies insofar as it aims to achieve a better control of migration. As one of the main migrant-receiving countries, France is an important actor in global migration discourses. As such, France's conceptualisation and implementation of the link between migration and development are seen as cases in point for other countries that are embarking on policy elaboration initiatives in this area.

Starting back in the late 1990s, France was one of the first countries to work on integrating international migration with the concept of co-development. The institutional base for co-development was established in 1997 by Sami Naïr, the Inter-ministerial Delegate for International Co-Development and Migration, with the publication of a guidance report on co-development policy related to migration (Naïr 1997). The report suggested a theoretical framework in which co-development would integrate immigration and development in such a way that the two countries involved could benefit from migration flows. Migration was envisaged by Naïr as an instrument for development through the productive investment of migrants' savings, the circular migration of students and young professionals, and return migration. Involving migrants in development projects is one on the pillars of this approach. This is to be achieved by getting the state heavily involved, and it in turn promotes the actions of other institutional actors, such as non-governmental organizations, local authorities and immigrant associations in particular. The co-development policy suggested by the report envisages immigrant associations acting as bridges between the host countries and the countries of origin. It also envisages private firms as one of the actors at the core of the link between migration and development. Immigrant entrepreneurs may rely on ethnic resources from their home countries, and in many ways, they facilitate trade and investments back home. Another possible way in which they can benefit the home countries is by creating their own companies upon their return. Education institutions also have a part to play in the co-development strategy by providing a space to educate foreign students, who are expected to return after graduation (Khoudour-Castéras 2009).

The methodology of action employed by this theory is based on controlling flows and enabling temporary migration. The development of the countries of origin, which should take place thanks to the facilitated management of migration, can be expected to reduce emigration pressures. By improving conditions in the countries of origin, the expectation is that potential migrants will be less inclined to leave their home countries. While migrants already in France should benefit from support to help them integrate into the host society, new migrants should be

obliged to return and benefit their home countries with the positive effects of the experiences they have acquired abroad.

A communiqué to the Council of Ministers in 2003 and another in 2005 expanded the understanding of co-development policy, by stating the four main priorities:

- Promotion of productive investment in the countries of origin;
- Mobilising the high-skilled diaspora;
- Supporting local development projects in the main regions of origin;
- Fostering reintegration aid for returning migrants (ECDPM and ICMPD 2013).

From these priorities, we can observe that France places its main focus on engaging the diaspora in development projects. It claims to have very well-organised and institutionalised diaspora communities. By adopting this stance and using these experiences, France has been a driving force in the building of co-development policies at a European level.

The focus on supporting migrant initiatives was also present in 2009 when the concept of 'solidarity development' was introduced to extend the earlier vision of 'co-development' to 'all development actions that are susceptible to contributing to controlling migration flow' (Ministry of Immigration, Integration, National Identity and Solidarity Development 2009). The strategy since 2007 has rested on concerted management agreements for migration flows and co-development (*Accords de gestion concertée des flux migratoires et de codéveloppement*) between France and the main countries of origin. Previously, the funding would go directly to an immigrant association, whereas now the countries of origin are committed to sharing the costs and responsibilities of implementing co-development policies (Panizzon 2011). These agreements are a legally binding instrument of co-development, which oblige the country of origin to cooperate in migration and transit control and the fight against irregular migration. In return, they benefit from development cooperation, and students and professionals have access to the French labour market, in particular through the 'Skills and Talent scheme' (Khoudour-Castéras 2009). The agreement allows the nationals of the country of origin to access the occupations on the list of specified occupations for third country nationals, which were reduced in number from 30 to 14 in 2011 (Ministère du Travail 2011). A 2009 policy document from the Ministry of Immigration also presented a list of 28 priority countries, which are eligible for multilateral co-development funding and reintegration support. There is a clear focus on the Maghreb and Sub-Saharan countries.

The fact that the migration and development nexus was accorded such high importance during the presidency of Nicolas Sarkozy (2007–2012) is also evident from the creation of an overarching ministry, the Ministry of Immigration, Integration, National Identity and Solidarity Development. The Ministry did not last long, and by 2010 it had been integrated into the Ministry of the Interior. With the change of government in 2012, there is now a Migration and Development Unit within the Ministry of Foreign Affairs and it is responsible for a programme known as 'Solidarity Development and Migrations', which conceives all projects related

to migration and development. This programme is also known as Programme 301. One of the recent documents adopted under the new government, the 2012 Finance Bill on France's transversal development policy, shows are orientation of the main priorities to support the transfer of knowledge and implement mechanisms for the productive investment of remittances in the host countries. The French Development Agency, which is mainly concerned with implementing Programme 301, believes that projects in these issue areas are the most successful in terms of having an impact on local development. As such, it works towards matching the skills of the diaspora with the needs of home countries, and it supports remittances from the diaspora by assuring financial security and increasing the credibility of the projects (ECDPM and ICMPD 2013).

Although Nair's first report on co-development in 1997 also speaks of circular migration as one of the priorities, there has been little implementation of the concept in practice. The 'Skills and Talent' permit (Cartes 'compétences et talents') adopted in 2006 seeks to encourage such mobility by granting visas to highly skilled foreigners on the condition that they will return to their home country within 6 years.[1]

The Skills and Talent permits were introduced as a mechanism within the current framework of 'chosen immigration', which simultaneously encourages human capital development in developing countries by enforcing circular migration. However, very few permits have been issued under this scheme. The peak year since its inception was 2009, when 368 permits were issued, but this number is still far off the envisaged quota of two thousand per year (Ministère de l'Intérieur 2012). Because of such discrepancies between declared objectives and the practical implementation of policies, the co-development policies have been criticised for disregarding the interests of the countries of origin and not working to benefit them, and for being used for the purpose of migration control instead (Khoudour-Castéras 2009; Panizzon 2011; ECDPM and ICMPD 2013).

2.2 Germany

Although diaspora involvement in the development of countries of origin was not yet a central topic of German foreign development or migration policy in 2006 (de Haas 2006), there has been a considerable increase in the interest to link migration and development policies since then (Deutscher Bundestag 2008; Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung 2010).

In 2006, a division on migration and development was created within the German development agency GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and given the task of grounding the topic of migration in the practical implementation of development cooperation. In early 2012, this division

---

[1] LOI n 2006-911 du 24 juillet 2006 relative à l'immigration et à l'intégration Article 2. II, 3.

was integrated into the Centre for International Migration and Development (CIM). The Federal Ministry for Economic Cooperation and Development (BMZ) is the main body responsible for development matters related to migration. Besides BMZ, several other ministries are involved in policymaking for migration and development, depending on the topic in question (Baraulina et al. 2012).

The first BMZ document to emphasise the direct link between migration and development dates back to 2010 and had the title 'Migration—Harnessing opportunities to promote development'. It lists the following areas as the core issues of migration and development policy in Germany:

- Delivering advisory services in the field of migration policy for countries of origin;
- Supporting the productive investment of remittances;
- Cooperation in the non-profit activities of diaspora communities;
- Promoting private sector development in the countries of origin;
- Supporting returning experts and their reintegration in the home economy;
- Getting migrant associations involved in development-related education work in Germany and encouraging networking with local-level actors (ECDPM and ICMPD 2013).

GIZ provides the main operational part of the *advisory services* in the countries of origin, and it looks at how to work towards obtaining benefits from migration by building migration institutions and structures. A recent study (ECDPM and ICMPD 2013) shows that one of the lessons learnt from the activities implemented in this field is that regional cooperation among governments and among diaspora groups from the same region can be beneficial. The study also suggests increased opportunities for knowledge sharing among different levels of institutions.

The CIM is responsible for promoting the developmental effects of *remittances*. By analysing the effects that remittances have in a specific economic area, the CIM promotes their most productive use and limits the risks associated with remitting (Baraulina et al. 2012). In order to increase the transparency of financial transfers and reduce their costs, GIZ built a Website in cooperation with the Frankfurt School of Finance, which allows users to compare the fees charged by money operators. GIZ also works with banks and insurance companies in the countries of origin to develop customised products for migrants, and it then communicates the possibilities to the migrant groups. GIZ and the European Microfinance Platform published a Manual on easy and safe access to financial services for migrants and the recipients of remittances (GIZ 2012a) as a means of helping to improve financial literacy.

GIZ is the also main implementing agency in the third area of migration and development policies, *diaspora engagement*. Several studies were conducted before the projects started to gain insights into the existing capacities of migrant associations. Capacity building activities are set up once the results of the studies have been completed and support is also provided in the countries of origin (Baraulina et al. 2012). The objective of this programme is to bring migration organisations to the level of strategic partners in development cooperation (Riester

2011). Although this instrument is considered to be highly important, many projects still do not achieve the desired outcomes, and the lack of professionalism of the migrant associations is often blamed for this (Baraulina et al. 2012).

The objective of *private-sector development* is to get the diaspora involved in regional economic development by providing advice and other skills to local SMEs in the countries of origin. The largest project conducted by Germany in this area was undertaken in Morocco. In addition to mobilising Moroccans abroad, the project also prepared home country institutions to work with expatriates through investment promotion centres, banks and the like.

Labour migration is the main theme identified for the field of migration and development in Germany. The demand for skilled labour is one of the most prominent topics surrounding migration policy debates in Germany. Besides liberalising immigration and making it easier for highly skilled migrants to enter the country, specific initiatives have been started for this purpose. The so-called Triple Win Migration initiative is a pilot project developed by the Federal Employment Agency's International Placement Services (ZAV) and GIZ, and it places staff from non-EU countries in occupations where Germany has a shortage. The special interests of migrants and countries of origin are taken into account through agreements with the relevant authorities in Germany (GIZ 2012b). The establishment of flexible business units is the second initiative aimed at reconciling the interests of the German labour market, the home countries and the workers themselves. These units conduct *development-sensitive recruitment of highly skilled workers,* resulting in a triple win for all concerned. Ideally, recruitment is followed by the engagement of migrants during their stay abroad and eventually by their return, to complete the 'migration cycle', as conceptualised in the 'three R's' of recruitment, remittances and return (Papademetriou and Martin 1991). A 'Returning Experts Programme' is in place to support graduates and experts who have completed their studies or training in Germany and who wish to return to their countries of origin. GIZ assists potential returnees in finding a relevant placement by establishing a link between businesses, research institutions, NGOs or government institutions and also by providing assistance during the initial periods of work in the home country situations. The CIM works on linking labour agencies and institutions that need highly skilled employees with experts from Germany through an Integrated Experts Programme.

2.3 The Netherlands

The Netherlands was also one of the first countries to conceptualise the migration–development nexus, with the Ministry of Foreign Affairs and Justice publishing a White Paper in 2004. The points of reference stemmed from the interests of Dutch migration management on the one hand and from development cooperation in the interest of developing countries on the other. It was recommended that relations between the Netherlands and countries receiving Dutch official development aid

should incorporate migration links as a more integral part of development cooperation (Ministry of Foreign Affairs and Justice 2004). Although this declaration of the importance of migration came relatively early in comparison with other receiving countries, the document did not provide concrete steps on how to implement the stated objectives. A 2008 policy memorandum by the Ministry of Foreign Affairs and Justice was more specific in outlining key priorities for the Netherlands. The current approach is still based on the six priorities listed in the memorandum: promoting circular migration, engagement of migrant associations, institutional development in migration management, remittances, sustainable return and reintegration in home country settings, and involving migration in development policies as well as development concerns in migration policies (Ministries of Foreign Affairs and Justice 2008).

Circular migration has gained much popularity within development policy circles in general, and when the Dutch government chose it as one of its priorities, it also acknowledged that there were many doubts about how it should be implemented in practice. For this reason, a pilot project was started in 2010 with the aim of understanding the risks and opportunities and to see if it might be possible to achieve the triple win objectives. Among other things, the government established agreements between employers in the Netherlands and the respective country of origin in relation to cooperation on return conditions (Ministry of Foreign Affairs 2010). After operating for a year and a half, the project was prematurely terminated as it was not producing the desired outcomes. The failure of the pilot on circular migration was attributed, among other reasons, to timing: its beginning coincided with the global financial crisis, which affected political support for the project (MGSOG 2012).

The government often sees the low level of capacities of migrant associations as an obstacle to working with them as fully fledged partners within the framework of development projects (Ministry of Foreign Affairs 2010). Therefore, *strengthening migrant associations* is a constant in the attempts to maximise the role that migrants play in the development of their countries of origin. Annual consultations are organised at a government level and the Ministry of Foreign Affairs regularly consults these organisations. Furthermore, it encourages collaboration between development organisations and migrant associations as this collaboration can be useful in terms of situating local partners in the countries of origin (Government of the Netherlands 2011). However, differences between the expectations of the government and those of the migrant associations may lead to a conflicting situation where the government expects the organisations to get involved and support government policy, while the organisations expect the government to help realise them their goals (Ministry of Foreign Affairs 2010).

Activities aimed at *institutional development in migration management* have focused on African countries up to now. The Netherlands finances a programme entitled 'Capacity Building for Diaspora Ministries in Africa', which trains civil servants to better engage respective diasporas in national development policy (Government of the Netherlands 2011). A 'Migration Management Degree Programme' is also offered to professionals within the areas of migration and asylum.

As far as strengthening the link between remittances and development is concerned, the Dutch government is working to create a favourable environment by improving the transparency of remittance channels, advising countries of origin on financial sector development, using remittances corridor data for evidence-based research and also by encouraging migrants' initiatives for the productive use of remittances (Government of the Netherlands 2011).

As the final priority, return can be considered as the most important element of Dutch policies in migration and development. However, the approach has been criticised for its focus on rejected asylum seekers and on its support for reintegration upon return, and a lack of attention to development objectives (ECDPM and ICMPD 2013). Reintegration support, in the form of advice to help find jobs or create small businesses or provide financial assistance, is offered to migrants in their countries of origin. The Dutch government uses conditionality in building cooperative relationships with the main migrant-sending countries. These are expected to cooperate on return migration in exchange for increased bilateral development cooperation, and this has been criticised by members of the Dutch Parliament. These conditions can be contested as far as achieving the development objectives in the countries of origin goes, since cutting development aid is likely to harm the home country population more than it does the government, and also because the aims are directed towards migration control for the benefit of the Netherlands. Unlike the so-called voluntary return projects with contested development effects, programmes for the temporary return of skilled nationals are widely supported, and they are considered to be highly successful in achieving the desired goals (ECDPM and ICMPD 2013). IOM's Ghana Health Project in cooperation with Ghana's Millennium Development Authority (MiDA) and its Temporary Return of Qualified Nationals (TRQN) project are two examples of projects that were judged to have been completed successfully.

2.4 Switzerland

Switzerland is specific in the sense that migration is not just talked about as a development tool for countries of origin, but for Switzerland itself as well. In several statements, high-level officials have highlighted the potentially positive effect of migration on destination countries. For example, Federal Councillor Simonetta Sommaruga openly declared that the national interest of Switzerland was the chief starting point of the country's migration policy, and that migration is indispensible for Swiss development (Sommaruga 2011). The migration and development link was first included in a strategic policy document as early as 2004, in the report of an inter-ministerial group, the Interdepartmental Working Group on Migration (IMZ 2004). In 2011, Switzerland's government, the Federal Council, endorsed an 'international migration cooperation report' that included the migration and development link in the Swiss foreign policy framework (IMZ 2011). The new approach emphasises a strong interdependency between the

economic, political and social aspects of migration and policy coherence among the different actors of the Swiss government. The concept of partnership with other countries and regions should guide collaboration on migration and development issues. The Federal Council's message on Switzerland's international cooperation for the period 2013–2016 positions the migration–development nexus as one of the strategic objectives of the development agenda (Federal Council 2012). The Global Programme on Migration and Development, a section within the Swiss Agency for Cooperation and Development (SDC), elaborated a strategy with work are as that are expected to lead to poverty reduction and development in countries of origin. Labour migration, diaspora engagement, integrating migration in development policies, involvement in international debates on migration and development, coherence of development policy with domestic migration interests are all parts of this strategy.

Labour migration, the first priority, is based on the assumption that migrants who have successfully settled in their host country are also in the best position to contribute to their country of origin. Therefore, labour law has to protect migrants in the work place and help them to achieve 'decent work'. Other parts of the labour migration cycle are also included as priorities, meaning that recruitment agencies should be regulated and that overall recruitment should be sensitive to the labour situation in the home country. The SDC's declared primary aim of improving the benefits of labour migration is implemented by preparing migrants before departure and, in the event of return, by supporting their reintegration in the home country. The geographical focus of the projects that support labour migration is on South Asia and the Middle East (SDC 2013a).

Including diaspora communities in development strategies is the second priority of the SDC with regard to fostering inter-linkages between migration and development. The Swiss focus in this realm is on improving conditions in countries of origin by giving advice to governments about how to organise legal structures, implement strategies and connect with their respective diasporas (SDC 2013b).

The SDC also advocates the inclusion of developmental aspects in Swiss migration policy. Migration partnerships with important migrant-sending countries are put in place to facilitate political dialogue. Occupational training projects and projects about how to improve living conditions in the home countries are implemented with a view to reducing emigration pressures. Migration partnerships have so far been formalised with three countries in the Western Balkans (Serbia, Bosnia and Herzegovina and Kosovo) as well as with Nigeria and Tunisia. The contents of the migration partnership agreements depend on the country, but the key elements are usually the institutionalisation of cooperation on readmission, return re-integration and visa policies as well as providing a framework for development projects in partner countries (ECDPM and ICMPD 2013). Development programmes in partner countries are implemented as an instrument of Swiss migration policy, specifically migration control. For example, the Re-connect project in Bosnia and Herzegovina offers training programmes for young Bosnian people who have already graduated at home or abroad, in order to offer better job opportunities and to

get them reacquainted with conditions in their home country and make sure they are better prepared for a possible return (SDC 2005).

One of the main objectives of the SDC's Global Programme on Migration and Development is to participate in and influence the global dialogue on migration and development. It has been particularly active in the global forum on migration and development (GFMD) and other UN dialogue platforms (SDC 2013c). Switzerland chaired the GFMD in 2011, and together with Bangladesh, it is co-leading the 'Population dynamics' thematic area within the framework of the global consultations for a Post-2015 UN Development Agenda.

3 Conclusion

Migration and its relationships with socioeconomic and political development in countries of origin have become increasingly important in the European development cooperation schemes. Since European countries are very active in the international arena and have been leading the debates in this area, our findings from a comprehensive policy review of France, Germany, the Netherlands and Switzerland present a pertinent case to show how this link is currently understood, and the direction in which the future developments might lead. It is now understood that the institutional environments and policies of host countries play a significant role with regard to the opportunities that diasporas have in terms of gaining relevant expertise and being able to mobilise. The general view of the potential contribution of migration to development is considered from a positive perspective. However, the potentially positive effects of migration depend on migration management and the institutional environment to which migrants are exposed, and therefore, several initiatives have been tried out and an attempt has been made to learn about the advantages and limitations of different approaches.

As the current debates on immigration have shown, most receiving countries regard the permanent migration of low-skilled workers as something undesirable (Cornelius an Rosenblum 2005). Therefore, the return and circular migration programmes designed by host countries focus mainly on this category of migrants. Unlike the perspective on low-skilled migrants, most high-income countries encourage immigration, and they often encourage the settlement of highly skilled migrants as well. The demand for skilled labour is one of the main topics of migration policy debates in all countries, insofar as they are faced with the problem of how to attract and retain the necessary foreign talent, while increasing cooperation with developing countries at the same time. In the last decade, all of the studied countries have introduced new measures to admit highly skilled migrants through relaxed conditions for temporary schemes, and with an option to stay on a permanent basis. In terms of development-friendly recruitment practices, the migration of highly skilled persons is essentially envisaged as something temporary. For example, the French immigration and integration law of 2006 allows the granting of 'skills and talent' visas to highly skilled foreigners on the condition that

they will return to their home country within 6 years. Several other innovative initiatives of circular migration programmes attempt to enforce return by offering only temporary options for migration, on the understanding that migrants will be less inclined to return after a long stay in the host country. In most cases, however, there are options for changing temporary residence status to permanent residence after a number of years in the host country, albeit with very demanding requirements for such a permit. In Germany, it is now possible for highly skilled migrants to obtain a permanent residence status from the outset, but this option is only available to a small group of people who can meet the highly demanding requirements (Section 19 AufenthG). With regard to concerns about depleting the low numbers of highly skilled people in developing countries, policy discussions in European host countries advocate ethical recruitment, return, and when this is not possible, contributions from a distance. The discussions on migration and development in host countries are overwhelmingly focused on skilled migrants, since it is considered that they can bring benefits to their respective home countries and to the host countries as well. As far as low-skilled migrants are concerned, the interests of the host countries are directed towards studying return possibilities, reintegration support and development projects that would decrease migration pressures. Both France and the Netherlands see their programmes for return and for the reintegration of failed asylum seekers and other unwanted migrants as part of the migration and development nexus, despite the fact that the main objective of such programmes is migration management rather than working in the interests of the countries of origin. The case of the Netherlands, which conditions bilateral aid on cooperation from the countries of origin for 'voluntary' return, has been criticised on the grounds that it is not working for their benefit, but rather it is actually used as a concealed way to deport unwanted migrants.

Nonetheless, there seems to be a growing consensus that some migration policies and programmes should be promoted because they are likely to be more 'development-friendly' than others. Initiatives aimed at improving the conditions of migrants abroad are included in policy documents of Germany, the Netherlands and Switzerland. There appears to be a growing consensus that successfully settled migrants are those best positioned to contribute to their country of origin. As part of its strategy for the coming years, Switzerland has established access to decent work as one of the main priorities for labour migration policy. Moreover, initiatives within the framework of remittances promotion have shown host countries that the best option is to work towards the use of productive remittances and to improve the financial environment in the countries of origin by reducing the risks associated with remitting. In order to become more effective in their initiatives concerning migration and development linkages, all the studied countries give priority to activities related to a selected group of origin countries (list of target countries in the Appendix, Table 1). Another lesson learnt from policy implementation in the past few years is that building the capacity of migrant associations is necessary in order to include them as qualified actors in the development programmes. As they often work without a professional background, it frequently happens that the project proposals do not meet the expectations of governments.

Background studies on the actual competencies of migrant associations help build more realistic expectations and invest in their capacities.

Countries of destination have been experimenting with different types of projects and innovative approaches, and it is clear from the overview that all the mapped countries are still at the testing phase and have not yet developed a consistent approach. The main criticism of the current focus on the return of low-skilled migrants is the clear motivation of receiving countries to serve domestic interests. Switzerland, with its straightforward declaration that the Swiss national interest is at the centre of its migration policy, would appear to be the most outspoken in terms of its intentions. Being an active player in international policy forums and adopting an approach that states clearly that national interests are the central instigator for policy could result in other host countries adopting this as a commonly accepted practice.

Appendix

Table 1 Target countries per selected host country

Host country	Target countries for migration and development policies
Switzerland	Benin, Burkina Faso, Egypt, Jordan, Lebanon, Morocco, Nigeria, Sri Lanka, Tunisia, Yemen
France	Algeria, Benin, Burkina Faso, Burundi, Cape Verde, Cameroon, Congo, DRC, Ivory Coast, Gabon, Guinea, Haiti, Madagascar, Mali, Morocco, Mauretania, Niger, Nigeria, Central African Republic, Rwanda, Senegal, Somalia, Surinam, Chad, Togo, Tunisia, The Comoros Islands, Vietnam
Germany	Cameroon, China, Egypt, Ethiopia, Georgia, Ghana, India, Indonesia, Israel/Palestinian Occupied Territories, Jordan, Morocco, Moldova, Mongolia, Nepal, Ukraine
The Netherlands	Algeria, Angola, Armenia, Burundi, China, Egypt, Ghana, Guinea Conakry, India, Iraq, Iran, Morocco, Nigeria, Sierra Leone, Sri Lanka, Sudan, Suriname, Turkey

References

Baraulina, T., Hilber, D., & Kreienbrink, A. (2012). Migration und Entwicklung Explorative Untersuchung des Handlungsfelds auf Ebene des Bundes, der Länder und der Kommunen. Working paper 49. Berlin: Bundesamt für Migration und Flüchtlinge.

Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung. (2010). Migration. Chancen für Entwicklungnutzen. Berlin.

CAS – Centre d'analyse stratégique (2006). Mouvements des hommes et des activités. Horizons stratégiques 2006 (1). Paris: La Documentation française.

Cornelius, W. A., & Rosenblum, M. R. (2005). Immigration and politics. *Annual Review of Political Science, 08*, 99–119.

Deutscher Bundestag. (2008). Das Konzept der Ko-Entwicklung (Co-development) als Brücke zwischen Migration und Entwicklung. *Wissenschaftliche Dienste*, Nr. 15/08.

ECDPM, & ICMPD. (2013). Migration and Development Policies and Practices: A Mapping Study of Eleven European Countries and the European Commission. Commissioned by SDC.

European Commission. (2005). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions—Migration and Development: Some Concrete Orientations. September 1, 2005, COM (2005) 390 final.

European Commission. (2013). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions—Maximising the Development Impact of Migration, The EU contribution for the UN High-level Dialogue and next steps towards broadening the development-migration nexus. May 21, 2013, COM (2013) 292 final.

Federal Council. (2012). Message on Switzerland's development cooperation in 2013–2016, Berne.

GIZ—Deutsche Gesellschaft für Internationale Zusammenarbeit. (2012a). *FReDI: Financial literacy for remittances and diaspora investments. A handbook on methods for project design.* GIZ: Bonn/Eschborn.

GIZ—Deutsche Gesellschaft für Internationale Zusammenarbeit. (2012b). A triple win for everyone. Akzente 04/2012. http://www.giz.de/en/downloads/giz2012-en-akzente04-triple-win-pilot-project.pdf. Accessed August 20, 2013.

Government of the Netherlands. (2011). Statement of the Netherlands. United Nations General Assembly Informal Thematic Debate on International Migration and Development. May 19, 2011, New York.

de Haas, H. (2005). International migration, remittances and development: myths and facts. *Third World Quarterly, 26*(8), 1269–1284.

de Haas, H. (2006). *Engaging diasporas. How governments and development agencies can support diaspora involvement in the development of origin countries*. International University of Oxford: International Migration Institute. http://www.imi.ox.ac.uk/pdfs/engaging-diasporas-hein-de-haas.pdf. Accessed August 14, 2013.

IMZ. (2004). Rapport final du groupe de travail interdepartemental Migration, Berne.

IMZ. (2011). Rapport sur la cooperation en matiere de migration internationale, Berne.

Kapur, D. (2001). Diasporas and technology transfer. *Journal of Human Development, 2*(2), 265–286.

Khoudour-Castéras, D. (2009). Neither migration nor development: The contradictions of French co-development policy. *CEPII*, Paris. December 2009.

Levitt, P. (1998). Social remittances: migration-driven local-level forms of cultural diffusion. *International Migration Review, 32*(4), 926–948.

Lowell, B.L., & Gerova, S.G. (2004). Diasporas and economic development: State of knowledge. Institute for the Study of International Migration, Georgetown University.

McKinley, B. (2003). International migration and development—the potential for a win–win-situation. The International Organization for Migration Statements Archive. http://www.iom.int/en/PDF_Files/Other/G77_DG_NYjune03.pdf. Accessed August 10, 2013.

MGSOG. (2012). Evaluation of the Blue Birds circular migration project in the Netherlands. Maastricht: Maastricht Graduate School of Governance. www.merit.unu.edu/publications/uploads/1344262652.pdf. Accessed August 25, 2013.

Ministère de l'Intérieur. (2012). La carte de séjour: compétences et talents. August 31, 2012. http://www.immigration.interieur.gouv.fr/Immigration/L-immigration-professionnelle/La-carte-de-sejour-competences-et-talents. Accessed August 12, 2013.

Ministry of Foreign Affairs and Justice. (2004). Verbandentussenontwikkeling en migratie: Brief van de ministers voorontwikkelingssamenwerking en voorvreemdelingenzaken en integration. The Hague: Ministry of Foreign Affairs and Justice.

Ministry of Foreign Affairs and Justice. (2008). Policy memorandum: international migration and development 2008. The Hague: Ministry of Foreign Affairs and Justice.

Ministry of Foreign Affairs. (2010). Migration and development. A perspective from the Netherlands. In *Global Migration Group Symposium: Overcoming Barriers: Building Partnerships for Migration and Human Development*, May 27–28, 2010, Geneva.

Ministry of Immigration, Integration, National Identity and Solidarity Development. (2009). L'Essentiel sur le développement solidaire—Favoriser le développement avec les pays source d'immigration, Paris. http://www.diplomatie.gouv.fr/fr/IMG/pdf/L_essentiel_sur_le_developpement_solidaire_Favoriser_le_developpement_solidaire_avec_les_pays_source_d_immigration.pdf. Accessed August 12, 2013.

Ministère du Travail, de l'emploi et de la Santé. (2011), Décrets, Arrêtés, Circulaires: Textes Généraux, *Journal Officiel De La République Française*, Texte 44, Sur 110, 12 Août, http://www.immigration-professionnelle.gouv.fr/sites/default/files/fckupload/arrete_du_11-08-2011.pdf

Naïr, S. (1997). Rapport de bilan et d'orientation sur la politique de codéveloppement liée aux flux migratoires. Paris: Premier Ministre. http://www.ladocumentationfrancaise.fr/rapports-publics/984000139/index.shtml. Accessed August 19, 2013.

Nyberg-Sørensen, N., Van Hear, N., & Engberg-Pedersen, P. (2002). The migration–development nexus. Evidence and policy options. State-of-the-art overview. *International Migration, 40*(5), 3–47.

OECD. (2010). *International migration outlook*. SOPEMI report 2010. Paris: OECD. http://www.oecd.org/dataoecd/7/13/45627895.pdf. Accessed August 19, 2013.

Panizzon, M. (2011). France's codevelopment program: Financial and fiscal incentives to promote diaspora entrepreneurship and transfers. In S. Plaza & D. Ratha (Eds.), *Diaspora for development in Africa* (pp. 183–229). Washington, DC: World Bank.

Papademetriou, D. G., & Martin, P. L. (1991). *The unsettled relationship. Labor migration and economic development*. New York: Greenwood Press.

Ratha, D. (2003). Workers' remittances: An important and stable source of external development finance. In D. Ratha (Ed.), *Global development finance 2003* (pp. 157–175). Washington, DC: World Bank.

Riester, A. (2011). Diasporas im Vergleich: Bedingungen des entwicklungspolitischen Engagements afrikanischer Migranten in Deutschland. In T. Baraulina, A. Kreienbrink, Axel & A. Riester (Eds.). *Potenziale der Migration zwischen Afrika und Deutschland, Beiträgezu Migration und Integration Band 2* (pp. 275–292). Nürnberg: Bundesamt für Migration und Flüchtlinge.

SDC. (2005). Preventing migration—Tapping the knowledge of Bosnian Youth. http://www.deza.admin.ch/en/Home/News/Close_up?itemID=21034. Accessed August 24, 2013.

SDC. (2013a). Labour migration. http://www.deza.admin.ch/en/Home/Themes/Migration/Labour_migration. Accessed August 24, 2013.

SDC. (2013b). Diaspora-migrant communities. http://www.deza.admin.ch/en/Home/Themes/Migration/Diaspora. Accessed August 24, 2013.

SDC. (2013c). Factsheet global programme migration and development. January 2013.

Skeldon, R. (2008). International migration as a tool in development policy: A passing phase? *Population and Development Review, 34*(1), 1–18.

Sommaruga, S. (2011). Keynote speech of Federal Councillor Simonetta Sommaruga on the occasion of the opening of the Concluding Debate of the Swiss Chairmanship on the Global Forum on Migration and Development. Geneva, December 1, 2011.

Tejada, G., & Bolay, J.-C. (2010). *Scientific diasporas from developing countries in Switzerland: Empirical evidence and policy responses. Skilled migrants from Colombia, India and South Africa in Switzerland as partners in development*. Bern: Peter Lang.

Chapter 5
Student Migration at the Global Trijuncture of Higher Education, Competition for Talent and Migration Management

Ana Mosneaga

Abstract International student migration is increasingly regarded as a subclass of talent mobility within the globalising knowledge economy, where a highly educated workforce is seen as a prerequisite for sustaining growth. This chapter looks at examples of relevant developments in European destination countries and examines the processes that shape international student migration as the nexus point where the globalisation of higher education, the global competition for talent and national migration management practices all converge. This chapter also establishes the wider context required to holistically position empirical findings on the migration and mobility of international students within the framework of existing understandings and current debates about the trends that make up this trijuncture. The conclusions point to a number of deep-rooted tensions that transform the interaction between the different agendas of the globalisation of higher education, talent attraction and migration management into a highly contested process, which often results in inconsistent policy outcomes.

1 Setting the Scene

International student migration is increasingly treated as a subclass of highly skilled migration by the states, regions and cities that compete for talent within the globalising knowledge economy. As global migration flows become increasingly complex, movements of people in search of employment represent 'a life choice driven by disparities in demography, income and employment opportunities across and within regions' (IOM 2008: n.d.). Such life choices ought to be easier for the highly skilled in so far as they receive encouragement from host countries to

A. Mosneaga (✉)
Section for Geography, University of Copenhagen, Copenhagen, Denmark
e-mail: anna1931@gmail.com; Anm@geo.ku.dk

migrate. However, in practice, immigration of any nature is a sensitive issue throughout the developed world, and especially in the European destination countries, and several selectivity mechanisms have been introduced as 'governments look at how to "cream skim" immigrants in order to attract the brightest' (Cervantes and Goldstein 2008: 299). This is resulting in a convergence between migration management regimes in Europe—albeit with persistent variations in the actual regulations–with regard to attracting skilled labour, including international students, while reducing the in-flow of 'unwanted' streams such as low-skilled workers, those who migrate for family reunification and asylum seekers (Brown and Tannock 2009; Skeldon 2009). It is within this context that highly skilled migrants 'whose mobility is more linked to choice, professional career and educational opportunities', can be seen as a 'better test case of the supposed liberalisation of human mobility in the world economy' (Favell et al. 2007: 16). While elaborating on this point with regard to international students, King argues that:

> They exemplify, on the one hand, the 'opening up' of tendencies of globalisation and the free movement of the best brains in the knowledge-based economy of the developed world; and, on the other, the countervailing trend of closure towards foreigners, stimulated by the often exaggerated spectre of excessive, unwanted and 'illegal' migration (King 2010a: 1357).

Not withstanding the fact that international students represent population flows that can be used to analyse the tensions that arise from such countervailing trends, improving the knowledge based on international student migration is also important, given its considerable expansion in recent decades. Student migration has been a rapidly growing phenomenon, as 'greater numbers seek further education in other countries, many eventually not returning home and becoming migrants' (Abella 2006: 11). According to OECD estimates, there were almost 3.7 million students enrolled in tertiary education institutions outside their country of citizenship[1] in 2009, and 77 % of these were hosted by OECD states (OECD 2011: 318). As shown in Fig. 1, this represented a 1.7-fold increase from 2000. Among the European destination countries considered here, Germany and France each received 7 % of all foreign students worldwide in 2009 and are among the top five OECD countries with the highest shares of foreign students (OECD 2011: 321). Switzerland is among the top five OECD countries with the highest percentages of international students in tertiary enrolments (OECD 2011: 318). Finally, even though the Netherlands receives a much smaller share, the number of foreign students enrolled in Dutch tertiary education institutions more than doubled between 2000 and 2009 (OECD 2011: 320). Furthermore, it is worth noting

---

[1] This is the OECD definition of foreign students and includes students who have been long-term residents or those born in their country of study, but who are classified as foreign citizens according to different national policies on the naturalisation of immigrants. The OECD makes a distinction between foreign students and international students, who are defined as those who have moved from their country of origin for the purpose of studying, and who therefore represent a subset of foreign students (OECD 2011: 319, 330). The differences in statistical definitions mean that any data on international students have to be treated with caution.
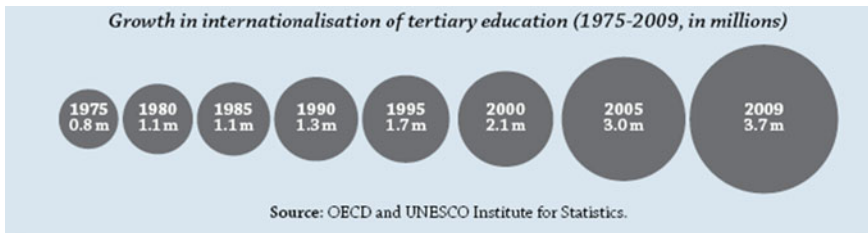
Fig. 1 Long-term growth in the number of students enrolled outside their country of citizenship. *Source* OECD (2011: 320)

that France, the Netherlands and Germany are also among the OECD countries with the highest percentage of stay rates among international students.[2]

This significant expansion in international student mobility is taking place within a context in which internationalisation and international student recruitment are being mobilised to satisfy national globalisation agendas, framed by the neoliberal language of boosting competitiveness in the knowledge economy. Universities are being increasingly assigned multiple responsibilities as agents of such agendas: as 'repositories of talent' (Brown et al. 2008a: 13) and therefore as 'critical instruments for attaining economic prosperity through the provision of educated personnel and knowledge creation' (King 2010b: 589). The actual globalisation of higher education, propelled in this context, has taken different forms, leading to various outcomes within different contexts, but globally, one of its significant outcomes has been the growth of the international education market and its related industry (King 2010a; Findlay 2010; Lewis 2011; Findlay et al. 2012). Brooks and Waters observe two broad dimensions through which the neoliberal globalisation of higher education has been shaping the flows of international students:

> Neo-liberal pressures can be seen to be exerting a two-way influence on student mobility: from the top-down, *through policies put in place and actions taken by national governments and individual tertiary institutions* in different parts of the world; and from the bottom-up, largely *through decisions taken by young people as to where they will study* (Brooks and Waters 2011: 29; emphasis added).

This chapter elaborates on these developments, which are shaping international student migration at the trijuncture of higher education globalisation, the global competition for talent and national migration management practices, by drawing on the examples of the European destination countries. It starts by positioning international student migration within the broader theoretical trends that characterise the conceptual landscape of migration and mobility studies. The following

---

[2] The OECD defines stay rate as the percentage of students who have changed their status for work, family or other reasons among students who have not renewed their permits (OECD 2011). No data are available on stay rates for Switzerland, and in general, these data should be treated with particular caution as they often draw on sources that are not readily comparable.

section looks at globalisation and the internationalisation processes that characterise the development of the higher education sector in the knowledge economy, and the actors involved in this process at different levels. The chapter then examines the uneven geographies of skills and talent and the intensifying quest for employability in the context of ongoing labour market transformation, both of which are important in terms of understanding how international students change their status to that of skilled workers. Thereafter, the focus is turned on the opportunities and constraints that international students experience as transitional migrants as they move from study to work, as well as the trends in migration management approaches to international student migration. Accordingly, this present chapter sets out the wider context for positioning empirical findings on the mobility of international students as skilled migrants within the framework of existing understandings and debates pertaining to the evolving global trijuncture between higher education, the competition for talent and migration management.

2 International Student Migration in the Conceptual Landscape of Migration Studies

In today's globalised world, 'we simply cannot ignore that the world is moving a bit more than it did before' (Adey 2010: 1), but it remains true that: 'The reality of the intensification of globalisation for most of us is more contradictory: capital moves easily, bodies which control capital move easily but bodies which are more expendable or peripheral are still largely constrained' (Dolby and Rizvi 2008: 2).

The variety and complexity of population movements stemming from this reality has led to conceptual developments that call for the 'emergence and institutionalisation of migration studies as a full-fledged interdisciplinary field' (Favell 2008a: 260). Consequently, a reorientation of migration studies is taking place, with migration flows treated somewhat instrumentally as evolving in contexts that are distinct to the understanding of these flows as interconnected processes. This section discusses the key theoretical trends driving this reorientation in order to position international student migration within the field of migration and mobility studies.

The first theoretical trend concerns the long-standing discussion about the balance between agency and structure in the social sciences in general and migration and mobility studies in particular. In this respect, existing approaches are often noted to either 'lend towards a more determinist position and play scant regard to the decisions of behaviour of individual actors', or to primarily 'focus on agency of the individuals [… and] struggle to take into account the role of broader social structures in shaping migration patterns' (Bakewell 2010: 1690). Describing the existing divide between these two camps, Brettell and Hollifield (2008) use the metaphor of a deep canyon between the top-down/macro- and bottom-up/micro-approaches to studying migration between and within different disciplines of the

social sciences. The existence of such a 'disciplinary bias has often resulted in reductionist approaches that focus on limited aspects of migratory experiences, blocking an understanding of the whole process' (Castles 2010: 1569). In fact, the need to find effective interdisciplinary approaches that bridge the deep divide stemming from these biases has increased, given 'the multi-layered, dynamic and complex nature of contemporary migration processes' (Collinson 2009: 3). In this context, globalising flows and networks come about at different spatial levels and should therefore be understood 'as elements of complex and dynamic relationships in which global forces have varying impacts according to differing structural and cultural factors and responses at the other levels' (Castles 2006: 361). This perspective enhances the importance of multi-scalar approaches to studying migration.

At the same time, since 'migration is clearly a space–time phenomenon, defined by thresholds of time and distance' (King 2012: 136), the 'concept of process is also critical to the analysis, since the factors that affect people's migration options, strategies and outcomes are played out over time' (Collinson 2009: 2). While such a processual perspective is far from being adopted as a mainstream approach, it has nevertheless sparked a reorientation of the conceptual landscape in migration and mobility studies. This reorientation is being driven by the increasing recognition that 'migration studies simultaneously need a top-down as well as a bottom-up approach' (Favell 2008a: 260). This realisation is also feeding into the emerging body of research on international student migration, with studies striving to interpret this phenomenon as a 'process' subject to the simultaneous workings of both agency and structure that dynamically vary across space and time. This, for example, leads Brooks and Waters to argue for 'an overtly geographical perspective' (2011: 114) that is able to account for the 'social, cultural and political meaning' (2011: 115) of the contemporary forms of student mobility and migration.

Another major conceptual trend within the field of migration and mobility studies that is of great relevance for international student migration relates to the advent of transnationalism, which gained currency in population mobility studies during the 1990s. Research adopting the transnational approach 'shifts attention away from the places between which migrants travel, to a broader investigation of the different social and economic ties and cultural values shaping migrants' movements and practices' (Geddie 2010: 79). In doing so, earlier studies that adopted a transnational perspective reflected the then-dominant view that the role of the state was in the process of being undermined by globalisation forces. However, this has led to a critique that such transnational accounts tend to be 'agency-heavy' and 'structure-light', that they overlook the geopolitical power relations within which transnational practices are embedded and are thus in need of further theorisation of space–time relations (Bailey 2001: 421). Since then, there has been an increase in scholarship showing greater sensitivity to these relations in 'the links between social transformation and human mobility across a range of socio-spatial scales' (Castles 2010: 1565). This has produced a continuous need 'to examine the relations between migration and [social] change under a transnational

lens because of the increasing boundedness of the global system' (Portes 2010: 1557). To this end, the theoretical contribution of the transnational lens consists of a focus on the multi-layered contexts in which the processes of international migration and mobility take place. In this sense, a transnational approach 'usefully challenges conventional distinctions between structure and agency, between political economy and forms of individualist explanation, as well as the binary division between global processes and local lives' (McDowell 2005: 20). Moving beyond this binary optic has particular relevance for theorising international student mobility and migration. In recent studies, this has led to a pluri-local conceptualisation of the phenomenon. This conceptualisation examines how it is situated within several geographical contexts and has thus provided the basis for acknowledging variegated agency—structure constellations that 'differ for each student given his or her various geographic relations and experiences' (Geddie 2010: 82). Likewise, moving beyond the binary optic raises awareness of the transitional nature of international student migration. As Brooks and Waters explain, 'a complex array of transnational networks and connections, linking students "home" and "host" societies […] do not end when a student graduates, but will in most cases persist over time, into their working lives and beyond' (2011: 134).

Together, these theoretical developments lead to the simultaneous positioning of international student migration as a flow of its own, and as part of other migration and mobility flows that overlap one another. The present chapter contributes to such a wider conceptual landscape by presenting an interdisciplinary[3] approach to understanding international student migration. The next sections outline this approach and draw upon different strands of literature from migration and mobility studies, as well as various bodies of research pertaining to contemporary developments in higher education, the competition for talent and migration management.

3 Higher Education in the Globalising Knowledge Economy

It has been observed that 'the focus on knowledge as the key motor for the economy […] has placed education at the centre of policy and politics' (Robertson 2009: 1). This section discusses some of the major transformation processes that are shaping the higher education landscape in the globalising knowledge economy.

---

[3] Here, interdisciplinarity is understood as an engagement with debates and the incorporation of findings and positions across disciplines, rather than as the eclectic application of different theoretical and methodological traditions from different disciplines. In this sense, it follows the conceptualisation of interdisciplinary perspectives in migration studies put forward by Favell (2008a), and King (2012).

3.1 Globalisation and Internationalisation Processes

A multitude of developments have been mentioned as having a globalising effect on higher education. The preoccupation with human capital formation driving the demand for, and the supply of higher education, the rapid growth of international student flows, and the increasing commercialisation of higher education as a means of enhancing competitiveness in the knowledge economy are among the developments widely cited as feeding the globalisation of higher education (Vincent-Lancrin 2004; Epstein 2007; Brown et al. 2008a, b; Marginson and Wende 2009; Findlay 2010; Robertson 2010a; Brooks and Waters 2011; Findlay et al. 2012). Against this backdrop, during the past decade, internationalisation was already being considered as 'an inevitable result of the globalised and knowledge-based economy' (Altbach and Teichler 2001: 5). Subsequently, it has been argued that 'internationalisation is changing the world of higher education, and globalisation is changing the world of internationalisation' (Knight 2004: 5) and that 'globalisation is obviously more transformative than internationalisation' (Marginson and Wende 2009: 22). However, in understanding the relationship between these two processes, it is important to emphasise that 'globalisation is fundamentally contested and contestable and internationalisation initiatives play out a range of positions, logics and strategies' (Khoo 2011: 338). This increases the importance of understanding internationalisation[4] and globalisation in relation to each other. In this sense, internationalisation represents a process that is being strategically incorporated into the economic agenda by supranational, national and sub-national actors in order to develop, maintain and strengthen their foothold in the competitive globalising higher education landscape, and in globalisation in the more general sense. Critical accounts of this development draw attention to the fact that this incorporation is 'informed by the demands of neoliberal capitalist economies', thus emphasising 'the view of international students primarily as strategic economic resources or a source of revenue for university institutions (Britez and Peters 2007: 355).

Although the neoliberal pressures behind such economic rationales help towards understanding the eagerness with which many states and higher education institutions are courting international students, they 'should not obscure the important political motives that also underpin policies to facilitate student migration' (Brooks and Waters 2011: 33). Table 1 lists four major patterns in the approaches of states to internationalisation and international student mobility, which the OECD classifies according to their underpinning rationales (OECD 2004; Vincent-Lancrin 2009).

The first approach, which seeks to foster mutual understanding, represents a more traditional model of internationalisation, whereas the other three 'are focused

---

[4] According to the working definition put forward by Knight, internationalisation refers to 'the process of integrating an international, intercultural and global dimension into the purpose, functions or delivery of post-secondary education' (2004: 11).

Table 1 Types of state approaches to the internationalisation of higher education

Approach	Objectives and characteristics
Mutual understanding	• Seeks to foster political, cultural and academic links between the students' host and home countries and sometimes pursues foreign policy and development aid objectives
	• Targets a small elite group of foreign students, who are expected to return after their studies
Skilled migration	• Focuses on attracting talented students as prospective knowledge workers
	• Proactive and targeted approach to recruitment through facilitated grant and/or immigration schemes
Revenue generation	• Aimed at developing higher education as an export industry
	• Substantial autonomy is granted to higher education institutions, which are encouraged to become entrepreneurial on the international market, while public subsidies are reduced or removed altogether
	• Differentiated immigration policies facilitate or limit the stay conditions for different groups
Capacity development	• Focuses on importing education services to meet local demand and encouraging domestic students to study abroad
	• In terms of migration policy, it promotes temporary mobility and encourages the return of the country's own nationals

Source Vincent-Lancrin (2009: 73–77)

on economic considerations', but the objectives pursued by these approaches are 'not mutually exclusive' (Vincent-Lancrin 2009: 73). Thus, while Germany, France and the Netherlands are among the European destination countries that are actively adopting the skilled migration approach, Germany also recognises the importance of student mobility as a foreign policy tool (Rohde 2012), and the Netherlands simultaneously pursues a revenue generation approach with regard to non-EU students (Roodhenburg 2012). This mix of approaches is also found in Switzerland, where no centralised efforts to attract foreign students existed until recently. Today, international student recruitment is increasingly becoming an integral part of Switzerland's bilateral strategies for research cooperation with other countries, while higher education and research policies are being streamlined across the cantons 'towards securing quality and increasing competitiveness and growth' (Becker and Kolster 2012: 27). Indeed, even if there are dominant patterns in the globalising higher education landscape, the outcomes of such approaches to internationalisation and international student mobility 'vary considerably from one country to the next, even with similar political intentions or instruments' (Vincent-Lancrin 2009: 73). This underlines the importance of influences exerted by multiple actors which are shaping the evolving higher education landscape on different geographical and administrative scales, as well as the peculiarities of the national contexts through which such influences are mediated.

3.2 Supranational, National and Sub-national Actors

Whether in relation to higher education or more generally, one should not overlook the fact that globalisation is 'the outcome of processes that involved real actors—economic and political—with real interests' (Robertson et al. 2002: 472). International student migration is a phenomenon that is taking place in a context in which 'there are complex articulations between global influences and the priorities of particular nations and regions' (Brooks and Waters 2011: 22). Thus, the national positions of European destination countries do not come about in a vacuum and should be contextualised in relation to both the supranational context shaped by actors such as the OECD and the EU, and the sub-national context constituted by actors at the regional and local levels as well as by those representing the business sector.

To start with the OECD, its influence on national higher education agendas and policies has been well documented (Lynch 2006; Mathisen 2007; Robertson 2010a; Brooks and Waters 2011). The organisation contends that 'higher education drives and is driven by globalisation' and sees it as one of the key economic mechanisms that, through its role in cultivating human capital and its capacity for innovation, 'determine competitiveness in the knowledge economy' (OECD 2009: 13). Such views held by the OECD exert an influence on state policies, particularly through 'the generation and production of different types of data' (Brooks and Waters 2011: 28), including standardised indicators and comparative policy reviews. In its flagship publication *Education at a Glance*, which compares the performance of the member states according to a selected set of education indicators, the Secretary General of the OECD states that:

> As countries compete to excel in a knowledge-oriented global economy, international benchmarks allow them to track the evolution of the level of skills and knowledge of their own populations compared to those of their competitors. […] The OECD has recognised from the outset that education plays a central role in economic development; today, the Organisation is better equipped than ever to both track and support that role (OECD 2011: 20).

Critical readings of this stance argue that it is based on 'assumptions about the inevitable and largely unproblematic nature of globalising pressures' (Brooks and Waters 2011: 25), but they nonetheless acknowledge the wide endorsement of such positions among the OECD member states. In fact, the OECD data that benchmark national higher education systems against one another have been described as providing a 'highly respected evidence base' (Kearney and Yelland 2010: 5) that helps policymakers to 'understand globalisation-related trends in higher education and imagine possible and plausible futures' (OECD 2009: 3). Such data are taken seriously by both national and sub-national policymakers. Among other things, this has resulted in an increased focus on attracting international students within the context of the development plans put forward by regional and municipal authorities in many European countries (Marmolejo and Puukka 2006).

The EU's higher education agenda reflects a similar economic orientation to that of the OECD, while it also promotes political and cultural objectives, such as fostering social cohesion and building a common European identity (Kenway and Fahey 2007; Robertson and Keeling 2008; Dale 2010; Robertson 2010b; Batory and Lindstrom 2011; Capano and Piattoni 2011). Higher education is to be mobilised as one of the core mechanisms within the framework of the Europe 2020 strategy, which represents the latest edition of the EU growth agenda. This was confirmed by the EU Commissioner responsible for education: 'The Europe 2020 strategy for smart, sustainable and inclusive growth rightly recognises the key role education and higher education must play if our ambitions for Europe in a fast-changing global reality are to be realised' (Eurydice Network 2011: 3).

These ambitions come down to boosting the competitiveness of the EU in the globalising knowledge economy. The incorporation of higher education as one of the core mechanisms in the framework of the EU competitiveness strategy means that higher education is no longer a 'bastion of national sovereignty' (Batory and Lindstrom 2011: 311), but a policy area 'subjected to constant supra-national pressures' (Capano and Piattoni 2011: 586). These pressures not only feed into the national higher education reforms but also exert an increasing influence on the position of individual higher education institutions (Mosneaga and Agergaard 2012). The European Commission now provides 'recommendations about how universities' structures of governance, financing and research management […] should be "modernised" to allow Europe to contend in the global competition for minds and markets' (Robertson and Keeling 2008: 225). The impact of such recommendations has been strengthened by the financial incentives that the Commission provides through a range of higher education programmes (Batory and Lindstrom 2011).

Such supranational influences are mediated through the specificities of different national circumstances and by the practices of sub-national actors, such as local authorities and individual higher education institutions, which approach internationalisation and international student recruitment in the context of these specificities (Brooks and Waters 2011). The business community, often represented by employer organisations and trade unions, also has a role to play in shaping this context (Mosneaga 2013). Vincent-Lancrin implies that sub-national actors have a role to play in steering approaches towards internationalisation and international student recruitment adopted by the states, stating that 'these strategies are not always coordinated and even less directly decided at a [national] government level' (2009: 73). A case in point is the plethora of scientific and academic collaboration initiatives between Germany, France, the Netherlands and Switzerland on the one hand, and India on the other. Reviews of such initiatives reveal their highly diverse scope and scale: they range well beyond the official memoranda of understandings at the national level to include a variety of regional exchange programmes and a multitude of institutional agreements (Castillo 2011; Girard 2011; Henslin 2011; Hercog and Naus 2011).

By adopting their respective strategies, regional and local authorities play a role in mediating the supranational and national pressures that are transforming the

higher education landscape. However, the implementation of these strategies is far from being a straightforward process. Examining policy internationalisation and the national variety of higher education systems, King notes that 'localised interpretation and elaboration as processes aiding the global spread of particular standards and models may sometimes take circuitous routes' (2010b: 592).

4 Study-to-work Status Transition in the Context of Labour Market Transformation

The focus on the 'inextricable co-influencing of the global and the local' (King 2010b: 593) is also relevant to understanding how post-graduation study-to-work status transition takes place in the context of national labour market transformations driven by the expansion of the globalising knowledge economy. Here, we can observe two developments that are having a particular influence on shaping the direction that such transformations take: the uneven distribution of skills and talents, which is giving rise to the global race for talent, and the emphasis on employability that this competitive environment engenders.

4.1 Uneven Geographies of Skills and Talent

The increasing reliance of developed economies on knowledge-intensive industries as primary sources of growth, and the rising demand for innovation that this generates are fuelling the so-called just-in-time approach to skills (Papademetriou et al. 2009: 216). This approach epitomises the increasing time pressure within the globalising knowledge economy, with companies having to have access to the 'right' profiles at the 'right' time in order to produce on-demand products and services and thereby gain a competitive advantage. However, employers are finding it difficult to secure the 'right' composition of skilled workers as there are 'mismatches between the skills produced and the skills needed nationally' (Skeldon 2009: 156). This is especially true in advanced economies undergoing demographic transition including France, Germany, the Netherlands and Switzerland. The situation manifests itself through uneven geographies of skills and fuels the competition for talent on a global scale. Explaining the reasoning behind this expanding competition for the best and brightest, some critical analysts note that:

> This not only makes talent more valuable to employers but also encourages them to look far afield, justified on such grounds as an ageing workforce, skill shortages, especially of engineering, IT and science graduates; and declining education standards domestically (Brown and Tannock 2009: 379).

In response to such demands from the business sector, policymakers in the OECD countries have been 'aggressively racing to increase the education attainment of their population' (Douglass 2009: 48) and/or designing selective immigration schemes focused on attracting the knowledge workers who possess skills deemed to be valuable for the national economy. In fact, efforts to increase tertiary education attainment levels have been expanding in most European countries, including France, Germany, the Netherlands and Switzerland. With regard to selective immigration schemes, all four countries have introduced varying degrees of selective orientation into their migration management systems since the mid-2000s (Tejada 2011; Sykes and Chaoimh 2012). Such policy initiatives are often based on the assumption that labour market demands can be predicted well in advance and that enhancing the skill profile of the country's population in line with these demands will ensure that the country stays competitive and will enjoy high-skilled, high-wage employment. In practice, however, 'it is extremely difficult to import specific type of skills at precisely the time and to the specific places they are required—even if these are known in the first place' (Skeldon 2009: 155). Furthermore, this assumption overlooks the structural ceiling that 'the capacity of a nation's population to actually benefit from post-secondary education […] is most often linked to the balance of graduates with immediate job opportunities' (Douglass 2009: 53). Analyses of corporate skill-formation strategies and of the expansion of tertiary education enrolments in the emerging economies indicate that the reality awaiting many university graduates in Western economies is likely to be characterised by high-skilled, but low-wage employment (Brown et al. 2007, 2008a, b, 2011). As many studies of immigrants' employment outcomes already show that skilled immigrants tend to be paid lower wages than their domestic counterparts in the same type of position, it is even argued that 'in far too many instances the real race is to obtain rather generic skills at a discount' (Papademetriou et al. 2009).

The way in which skills or talent is measured is another issue related to the imbalanced structure of rewards between education and employment generated by uneven geographies of skills and talents. More often than not, migration policies are based on dehumanising definitions of the highly skilled and simplistic assumptions about talent mobility (Mosneaga 2010; Mosneaga and Winther 2013). Even economists, who have traditionally measured the highly skilled in terms of their educational levels, are starting to acknowledge that a 'variety of factors contribute to skills development, such as work experience, length and type of training, formal education, and the economic value of the work performed' (D'Costa 2008: 46). Exploring the production of migrants' skills in multiple dimensions across sending and receiving contexts, Raghuram warns that 'skills provide migration policies with a thin veneer of gender, class and race neutrality' (2008: 93), when, in practice, all these elements influence the acquisition, development and transferability of individual skills.

Against the backdrop of these observations and arguments, the goal of talent attraction represents a response to such multidimensional geographies of skills and talents. Accordingly, the unevenness of these geographies can be regarded as one of

the underlying factors reconfiguring the relationship between education and employment within the context of the globalisation of higher education and ongoing restructuring of the labour market. Such reconfigurations provide a challenging context for the study-to-work status transition process of higher education graduates.

4.2 The Quest for Employability

Looking at how employability is being interpreted and sought-after in this unsettled context adds another important dimension to our understanding of the challenge of status transition. According to the International Labour Organisation:

> The term employability relates to portable competencies and qualifications that enhance an individual's capacity to make use of the education and training opportunities available in order to secure and retain decent work, to progress within the enterprise and between jobs, and to cope with changing technology and labour market conditions (ILO 2004: n.d.).

In the fast-paced environment of the globalising knowledge economy, characterised by the volatility of economic cycles and labour markets, ensuring one's continuous employability is increasingly portrayed as an individual responsibility (Allen and Velden 2007; Hall 2009). This is particularly clear in the emphasis on life-long learning actively promoted in Europe, where each person 'is transformed into an individual learner responsible for the development of their capabilities' (Brown et al. 2008b: 142). In this context, it has been observed that to remain competitive in the knowledge economy, 'tertiary education is increasingly becoming a necessary, but no longer sufficient condition' (Allen and Velden 2007: 1). In addition to technical knowledge and expertise within a specific field, higher education graduates are increasingly expected to possess competencies such as functional flexibility and the ability to innovate and manage knowledge, as well as to mobilise human resources and demonstrate an international orientation. Hall explains that the very depiction of the knowledge economy as a highly competitive environment requires both individuals and education systems to 'foster particular embodied skills and subjectivities' (2009: 610). Taking the case of business education, she lists three types of skills and subjectivities that are increasingly valorised by knowledge service firms: '[…] "global leaders"; "fast" management subjects who are able to adapt and cope with the inherent uncertainty of working in the "knowledge-based economies" and "creative" economic actors that are seen as important components of a competitive, skilled workforce' (Hall 2009: 610).

However, Hall then also argues that 'many of these more embodied types of knowledge are likely to be relatively sticky and difficult to translate between the spaces of business education and corporate practice' (2009: 613). Therefore, she recommends challenging the political and corporate assumption that such subjectivities and skills can be taught by higher education institutions. While questioning this assumption is important, it is also important to realise that, its validity aside, the high-profile talk promoted by corporate and political elites about what is demanded from individuals for them to succeed in the globalising knowledge economy is

already having an impact on individual choices and decisions. Many students go a long way to meet such demands. Their strategies include pursuing degrees in high-ranking institutions, searching for relevant work experience, adding extra-curricular activities and studying abroad, which they see as a way of providing them with the international 'experience/exposure that is greatly valued by employers as well as by the graduates themselves' (Brooks and Waters 2011: 11). In effect, the high-profile focus, which in the EU emphasises a move 'towards a high-tech, low-carbon economy that prioritises innovation, creativity and mobility' (EU 2010a), is producing policies that actively promote all these strategies as boosters of employability. Educational mobility is particularly appreciated by the many EU and national initiatives that encourage students 'to travel in order to enhance their job prospects in a globally connected work force, their cross-cultural competencies and, thereby, their work skills and employability' (Kenway and Fahey 2007: 162). In practice, however, there is only patchy evidence that employers prefer graduates with mobility experience, while the active promotion of student mobility in the EU is leading to an inflation of its employability effect, as there are 'many more mobility-rich students around now than in the past' (King et al. 2010: 36).

Regardless of the prescriptions that are in fashion in terms of boosting one's employability, the truth is that study-to-work status transition represents a daunting challenge in the aftermath of the global financial crisis of 2008. The enduring economic recession has raised concerns about the so-called lost generation of young people (Coy 2009; Blanchflower 2010; ILO 2010, 2011; OECD 2010). A 2010 ILO report shows that the job crisis is affecting both the skilled and unskilled categories and it also notes that the lost generation label applies particularly to the 'marginalised cohort of educated youth' (ILO 2010: 43) who are trying to enter the labour market after completing their higher education. In the OECD member states the real concern about this generation lies in the tremendous increase in unemployed youth, whose numbers rose from 11 to 15 million between 2007 and 2010 (OECD 2010). With the economy in such a dismal state, many graduates are 'experiencing status frustration, feeling economically insecure and unable to see how to build a career' (Standing 2011: 77). Moreover, even those who do find jobs tend to end up in short-term, low-paid positions or unpaid internships that 'stretch well beyond what could be required to establish "employability"' (Standing 2011: 65).

In the light of these harsh realities, although the emphasis on employability as an individual responsibility is still dominant, it is now complemented by the realisation that wider structural conditions also affect individuals' employment prospects, as well as their outcomes. Even before the economic crisis began to shape the tone of the policy documents, a European Commission staff working paper noted that, besides being influenced by one's knowledge, skills and attitude, 'labour market rules and institutions have a significant impact on the ability of an individual to gain employment' (EC 2008: 148). In the context of the economic crisis, the EU Agenda for New Skills and Jobs stresses that 'it is not enough to ensure that people remain active and acquire the right skills to get a job: the recovery must be based on job-creation, which depends first and foremost on economic growth' (EC 2010b: 16).

Seen in this light, the status transition of international students in the European destination countries, where the economies are markedly affected by the crisis, albeit to a varying degree,[5] is shaped by the interaction between the personal and structural aspects of employability. Considerations about employment prospects play out in the context of student migrants' choice of study destination as well as their perspectives for staying in the host country after graduation (Mosneaga and Winther 2013; Sykes and Chaoimh 2012). It is interesting to note that international students in science and technology are more positive about their job prospects in the European host countries than students in the social sciences and humanities (Sykes and Chaoimh 2012). Similarly, research on the labour market considerations of international graduates in London, UK, shows that science and technology graduates have a more confident outlook than those from arts and design disciplines, and among other things, it attributes this to the greater international transferability of science and technology skills (Geddie 2010). This underlines the significance of employability in shaping student migrants' career choices in terms of the specialisation they pursue and where they study.

5 International Students and Migration Management

Indeed, the migrant status of international students adds some extra dimensions to their employability and their status transition in the host country in general (Kuptsch 2006; Hawthorne 2009; Brooks and Waters 2011). While the study-to-work transition is a challenging process for all, for international students it tends to be an additionally confusing process as they have to navigate its various dimensions as foreigners. These dimensions are examined here by considering the position of international students as transitional migrants in a transnational context and by looking at the interaction between mobility and immigration policies in the management of international student migration.

5.1 International Students as Transitional Migrants in a Transnational Context

In the literature highlighting the ever-more prominent link between international student mobility and skilled migration, students are regarded as a transitional category of migrants (Tremblay 2005; Kuptsch 2006; Vincent-Lancrin 2008; Skeldon 2009; Findlay et al. 2012). This transitional character encompasses several dimensions, as when, for example, a study-to-work status transition involves a

---

[5] Apart from Germany where the youth unemployment rate decreased from 11.7 % in 2007 to 9.7 % in 2010, during the same time period youth unemployment rates increased in France from 18.9 to 22.5 %, the Netherlands from 5.9 to 8.7 % and Switzerland from 7.1 to 7.2 % (ILO 2011).

shift from being single to being part of a family. Similarly, the status transition of international students often involves several geographical locations, and on a transnational scale the factors that shape their transition experiences often range well beyond their host or home contexts (Geddie 2010). Favell's (2008b) account of different forms of mobility prompted and/or encouraged by European integration illustrates the multiple forms that status transition can take. He argues that a simple mechanism of student exchange programmes can subsequently 'lead to further migration via a series of different paths: additional study, seeing new professional opportunities, getting a taste for different or foreign countries, or of course romance' (Favell 2008b: 67).

In order to capture such different dimensions, the international students' status transition has to be recognised as a transitional and transnational stage, framed by diverse sets of challenges and opportunities (Mosneaga and Winther 2013). Some of these are shared with other migrant categories, while others are more characteristic of student migrants. For example, Castles (2006) notes the short-sightedness and occasional inconsistency common to many temporary migration schemes of European countries today, including those applied to foreign students, and argues that this may lead to unintended policy outcomes reminiscent of the postwar guest-worker programmes. Turning to another aspect of student mobility, Mau (2010) notes that the extended time periods spent studying abroad and interacting with peers from multiple origins and backgrounds are particularly conducive to transnational ties when compared with other types of mobile groups. In this respect, 'there is some debate as to whether students should be seen as a sub-group of other types of migrants (such as the highly skilled) or whether they constitute a separate group on their own' (Brooks and Waters 2011: 82). Furthermore, 'there is some ambivalence in the literature as to the social characteristics of those who move abroad for their studies' (Brooks and Waters 2011: 82), with numerous studies suggesting that it is those from a privileged social background who study abroad, while others are reluctant to regard students as a form of elite migration.

The very diversity of the existing perspectives of mobile students highlights the heterogeneity inherent in this group. Recognising this diversity of nuances colouring international student migration is a precondition for successfully combining expressions of the international students' status transition process at an individual level with its expressions at the level of the social, political and economic contexts of the countries of origin and destination.

5.2 The Management of International Student Migration: Mobility Versus Immigration Policy

Looking at how international student migration is approached from a migration management perspective is important for understanding the ramifications of the process of international students' status transition for the individuals concerned and the wider political and economic contexts. In this connection, the EU promotes a

very positive picture of student mobility. According to the guide for mobile students published within the framework of the Youth on the Move initiative[6]:

> Travelling to another EU country to study ('learning mobility') is one of the fundamental ways in which young people can boost their personal development as well as their future job opportunities. Learning mobility also benefits the EU as a whole: it fosters a sense of European identity; it helps knowledge circulate more freely; and it contributes to the internal market as Europeans who are mobile as young learners are more likely to be mobile as workers later in life (EU 2010b: 5) .

This emphasis on intra-European mobility is not coincidental. Although Youth on the Move also includes programmes designed to promote student mobility with third countries and recognises the need to 'attract highly skilled migrants in the global competition for talent' (EC 2010a: 13), the reality is that third-country nationals are subjected to the filters of national immigration policies. In fact, the immigration of third-country nationals in the EU is understood as a critical area of home affairs policy concerned with security and the distinction between internal and external borders, and in this sense it radically differs from the tone of the discussions on mobility policy. An analysis of the developments in both of these policy areas during the early phases of the EU's Lisbon Agenda—the predecessor of the Europe 2020 strategy—observes that:

> There appears to be the implicit suggestion in many of these EU developments that 'migration' is an imperfect form of movement because it encounters the structural and organisational features of states while 'mobility' is a more perfect form of movement occurring within a more integrated European space (Geddes and Balch 2002: n.d.).

Since then, the fact that population mobility and immigration are inherently linked seems to have been acknowledged more, but the tensions between the two policy areas persist, with mobility being embraced while immigration is curtailed. In fact, such tensions reflect the rigidity of the migration management regimes found in many EU and OECD countries, where migrants are differentiated into desirable and undesirable categories (Mosneaga 2013). This means that different migrant groups are 'incorporated into host societies at different positions in a hierarchy of citizenship, dependent on a range of factors including their entry status' (Stasiulis 2008: 96). Such a categorisation of migrant statuses persists in the EU's renewed Global Approach to Migration and Mobility,[7] which is otherwise

---

[6] The Youth on the Move initiative represents one of the main flagship initiatives under the Europe 2020 strategy and aims 'to respond to the challenges young people face and to help them succeed in the knowledge economy' (EC 2010a: 4) by improving the quality of education and training systems, supporting labour market integration and promoting mobility. The EU Agenda for New Skills and Jobs mentioned earlier is designed to complement the Youth on the Move initiative.

[7] The EU adopted a Global Approach to Migration back in 2005, emphasising the need for a coherent and comprehensive policy framework for managing the broad range of issues in cooperation with non-EU countries. This approach was renewed and renamed the Global Approach to Migration and Mobility following an evaluation in 2011, which among other things 'highlighted the need for stronger coherence with other policy areas' (EC 2011a).

supposed to strengthen the coherence between the mobility and migration policy areas and thus improve the alignment of the EU's migration strategy with the objectives of its education and employment policies:

> People-to-people contacts through education and training, trade and business, cultural exchanges, tourism or visiting family members across borders form an essential part of today's world. [However,] without well-functioning border controls, lower levels of irregular migration and an effective return policy, it will not be possible for the EU to offer more opportunities for legal migration and mobility (EC 2011b: 5).

Looking more specifically at the case of international student mobility, Crosier (2010) draws attention to the fact that persistent tensions between mobility and immigration policies are leading to contradictory approaches to this issue and argues that:

> By separating mobility and immigration into separate categories for thought and debate, we have managed to create a situation where it is possible for many—governments as well as citizens—to hold contradictory positions simultaneously. Student mobility is a good thing for society to encourage and stimulate, and immigration is a societal problem to discourage and control (Crosier 2010: 13).

The analyses of the relevant policy frameworks of European countries confirm that, besides influencing how international student migration is considered and discussed by policymakers and the general public, the separation of mobility policies from immigration policies also influences how international students' status transition is actually handled by national migration management frameworks (Mosneaga 2013). The fact that there is a contradictory relationship between how mobility and migration are approached provides fertile ground for widening the difference between policy and practice in the management of international student migration. It thereby carries implications for the host countries' ability to attract and retain international students as prospective skilled migrants. As Sidhu suggests, 'although states are attempting to articulate their development agendas and labour market needs with migration regimes, the outcomes are less coordinated than anticipated by policymakers' (2011: 3).

6 Conclusion

This chapter took its point of departure from the positioning of international student migration as a phenomenon evolving at the globalising trijuncture of higher education, the competition for talent and trends in migration management. To offer a fuller picture of the dynamics of interaction at this trijuncture, the analysis draws on the examples of the European destination countries to synthesise relevant findings from various bodies of research into the globalisation of higher education, the global competition for talent and national migration management practices. In doing so, this perspective uncovers the workings of the key trends and

processes that are shaping international student migration within the context of today's knowledge economy.

Looking at the conceptual trends that are feeding an expanding body of research on international student migration, the discussion highlights the reorientation within migration and mobility studies that is raising an awareness of the multi-layered complexity of population flows and their close interrelation with one another. Consequently, international student mobility is increasingly recognised as a process shaped by the combined influences of individual agency and structural factors that also evolve with life stages. Moreover, the incorporation of a trans-national perspective into studies of international student migration is leading to the realisation that such agency–structure constellations are simultaneously embedded in multiple geographical contexts. Together, these conceptual trends reveal the transitional character of international student migration that often overlap, or evolve into other types of migration, and thus connect multiple places in ways that range well beyond binary links between origin and destination contexts.

Seen in this light, the globalisation of higher education emerges as one of the key processes that feed into this transitional nature of international student migration on a transnational scale. The landscape of globalising higher education is characterised by the increasing mobilisation of higher education sectors to meet the goals of primarily, though not solely, economic globalisation agendas. The analysis shows multiple levels of influences feeding into this development, ranging from supranational organisations like the OECD and the EU, to national govern-ments and sub-national actors, such as regional public authorities and higher education institutions. This means that the globalisation of higher education is mediated through a host of administrative and geographical peculiarities, which in turn account for diverging approaches to internationalisation and international student mobility across, and even within, national contexts.

Besides being embedded in such multi-scalar transformations of the higher education landscape, international student migration is also embedded in complex processes of labour market transformation. In this respect, the global competition for talent represents the key trend that is influencing the direction of international student flows, the approaches towards international student migration and the outcome of this migration in terms of individuals' study-to-work status transition. Underlying this competition is an uneven spatial distribution of talents which, among the industrialised countries competing in the knowledge economy, trans-lates into preoccupations with higher education attainment levels and selective immigration policies. However, some argue that the effect of such measures is questionable within the context of persistent economic recession and the increasing unpredictability of labour markets. Instead, there is now an ongoing reconfiguration of the education–employment relationship, and among other things, this is translating into an increased focus on individuals' efforts to secure employability. Importantly, the ongoing job crisis and rising concerns about lost generations of educated youth are increasingly raising an awareness of the inex-tricable links between the individual and structural dimensions of employability. This awareness of employability provides an important backdrop for students'

choices concerning what to study, where to study and where to continue a post-graduation career.

However, the nuances inherent in the process of making such choices cannot be fully understood without reflecting on the position of international students as migrants. The accounts provided by the existing literature of the characteristics of international students and their similarities and differences with other migrant groups do not offer a unified picture. The argument put forward here makes the case for accounting for such heterogeneity by recognising the broad range of constraints and opportunities that international students encounter as transitional migrants in a transnational context. Likewise, it is argued that national migration management practices play a decisive role in shaping international students' migration and career trajectories. In this respect, the controversial approach of European migration management regimes that welcome mobility but which police immigration provides a base for widening policy-practice gaps in the management of international student migration.

Taken as a whole, this discussion of international student migration at the global trijuncture of higher education, the competition for talent and migration management points to the existence of some deep-rooted tensions concerning the pursuit of these three rather different agendas simultaneously. The existence of these tensions converts the relationship between the lofty aims of the ambitious agendas promoting the internationalisation of higher education and talent attraction on the one hand and the gate-keeping practices of national migration management on the other into a highly contested process, and this often leads to inconsistent policy outcomes. How such tensions are manifested in the relationship between origin and destination contexts deserves an in-depth exploration in its own right that can open up avenues for further research.

References

Abella, M. (2006). Global competition for skilled workers and consequences. In C. Kuptsch & E. F. Pang (Eds.), *Competing for global talent* (pp. 11–32). Geneva: ILO.

Adey, P. (2010). *Mobility*. New York: Routledge.

Altbach, P., & Teichler, U. (2001). Internationalization and exchanges in a globalised university. *Journal of Studies on International Education, 5*(1), 5–25.

Allen, J., & Velden, R. (2007). Introduction and the flexible professional in the knowledge society. In J. Allen & R. Van der Velden (Eds.), *The flexible professional in the knowledge society: General results of the REFLEX project* (pp. 1–7, 9–56). Maastricht: Research Centre for Education and Labour Market, Maastricht University.

Bailey, A. (2001). Turning transnational: Notes on the theorisation of international migration. *International Journal of Population Geography, 7*(6), 413–428.

Bakewell, O. (2010). Some reflections on structure and agency in migration theory. *Journal of Ethnic and Migration Studies, 36*(10), 1689–1708.

Batory, A., & Lindstrom, N. (2011). The power of purse: supranational entrepreneurship, financial incentives, and European higher education policy. *Governance: An International Journal of Policy, Administration, and Institutions*, *24*(2), 311–329.

Becker, R., & Kolster, R. (2012). *International student recruitment: Policies and developments in selected countries.* Nuffic: Netherlands Association for International Cooperation in Higher Education.

Blanchflower, D. (2010, January 21). Credit crisis creates lost generation. Bloomberg. http://www.bloomberg.com/news/2010-01-22/credit-crisis-creates-lost-generation-david-g-blanchflower.html. Accessed 2 February 2011.

Brettell, C., & Hollifield, J. (2008). Introduction: Migration theory—talking across disciplines. In C. Brettell & J. Hollifield (Eds.), *Migration theory: Talking across disciplines* (2nd ed., pp. 1–29). New York: Routledge.

Britez, R., & Peters, M. (2007). Internationalisation and the Cosmopolitical University. In D. Epstein, R. Boden, R. Deem, F. Rizvi & S. Wright (Eds.), *World year book of education 2008: Geographies of knowledge, geometries of power—Framing the future of higher education* (pp. 355–370). New York: Routledge.

Brooks, R., & Waters, J. (2011). *Student mobilities, migration and the internationalization of higher education.* Hampshire: Palgrave Macmillan.

Brown, P., Lauder, H., & Ashton, D. (2007).Towards a high-skills economy: Higher education and the new realities of global capitalism. In D. Epstein, R. Boden, R. Deem, F. Rizvi & S. Wright (Eds.), *World year book of education 2008: Geographies of knowledge, Geometries of power—Framing the future of higher education* (pp. 190–209). New York: Routledge.

Brown, P., Lauder, H., & Ashton, D. (2008a). *Education, globalisation and the knowledge Economy, TLRP Commentary.* London: Economic and Social Research Council UK.

Brown, P., Lauder, H., & Ashton, D. (2008b). Education, globalisation and the future of the knowledge economy. *European Educational Research Journal, 7*(2), 131–156.

Brown, P., Lauder, H., & Ashton, D. (2011). *The global auction: The broken promises of education, jobs and incomes.* New York: Oxford University Press.

Brown, P., & Tannock, S. (2009). Education, meritocracy and the global war for talent. *Journal of Education Policy, 24*(4), 377–392.

Capano, G., & Piattoni, S. (2011). From Bologna to Lisbon: The political uses of the Lisbon 'script' in European higher education policy. *Journal of European Public Policy, 18*(4), 584–606.

Castillo, M. V. (2011). Migration, scientific diasporas and development: Skilled Indians in Switzerland. Background paper prepared in the framework of the project Migration, Scientific Diaspora and Development: Impact of Skilled Return Migration on Development in India.

Castles, S. (2006). Guestworkers in Europe: A resurrection? *International Migration Review, 40*(4), 741–766.

Castles, S. (2010). Understanding global migration: A social transformation perspective. *Journal of Ethnic and Migration Studies, 36*(10), 1565–1586.

Cervantes, M., & Goldstein, A. (2008). Talent mobility in the global economy: Europe as a destination. In A. Solimano (Ed.), *The international mobility of talent: Types, causes and development impact* (pp. 298–337). Oxford: Oxford University Press.

Collinson, S. (2009). The political economy of migration processes: An agenda for migration research and analysis. IMI Working Papers 12. Oxford: International Migration Institute, University of Oxford.

Coy, P. (2009, October 8). The lost generation. Bloomberg Businessweek. http://www.businessweek.com/magazine/content/09_42/b4151032038302.htm. Accessed 2 February 2011.

Crosier, D. (2010). Student mobility in the next decade: do we know where we're going? In E. Froment, J. Kohler, L. Purser & L. Wilson (Eds.), *EUA bologna handbook. making bologna work—Volume B: Introducing bologna objectives and tools; Developing mobility and ensuring recognition; Understanding mobility and recognition* (B 3.1, pp. 1–15). Berlin: Raabe.

D'Costa, A. (2008). The international mobility of technical talent: Trends and development implications. In A. Solimano (Ed.), *The international mobility of talent: Types, causes and development impact* (pp. 44–83). Oxford: Oxford University Press.

Dale, R. (2010). Constructing universities' responses to Europe's Lisbon Agenda: The roles of the European Commission in creating the Europe of knowledge, LLAKES Research Paper 19, Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education, University of London.

Dolby, N., & Rizvi, F. (2008). Introduction: Youth, mobility and identity. In N. Dolby & F. Rizvi (Eds.), *Youth moves* (pp. 1–14). New York: Routledge.

Douglass, J. (2009). The race for human capital. In J. Douglass, C. King, & I. Feller (Eds.), *Globalization's Muse: Universities and Higher Education Systems in a changing world* (pp. 45–65). Berkeley: Berkeley Public Policy Press.

Epstein, D. (2007). Introduction: Geographies of knowledge, geometries of power—Framing the future of higher education. In D. Epstein, R. Boden, R. Deem, F. Rizvi, & S. Wright (Eds.), *World year book of education 2008: Geographies of knowledge, geometries of power—Framing the future of higher education* (pp. 1–8). New York: Routledge.

European Commission. (2008). Progress towards the Lisbon objectives in education and training: Indicators and benchmarks 2008. Commission Staff Working Document based on SEC (2008) 2293.

European Commission. (2010a, September 15). *Youth on the move: An initiative to unleash the potential of young people to achieve smart, sustainable and inclusive growth in the European Union*. Brussels: COM (2010) 477 final.

European Commission. (2010b, November 23). *An agenda for new skills and jobs: A European contribution towards full employment*. Strasbourg: COM (2010) 682 final.

European Commission. (2011a, November 18). Stronger cooperation and mobility at the centre of the renewed EU migration strategy. Brussels: EC Press Release, IP11/1369.

European Commission. (2011b, November 18). *The global approach to migration and mobility*. Brussels: COM(2011) 743 final.

European Union. (2010a). *"What's in it for Me?" EU opportunities in education, culture and training*. Luxembourg: Publications Office of the European Union.

European Union. (2010b). *A guide to the rights of mobile students in European Union*. Luxembourg: Publications Office of the European Union.

Eurydice Network. (2011). *Modernisation of higher education in Europe: Funding the social dimension*. Brussels: EACEA P9 Eurydice.

Favell, A., Feldblum, M., & Smith, M. (2007). The human face of global mobility: A research agenda. *Society, 44*(2), 15–25.

Favell, A. (2008a). Rebooting migration theory: Interdisciplinarity, globalise, and post-disciplinarity in migration studies. In C. Brettell & J. Hollifield (Eds.), *Migration theory: Talking across disciplines* (2nd ed., pp. 259–278). New York: Routledge.

Favell, A. (2008b). *Eurostars and Eurocities: Free movement and mobility in an integrating Europe*. Oxford: Blackwell Publishing.

Findlay, A. (2010). An Assessment of supply and demand-side theorizations of international student mobility. *International Migration, 49*(2), 162–190.

Findlay, A., King, R., Smith, F., Geddes, A., & Skeldon, R. (2012). World class? An investigation of globalisation, difference and international student mobility. *Transactions of the Institute of British Geographers, 37*(1), 118–131.

Geddes, A., & Balch, A. (2002). The political economy of migration in an integrating Europe: Patterns, trends, lacunae and their implications, PEMINT Working Paper 6/2002. Liverpool: University of Liverpool.

Geddie, K. (2010). Transnational landscapes of opportunity? Post-graduation settlement and career strategies of international students in Toronto, Canada and London, UK. PhD Thesis submitted to the Department of Geography, University of Toronto.

Girard, B. (2011). Report on recent Indian skilled migration to France. Background paper prepared in the framework of the project Migration, Scientific Diaspora and Development: Impact of Skilled Return Migration on Development in India.

Hall, S. (2009). Ecologies of business education and the geographies of knowledge. *Progress in Human Geography, 33*(5), 599–618.

Hawthorne, L. (2009). The growing global demand for students as skilled migrants. In The Transatlantic Council on Migration, B. Stiftung, & Migration Policy Institute (Eds.), *Talent, competitiveness and migration* (pp. 362–398). Gütersloh, Germany: Verlag Bertlesmann Stiftung.

Henslin, A. S. (2011). Background paper for Germany—SNIS project "Migration, Scientific Diaspora and Development". Background paper prepared in the framework of the project Migration, Scientific Diaspora and Development: Impact of Skilled Return Migration on Development in India.

Hercog, M., & Naus, S. (2011). Background paper for the Netherlands—SNIS project "Migration, Scientific Diaspora and Development". Background paper prepared in the framework of the project Migration, Scientific Diaspora and Development: Impact of Skilled Return Migration on Development in India.

International Labour Office. (2010). *Global employment trends for youth—August 2010: Special issue on the impact of the global economic crisis on youth*. Geneva: ILO.

International Labour Office. (2011). *Global employment trends for youth: 2011 update*. Geneva: ILO.

International Labour Organisation (2004). R195 recommendation concerning Human Resources Development: Education, training and lifelong learning. Adopted at the 92nd Session of the International Labour Conference, 17 June, Geneva. http://www.ilo.org/ilolex/cgi-lex/convde.pl?R195. Accessed 2 February, 2012.

International Organisation for Migration. (2008, October 2). Search for work and workers at the heart of migration in this century, says IOM's World Migration Report 2008. IOM News Release. http://www.iom.int/jahia/Jahia/newsArticleEU/cache/offonce?entryId=20343. Accessed 10 December 2008.

Kearney, M., & Yelland, R. (2010). Higher education in a world changed utterly: Doing more with less. Discussion Paper for OECD/Institutional Management in Higher Education Conference, 13–15 September. Paris: OECD/IMHE.

Kenway, J., & Fahey, J. (2007).Policy incitements to mobility: Some speculations and provocations. In D. Epstein, R, Boden, R. Deem, F. Rizvi & S. Wright (Eds.), *World year book of education 2008: Geographies of knowledge, geometries of power—Framing the future of higher education* (pp. 161–179). New York: Routledge.

Khoo, S. (2011). Ethical globalisation or privileged internationalisation? *Globalisation Society and Education, 9*(3–4), 337–353.

King, R. (2010a). Book reviews: The dynamics of international student circulation in a global context; and academic mobility in higher education. *Journal of Ethnic and Migration Studies, 36*(8), 1355–1357. (Unless otherwise stated, King R. refers to publications by Russell King).

King, R. (2010b). Policy internationalization, national variety and governance: Global models and network power in higher education states. *Higher Education, 60*(6), 583–594.

King, R. (2012). Geography and migration studies: Retrospect and prospect. *Population, Space and Place, 18*(2), 134–153.

King, R., Findlay, A., & Ahrens, J. (2010). International student mobility literature review. Report to HEFCE, the British Council and the UK National Agency for Erasmus. Higher Education Funding Council for England.

Knight, J. (2004). Internationalization remodelled: Definition, approaches, and rationales. *Journal of Studies of International Education, 8*(1), 5–31.

Kuptsch, K. (2006). Students and talent flow—The case of Europe: From castle to harbour? In C. Kuptsch & E. F. Pang (Eds.), *Competing for global talent* (pp. 33–61). Geneva: International Labour Office.

Lewis, N. (2011). Political projects and micro-practices of globalising education: Building an international education industry in New Zealand. *Globalisation, Society and Education, 9*(2), 225–246.

Lynch, K. (2006). Neo-liberalism and marketisation: The implications for higher education. *European Educational Research Journal, 5*(1), 1–17.

Marginson, S., & Wende, M. (2009). The new global landscape of nations and institutions. In Organisation for Economic Cooperation and Development (Ed.), *Higher Education to 2030—Volume 2: Globalisation* (pp. 17–62). Paris: OECD.

Mathisen, G. (2007). Shaping the global market for higher education through quality promotion. In D. Epstein, R. Boden, R. Deem, F. Rizvi & S. Wright (Eds.), *World year book of education 2008: Geographies of knowledge, geometries of power—Framing the future of higher education* (pp. 266–279). New York: Routledge.

Mau, S. (2010). *Social transnationalism: Lifeworlds beyond the Nation-State*. New York: Routledge.

Marmolejo, F., & Puukka, J. (2006, November 29–December 1). Supporting the contribution of higher education to regional development: lessons learned from an OECD review of 14 regions throughout 12 countries. Paper prepared for the UNESCO Forum on higher education, research and knowledge—Colloquium on research and higher education policy: "Universities as Centers of Research and Knowledge Creation: An Endangered Species?" Paris.

McDowell, L. (2005). *Hard labour: The forgotten voices of latvian migrant 'Volunteer' Workers*. London and Oregon: UCL Press and Cavendish Publishing.

Mosneaga, A. (2010). Linking international student mobility to skilled migration: The case of Denmark. *International Journal of Contemporary Sociology, 47*(1), 98–118.

Mosneaga, A., & Agergaard, J. (2012). Agents of internationalisation? Danish universities' practices for recruiting international students. *Globalisation, Societies and Education, 10*(4), 519–538.

Mosneaga, A. (2013). Managing international student migration: The practices of institutional actors in Denmark. *International Migration*. Early View, doi:10.1111/imig.12071

Mosneaga, A., & Winther, L. (2013). Emerging talents? International students before and after their career start in Denmark. *Population, Space and Place, 19*(2), 181–195.

Organisation for Economic Cooperation and Development. (2004). *Internationalisation and trade in higher education: Opportunities and challenges*. Paris: OECD, Centre for Educational Research and Innovation.

Organisation for Economic Cooperation and Development. (2009). *Higher Education to 2030—Volume 2: Globalisation*. Paris: OECD.

Organisation for Economic Development and Cooperation. (2010). Lost generation? OECD Observer, 274 (May).

Organisation for Economic Development and Cooperation. (2011). *Education at a Glance 2011: OECD indicators*. Paris: OECD.

Papademetriou, D., Sommerville, W., & Tanaka, H. (2009). Talent in the 21st Century. In The Transatlantic Council on Migration, B. Stiftung & Migration Policy Institute (Eds.), *Talent, competitiveness and migration* (pp. 215–266). Gütersloh, Germany: Verlag Bertlesmann Stiftung.

Portes, A. (2010). Migration and social change: Some conceptual reflections. *Journal of Ethnic and Migration Studies, 36*(10), 1537–1563.

Raghuram, P. (2008). Governing the mobility of skills. In C. Gabriel & H. Pellerin (Eds.), *Governing international labour migration: Current issues, challenges and dilemmas* (pp. 81–94). London: Routledge.

Robertson, S., Bonal, X., & Dale, R. (2002). GATS and the education service industry: The politics of scale and global reterritorialization. *Comparative Education Review, 46*(4), 472–492.

Robertson, S., & Keeling, R. (2008). Stirring the lions: Strategy and tactics in global higher education. *Globalisation, Society and Education, 6*(3), 221–240.

Robertson, S. (2009, March 6). Education, knowledge and innovation in the global economy: challenges and the future directions. Keynote address to launch of research centres, VIA University College, Aarhus.

Robertson, S. (2010a). Globalising UK higher education. LLAKES Research Paper 16, Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education, University of London.

Robertson, S. (2010b). The EU, 'regulatory state regionalism' and new modes of higher education governance. *Globalisation, Society and Education*, 8(1), 23–37.

Rohde, N. (2012). Germany. In I. Ferencz & B. Wächter (Eds.), *European and national policies for academic mobility: Linking rhetoric, practice and mobility trends*. Bonn: Lemmens Medien GmBH (ACA Papers on International Cooperation in Education).

Roodhenburg, S. (2012). The Netherlands. In I. Ferencz & B. Wächter (Eds.), *European and national policies for academic mobility: Linking rhetoric, practice and mobility trends*. Bonn: Lemmens Medien GmBH (ACA Papers on International Cooperation in Education).

Sidhu, R. (2011). Re-thinking student migration trends, trajectories and rights. ARI Working Paper 157, Asia Research Institute of the National University of Singapore.

Skeldon, R. (2009). The race to attract mobile talent. *Current History, 108*(717), 154–159.

Standing, G. (2011). *The Precariat*. London: Bloomsbury Academic.

Stasiulis, D. (2008). Revisiting the permanent–Temporary labour migration dichotomy. In C. Gabriel & H. Pellerin (Eds.), *Governing international labour migration: Current issues, challenges and dilemmas* (pp. 95–111). London: Routledge.

Sykes, B., & Chaoimh, E. (2012). *Mobile talent? The staying intensions of international students in five EU Countries*. Berlin: SVR GmbH.

Tejada, G. (2011). Overview of Swiss scientific cooperation policies towards India and some key data on skilled Indians in Switzerland. Background paper prepared in the framework of the project Migration, Scientific Diaspora and Development: Impact of Skilled Return Migration on Development in India.

Tremblay, K. (2005). Academic mobility and immigration. *Journal of Studies in International Education, 9*(3), 196–228.

Vincent-Lancrin, S. (2004). Building future scenarios for universities and higher education: An international approach. *Policy Futures in Education, 2*(2), 245–263.

Vincent-Lancrin, S. (2008). Student mobility, internationalisation of higher education and skilled migration. In International Organisation for Migration (Ed.), *World migration report 2008: Managing labour mobility in the evolving global economy* (pp. 105–125). Geneva: IOM.

Vincent-Lancrin, S. (2009). Cross-border higher education: Trends and perspectives. In Organisation for Economic Cooperation and Development (Ed.), *Higher education to 2030—Volume 2: Globalisation* (pp. 63–88). Paris: OECD.

Part III
Empirical Evidence and Policy Implications

Chapter 6
The Role of Highly Skilled Diaspora and Returnees in India's Development: Data Collection Strategies and Survey Methods

Umesh L. Bharte

Abstract Research into different aspects of migration has expanded significantly over the last few decades paving the way for dialogue of a more interdisciplinary nature. This has not only resulted in a diversity of migration-related topics but it has also seen migration scholars adhering to a diverse range of methods. Today, we can see how issues related to the return of highly skilled migrants to their countries of origin and the ways in which they can contribute to the development process have become the subject of many studies. Likewise, scholars have been attracted to the study of diasporas and their potential contributions to development. In the case of Indian skilled migration, it has become important to deliberate upon the strategies and the specific methods that are used to assess the role played both by the diaspora and by returnees in home country development. This chapter provides an overview of the methods that were used for carrying out a recent research study on Indian skilled migration. Given the technical nature of this chapter on *Method*, we have restricted our discussion to the sampling procedure, the tools employed in the study, the operational definition of the target group and the data collection procedure used. Information is also provided on the key sample characteristics in order to supplement the discussion. Three questionnaires were developed for the study which allowed us to observe three sets of highly skilled Indians at the same time, diaspora, returnees and non-migrants, and to compare their perceptions about returning to India after international exposure. In terms of practical application, our hope is that the study will inform policy-making bodies in both the host and the source countries concerned.

U. L. Bharte (✉)
Zakir Husain Centre for Educational Studies, School of Social Sciences,
Jawaharlal Nehru University, New Delhi, India
e-mail: bharteumesh@gmail.com

1 Introduction

Research into different aspects of migration has expanded significantly over the past number of decades, and this trend seems likely to continue into the future. The cross-border movement of people has attracted scholars from various disciplines, who use various assumptions, tools and methodologies specific to those disciplines. Along with traditional discipline-bound investigations, in recent times, migration research has also paved the way for more interdisciplinary dialogues, resulting in an increasing stock of knowledge. Not only is there a diversity of migration-related topics but the range of methods that migration scholars use is also varied. However, no method or underlying methodology can claim to be better than the others. They differ only in terms of the underlying assumptions and the nature of truth. Therefore, we should make it clear from the outset that we are using the term *method* rather than *methodology*.

The words method and methodology are often used interchangeably as if they both convey the same thing, not just in migration studies but in other domains of enquiry in social sciences as well. Although methodology and method are related, they cannot substitute each other conceptually. Methodology essentially asks questions about what knowledge is, how that knowledge is acquired, and more importantly what is the nature of truth (i.e. is knowledge out there to be discovered or do we construct that knowledge ourselves). Hence, methodology deals with fundamental issues of interpretive, hermeneutic or constructive claims of knowledge or the claims of objective reality. On the other hand, methods are specific tools and techniques employed in data collection and/or data analysis. Unlike methodology, the canvas of method is very limited and restricted (Castles 2012; Baronov 2004; Ladyman 2002). With this understanding in mind, we will now look at the objectives and research questions in order to establish the context of the study.

2 Objectives and Research Questions

The issue of return migration and home country development has occupied an important place in the writings of migration scholars and policymakers around the world, especially during the last couple of decades. Return migration of the highly skilled people to their home countries and the ways in which they can contribute to the development process has become a major subject of many international studies. Likewise, and for the same reasons, scholars have been attracted to the study of the different diasporic communities and their potential role in the development of the countries of origin. However, although there have been some studies, there has been a shortage of systematic studies on the contribution of both Indian high-skilled returnees and the Indian diaspora to development in India. The research project: 'Migration, scientific diasporas and development: Impact of

skilled return migration on development in India' was set against this background with the intention of advancing knowledge on our evidence-based understanding of the links between return migration, the diaspora and development in the home country. The two major objectives of the study were to examine the development impact of highly skilled return migration in India and to document the perceptions of Indian professionals and students residing in the selected European destination countries with regard to their potential development role in relation to India. The study sought to answer the following research questions:

On the Indian side:

- What are the motives behind the return of skilled Indians?
- What is their current employment situation in India?
- How has the international exposure of skilled Indian returnees affected them professionally, economically and socially?
- To what extent do skilled Indians influence development in India through investment, knowledge and skills transfer and what is their social impact upon return?

On the European side:

- What motivates skilled Indians and Indian students in continental European countries to return to India?
- What is their current employment/study situation and what are their experiences there?
- In what ways, and to what extent, do skilled Indians engage with India and its development?

3 Sample

Given the purpose of the study, it was essential to conduct a sample survey of highly skilled Indians currently living in continental European countries, and of those who had gone back to India after significant exposure to continental European countries. In India, six major cities were selected for the field work: Delhi-NCR, Kolkata, Hyderabad, Bangalore and Mumbai-Pune, as a majority of highly skilled returnees choose to live in these cities. Four major continental European countries: Switzerland, Germany, France and the Netherlands were selected for surveying highly skilled Indians. Here, the aim was to explore the current situation and experiences of Indian professionals and students residing in those European countries and their prospective contribution to the development of India. The decision to choose these destination countries was made on the strength of the current trend that has seen an increasing number of highly skilled Indians moving to these countries, notwithstanding the importance of traditional countries such as the USA, Canada, Australia and the UK. This is partly the result of new policies to attract skilled people or a revision of existing institutional settings by these countries in the selection of

immigrants, but it is also a consequence of the internationalisation of their education systems and labour markets (mostly in the Netherlands and Switzerland). The four chosen countries also shared a common characteristic in that they did not have English as their native language, and therefore, they provided similar circumstances in terms of barriers to the easy integration of Indian immigrants. Since migration from India to these four countries was very limited until very recently, we decided to describe them by coining the term 'new destination countries'. We thought that studying the Indian diasporas in these destination countries would provide us with newer insights into the plans of highly skilled Indian immigrants in Europe.

Along with this geographical selection, importance was also attached to those sectors where destination countries are experiencing skills shortages and which have absorbed significant numbers of return migrants in India. The sectors chosen were information and communication technologies (ICT), finance and management, biotechnology and pharmaceuticals and academia in the fields of science and technology. We also included the medical sector (doctors only) for the sample in India. In order to provide an analytical space for comparison with returnees, the study also included a control group made up of highly skilled Indian individuals from the same sectors, but who did not have any international exposure. In the receiving European countries, the sample included Indian professionals and students. The operational definitions of 'returnees' and 'non-migrants' in India and 'skilled (Indian) migrants' in Europe are outlined in the following subsection. Since there is no database of returnees in India to give an idea of the number of returnees, we used a purposive snowball sampling technique to collect the data. Purposive and snowball sampling techniques were also used for data collection in the receiving European countries, mainly because of the absence of any authentic list of Indians living abroad.

Accordingly, it should be noted here that it is almost impossible to arrive at a statistically representative sample of returnees, mainly because the 'total population of returnees *in any country* is not known' (Black et al. 2003, p. 7, emphasis in italics).

3.1 Operational Definitions

In India, 'returnees' (experimental group) and 'non-migrants' (control group) were operationally defined before the actual data collection began. A returnee was defined as a non-resident Indian (NRI) or a person of Indian origin (PIO—either the migrant or his/her parents should have been born in India) who had stayed abroad for a total of at least 6 months before returning to India. The total duration included multiple stays abroad, specifically in any of the four European countries (Germany, France, Switzerland and the Netherlands) or any other country, and who currently holds employment status in India. The condition was that respondents should have at least a Bachelor's Degree. To provide a comparative perspective, the control group was comprised of highly skilled Indian professionals

who work for the same organisation/firm/institute in India as the returnee(s), but who had never been abroad despite having the potential to do so (i.e. they were equally eligible to migrate and return as 'returnees' because of their skills and level of job position).

In order to be eligible for inclusion in the survey in Europe, respondents had to fulfil the following criteria: they had to be Indian professionals or students, residing in one of the four selected countries, and be specialised in any of the four sectors (ICT, finance and management, biotechnology and the pharmaceutical industry, academia and research). Respondents had to be first-generation migrants. In addition, people working in international organisations were excluded as they stayed in the host countries on a different permit and often moved from one job to another within the same organisation regardless of the host country.

4 Tools Employed in the Study

A total of three questionnaires were developed. Two questionnaires were prepared for primary data collection in India—one for the returnees (experimental group) and one for the non-migrants (control group) (see Appendix 1, 2). The third questionnaire was designed for Indian skilled professionals and students residing in the selected European countries (see Appendix 3). Both the European and Indian questionnaires were considered complementary to each other.

The questionnaire for the returnees consisted of the following five major content-related sections in addition to a personal information section: current employment situation; information related to out-migration/on-site assignment; return migration and its contribution to the home country; position in society; transnational ties and future plans. All the sections included a mix of both closed and open-ended questions so as to offer respondents enough space to provide some qualitative responses whenever required. With the exception of the section on out-migration/on-site assignment; return migration and its contribution to the home country in the questionnaire for the non-migrants, every other section was the same as the questionnaire for returnees. The questionnaire for the Indian professionals and students residing in the selected European countries consisted of five content-related sections: migration motives; experiences in the country of residence; employment situation for currently employed professionals or the study situation in the case of students; ties with India and development impact; and future plans. Questions relating to the background information of respondents were included at the end of the questionnaire. This questionnaire was developed as an online survey using SurveyMonkey. In addition to the survey questionnaire, some 30 in-depth interviews were also conducted with high-skilled returnees in India, skilled professionals and post-graduate students of Indian origin residing in Switzerland, the Netherlands, France and Germany as well as some representatives of the embassies and consulates of France, Germany, Switzerland and the Netherlands in India.

5 Data Collection

The study was coordinated by the Cooperation and Development Centre (CODEV) of the Ecole Polytechnique Fédérale de Lausanne (EPFL), and it was implemented in collaboration with the International Migration Branch (MIGRANT) of the International Labour Office (ILO), the Institute of Development Studies, Kolkata (IDSK) and the International Migration and Diasporas Studies (IMDS) Project of Jawaharlal Nehru University (JNU). However, it was primarily the three partner institutions that took an active part in the data collection phase. For the most part, the Indian field survey was jointly conducted by IDSK and JNU teams across the identified cities, while the data collection in the selected European destination countries was carried out by the EPFL team.

Before commencing the actual field work, there was a pilot survey of potential respondents in the Delhi-NCR region, and a separate pilot survey was conducted among skilled foreign professionals and students in Switzerland. The JNU team conducted a small pilot survey in the Delhi-NCR region using a preliminary draft of the questionnaire in order to get a feeling for the actual field and to attain an informed understanding of the specificities involved. The pilot survey was also conducted in Lausanne, Switzerland among a group of Indian students and professionals as well as some other foreign nationals currently living in Switzerland. The experience of the pilot surveys helped the study to streamline some of the issues and/or questions included in the earlier questionnaires. Surveyors were trained after the piloting in order to minimise human error.

The actual data were obtained from returnees and non-migrants in the six selected cities in India during the period between August 2011 and February 2012. However, the data collection process continued for a longer period in Delhi and Kolkata, as JNU and IDSK, the two Indian partners, were, respectively, based in these two cities. Throughout the data collection phase in India, target respondents were approached formally with prior appointments, especially in sectors such as academia, and the respondents in sectors such as ICT and finance and management were located through informal channels. The total sample in India comprised 673 respondents, of which 527 were returnees and 146 were non-migrants. The returnees comprised a total of 463 male respondents and 64 female respondents. The non-migrants consisted of 122 male and 24 female respondents (Table 1).

A comparatively large number of respondents in both groups (returnees and non- migrants) were from Kolkata and Delhi, and this was mainly due to the fact that the partner institutions were located in these two cities. This allowed the investigators to carry out field work for a longer period. Furthermore, the academic and ICT sectors have a larger representation of respondents than the other selected sectors, which might possibly offer a truer reflection of the population, insofar as it is commonly known that in India these sectors have a comparative advantage in the international human resource market (Table 2). In both Europe and India, the survey was conducted with the intention of maximising the possible diversity among the sectors of activity.

Table 1 Sample size (returnees and non-migrants) in India

Sample categories	Number of respondents	Male		Female	
		Number	Percentage	Number	Percentage
Returnees	527	463	87.86	64	12.14
Non-migrants	146	122	82.56	24	16.44
Total	**673**	**580**	**86.18**	**83**	**12.33**

Source Field survey in India, 2011–2012

Table 2 Sector-wise distribution of respondents

Sector/Functional area of current employment	Returnees		Non-migrants	
	Number of respondents	Percentage	Number of respondents	Percentage
Information and communication technology	194	36.81	75	51.37
Finance and management	60	11.39	13	8.90
Pharmaceutical and biotechnology	16	3.04	2	1.37
Medical	13	2.47	14	9.59
Academia	232	44.02	30	20.55
Other	12	2.28	10	6.85
No answer	0	0	2	1.37
Total	**527**	**100**	**146**	**100**

Source Field survey in India, 2011–2012

Regarding the educational profile of the returnees and non-migrants, holders of Master's and Bachelor's degrees dominated the ICT and financial and management sectors, while PhD holders dominated academia and the pharmaceutical and biotechnology sectors. The ICT and financial and management sectors had approximately 60 % of the sample in the younger age category and the smallest proportion in the older age category. The other sectors, including pharmaceutical and biotechnology, medicine and academia, had a smaller proportion in the younger age category and a higher proportion in the middle and older categories. However, in overall terms, the maximum numbers of returnees in our sample were in the youngest age group, followed by the middle and then the older category. This was in line with findings in the literature that show well-educated, highly skilled individuals as being more likely to migrate and to more distant places than their less-educated or semi-skilled counterparts. This multidimensional selectivity of migrants also has obvious implications for the impact of migration on sending and receiving countries (Lewis 1982).

It should be noted that a majority of returnees in India (52.94 %) had been to several destination countries as part of a project assignment, research assignment or internship. Emigration for the purpose of studying was the other major type of

engagement abroad. This fits in well with Gmelch's (1980, p. 138) typology of returnees who intended to migrate temporarily. In this typology, the time of return is determined by the objectives they set out to achieve at the time of emigration. For the USA, which had the highest number of visitors as a destination country, the most frequent engagement was for higher studies, followed by project assignment. In a study by Wadhwa et al. (2009), the strongest factors bringing these immigrants to the USA were professional and educational development opportunities. Our study also showed that most Indians who went to the USA did so to pursue higher studies and professional development. For the UK, the second most frequented country for Indians, project assignment was the most popular engagement. For the new European destination countries, such as Germany, Switzerland, France and the Netherlands, project/research assignment had the maximum engagements.

Data in Europe were collected simultaneously in all four selected countries during the period between June 2011 and April 2012. The project team benefitted from the support of one consultant for each country to help with online survey dissemination. The online survey was circulated among the members of Indian student and alumni associations, members of Indian organisations, members of professional and social network sites, researchers in research institutes and academia, and among friends and colleagues of the individuals with whom contacts had already been established. In addition to attempting to contact potential respondents directly, invitations to the survey were also posted on different social network sites. Among those who provided an answer about where they had found out about the survey, 277 respondents said they were directly contacted by the investigator, 157 found out through a friend or a colleague, 71 learned about it through their employer, 38 found the survey on a website, 12 through the embassy, and the others found it through other media, such as posts on Facebook and Yahoo groups.

Considering the overall Indian population in selected European countries, our sample showed an under-representation of responses from Indians in Germany. This distribution was due to the fact that our sampling strategy was relatively more successful in the other countries and this should be taken into account when interpreting our results. However, in line with the general male-dominance of Indian skilled migration to Europe, our sample showed a representative distribution in which almost 80 % of respondents were male (Table 3). The Indian skilled migrants were mostly young and from urban areas. In our sample, 90 % of all respondents were 35 years old at most, 30 % were married, and only about 15 % had children.

Only in the recent years, with the changes in immigration policies and the internationalisation of higher education, have European countries become more attractive destinations for Indian students and professionals. The definition of highly skilled Indians in the study also included students, who represented over 60 % of the sample except for the Netherlands (Table 4). The share of respondents whose main activity at the time of the survey was in paid employment was higher for Indians in the Netherlands. Some respondents were engaged in activities other

Table 3 Respondents by country of residence and gender

Host country	Female	Male	Total
France	68(24.82)	206(75.18)	274(100)
Germany	26(21.14)	97(78.86)	123(100)
Switzerland	33(17.74)	153(82.26)	186(100)
Netherlands	20(26.67)	55(73.33)	75(100)
Total	**147(22.34)**	**511(77.66)**	**658(100)**

Note The figures in parentheses represent percentages
Source Field survey in Europe, 2011–2012

Table 4 Main activity of migrants in the host country

Host country	Salaried employment	Education	Other activities	Total
France	85(27.96)	186(61.18)	33(10.86)	304(100)
Germany	49(35.51)	86(62.32)	3(2.17)	138(100)
Switzerland	52(23.96)	148(68.2)	17(7.83)	217(100)
Netherlands	41(50)	28(34.15)	13(15.85)	82(100)
Total	**227(30.63)**	**448(60.46)**	**66(8.91)**	**741(100)**

Note The figures in parentheses represent percentages
Source Field survey in Europe, 2011–2012

than salaried employment or education: nine female respondents cited housework as their main activity, 13 respondents were retired, 22 were self-employed, and 22 were unemployed.

A majority of the Indian professionals surveyed worked for multinational companies. Most of these companies originated from the countries hosting the respondents. The second largest group of respondents worked in academia and research institutions. This share was particularly large in Germany and Switzerland. In most cases, the type of work was research-related (34.5 % of respondents in employment), technical (27 %) or managerial (25.5 %). A few other professionals (13 %) were engaged in activities such as consulting, internships or they owned their businesses. The survey targeted professionals specialised in the fields of ICT, finance and management, the biotechnology and pharmaceutical industry as well as academia and research. Individuals working in ICT represented the biggest group (34.6 %), while the rest of the sample was dispersed across different sectors: 12.5 % in biotechnology and the pharmaceutical industry; 10.4 % in the financial sector and smaller shares in the automotive and aerospace industry, chemicals and manufacturing, the energy sector, health and the environmental sector. The host countries differ with regard to the type of contracts the workers had with employers. In the Netherlands, 72.5 % of respondents had a permanent contract. Permanent contracts were also more commonly used in France, while in Germany and Switzerland close to 60 % worked in either temporary or contract jobs. The sector-wise and country-wise distribution of the Indian professionals are shown in Table 5.

Table 5 Type of employment by host country

Host country	Multinational company	Academia and research	Local company	Self-employment	Total
France	57(62.64)	15(16.48)	10(10.99)	9(9.89)	91(100)
Germany	20(43.48)	21(45.65)	5(10.87)	0(0)	46(100)
Switzerland	17(30.36)	26(46.43)	6(10.71)	7(12.5)	56(100)
Netherlands	29(70.73)	3(7.32)	6(14.63)	3(7.32)	41(100)
Total	**123(52.56)**	**65(27.78)**	**27(11.54)**	**19(8.12)**	**234(100)**

Note The figures in parentheses represent percentages
Source Field survey in Europe, 2011–2012

Table 6 Level of study for student respondents

Host country	Bachelors	Masters	PhD	Other	Total
France	9(5.29)	114(67.06)	38(22.35)	9(5.29)	170(100)
Germany	0	22(28.95)	43(56.58)	11(14.47)	76(100)
Switzerland	4(3.13)	23(17.97)	91(71.09)	10(7.81)	128(100)
Netherlands	0	9(34.62)	16(61.54)	1(3.85)	26(100)
Total	**13(3.25)**	**168(42)**	**188(47)**	**31(7.75)**	**400(100)**

Note The figures in parentheses represent percentages
Source Field survey in Europe, 2011–2012

In addition, the distribution of Indian students in Europe is highly skewed towards post-graduate studies, with an increasing share of PhD enrolments over the past few years. Accordingly, the majority of all Indian students in the Netherlands, France and Germany were enrolled on Masters' programmes, while Switzerland was particularly attractive for PhD students (Table 6). Only a minor share of all Indian students was enrolled in undergraduate courses in the selected countries. As the general statistics show, a large majority of Indian students in Europe specialise in engineering, ICTs and natural sciences.

Corresponding to the general profile of the student population, in the sample of student respondents, the study found the largest groups studying engineering (30 %), management and business administration (18 %) and life sciences (14.5 %). Only 3 % were specialising in social sciences or humanities. The remaining respondents were in different fields of the natural sciences. The small number of students, who had already studied abroad for their earlier degrees (30 % of the sample), had in almost all cases stayed in the same host country for their ongoing studies.

6 Concluding Remarks

As we mentioned earlier, the entire project was initiated in order to expand the knowledge-base on skilled return migration and its impact on development and to explore strategies for leveraging the potential of scientific diasporas.

The development impact of the flows of scientists, skilled professionals and students may come in the form of financial remittances and investment, knowledge transfer through diaspora networks as well as through eventual return to the home country. Taking the example of Indian skilled migration, the study tried to offer an evidence-based analysis by systematically enquiring about the impact that both return and diaspora transnationalism might have on home country development. One of the overarching features of this study is that it observes three sets of highly skilled Indians (respondents) simultaneously, and this helps us to develop a holistic understanding of the issue at hand. The first set of people we observe are currently working or studying in their host countries, the second set is made up of those who have already had exposure to a host country and who have returned to their home countries, while the third set comprises those who are skilled but who have not had any exposure abroad. The possibility of observing three sets of skilled Indians at the same point of time (during 2011–2012) provided us with a unique opportunity to analyse perceptions of similar issues at different levels of experiences. In other words, the differences in perceptions about engaging with India's development before returning to India and after returning to India can be used as a proxy of the difficulties faced by skilled Indians in carrying out their plans once they return from the host countries.

Considering the fact that return migration of the highly skilled and development is strongly linked, and given the increasing number of migrants heading back to their home countries, the return phenomenon has gained momentum in recent years, with studies showing a variety of interpretations of this issue. However, the empirical evidence does not support the benefits of return migration in a systematic manner, and there is still a shortage of conclusive studies on the specific conditions that facilitate a positive impact. Cassarino (2004) argues that until and unless we critically interrogate the phenomenon of return migration, the relationship between migration and development will remain ambiguous.

Over the past few years, the study of diasporas has also garnered attention within the migration and development nexus, with scholars examining the linkages between migrants and their real or imaginary homeland for the cause of development in those countries (Meyer 2001; Tejada and Bolay 2010). Different diaspora groups have attracted interest because of their ever-increasing global presence and their growing influence in negotiations at a national and international level. This is especially true for the Indian diaspora—the third largest after the British and the Chinese in terms of size and spread. Due to its development potential, the Indian diaspora has emerged as a strong strategic partner for the government to engage with (Kapur 2003; Khadria 2012; MOIA 2012). Although members of the diaspora may not be physically present in their home country as return migrants are, they can, nonetheless, contribute to the development process at home through their accumulated knowledge, skills and financial capital, and the networks they have established in the host countries (Khadria 1999; Yingqi and Balasubramanyam 2006; Brinkerhoff 2008; Tejada 2012).

In this way, highly skilled returnees and diaspora members are seen as potential drivers of development in the home country. Apart from physical return, other

important channels for engagement that the study identified as ways of examining the development role of Indian high skilled included remittances and financial investments, work-related knowledge transfer and the transfer of social capital. The main findings along these lines and their analysis as well as other conceptual-theoretical and empirical dimensions are presented in the chapters that follow in this edited volume.

Finally, we must mention some of the limitations that affected the study. The study was subjected to a number of practical constraints such as limited duration, limited number of sectors/professions, limited geographical coverage in terms of the number of locations (six major cities in India and four destination countries in Europe), practically conducting the field work, and there was also a limited sample size from each selected sector/profession and location. Accordingly, we neither claim that the sample is representative of the Indian skilled migrant and return population as a whole nor can we say that such a sample could have been possible. Consequently, another restriction was the need to rely heavily on such non-probability sampling techniques as purposive and snowball sampling for the purpose of data collection in India and the European countries. Furthermore, during the entire data collection phase both formal and informal ways were used to identify and approach returnees and non-migrants. This was especially true of the data collection carried out in India.

In India, arranging appointments through formal channels with returnees and non-migrants proved to be very difficult in all sectors except academia because of the entry barriers placed by the organisations. Consequently, a majority of respondents, particularly those from the ICT and management sector in the Indian part of survey, were contacted through informal channels, often during their lunch breaks. At times, the field investigators had to complete the survey within a sub-optimal duration of time. On the other hand, professionals in the academic sector showed a keen interest in our survey and gave us sufficient time to complete the survey, and they also provided some insightful comments, which helped us raise important issues in our research. As a result, there were significant differences in the level of cooperation during the survey, depending on the respondents' sector of activity. Therefore, some of our variables, especially the perception variables, may suffer from measurement error. In addition, in this study and in relation to the migration and development nexus, the emphasis was only placed on highly skilled Indian personnel.

With regard to the gender imbalance, the total sample in India comprised 673 respondents, of which 580 respondents were men (about 87 %) and 83 were women (about 13 %). This significant large male proportion can be explained by the fact that a much higher percentage of highly skilled men than skilled women migrate to developed regions of the world. Another reason might be the composition of the data which was skewed towards technical and managerial sectors of employment (about 60 % of all respondents belonged to this area), which is often considered to be male-dominated. However, women are fairly well represented in research and academic fields of employment. This pattern is in line with the fact

that gender, by and large, has received limited attention in the literature on migration.

Despite these limitations on the study, we should not underestimate the value that the study adds to the existing body of knowledge. The contemporary discourse on migration and development has to consider the agency role of both diaspora communities and highly skilled returnees on an equal footing. Indeed, several countries of origin are introducing special measures to engage with their diaspora and attract highly skilled personnel. However, very few approaches focus on the role that highly skilled returnees and diaspora communities play in home country development in one single study. Therefore, our study seeks to fill this gap by offering an empirical investigation of these two components.

Appendices

Appendix 1 : Questionnaire for returnees

Research Project on

Migration, Scientific Diasporas and Development Impact of Skilled Return Migration on Development in India

Project jointly conducted by:

Institute of Development Studies Kolkata
27/D, DD Block, Sector I,
Salt lake, Kolkata- 700064.
Ph.: (033)2321 3120,
Fax: (033)2321 3119
Email: idsk1@vsnl.net,
Website:www.idsk.edu.in

Zakir Hussain Centre For Educational
Studies School of Social Sciences
Jawaharlal Nehru University
New Delhi- 110067.
Ph.-(011)26704416
Email: chair_zhces@mail.jnu.ac.in

Ecole Polytechnique Federale De Lausane
Cm 2, Station 10, Ch-1015, Lausanne
Ph.: +41216936012
Email:cooperation@epfl.ch
Website: http:// cooperation.epfl.ch

CITY CODE ☐ SECTOR CODE ☐ ☐ COMPANY CODE ☐ ☐ EMPLOYEE CODE ☐ ☐ **Questionnaire**

Schedule 1

Migration, Scientific Diasporas and Development Impact of Return Skilled Migration on Development in India

Section 1: Current employment situation

Sl No.	Questions	Options	Codes
1.	What is the name of the firm/institution of your current employment? Always mention full form of names of firms.		
2.	What is your present occupation/designation? Always mention exact designation.		
3.	What is your position at the current employer? Please choose one that suits best your position.	**a)** Managerial **b)** Technical **c)** Researcher **d)** Others specify:	1 2 3 98
4.	Please specify your position as Senior Level or Middle Level or Entry Level.	**a)** Senior Level **b)** Middle Level **c)** Entry Level	1 2 3
5.	What is the type of your firm/institution?	**a)** I am working for a multinational firm/institution **b)** I am working for a national firm/ institution **c)** I am employed in an academic and research institution **d)** I am Self employed **e)** Others specify:	1 2 3 4 98
6.	What is the sector/functional area of your current employment?	**a)** Information &communication technology **b)** Financial &management sector **c)** Pharmaceutical/Biotechnology **d)** Medical **e)** Others specify:	1 2 3 4 98
7.	Total emoluments permonth(in Rupees)	a) Below 25000 b) Between 25000 to 35000 c) Between 36000 to 50000 d) Between 51000 to 75000 e) Between 76000 to 100000 f) Above 100000 g)I do not reveal my income	1 2 3 4 5 6 7
8.	To what extent are you satisfied with your present employment/business?	a) extremely dissatisfied b) moderately dissatisfied c) indifferent d) moderately satisfied e) extremely satisfied	1 2 3 4 5
9.	To what extent are your employer and colleagues satisfied with your skills, experience, knowledge and ideas?	a) extremely dissatisfied b) moderately dissatisfied c) indifferent d) moderately satisfied e) extremely satisfied	1 2 3 4 5

Comment:

CITY CODE ☐ SECTOR CODE ☐☐ COMPANY CODE ☐☐ EMPLOYEE CODE ☐☐   **Questionnaire**

Schedule 1

Section 2: Information related to Out-migration/On-site assignment

1.	How long you lived outside of India?	a) Less than 6 months	1
		b) 6 months to 1 year	2
		c) 1 year to 2 years	3
		d) More than 2 years	4

2. Please provide the following information about your most important visit(s) abroad

**Instruction:** Please write the most applicable codes regarding type of visa and engagements during stay abroad from the code list given below the table.

1	2	3	4	5	6	7
SL NO	Name of Country/ies	Type of visa	From (month/ year)	To (month/ year)	Effective (see note) Duration of stay (in months)	Engagements during stay abroad
1						
2						
3						
4						

Codes for Column 3 (Visa Types): 1- student visa, **2**-employment visa, **3**-family reunification visa, **4**-permanent residence permit, **5**-tourist visa, **6**-other, specify
Codes for Column 7 (Engagements during stay abroad): 1-Higher studies , **2**-Employment by own initiative, **3**-Project assignment/Research Assignments / internship, **4**-Accompanying a family member/partner, **5**-Any others (Please specify)
Codes for column 4 &5 (from –to): (-99)--who forgot the particular date
(**Note: 'effective'** stay means the actual stay in the job in the destination country excluding unpaid vacation, time spend for`switching jobs.)

Comment:

CITY CODE ☐ SECTOR CODE ☐☐ COMPANY CODE ☐☐ EMPLOYEE CODE ☐☐ **Questionnaire**

Schedule 1

3 .Please, identify which of the above mentioned stays abroad you consider most relevant for your personal development._____ (Write the sr. code from Q.2)

We would like to ask you some further questions about these specific stays abroad

SI No.	Questions	Options	Codes
4.	For your most relevant stay abroad, please identify your monthly income (in Euros) (after taxes & compulsory deductions).	a)Below 2000 b)Between 2001 to 4000 c)Between 4001 to 6000 d)Above 6000 e) I did not receive any income while staying abroad	1 2 3 4 5
5.	Rate your overall experience during your stays abroad,on a scale from 1 (very bad) 2(bad), 3(neutral, cannot say), 4(good) to 5 (very good)	a)Tolerance towards foreigners b) Possibility to communicate with local population (language related issues) c) Acceptance of different cultural and religious practices	1( ) 2( ) 3( )
6.	What is your current resident status overseas?	a) No resident status abroad b) Temporary residence status in _____ (name of the countries) c) Permanent residence status _____ (name of countries) d)Any other please specify (e.g. Holding foreign nationality):	1→Q8 2 3 98
7.	Do you hold any of the following statuses?	a)Person of Indian origin (PIO) b) Overseas Citizenship of India (OC I) c)Non-residentIndian (NRI) d)None	1 2 3 4
8.	When you were abroad, did you send remittances to India?	a)Yes b)No	1 2→sec 3

9. If yes, please mention in the following table:

Instruction: Please write the most applicable codes for recipients of money and purpose of transfer from the codes mentioned:

1	2	3
To whom	Purpose	Amount(in Euros)(per annum)

Comment:

CITY CODE ☐ SECTOR CODE ☐ ☐ COMPANY CODE ☐ ☐ EMPLOYEE CODE ☐ ☐   **Questionnaire**

Schedule 1

Codes for Recipients (column1): 1-familymember, **2**-friend, **3**-colleague,
4-professional organization, **5**-charity organization, **6**-any other
Codes for purpose (column2): 1-to cover the daily expenses, **2**-tocover education costs,
3-for investment/business, **4**-for buying house/land, **5**-for philanthropicactivities ,
6-savings, **7**-any other.

Section 3: Return migration and its contribution to home country

Sl. No.	Questions	Options	Codes
1.	When did you return to India?	---------month -----------year	
2.	Who influenced/inspired/motivated you to come back to India?	a) Own initiative	1
		b) Family	2
		c) Mentor/Your teacher	3
		d) Employer	4
		e) others	98
		Specify:	
3.	What has motivated you to come back to India?	**Employment-related factors**	
		a) Project completed/contract expired/programme of study completed	1 ( )
	Instruction: Please select three most important reasons and rank them from 1 (most important), 2 (second most important), 3 (third most important)	b) Recession in the host country/Increasing unemployment in the local labour market overseas	2 ( )
		c) Better business/entrepreneurial opportunities in India relative to the destination country	3 ( )
		d) Better employment/career advancement opportunities in India in concerned sector than in destination country	4 ( )
		e) Higher real earnings relative to the cost of living	5 ( )
		Immigration and integration-related factors	
		f) Requirement of my scholarship	6 ( )
		g) Difficulties in integration in the host society	7 ( )
		h) Rigid immigration and settlement policies in the destination country	8 ( )
		Personal/Family-related factors	
		i) I want to be with my family	9 ( )
		j) I have to take care of someone in India	10 ( )
		k) I want to bringup my childrenin India	11( )
		l) Any other	98 ( )
		specify:	
Comment:			

CITY CODE ☐   SECTOR CODE ☐ ☐   COMPANY CODE ☐ ☐   EMPLOYEE CODE ☐ ☐   **Questionnaire**

Schedule 1

4.	What influenced your decision to select this specific city (Delhi NCR, Kolkata, Mumbai, Hyderabad and Bengaluru)? *Instruction:* Please select three most important reasons and rank them from 1 (most important), 2 (second most important), 3 (third most important)	**Personal/Family-related factors** a) My parents and/or close relatives live here b) My hometown **Employment-related factors** c) Decided by my employer d) The company/sector I wanted to work for was based here e) Scope for self employment/entrepreneurship f) Emerging state government support g) Better remuneration packages relative to cost of living **Educational/health factors** h) Good educational institutions for children i) Good health facilities j) Living environment of the city, e.g., climate, availability of housing and transportation k) Any other specify:	1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( ) 8 ( ) 9 ( ) 10 ( ) 98( )
5.	Did you face any difficulties upon return in India? *Instruction:* Please select three most important reasons and rank them from 1 (most important), 2 (second most important), 3 (third most important)	a) I did not face any particular difficulties b) I faced difficulties related to housing c) I faced difficulties related to schooling of children d) I faced difficulties related to bureaucracy e) I faced difficulties in terms of work culture f) I faced difficulties with infrastructural facilities at the work place g) I faced difficulties in terms of acceptance by professional colleagues h) I faced difficulties in terms of recognition of foreign degrees, qualifications and experience	1 Q6 2( ) 3( ) 4( ) 5( ) 6( ) 7( ) 8( )
6.	Which of the following do you consider most important to your current work/business? *Instruction:* Please select three most important reasons and rank them from 1 (most important), 2 (second most important), 3 (third most important)	a) Knowledge and skills gained overseas b) Hands on experience abroad c) Network established overseas d) Capital accumulated overseas e) Foreign qualification f) Others specify:	1( ) 2( ) 3( ) 4( ) 5( ) 98( )
7.	Can you give us an example on how you used your skills, experience, knowledge and ideas gained overseas to contribute to your company/institute/business? (open question)		
8.	How much is your current annual income in real terms as compared to earlier income abroad?	a) Much lower than before b) Lower than before c) Not much change d) Higher than before e) Much higher than before	1 2 3 4 5

Comment:

Section 4: Position in society

Sl. No.	Questions	Options	Codes
1.	What are the investments that you made after your return to India in the past five years? ***Instruction:*** Please select three most important investment in terms of amountand rank them from 1 (most important), 2 (second most important), 3 (third most important)	a) Housing related expenditure (building material/purchasing a house/flat) b) Purchase of land c) Personal and Family Business d) Durable consumption goods (electronic appliance, furniture, etc) e) Providing support to other family members f) Education for yourself or for close relatives g) Investment on stock market h) Community Services/Activities i) Other expenditures, specify:	1( ) 2( ) 3( ) 4( ) 5( ) 6( ) 7( ) 8( ) 98( )
2.	How has your stay overseas affected your level of investments?	a) in a very negative way b) in a negative way c) no change d) in a positive way e) in a very positive way	1 2 3 4 5
3.	How has your and your family's standard of living changed in the past five yearsor after your return from abroad (if it was within last five years)?	a) in a very negative way b) in a negative way c) no change d) in a positive way e) in a very positive way	1 2 3 4 5
4.	Do you think that your experience abroad has contributed to your personal development?	a) Yes b) No	1 2
5.	In your opinion, how much influence do your ideas and opinions have on people around you (e. g. family members,relatives,colleagues ,friends)	a) no influence at all b) little influence c) a lot of influence	1 2 3
6.	In what way has your position in the society been affected by your overseas exposure?	a) very negatively b) negatively c) not much change d) positively e) very positively	1 2 3 4 5
7.	Are you a member of any of the following type of organization in India?	a) No b) religious organization c) diaspora/migrant network d) local sports/music or other leisure organization e) humanitarian organization f) professional organization g) political party h) other specify:	1 2 3 4 5 6 7 98

Comment:

Section 5: Transnational ties

1.	Have you kept your contacts overseas after your return?		a) Yes b) No	1 2 → Q2

If yes, see the following table and tick on the appropriate options.

Instruction: Please write the most applicable codes regarding frequency of communication and content of communication from the codes given below the table. You can fill more than one code e.g., 2+1

1	2	3
Contacts (origin whether Indian or foreign or both)	**Frequency of communication**	**Content/nature of communication**
a. colleagues		
b. any other professional contacts		
c. friends		
d. scientific and professional diaspora groups		
e. Family		

Codesfor Frequency of communication (column 2): 1-every day, **2-**every week,**3-**every month, **4-**a couple of times per year, **5-**no contact.

Codes for content of communications (column 3):1-investment opportunities in India, **2-**Professional developments, **3-**Job opportunities overseas, **4-**Education and training opportunities, **5-**Diaspora activity related

6-Professional and scientific collaborations, **7-**personal communications, **8-**community service related activities

SI no	Questions	Options	Codes
2.	Do you have any concrete plan to move abroad?	a) Yes b) No	1 2 → Q7
3.	If Yes When	a)Within one year b)Within two years c)Within three years b)when I get the chance c)I do not Know	1 2 3 4 5
4.	If yes, for how long?	a)for less than a year b)from 1 to5 years c)from 6to 10 years d)permanently e)I don't know	1 2 3 4 5

CITY CODE ☐ SECTOR CODE ☐☐ COMPANY CODE ☐☐ EMPLOYEE CODE ☐☐   **Questionnaire**

Schedule 1

| 5. | Please write the name of destination countries | a)Country: _____ | 1 |
| | | b)Not yet Decided | 2 |

Comment:

6.	Why do you plan to move abroad?	**Employment-related factors**	
		a) Better business/entrepreneurial opportunities in the destination country	1
		b) Better employment/career advancement opportunities in the destination country	2
		Life style factors	
		c) I prefer life style abroad	3
		d) I feel disconnected from India	4
		Personal/Family -related factors	
		e) My close relatives live abroad	5
		f) I want to bring up my children abroad	6
		g) any other	98
		specify :	
7.	Have you ever thought of actively taking part in the development process of India?	Yes	1
		No	2 → Q9
8.	If yes, please explain in what way:	a) business (e.g. business, finance, joint ventures)	1
		b) social services (e.g. addressing poverty, health sector, education , philanthropy)	2
		c) academic and training (e.g. culture, sports, knowledge, science and technology	3
		d) policies (attract FDI)	4
		e) I can create more jobs in my field	5
		f) any other	98
		specify.	
9.	Has any skilled professional returned to India as a result of your encouragement?	a) Yes	1
		b) No	2 → Q11

10. If yes, please mention:

Sector	No of person motivated

Comment:

CITY CODE ☐ SECTOR CODE ☐☐   COMPANY CODE ☐☐   EMPLOYEE CODE ☐☐   **Questionnaire**

Schedule 1

11. Do you have any information regarding the following incentive programmes by the Government of India? Please mention.
Instruction: Please write the most applicable codes for 11.3 from the codes given below the table

	1	2	3			
	11.1 Do you know about the following:	**11.2 Have you ever participated in any of the following?**	**11.3 If no, for which of the following reasons you don't have or have not participated in the following?**			
	1Yes 2 No→next item	1Yes→next item 2 No				
a) The Overseas Citizenship of India	1 2	1 2				
b) Person of Indian Origin Card	1 2	1 2				
c) Government Investment Incentives (Resurgent India Bonds)	1 2	1 2				
d) NRI deposit schemes	1 2	1 2				
e) Indian Diaspora Day (Pravasi Bharatiya Divas)	1 2	1 2				
f) Transfer of knowledge through The Global Indian Network of Knowledge	1 2	1 2				

Codes for 11.3 (column3):1-Too Expensive/ Cannot Afford, **2**-Not Interested, **3**-Do not want to support the current Government, **4**-Have Indian Passport, **5**-Not interested in returning to India, **6**-Other (Specify),**99** -No answer

12.	Do you think it will be good for India's development if highly skilled Indians return from abroad?	a) I strongly disagree	1
		b) I disagree	2
		c) Does not make any difference to me	3
		d) I agree	4
		e) I strongly agree	5
13.	Please explain why?		
14.	What should be done by the Government of India to encourage people to return to India? Please give your suggestion.		

Comment:

CITY CODE☐ **SECTOR CODE**☐☐ **COMPANY CODE**☐☐ **EMPLOYEE CODE**☐☐   **Questionnaire**

Schedule 1

Section 6: Personal Information

1.	Name and Surname			
2.	E-mail address:		3. Phone number:	
4.	What is your age?		_____years	
5.	Place of Birth(Town/City):		a) Urban	1
			b) Rural	2
6.	Gender		a) Male	1
			b) Female	2
7.	Religion		a) Hindu	1
			b) Muslim	2
			c) Christian	3
			d) Sikh	4
			e) I do not belong to any group	5
			f) Others	98
			Specify:	
8.	Your social category		a) General	1
			b) Reserve	2
			c) Do not want to answer	3
9.	Marital status		a) married	1
			b) unmarried	2
			c) divorcee	3
			d) live in	4
			e) Widowed	5
			f) Do not want to answer	6
10.	Do you have children?		a) Yes ___ (how many) Please mention their ages_____	1
			b)no	2
11.	Languages Known		a) _____ _____ (Mother tongue) b) _____ c) _____ d) _____	
12.	Medium of Schooling up to XII		a) Mother Tongue	1
			b) English	2
			c) Hindi	3

CITY CODE ☐ SECTOR CODE ☐☐ COMPANY CODE ☐☐ EMPLOYEE CODE ☐☐ **Questionnaire**

Schedule 1

		Specify:	d) Others	98
13.	What is your highest obtained educational degree? (Degree/ course):	specify:	a) Bachelor	1
			b) Master	2
			c) PhD	3
			d) Other	98
	a) Name of the Institution b) Country/State c) Year of completion d) Specialization at the highest level, if any / field of studies	_____ _____ _____ _____		
14.	City of present residence			

You have reached the end of the questionnaire.
Thank you very much for your cooperation!
Is there anything else you would like to tell us about the links between return migration and home country development?

_____

_____

_____

15.	Would you like to receive a summary report of this study project?	a) Yes	1
		b) No	2

		1st Visit:	2nd Visit:	3rd Visit:
16.	Date of surveys			
17.	Surveyors name and code and date			
18.	Scrutiny's Name and Code and date			

Comment:

CITY CODE ☐ SECTOR CODE ☐ ☐ COMPANY CODE ☐ ☐ EMPLOYEE CODE ☐ ☐   **Questionnaire**

<div align="right">**Schedule 2**</div>

Appendix 2: Questionnaire for non-migrants

Research Project on

Migration, Scientific Diasporas and Development Impact of Skilled Return Migration on Development in India

Project jointly conducted by:

Institute of Development Studies Kolkata
27/D, DD Block, Sector I,
Salt lake, Kolkata-700064.
Ph.: (033)2321 3120,
Fax: (033)2321 3119
Email: idsk1@vsnl.net,
Website: www.idsk.edu.in

Zakir Hussain Centre For Educational
Studies School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067.
Ph.-(011)26704416
Email: chair_zhces@mail.jnu.ac.in

Ecole Polytechnique Federale De Lausane
Cm 2, Station 10, Ch-1015, Lausanne
Ph.: +41216936012
Email:cooperation@epfl.ch
Website: http:// cooperation.epfl.ch

CITY CODE ☐ SECTOR CODE ☐☐ COMPANY CODE ☐☐ EMPLOYEE CODE ☐☐ **Questionnaire**

Schedule 2

Migration, Scientific Diasporas and Development Impact of Return Skilled Migration on Development in India
Section 1: Current employment situation

SI No.	Questions	Options	Codes
1.	What is the name of the firm/institution of your current employment?Always mention full form of names of firms.		
2.	What is your present occupation/designation? Always mention exact designation.		
3.	What is your position at the current employer? Please choose one that suits best your position.	**a)** Managerial **b)** Technical **c)** Researcher **d)** Others specify:	1 2 3 98
4.	Please specify your position in hierarchy as SeniorLevel or Middle Level or Entry Level.	**a)** Senior Level **b)** Middle Level **c)** Entry Level	1 2 3
5.	What is the type of your firm/institution?	**a)** I am working for a multinational firm/institution **b)** I am working for a nationalfirm/ institution **c)** I am employed in an academic andresearch institution **d)** I am self employed **e)** Other specify:	1 2 3 4 98
6.	What is the sector/functional area of your current employment?	**a)** Information &communication technology **b)** Financial &management sector **c)** Pharmaceutical/Biotechnology **d)** Medical **e)** Others specify:	1 2 3 4 98
7.	Total emoluments permonth(in Rupees)	a)Below 25000 b)Between 25000 to 35000 c) Between 36000 to 50000 d) Between 51000to 75000 e) Between 76000 to 100000 f) Above 100000 g) I do not reveal my income	1 2 3 4 5 6 7
8.	To what extent are you satisfied with your present employment/business?	a) extremely dissatisfied b) moderately dissatisfied c) indifferent d) moderately satisfied e) extremely satisfied	1 2 3 4 5

Comment:

CITY CODE ☐ SECTOR CODE ☐ ☐ COMPANY CODE ☐ ☐ EMPLOYEE CODE ☐ ☐   **Questionnaire**

Schedule 2

9.	To what extent are your employer and colleagues satisfied with your skills, experience, knowledge and ideas?	a) extremely dissatisfied	1
		b) moderately dissatisfied	2
		c) indifferent	3
		d) moderately satisfied	4
		e) extremely satisfied	5

Section 2:Contribution to home country

Sl. No.	Questions	Options	Codes
1.	What influenced your decision to select this specific city, write the name of the city (Delhi NCR, Kolkata, Mumbai, Hyderabad and Bengaluru)? **_Instruction:_** Please select three most important reasons and rank them from 1 (most important), 2 (second most important), 3 (third most important)	**Personal/Family-related factors** a) My parents and/or close relatives live here b) My hometown **Employment-related factors** c) Decided by my employer d) The company/sector I wanted to work for was based here e) Scope for self-employment/entrepreneurship f) Emerging state government support g) Better remuneration packages relative to cost of living **Educational/health factors** h) Good educational institutions for children i) Good health facilities j) Living environment of the city, e.g., climate, availability of housing and transportation k) Any other specify:	1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 ( ) 7 ( ) 8 ( ) 9 ( ) 10 ( ) 98( )
2.	Do you think that overseas experience makes a difference to your professional career?	a) Advantage position b) disadvantage position c) I do not know	1( ) 2( ) 3( )
3.	How much is your current annual income in comparison to your colleagues returning from abroad?	a) Much higher than return migrants b) Higher than return migrants c) Not much change d) Lower than return migrants e) Much lower thanreturn migrants f) I do not know	1 2 3 4 5 6

Comment:

CITY CODE ☐ **SECTOR CODE** ☐☐ **COMPANY CODE** ☐☐ **EMPLOYEE CODE** ☐☐   **Questionnaire**

Schedule 2

Section 3: Position in society

Sl. No.	Questions	Options	Codes
1.	What are the investments that you made inIndia in the past five years? *Instruction:* Please select three most important investment in terms of amountand rank themfrom 1 (most important), 2 (second most important), 3 (third most important)	a)Housing related expenditure (building material/purchasing a house/flat) b) Purchase of land c)Personal and Family Business d)Durable consumption goods (electronic appliance, furniture, etc) e)Providing support to other family members f) Education for yourself or for close relatives g) Investment on stock market h)Community Services/Activities i)Other expenditures, specify:	1( ) 2( ) 3( ) 4( ) 5( ) 6( ) 7( ) 8( ) 98( )
2.	In your opinion, how much influence do your ideas and opinions have on people around you (e. g. family members,relatives,colleagues ,friends)	a) no influence at all b) little influence c) a lot of influence	1 2 3
3.	Do you think that having foreign exposure would enhance your standard of living?	a)Yes b)No	1 2
4.	Do you think that your colleagues with foreign exposure contribute to the firm/organisation relatively more?	a) I strongly disagree b) I disagree c) Does not make any difference to me d) I agree e) I strongly agree	1 2 3 4 5 6
5.	Are you a member of any of the following type of organization in India?	a) No b) religious organization c) diaspora/migrant network d) local sports/music or other leisure organization e) humanitarian organization f) professional organization g) political party h) other (specify)	1 2 3 4 5 6 7 98

Comment:

Section 4: Transnational ties

Sl no	Questions	Options	Codes
1.	Have you been abroad for work/employment/study?	a) Yes	1
		b) No	2
2.	Why have you not been abroad till now? (you can choose up to 3 options)	a) Never tried	1
		b) Never got the chance	2
		c) Experiences of my friends/colleagues are not encouraging	3
		d) Don't want to go due to family reasons	4 → Q8
		e) Don't want to go due to cultural/religious issues	5 → Q8
		f) I am satisfied here	6
		g) Others	98
		Specify:	
3.	Do you have any concrete plan to move abroad?	a) Yes	1
		b) No	2 → Q8
4.	If Yes When	a) Within one year	1
		b) Within two year	2
		c) Within three years	3
		d) when I get the chance	4
		e) I do not Know	5
5.	If yes, for how long?	a) for less than a year	1
		b) from 1 to 5 years	2
		c) from 5 to 10 years	3
		d) permanently	4
		e) I don't know	5
6.	Please write the name of preferred destination countries	a) Country: _____	1
		b) Not yet Decided	2
7.	Why do you plan to move abroad?	**Employment-related factors**	
		a) Better business/entrepreneurial opportunities in the destination country	1
		b) Better employment/career advancement opportunities in the destination country	2
		Life style factors	
		c) I prefer life style abroad	3
		d) I feel disconnected from India	4
		Personal/Family-related factors	
		e) My close relatives live abroad	5
		f)I want to bring up my children abroad	6
		g)any other	98
		specify :	
Comment:			

CITY CODE ☐   SECTOR CODE ☐☐   COMPANY CODE ☐☐   EMPLOYEE CODE ☐☐   **Questionnaire**

Schedule 2

8.	Have you ever thought of actively taking part in the development process of India?	a) Yes	1
		b) No	2→Q10
9.	If yes, please explain in what way:	a) business (e.g. business, finance, joint ventures)	1
		b) social services (e.g. addressing poverty, health sector, education, philanthropy)	2
		c) academic and training (e.g. culture, sports, knowledge, science and technology	3
		d) policies (attract FDI)	4
		e) I can create more jobs in my field	5
		f) any other	98
		(please specify):	
10.	It will be good for India's development if highly skilled Indians return from abroad?	a) I strongly disagree	1
		b) I disagree	2
		c) Does not make any difference to me	3
		d) I agree	4
		e) I strongly agree	5
11.	Please explain why?		
12.	What should be doneby the Government of India to encourage people to return to India? Please give your suggestion.		

Comment:

CITY CODE ☐ **SECTOR CODE** ☐☐ **COMPANY CODE** ☐☐ **EMPLOYEE CODE** ☐☐   **Questionnaire**

Schedule 2

Section 5 : Personal Information

1.	Name and Surname		
2.	E-mail address:	3.Phone number:	
4.	What is your age?	_____years	
5.	Place of Birth(Town/City):	a)Urban	1
		b)Rural	2
6.	Gender	a)Male	1
		b)Female	2
7.	Religion	a)Hindu	1
		b)Muslim	2
		c)Christian	3
		d)Sikh	4
		e)I don't belong to any group	5
		f)Others	98
		Specify:	
8.	Your social category	a)General	1
		b)Reserve	2
9.	Marital status	a)married	1
		b)unmarried	2
		c)divorcee	3
		d)live in	4
		e)widowed	5
10.	Do you have children?	a)Yes ___ (how many) Please mention their ages_____	1
		b)No	2
11.	Languages Known	a)_____(Mother tongue) b)_____ c)_____ d)_____	
12.	Medium of Schooling up to XII	a)Mother Tongue	1
		b)English	2
		c)Hindi	3
		d)Others	98
		Specify:	
13.	What is your highest obtained educational degree? (Degree/ course):	a)Bachelor	1
		b)Master	2
		c)PhD	3
		d)Other	98
		specify:	

CITY CODE ☐ **SECTOR CODE** ☐☐ **COMPANY CODE** ☐☐ **EMPLOYEE CODE** ☐☐   **Questionnaire**

Schedule 2

	a)Name of the Institution b)Country/State c)Year of completion d)Specialization at the highest level, if any / field of studies	_____ _____ _____
14.	City of present residence	

You have reached the end of the questionnaire.
Thank you very much for your cooperation!
 Is there anything else you would like to tell us about the links between return migration and home country development?

_____

_____

15.	Would you like to receive a summary report of this study project?	a)Yes	1
		b)No	2

16.	Date of surveys	1st Visit:	2nd Visit:	3rd Visit:
17.	Surveyors name and code and date			
18.	Scrutiny's Name and Code and date			

Comment

Appendix 3 : Questionnaire for skilled Indians in Europe

Survey on Skilled Indians and Development

We are kindly inviting all professionals/students of Indian origin who currently reside in France, Germany, The Netherlands and Switzerland toparticipate in a survey on "Skilled Indians and Development". By completing the survey you will help us identify ways of engaging skilled professionals and scientists in home country development. List of policy recommendations based on the results of this research will be made available to officials in destination countries as well as in India.

Please fill in the questionnaire within the next two weeks.
Completing this survey should take approximately **20 minutes**.

All information collected from the survey will be treated in strict confidence and all respondents will be treated as anonymous. More informationabout the research project can be found at http://cooperation.epfl.ch/page-9063-en.html
We thank you very much for your attention and remain at your disposal should you have any query,

Yours faithfully,

Gabriela Tejada, PhD   Prof. Jean-Claude Bolay
Project Leader and Coordinator   Director of Cooperation
CODEV, EPFL   CODEV, EPFL

Section 1: Migration motives

1. In which year did you arrive in your current country of residence?
Year_____

2. In which country do you currently reside?
a)   Switzerland
b)   Germany
c)   France
d)   The Netherlands
e)   other, please specify where_____

3. What resident status do you currently hold in your country of residence?
a) student visa
b) family reunification visa
c) temporary residence permit
d) permanent (unlimited) residence permit
e) citizenship
f)   Other, please specify:_____

4. Please specify which citizenship(s) you hold.
a) Indian
b) Other: please specify _____

5. What was the most important reason for your move to Switzerland/Germany/France/ the Netherlands? (Please select only one answer.)
a) I was sent by a company/institution.
b) I found a job at a Swiss/German/French/Dutch employer on my own initiative.
c) I came to study.
d) I wanted to start my own business here.
e) Family reunification/ to join my partner
f)   Other, specify _____

6. Before coming to your current country of residence, had you lived outside of your home country, staying in one location for one month or longer?
a) Yes
b) No (please skip to Section 2)

6.1 If yes, please list all countries where you have stayed for more than a month.
_____
_____

6.2 For the two longest periods of your stay abroad please specify in which country you lived, the duration of your stay, the purpose of your stay and the type of visa you stayed on.

	Country	Starting Year	Duration of stay (number of months)	Purpose of stay a) study-related b) employment by own initiative c) project/research assignments/ internship d) accompanying my family/partner e) other – specify	Type of Visa a) student visa b) family reunification visa c) temporary residence permit d) permanent residence permit e) tourist visa f) other specify
Longest time abroad	I was in _____ (specify a country)	_____ (specify the year)	for____months		
2nd longest time abroad	I was in _____ (specify a country)	_____ (specify the year)	for____months		

Answer options: Country: a list of countries;
Starting year: a) before 1970, b) 1971-1980, c) 81-90, d) 1990…….
Duration: a) less than 3 months, b) 3 to 6 months, c) 6 months to 1 year, d) 1 to 3 year, e) more than 3 years
Purpose of stay: a) study-related, b) employment by own initiative, c) project/research assignment/internship, d) accompanying a family member, e) other

---

Section 2: Experiences in the country of residence

1. How well do you consider yourself to speak and understand the local language(s) of your current country of residence?
a)   not at all
b)   a little bit
c)   reasonably well
d)   very well

2. Are you affiliated with any organizations described below based in your *present country of residence*? (You may choose more than one answer.)
a)   None (skip to question 3)
b)   religious organization
c)   local sports/music or other leisure organization
d)   humanitarian organization
e)   political party
f)   diaspora/migrant network
g)   professional organization

2.1 If you are a member of a diaspora/migrant network or of a professional organization, please specify the name
_____

3. Are you a member of any international association (not necessarily based in your present country of origin) whose members are primarily of Indian origin?
a)   No
b)   Yes, please specify the name _____

4. How often do you socialize with people of Indian origin (excluding your immediate family)?
a)   every day
b)   several times a week
c)   a few times a month
d)   less often
e)   never

5. Given your experiences, how would you rate each of the following qualities in your current country of residence?
(*Please, circle your answer for each of the items.*)

	Very bad	Bad	Neither good nor bad	Good	Very good
Employment/career opportunities	1	2	3	4	5
Income level	1	2	3	4	5
Ease of doing business	1	2	3	4	5
Living environment and amenities (e.g. housing, transport)	1	2	3	4	5
Tolerance towards foreigners	1	2	3	4	5
Possibilities to integrate into the local society	1	2	3	4	5
Possibility to communicate with local people (language-related)	1	2	3	4	5
Social welfare system (e.g. schooling, health care, children day-care facilities)	1	2	3	4	5
Ease of obtaining a residence/work permit	1	2	3	4	5

6. What best describes your main activity at the moment? Please select one.
a)   In paid employment (go to Section 3.1)
b)   Self-employed (go to Section 3.1)
c)   In education (PhD students included) (go to Section 3.2)
d)   Unemployed (go to Section 3.3)
e)   Retired (go to Section 3.3
f)   Doing housework (go to Section 3.3)
g)   Other, please specify _____(go to Section 4)

Section 3.1 Employment situation (for currently employed professionals only)

1. What is your employment situation at the moment?
a)   working for a multinational company originating from NL/CH/FR/DE
b)   working in a multinational company originating from India
c)   working in a multinational company originating elsewhere
d)   I am working for a local company/institution.
e)   I am self-employed.
f)   I am employed in an academic and research institution
g)   Other, please specify _____

2. What is the sector of your current employment?
a)   Information & Communication Technology
b)   Financial and management services
c)   Biotechnology / Pharmaceutical industry
d)   Other, please specify _____

3. What is your position at the current employer? (Please choose one that suits best your position.)
a)   Managerial
b)   Technical
c)   Research
d)   Other, please specify _____

4. What is the level of your position at the current employer? (Please choose one that suits best your position.)
a)   Entry level
b)   Mid-level
c)   Senior-level

5. What type of position do you have?
a)   temporary employment
b)   permanent employment
c)   on secondment (on-site work)
d)   consultancy
e)   other (please specify _____)

6. Do you feel that you are overqualified for your current position?
a)   Yes
b)   No

6.1 If yes, please briefly explain why you feel this way.
_____
_____

7. How much is your monthly income after taxes and compulsory deductions, from all sources?
 a)   less than 2000 euro (less than 2500 Swiss Francs)
 b)   from 2001 to 4000 (from 2501 to 5000 Swiss Francs)
 c)   from 4001 to 6000 (from 5001 to 7400 Swiss Francs)
 d)   more than 6000 euro (more than 7400 Swiss Francs)

8. How does your remuneration match your skills?
 a)   Very well
 b)   Just adequate
 c)   Inadequate

8.1 If you chose answer c (inadequate), please briefly explain why you feel this way.
_____
_____

9. Please rate your satisfaction with your present job for each of the following characteristics. (Please circle your answer for each item.)

	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied
Salary	1	2	3	4	5
Working conditions (e.g. contractual stability, flexibility, work-life balance)	1	2	3	4	5
Equal opportunities at work as a foreigner	1	2	3	4	5
Infrastructure/research facilities	1	2	3	4	5
Intellectual challenge	1	2	3	4	5
Level of responsibility	1	2	3	4	5
Possibility to improve technical skills	1	2	3	4	5
Possibility to improve communication and networking skills	1	2	3	4	5

Section 3.2 Current study situation (for students only)

1. Which educational institution are you currently enrolled in?

Level	Main field of studies	Which year did you start your current degree?	Which year do you expect to complete your current degree?
a) First university degree (Bachelors) b) Master's degree c) PhD d) exchange/guest student e) Other	a) Information technology b) Computer and systems sciences c) Physical sciences d) Mathematics e) Life Sciences f) Biotechnology g) Environmental sciences h) Social and political sciences i) Humanities j) Management and Business administration k) Engineering l) Other, please specify		

2. Please list chronologically all previous educational institutions you have attended at the university level in the past.

Level	Field of studies	Country
a) First university degree (Bachelors)	a) Information	
b) Master's degree	b) Computer and systems sciences	
c) PhD	c) Physical sciences	
d) Other, specify_____	d) Mathematics	
	e) Life Sciences	
	f) Biotechnology	
	g) Environmental sciences	
	h) Social and political sciences	
	i) Humanities	
	j) Management and Business administration	
	k) Engineering	
	l) Other, specify_____	

3. Please pick the three most important reasons for selecting your present country of residence as your study destination.

1st most important
2nd most important
3rd most important

	Famous university/professor/study programme in my field
	Wider employment opportunities in India after graduation
	Wider employment opportunities abroad after graduation
	Affordable cost of tuition
	Scholarship offer
	Accompanying a family member or a partner
	Advice of colleagues, fellows or friends
	My home university had an agreement with this institution
	Theculture/lifestyle of this country
	Language of instruction
	Other

4. How do you pay for your studies in your current country of residence? (You may choose more than one answer)
 a) My own savings
 b) My family's sponsorship
 c) A loan from a financial institution
 d) Salaried position
 e) Side job
 f) Scholarship/grant/fellowship, please mention the name _____

5. What is your plan after completing your current degree? Please select only one.

Activity	Where?(Name the country)	When? (expected year)
a) Further education		
b) Paid employment		
c) Join family business		
d) Set up my own company		
e) I don't know		
f) other		

Section 3.3

1. Are you currently looking for paid work?
   a) Yes
   b) No
   c) Other (please specify) _____

2. Have you ever had a paid job?
   a) Yes
   b) No

3. Please list your past employers (up to three) in reverse chronological order (your most recent jobs first).

	Sector a) Information & Communication Technology b) Financial and management services c) Pharmaceutical/ Biotechnical industry d) Academic and research institution e) Other, specify	Level a) senior level b) mid-level c) entry-level	Country (write down)
Most recent job			
2nd most recent			
Third most recent			

4. Please describe the educational institutions you have attended at the university level or higher.

	Level a) First university degree (Bachelors) b) Master's degree c) PhD d) Other, specify_____	**Field of studies** a) Information technology b) Computer and systems sciences c) Physical sciences d) Mathematics e) Life Sciences f) Biotechnology g) Environmental sciences h) Social and political sciences i) Humanities j) Management and Business administration k) Engineering l) Other, specify_____	**Country**

Section 4: Ties with India and development impact

1. How often are you in contact with your family and friends in India?
   a) every day
   b) every week
   c) every month
   d) a couple of times per year
   e) no contact

2. How often do you discuss any of the following with people in India?

	a) never b) occasionally/seldom c) often d) all the time
a) Personal affairs	
b) Professional and scientific collaboration	
c) Education and training opportunities in NL/CH/FR/DE	
d) Job opportunities overseas	
e) Business/investment opportunities in India	
f) Community service activities in India	
g) Political situation in India	

3. How often do you follow news about current events in India?
   a) every day
   b) several times a week
   c) a few times a month
   d) less often
   e) never

4. How often do you visit India since you have been in your current country of residence?
   a) I haven't visited yet
   b) a few times a year
   c) once a year
   d) every other year
   e) once every few years
   f) other (please specify)_____

5. If applicable, please list the purpose and duration of your last three visits to India.

	Purpose a) personal affairs (visiting family, friends..) b) business/entrepreneurial activities on my own initiative c) sent by my employer d) research and teaching engagement e) other, specify_____	Duration
Last visit		
Second last		
Third last visit		

6. In the past 12 months, have you sent any money to family members, friends or organizations in India?
   a) Yes
   b) No (skip to Question7)

6.1. Please specify to whom and for what purpose you sent this money.

To whom	purpose	Amount (optional)
a) family member b) friend c) colleague d) professional organization e) charity organization f) other, specify	a)for daily expenses b)to cover education costs c)for investment/business d)for buying housing/land e)for philanthropic activities f) for savings g) other_____	Which of the following categories best describes the total amount you sent to this person/organization? a) less than 100 euro (less than 120 CHF) b) 100 to 500 euro (120–620 CHF) c) 500 to 1000 euro (620-1200 CHF) d) more than 1000 (more than 1200 CHF)

7. Have you made any direct investments in India since your arrival in your present country of residence (for example buying land,investing in business, stock market…)?
   a) Yes
   b) No (skip to Question 8)

7.1. What kind of investment have you made? You may choose more than one.
a)   Housing related expenditure (building material/purchasing a house/flat)
b)   Land
c)   Personal or family business
d)   Investment on stock market
e)   Community services/activities
f)   Other, please specify_____

8. Are you a member of any of the following types of organization *in India*?
a)   No
b)   religious organization
c)   professional organization
d)   local sports/music or other leisure organization
e)   humanitarian organization
f)   political party
g)   Other; please specify_____

9. The Government of India has put in place some incentive programmes for Indians living abroad. Please answer the questions in the topline by filling in the correct number below.

	Do you know about the following:	Do you or have you ever participated in any of the following?	If no, for which of the following reasons you don't have or have not participated in the following? (more reasons possible)		
	1Yes 2 No	1Yes 2 No	1 Too Expensive/ Cannot Afford, 2 Not Interested, 3 Do not want to support the current Government, 4 Have Indian Passport, 5 Not interested in returning to India, 6 Other (Specify below)		
The Overseas Citizenship of India					
Person of Indian Origin Card					
Government Investment Incentives (for ex. Resurgent India Bonds, India Millennium Deposits)					
NRI deposit schemes					
Indian Diaspora Day (Pravasi Bharatiya Divas)					
Sharing of knowledge through The Global Indian Network of Knowledge					

10. How important is regional and national development of India to you?
a)   not important at all
b)   somewhat not important
c)   somewhat important
d)   very important

11. Do you think your present activity could have an impact on socio-economic development of India?
a)   Yes
b)   No
Please briefly explain your answer.
_____
_____

Section 5: FUTURE PLANS

1. How many years do you expect to stay in your current country of residence (from this moment onwards)?
less than a year
    a) less than a year
    b) from 1 to 5 years
    c) more than 5 years
    d) permanently
    e) I don't know

2. What do you plan to do in the following five years? Please choose the most likely option.
    a) I do not know
    b) I plan to stay in my current country of residence
    c) I plan to return to India
    d) I intend to move to another country
    e) Other plans, specify_____

3. If you plan to move to another country, please mention where (more options possible).
    a) USA   g) The Netherlands
    b) UK   h) Switzerland
    c) Canada   i) Sweden
    d) Australia   j) Spain
    e) Germany   k) Italy
    f) France   l) Other, please specify_____

4. Are you planning to return to India atany time in the future?
    a) Yes (Please go to question 5)
    b) No (Please skip to question 6)
    c) I don't know (Please skip to question 7)

5. When are you planning to return to India?
    a) within 5 years
    b) within 10 years
    c) within 20 years
    d) in more than 20 years
    e) I do not knowwhen

5.1 If you are considering moving back to India, please name the most important reasons for that. (Please rank the top three reasons by putting "1" in the box next to what you consider the most important reason, "2" for the second most important reason and "3" for the third most important.)

	Employment-related factors
	Project completed/contract expired
	Recession in the host country/Increasing unemployment in the labour market abroad
	Better business/entrepreneurial opportunities in India relative to the destination country
	Better employment/career advancement opportunities in India relative to the destination country
	Higher real earnings relative to the cost of living in India
	Immigration and integration-related factors
	Requirement of my scholarship/ programme of study completed
	Difficulties in integration in the host society
	Rigid immigration and settlement policies in the destination country
	Personal/Family-related factors
	I want to be with my family
	I have to take care of someone in India (family responsibilities)
	I want to bring up my children in India
	Any other (Please specify_____)

6. If you are NOT considering moving back to India, please name the <u>most important reasons</u> for that. (Please rank the <u>top three reasons</u> by putting "1" in the box next to what you consider the most important reason, "2" for the second most important reason and "3" for the third most important.)

	Employment-related factors
	Better business/entrepreneurial opportunities in the destination country
	Better employment/career advancement opportunities in the destination country
	Lifestyle factors
	I prefer lifestyle abroad
	I feel disconnected from India
	Personal/Family-related factors
	My close relatives live abroad
	I want to bring up my children abroad
	Any other (Please specify_____)

7. Please indicate your perceptions about the following matters in India regarding your personal position by ticking the appropriate box.

	Very bad	Bad	Neither good nor bad	Good	Very good
a) job opportunities in India					
b) educational opportunities in India					
c) business/investment opportunities in India					
d) social and security situation in India					
e) political situation in India					

Section 6: Personal Background

1. Please select your gender:
    a) Male
    b) Female

2. What is your age? :_____ years

3. Which is your country of birth?

4. Which part of India are you from?
    a) Urban metropolitan area
    b) Semi-urban, smaller cities and towns
    c) Rural area

5. Which Indian state are you from?_____

6. What is your present relationship status?
    a) In a relationship (boyfriend/ girlfriend) (please go to question 7)
    b) Married (please go to question 7)
    c) Single (please skip to question 8)
    d) Separated/divorced (please skip to question 8)
    e) Widowed (please skip to question 8)

7. Where is your partner residing currently? Only answer this question if you are in a relationship.
    a) In the same country as I do
    b) In India
    c) In another country, namely in _____

7.1 Which nationalities does your partner have?
    a) Indian   d) French   g) Other, please specify_____
    b) Swiss   e) Dutch
    c) German   f) American

7.2 What best describes your partner's activity at the moment?
   a) He/she is in paid employment
   b) He/she is self-employed
   c) He/she is a student
   d) He/she is unemployed and is looking for a job
   e) He/she is unemployed and is not looking for a job
   f) He/she is retired
   g) Other, please specify_____

8. Do you have children?
   a) No (skip to question 10)
   b) Yes, _____ (how many?) Please mention their ages_____

9. Where are your children residing currently?
   a) Inthe same country as I do
   b) In India
   c) In another country, namely in _____

9. Which community do you belong to?
   a) Hindu
   b) Sikh
   c) Muslim
   d) Christian
   e) I do not belong to any community
   f) Other, specify_____

10. Please specify what languages you speak.
   a) _____(Mother tongue)
   b) _____
   c) _____
   d) _____

You have reached the end of the questionnaire.
Thank you very much for your cooperation!

Is there anything else you would like to tell us about the links between Indians abroad and home country development?
   _____
   _____

Please indicate where you found out about the survey?
   a) I was directly contacted by the investigators
   b) through the embassy
   c) through my employer
   d) through a friend/colleague
   e) I found the survey on the website
   f) other, please specify_____

Would you like to receive a summary report of this study project?
   a) Yes
   b) No

CONTACT INFORMATION (OPTIONAL)
In case we need to clarify some of the information you have provided, please list phone numbers and/or an e-mail address where you can be reached.

Name and Surname _____
E-mail address _____
Phone number_____

References

Baronov, D. (2004). *Conceptual foundations of social research methods*. London: Paradigm Publishers.

Black, R., King, R., Litchfield, J., Ammassari, S., & Tiemoko, R. (2003). *Transnational migration, return and development in West Africa*. Sussex: Sussex Centre for Migration Research.

Brinkerhoff, J. M. (Ed.). (2008). *Diaspora and development: Exploring the potential*. London: Lynne Rienner Publishers.

Cassarino, J. P. (2004). Theorising return migration: A conceptual approach to return migrants revisited. *International Journal on Multicultural Societies, 6*(2), 253–279.

Castles, S. (2012). Understanding the relationship between methodology and method. In C. Vargas-Silva (Ed.), *Handbook of research methods in migration* (pp. 7–25). UK: Edward Elgar.

Gmelch, G. (1980). Return migration. *Annual Review of Anthropology, 9*, 135–159.

Kapur, D. (2003). Indian diaspora as a strategic asset. *Economic and Political Weekly, 38*(5), 445–448.

Khadria, B. (1999). *The migration of knowledge workers: Second-generation effects of India's brain drain*. New Delhi: Sage Publication.

Khadria, B. (Ed.). (2012). *India migration report 2010–2011: The Americas*. New York: Cambridge University Press.

Ladyman, J. (2002). *Understanding philosophy of science*. London: Routledge.

Lewis, G. J. (1982). *Human migration: A geological perspective*. London: Croom Helm.

Meyer, J. B. (2001). Network approach versus brain drain: Lessons from the diaspora. *International Migration, 39*(5), 91–110.

MOIA. (2012). *Annual report 2011–12, Ministry of Overseas Indian Affairs*. New Delhi: Government of India.

Tejada, G., & Bolay, J. C. (Eds.). (2010). Scientific diasporas from developing countries in Switzerland: Empirical evidence and policy responses. Skilled migrants from Colombia, India and South Africa in Switzerland as partners in development, Peter Lang, Bern.

Tejada, G. (2012). Mobility, knowledge and cooperation: Scientific diasporas as agents of development. *Migration and Development, 10*(18), 59–92.

Wadhwa, V., Saxenian, A., Freeman, R., Gereffi, G., & Salkever, A. (2009). *America's loss is the World's gain*. United States: The Kauffman Foundation.

Yingqi, W., & Balasubramanyam, V. N. (2006). Diaspora and development. *The World Economy, 29*(11), 1599–1609.

Chapter 7
Diasporic Paths to Development: An Indian Perspective

Umesh L. Bharte and Rashmi Sharma

Abstract Amidst the constant emphasis on identifying the variables for development, increasing importance is now being attached to highly skilled migration, resulting formations of diasporas, and their role in negotiations at a national and international level. Diasporas are of special interest, and they have become a vital concern at a global level, in part because of their potential developmental impact in the home countries. This is specifically pertinent for the Indian diaspora, which comprises 25 million people spread over 130 countries, making it the third largest in the world after the British and the Chinese. This chapter looks at the different programmes and policies that the Indian government has implemented to convert overseas Indians into partners of national development. In seeking to explore the extent to which these efforts have been successful or not, we examine the diverse ways that skilled Indians in Europe contribute to the development process of India. We discuss the views and suggestions of both the Indian diaspora and returnees as to what needs to be done to provide an enabling setting for diaspora engagement. The conclusions indicate that the Indian government needs to be more sensitive to diaspora needs and to build a trustful relationship with the diaspora. Furthermore, there is a need for an environment in India that is conducive to diaspora engagement if the contributions are to materialise substantially.

U. L. Bharte (✉) · R. Sharma
Zakir Husain Centre for Educational Studies, School of Social Sciences,
Jawaharlal Nehru University, New Delhi, India
e-mail: bharteumesh@gmail.com

R. Sharma
e-mail: rashm02@gmail.com

1 Introduction

> We are brought by dispersion to the need of a cohesion greater than ever before.

<div align="right">Du Picq (1921: p. 21)</div>

Over the last couple of decades, the term 'diaspora' has fascinated the intellectual thinking of many migration scholars and this trend seems to be continuing. Accordingly, the academic world has shown some curiosity as to how the word 'diaspora' could be helpful in appreciating international migration, migrants, and the relation between the motherland and the host society (Khadria 2012). Traditionally, the word 'diaspora' was mainly confined to the Jewish experience of worldwide dispersion and the Jews' eventual return to their homeland. However, other communities originating from different nation states soon settled in diverse destination countries and they began to be referred as diasporas. As Tololian (1991, pp. 4–5) argues, 'the term that once described Jewish, Greek and Armenian dispersion now shares meanings with a larger semantic domain that includes words such as immigrant, expatriate, refugee, guest-worker, exile community, overseas community and ethnic community'.

Due to the proliferation of the usage of the term diaspora and its *sexiness* (Clifford 1994, p. 311), many scholars have offered alternative conceptualisations, taking the discourse on diaspora even further. A seminal article written by Safran (1991) in the inaugural issue of the journal, *Diaspora* paved the way for scholarly excursions in the field. Building on Safran (1991), Cohen (2010) has elaborated on the common features of diasporas (see Appendix I).

As the diaspora concept has become more fashionable, varied explanations have been provided by migration scholars who go beyond the strong link that the word diaspora has with the Jewish experience (Oonk 2007). For example, Vertovec (1997) proposed three distinct meanings of diaspora: as a social form, as a type of consciousness and as a mode of cultural production. The diaspora as a 'social form' refers to the process of becoming scattered and then uniting through social ties, networks and a collective or group-level identity. The diaspora as a 'type of consciousness' takes into account the variety of experiences, a state of mind and a sense of identity. The diaspora as a 'mode of cultural production' focuses on the production and reproduction of transnational social and cultural phenomena. For Patterson and Kelley (2000), '…diaspora is both a process and a condition. As a process, it is constantly being remade through movement, migration, and travel, as well as imagined through thought, cultural production and political struggle. Yet, as a condition, it is a consequence of the process by which it is being made and remade (p. 20)'.

In recent times, it has been shown how methodological nationalism influences theorisation in the mainstream social sciences, including migration and diaspora studies. Wimmer and Schiller (2002) view methodological nationalism as an assumption of taking any nation, state or society as the natural social and political form of the modern world in a reductionist way. However, as these authors notably

argue, such an assumption would not reflect the reality of migratory flows and stocks (i.e. diasporas) once a perspective of transnationalism is introduced into the analysis. Notwithstanding Wimmer and Schiller (2002), more recently, Chernilo (2011) advocates the assumption of methodological nationalism as a key feature of the very history of the social sciences, stating that 'the contemporary relevance of discussing methodological nationalism lies in the fact that it is found in social theory as much as in empirical research, in states' self-presentation and in everyday media and political discourses (p. 112)'. In spite of the transnationalism debate, it seems logical that the very concept of a nation-sate remains a powerful discourse in diaspora studies.

In the postmodern world, it is further argued that the identity of any diasporic community is not a one-dimensional phenomenon. Diasporic identities are constructed, deconstructed and reconstructed in a flexible and situational way, and they involve complex social-psychological and cultural processes (Cohen 2004; Agnew 2005; Hall 1990; Leonard 2010). However, in one form or another, the notion of a real or imagined homeland remains a powerful idea, and many minority groups are now increasingly identified in terms of diasporic origins and affiliations (Oonk 2007; Cohen 2010). As Bhatia observed (2002, p. 55), 'various Third World diasporic communities, settled primarily in Europe and North America, negotiate their cultural identities as citizens of First World countries, while retaining a strong identification with the culture of their home country'. Hence, it is also interesting to note that almost all diaspora groups in the world feel an urge to 'maintain, revive and invent' a connection with the homeland amidst the pressure of 'forgetting, assimilating and distancing' (Clifford 1994). The creation of a strong ethnic identity in the settlement countries paves the way for a minority group to create a sociocultural space and to make its own contributions to society more visible. This also applies to the diverse Indian communities in the various settlement countries around the world.

1.1 Diaspora, Development and the Case of India

In recent years, diaspora-development linkages have increasingly formed a subject of research, with a focus on the nature of the relationship between the diaspora and the home-country development (Kapur 2003, 2010; De Haas 2006; Brinkerhoff 2008; Faist 2008; Lowell and Gerova 2004). Several studies have examined how migration affects the development of the home country and its various modes, which have called the diasporic paths to development (i.e. how and whether migration leading to diaspora formation results in the development of the sending country). This development might not be restricted to the economic sphere alone but to the social aspects of life as well (Meyer 2001; Tejada and Bolay 2010). Amidst all this, diasporas have become the centre point because of their international influence and reach, and they do not just manipulate national situations but global situations as well, working in favour of the sending country by advocating

and representing its interests. The Indian government is also trying to pursue its diaspora, the third largest in the world, because of its capability to provide an impetus to development. The diaspora has also actively engaged with the policies of the Indian government and some schemes such as the PIO (person of Indian origin) card and the OCI (overseas citizenship of India) have been very popular among Indians located abroad.

It has been realised that the members of the diaspora can contribute to the development of the home country even when they are far away, and physical return is not the only way in which they can transfer knowledge and other associated benefits to the sending country. The diaspora can help by acting as a bridge for the transfer of knowledge, skills, finance, networks and technology from the host countries (Khadria 1999, 2012). Moreover, the recent era of globalisation and the consequent advancements in ICT (Information and Communication Technology) and transportation have also helped recognise the ever-increasing presence and influence of diasporas on both the political and the economic front. Two examples would suffice here. First, as Sobel (1986) and Boas (1995) observe that the Jewish State would not have survived without financial assistance and political support from diaspora Jews. Second, the passing of the recent India–United States Civil Nuclear Cooperation Agreement Bill in the American Congress under the Obama Presidency might be taken as an example of the considerable influence that Indian–Americans wield in the USA.

The Indian diaspora has a long history of migratory flows in different parts of the world. Early migrants were indentured labourers on South American, Asian and African plantations. Then, prior to 1960, Indians started to migrate as semi-skilled and skilled labourers, primarily to the UK. From the 1970s on, Indians migrated to the USA and Canada as high-skilled professionals, and more recently they have been going to the emerging destination countries of Europe as high-skilled professionals and students.

There has been a significant increase in the migration flows of highly skilled labour since the global market became more receptive to foreign talent, and while this acceptance is still very much regulated, economic and demographic compulsions often shape political will, sometimes forcibly so. Today, it is estimated that some 30 % of international labour migrants are skilled persons (Wickramasekara 2010). As a result of the predicted demographic boom in the Indian labour force, it is expected that more and more Indians will be absorbed into the international markets. Although it has been speculated that the rise in the economies of India, China and other developing countries will attract the highly skilled—something that might possibly balance migration to the developed countries—the current slowdown in these economies would seem to indicate that the traditional popular economies (USA, UK) will continue to hold the upper hand in the dynamics of migration, allowing them to attract the highly skilled. Until now, India has also been a leading source of highly skilled people for a number of countries. The number of people of Indian origin living abroad, estimated at 20 million at the turn of the century, is now believed to have risen to 25 million (MOIA 2012). OECD countries in general have seen an increase in immigration from India in recent

years, and most of these migrants are highly skilled Indians. In this changing scenario, Indian migration, which was formerly limited to the USA, Canada and the UK for the most part, has now spread to other countries in Europe including Germany, France, the Netherlands and Switzerland. These countries have experienced a rise in the inflows of skilled professionals and students from India.

Just like highly skilled Indian professionals, the success stories of Indian diasporic groups in developed countries (as opposed to those in the Middle East or other parts of the world) have attracted a lot of attention. As Khadria (2012) mentions, 'they are well educated, entrepreneurial, prosperous, fluent in English, make important contributions to economic and cultural life in countries of their settlement. Indians have developed vibrant and sophisticated communities in the *different developed parts of the world*, and made important and wide-ranging contributions to those societies (p. 119, emphasis in italics)'.

Since the link between diaspora and development is not so straightforward, concerned governments across the world are striving to initiate a constructive dialogue with their expatriates. The Indian government has recognised the importance of its expatriates, whether they are highly skilled professionals or members of the diasporic community, and it has put a number of programmes and policies in place to connect with them (Singh 2012). Although the Indian government has been exploring these various paths to development, which are aimed at converting overseas Indians in partners of nation building, it would be interesting to examine the extent to which these efforts have been successful. It would also be interesting to know the discrepancies, if any, between policy and practice.

Against the backdrop of this situation, this chapter is structured in the following manner: The first section discusses the evolution of the concept of diaspora and its centrality in the development discourse in general. The second section examines the changing attitude of the Indian government towards its expatriates, ranging from the pre-independent Gandhian approach to the present day context. Sections three and four shed light on the various programmes and policies used by the Indian government to connect with its diaspora, and the outcomes of these are then discussed. This is followed by two sections that present the findings of a study on Indian skilled migrants in four European countries with regard to how they contribute to the development process. These sections also discuss how aware return migrants and the diaspora are of government policies to engage with the diaspora, as well as suggestions on how to create favourable environments. The chapter ends by highlighting some of the disparities between the policies adopted by the Indian government and the extent to which they reach their targeted audience.

2 The Changing Attitude of the Indian Government Towards its Expatriates

As we will see, the attitude of Indian government towards its overseas population has not been linear. Indian foreign policy has witnessed many shifts with regard to Indians living abroad, ranging from Gandhian ideals to the pragmatic concerns of

today's United Progressive Alliance (UPA) government. In the context of the discourse on diaspora and development, it is worth examining the changing nature of India's attitude towards its overseas citizens.

Long before India acquired its status as an independent state, it was Gandhi, during the struggle for independence, who supported the cause of the Indian diaspora in a structured way for the first time. As Khadria (2012) notably argues,

> During the struggle for independence, overseas Indians played a crucial role, especially as a part of campaigns against the mistreatment and discrimination of Indians living in different parts of the world. Gandhi not only took the initiative but also convinced other nationalist leaders like Gopal Krishna Gokhale into the cause of overseas Indians (p. 120).

Although Gandhi fought for the rights of Indians in a South African context, he was concerned about overseas Indians in general (Sinha and Kerkhoff 2003; Lall 2001; Natarajan 2009). Gandhi built on his experiences of scattered Indians in South Africa, the Caribbean and elsewhere to successfully construct the nationalist doctrine which he imported to India. 'The diasporic Gandhi is an important precursor to the nationalist Gandhi (Natarajan 2009, p. 43)'. Gandhi lived in South Africa for almost 21 years, and he witnessed the discrimination that Indian migrants were subjected to. Such a long stretch of time and his experiential account of Indian migrants in South Africa were formative enough to give rise to a nationalist feeling in Gandhi (Natarajan 2009; Sarkar 1983). Once he returned to India to lead the national movement against the colonial rule, Gandhi mobilised the masses through this nationalist appeal. However, after Gandhi was assassinated in 1948, his ideas of connecting diasporic Indians faded gradually.

India as a nation, characterised by its enormous population, long history, rich cultural heritage and colonial legacy, gained independence in 1947 and Jawaharlal Nehru became the leader of independent India as its first Prime Minister. By and large, the Nehruvian era was characterised by total neglect, or what Parekh (1993) referred to as the policy of *studied indifference* vis-à-vis the diaspora. Indeed, Nehru was one of the founding fathers of the non-aligned movement (NAM), which was established in the 1960s at the height of the Cold War. The principal objective of the NAM was national independence and the sovereignty and territorial integrity of States. Interstate interference of any sort was strictly prohibited.

Under the influence of the ideals of NAM, Nehru remained distant with overseas Indians and thought that Indians abroad should integrate into their domicile or adopted national territories. For Nehru, respecting the independence and sovereignty of States was more important than treating overseas Indians as subjects of India. Accordingly, Nehru wanted Indians abroad to identify themselves with their countries of settlement rather than identify with their land of origin. Consequently, Nehru refused to assist Indians abroad in any of the issues at hand. However, he kept the possibility open for overseas Indians to return to India if they wished to, but dual citizenship or identity was not a concern for him (Sinha and Kerkhoff 2003; Nijhawan 2003).

In the post-independence period, even after Nehruvian era, the Indian government followed a policy of non-interference with regard to its expatriates. For

example, during the prime ministership of Indira Gandhi, the focus was more on national security and assigning an increasing role and more responsibility to the State in governing various organisations and core industries. She was more interested in State intervention and was reluctant to get the private sector involved. The Indian diasporic issue was hardly a matter of concern during Indira Gandhi's leadership (Nijhawan 2003; Kapur 1987). Neither did overseas Indian communities figure prominently in Indian foreign policy during the period that Rajiv Gandhi was Prime Minister. Nonetheless, Rajiv Gandhi tried to develop regional cooperation and harmonious relations with neighbouring countries and this was evident in his active efforts to create SAARC—South Asian Association for Regional Cooperation (Gupta 1987).

To a large extent, the policy of indifference towards expatriate Indians continued until the 1990s. There was a dramatic shift in India's foreign policy with regard to Indians abroad during the 1990s. Due to immense difficulties in the Indian economy and the inevitable pressures of globalisation, in 1991, the then Finance Minister Dr Manmohan Singh liberalised the economy. As a consequence, foreign direct investment (FDI) started to flow into different sectors of the Indian economy. FDI was also welcomed from Indian overseas, and their active participation was sought. This changed view of Indians living abroad was also one of the noteworthy features of Atal Bihari Vajpayee's BJP-led government. In fact, for the first time, Vajpayee strongly advocated getting Indians abroad involved in nation building. Successive governments, including the current UPA government during its second term, continued in their efforts to woo overseas Indian communities and tried to get them to participate in the development process. Accordingly, it seems as though the circle has been completed, and that the initial Gandhian ideals have been restored in India's foreign policy (Sinha and Kerkhoff 2003).

The statement of the current Prime Minister, Dr. Manmohan Singh, on the home page of the Overseas Indian Facilitation Centre (OIFC) amply sets out its agenda, 'India is a land of opportunity that places premium on enterprise and creativity … I invite you, the Overseas Indians, to make use of the investment and business opportunities that India now offers. This is the time for all of us to become strategic partners in India's progress'.[1]

3 The Indian Government's Initiatives to Engage with its Diaspora

The Indian government's policy towards its expatriates has undergone many changes, from periods of indifference to the establishment of the *Pravasi Bhartiya Samman* award. With the economic reforms of 1991 and larger policy shifts, engagement with diaspora became an issue of repute and importance in the Indian

---

[1] http://www.oifc.in

context (Lal et al. 2006). This subsequently led to the establishment of the High Level Committee on the Indian diaspora in 2000. Following the recommendations of the Committee, a separate ministry dedicated to the global community of people of Indian origin, The Ministry of Overseas Indian Affairs (MOIA) came into existence in 2004. In addition, the OIFC was set up in the year 2007. As we will see, most of the initiatives on the part of the Indian government are mainly channelled through these two nodal bodies.

The MOIA sees itself as a 'services' ministry and performs the function of providing different kinds of services that are much in demand from overseas Indians, such as diaspora Services, Financial Services, Emigration Services and Management Services. Its other important functions include building networks, partnerships and making use of the easily identifiable diaspora for development in India. It engages in several areas such as the promotion of trade and investment, emigration, education, culture, health and science & technology.[2] In accomplishing its mission, the Ministry is guided by key policy imperatives such as offering customised solutions to meet the varied expectations of the Overseas Indian community, bringing a strategic dimension to India's engagement with its diaspora, tapping the 'investible diasporic community' in terms of knowledge and resources in diversified economic, social and cultural areas (MOIA 2012).

While the MOIA is an entirely public, government body, the OIFC is a Public Private Partnership between the MOIA and the Confederation of Indian Industry (CII), and it places an emphasis on expanding investment, economic issues and the economic engagements of overseas Indians with India. Apart from the MOIA and the OIFC, the Ministries of Home Affairs, Commerce, External Affairs and the Department of Science and Technology (DST) also engage with Indian migrants through various platforms. These various efforts can be seen as paths to development envisaged by the Indian government to attract oversees Indian communities for the cause of development. In the next section, we outline these paths in more detail.

India has built up an impressive diaspora infrastructure and policies to attract finance from the Indian diaspora in addition to schemes to make them emotionally attached to their homeland. Among the various steps taken, the Indian government has also provided voting rights and arrangements for non-resident Indians (NRIs). The Union Cabinet of the Government of India has cleared the way for amendments to Section 20 of the Representation of People's Act, meaning that NRIs could now have voting rights. Under the amended law, Indian nationals residing in foreign countries who have been absent from their place of ordinary residence in India due to work, education, etc. can get their names included on electoral rolls in India and thereby exercise their voting rights. The Bill will entitle eligible citizens of India to cast their votes in their original constituencies in Parliamentary and State Assembly elections, and thus, it enables them to fully participate in the democratic process of the country as citizens of India (Khadria 2012).

---

[2] http://www.moia.gov.in

3.1 Initiatives Through MOIA: Institutional Set-up

India has built up an extensive diaspora infrastructure to cater for the needs of the diaspora and to build and develop relations with the diaspora. The Ministry has established various organisations and councils to undertake these activities. These include the India Development Foundation (IDF), a non-profit trust that serves as a single-window platform to facilitate diaspora philanthropy, build 'Social Capital and Philanthropy Network' and lead Overseas Indian philanthropic capital into India's social development effort; The Prime Minister's Global Advisory Council (PMGAC), a high-level body that draws upon the skills, talent, experience and knowledge of the best minds of overseas Indians in diverse fields, which was set up in 2009 to meet India's development goals and facilitate investment by Overseas Indians into India; Pravasi Bharatiya Kendra, seen by New Delhi as a way to benefit from networks, with and amongst overseas Indians, and which is expected to develop over time into a hub of activities for sustainable, symbiotic and mutually rewarding economic, social and cultural engagement between India and its diaspora; Overseas Indian Centres set-up in Washington, Abu Dhabi and Kuala Lumpur as field organisations to strengthen the mechanisms that allow overseas Indians to redress their grievances by making necessary institutional arrangements to provide services in different spheres of economic, social and cultural matters and engage the diaspora; The Indian Council of Overseas Employment (ICOE) set-up in July, 2008 as a think tank for all matters relating to international migration and to lead evidence-based work on international migration, support informed policymaking and enable strategic interventions for a coherent and harmonised response to the transnational movement of people.[3]

In addition to the diaspora infrastructure that we have already mentioned, the Indian government has also put various policies in place to engage with the Indian diaspora and these are discussed below.

3.2 Initiative Through MOIA: Policies Implemented

3.2.1 Pravasi Bharatiya Divas

The government of India celebrates Pravasi Bharatiya Divas (PBD) on 9th January each year to mark the contribution of the Overseas Indian community to the development of India. This day was chosen because Mahatma Gandhi returned to India from South Africa on the same day in 1925. PBD conventions have been held every year since 2003 and are considered to provide a platform to the overseas Indian community. It helps them to engage in various beneficial activities with the Indian government and with people from the land of their ancestors. These

---

[3] http://moia.gov.in

encounters are expected to result in networking and sharing experiences among the overseas Indian community in various fields. The Pravasi Bharatiya Samman award is also presented at this event in appreciation of the diaspora's role in the growth of India. PBD is held every year and it serves as an effective platform to keep alive the links with the Indian diaspora and to announce new measures which are underway. In this regard, it is a high-level event which is looked upon and awaited by both the diaspora and the government to introduce some new prospects.

3.2.2 The Global Indian Network of Knowledge (Global-INK)

Global-INK, an electronic platform to facilitate the transfer of knowledge, was also set up with the aim of leveraging the expertise, skills and experience of overseas Indians. The key objective of this initiative is to draw upon the knowledge base of the Indian diaspora and unleash knowledge sharing in key focus areas such as health care, science and technology and the environment, where the Indian diaspora is considered to have made significant strides. The idea was to provide a framework that will pull in the diaspora as 'knowledge' partners, with institutions in India acting as 'stakeholder' partners and the government playing the role of 'facilitator'. It is intended to achieve these aims using various collaboration tools such as discussion forums, ask an expert, user directory, knowledge bank and several projects.[4]

3.2.3 Person of Indian Origin (PIO) Card

Introduced in 2002, the PIO card grants visa-free travel to India for a period of 15 years. PIO cardholders are exempted from registering with the police if their stay does not exceed 180 days. The card is designed for foreign passport holders of Indian origin up to the fourth generation who have settled in countries throughout the world other than Afghanistan, Bangladesh, Bhutan, China, Nepal, Pakistan or Sri Lanka. They enjoy parity with NRIs as they can purchase property (except for agricultural land), access central and state-level housing schemes and education. However, PIO cardholders are not granted political rights, and therefore, they cannot vote or stand for election.

3.2.4 The Overseas Citizenship of India (OCI) Scheme

The OCI Scheme was introduced in August 2005 through an amendment of the Citizenship Act, 1955, in response to continual demand for 'dual citizenship' from the overseas Indians, especially the diaspora in North America. This scheme

---

[4] https://www.globalink.in/web/globalink/about-us; http://moia.gov.in/pdf/global_INK_in_new_size.pdf

provides more extensive benefits to the diaspora, and both the PIO and OCI schemes enjoy popularity among the Indian diaspora as they provide them with benefits as members of the diaspora. According to the latest MOIA annual report, a total of 1,029,131 individuals of Indian origin had successfully applied for OCI status as of 14 February 2012 (Lum 2012).

3.2.5 Know India and Study India Programmes

The Know India (launched in 2004) and Study India (introduced in 2012) Programmes of the Ministry are attempts to provide unique forums for students and young professionals of Indian origin to visit India, to undergo short-term courses in the form of summer schools, share their views, expectations and experiences and to develop closer bonds with contemporary India. In broad terms, this is expected to promote an awareness of different facets of life in India and the progress made by the country in various fields e.g. economic, industrial, education, science and technology, communication and information technology, culture, and thus encourage them to foster closer ties with the land of their ancestors and enhance their engagement with India. So far, the MOIA has organised 20 Know India programmes (KIP) in which 623 overseas youths have participated. A third scholarship programme for diaspora youth was instituted in 2006, when the government announced that 100 scholarships for diaspora youth (50 for NRIs and 50 for persons of Indian origin) would be awarded each year to allow the successful candidates to pursue an undergraduate education in India (Lum 2012).

Along similar lines, but aimed at overseas youth who have already availed of the facility to visit India under the KIP, the Overseas Indian Youth Club (OIYC) is a tool for diaspora youth from the 18–30 age group in countries with a substantial diaspora population. The OIYC provides an institutional mechanism of the Indian Missions/Posts located abroad aimed at engaging young overseas Indians, students and professionals, and it includes facilitating their work in social sectors at a district level in India. The Scheme was initially started in those countries which had already shown a good level of participation in the KIPs. The Know Goa Programme was established along similar lines by the Government of Goa for NRI/PIO youths whose forefathers had migrated from Goa. 'Tracing the Roots' is another scheme for PIOs, and it allows people to trace their roots in India. Plans are also under way to establish a PIO University under the Innovation Universities Act. Accordingly, these schemes are aimed at emotionally binding the Indian diaspora with the homeland, and even though they operate at a small level, they are still able to attract Indians located abroad.

3.2.6 Scholarship Programme for Diaspora Children (SPDC)

This scheme for NRIs/PIOs/OCIs from 40 countries with a substantial Indian diaspora population was launched during the 2006–2007 academic year. Under

this scheme, 100 scholarships worth up to US$5,000 per annum are granted to PIO and NRI students for undergraduate courses in engineering/technology, humanities/liberal arts, commerce, management, journalism, hotel management, agriculture/animal husbandry, etc. So far, a total of 468 candidates have availed the scholarship since its inception (MOIA 2012).

3.3 Initiatives Through OIFC

The OIFC has a clear mandate to promote overseas Indian investment in India and facilitate business partnerships, and it is engaged in such activities, functioning as a clearing house for all investment-related information, helping states in India to project investment opportunities to overseas Indians, promoting overseas Indian investment in India and facilitating business partnerships. It has been involved with 'Knowledge Partners', firms specialising in the areas of foreign investment consulting, regulatory approvals, market research, joint venture partner identification, project financing, accounting, taxation, legal matters, portfolio investments and other issues.[5] It is also involved in networking, answering queries about returning to India, taxation, market entry, real estate, FDI etc. As one of its new activities, the OIFC also produces publications that serve as handbooks for overseas Indian clientele. The latest handbook carried the title 'Returning Indians—All that you need to know'.

3.4 Other Initiatives

3.4.1 Ramanujan Fellowships

These fellowships launched by the Government of India through the DST in 1997–1998 are intended to get brilliant scientists and engineers from all over the world to take up scientific research positions in India and are especially aimed at those scientists who want to return to India from abroad.[6] Fellowship holders are allowed to choose any scientific institution or university in the country and are eligible for regular research grants through the extramural funding schemes of the various S&T agencies of the Government of India (DST 2012). This fellowship is open to scientists and engineers under the age of 60. The duration of a Ramanujan fellowship is 5 years. The value of the fellowship is Rs. 75,000 per month. Each fellow also receives a research grant of Rs. 5.00 lakhs per annum. About 155 Ramanujan Fellowships have been offered to date in different areas.

---

[5] http://www.oifc.in

[6] http://www.dst.gov.in/scientific-programme/ser-ramanujan.html

3.4.2 Ramalingaswami Re-entry Fellowship

This fellowship is a re-entry scheme of the Department of Biotechnology (DBT) of the Ministry of Science and Technology, and it was instituted during 2007–2008. The scheme was conceptualised with the goal of attracting highly skilled researchers (Indian nationals) who are working overseas in various disciplines of biotechnology (agriculture, health sciences, bio-engineering, energy, environment, bioinformatics and other related areas). Under this scheme, a fellowship of Rs. 75,000 per month is provided for a period of 5 years in addition to a contingency grant of Rs. 5.00 lakhs per annum (DBT 2009–2010).

Provisions, such as reduced customs duties for the residence transfers of overseas Indians returning back to India, are available and include the retention of NRI status for up to 3 years after return. Other avenues to promote investment by the Indian diaspora include special incentives for bank deposits, stock market investments and certain special provisions granted to OCIs and NRIs for FDI. To encourage the employment of overseas Indians, the rules for doctors, scientists, academics and accountants have either been amended or are in the process of being amended (Singh 2012). The draft of the National Council of Human Resources in Health (NCHRH) Bill is a case in point that allows doctors who hold overseas citizens of India (OCI) status to work in India and to join medical colleges as faculty members.

4 Outcome of the Efforts of the Indian Government

Even though the association between the Indian government and the Indian diaspora took time to take a shape, the strength of association was evident when the Indian diaspora came to help the home country during the 1991 foreign currency reserve crisis. The diaspora played a pivotal role in rebuilding the country's foreign exchange reserves. Once again, during the ongoing 2013 crisis, the Government of India is looking to the Indian diaspora to help save the free falling Indian rupee. It has devised various measures to facilitate deposits from the diaspora and boost currency inflows (Reuters 2013). However, if we analyse the effectiveness of the efforts of the Indian government, we cannot contend that the policies of the Indian government to pursue the Indian diaspora have been totally successful. Indeed, the success rate of Indian policies has been far from satisfactory. When compared to the success of its neighbours, Taiwan and mainland China, in attracting and engaging their diaspora, Indian efforts have not been all that fruitful.

In China and Taiwan, the governments have launched organised initiatives to encourage emigrants to return. Back in the 1960s, Taiwan started to offer high-skilled migrants major advantages, including additional salaries and other benefits such as excellent research facilities. Mainland China introduced similar policy measures shortly after, and since 1989 it even operates a service centre that provides

services such as housing assistance, duty-free imports and return assistance to help self-financed students to return. Until recently, the focus in India has been more on general economic reforms, stimulating private sector initiatives and making investments by returning migrants more feasible (Weisbrock 2008). Compared to China, the share of Indian migrants in FDI is low. FDI flows to India have grown steadily since the economic reforms were introduced, but for a long time they have remained relatively modest compared to diaspora FDI flows to China. Whereas the Chinese diaspora has contributed around 50 % of FDI inflows to China, in India the contribution to FDI flows made by NRIs is about 5–10 % (Hugo 2003). One reason for this is that there is less domestic opposition to incentives granted to diasporic investors in China than in India, as the country did not have a strong capitalist class of the Indian kind at the time it opened up the economy. Furthermore, the local governments in China have traditionally been more proactive in attracting diasporic investments than those in India have been. The High Level Committee on the Indian diaspora attributed the responsibility for this rather low investment by NRIs and PIOs in India to the Indian government. They pointed out that investment is subject to a lot of regulation in India and this, together with the highly bureaucratic procedures and corruption in the country, makes the system non-investor friendly (Singhvi et al. 2001). Hence, there has been a lack of trust among the Indian diaspora regarding the Indian government system.

Apart from the problems faced by investors, the other issue that hampers investment by the Indian diaspora is the lack of basic infrastructure and facilities for health services and education in India. Accordingly, the various policies employed by the Indian government to lure the diaspora to engage with the country and/or to return have not been a great success. This indicates that an active diaspora policy must also be accompanied by concerted attempts to improve the overall infrastructure and energy supply in order to attract overseas Indian investment (Lum 2012). The responses of the return migrants to India from our study indicate the aspects mentioned above, as both returnees and non-migrants feel the lack of similar factors in the home country: provision of better infrastructural facilities, better remuneration packages and adoption of anti-corruption practices. According to the respondents, these are the most important measures that need to be taken if people are to be encouraged to return and work in the Indian economy. Hence, there is a need to win the trust of the people of the diaspora in order to make them invest their hard-earned money and other related financial investments in India.

Even though the results of their efforts are different, both the Indian and the Chinese diasporas are attracting increasing attention from scholars (e.g. Khanna 2007; Huang and Khanna 2003) because of the influence they have exerted globally. It is not surprising to see that the Chinese diaspora and global Indians have come of age in gaining maximum benefits for their countries of origin, when the decade ahead is largely seen as the decade of China and India, and the two countries are often referred to together as 'Chindia'! Huang and Khanna (2003) state that brightening prospects in India and a changing attitude with regard to those who have gone abroad are helping to attract many NRI engineers and

scientists back home and making many expatriate business people open up their wallets. Similarly, there is also evidence of China's policy of wooing back the diaspora through a combination of economic incentives and patriotic rhetoric. While China has won recognition as being the world's factory thanks to the help of its diaspora, India could become known as the world's technology lab (Huang and Khanna 2003).

5   Contribution to Development by the Indian Diaspora

The policies and varied programmes of the Indian government that we have mentioned here are being formulated to woo Indian expatriates so that they may contribute to the development of their home country, by either physically returning home or facilitating the transfer of knowledge and skills, money, technology and networks.

The study of Indian skilled migration that we undertook sought to examine the factual and potential development impact of Indian skilled migrants—both diaspora and returnees.[7] Accordingly, in the study we attempted to test ways in which skilled Indians (both professionals and students) in four selected European countries—France, Switzerland, the Netherlands and Germany—have contributed to their homeland in various manners, and the awareness among returnees (in six selected Indian cities, three of which are metropolitan cities—Delhi, Kolkata, Mumbai, Pune, Hyderabad and Bangalore) of the different ways that the Indian Government has envisaged to leverage their potential for development.[8]

5.1   Findings of the Indians Abroad

We also stated earlier that there are several channels through which the diaspora can contribute to the development of the home country, and physical return is just one of these channels. Indeed, apart from highly propagated return migration, the diaspora can often benefit the sending country more while they are in the destination country, by facilitating the transfer of new knowledge, technology, connections and investment. In this way, they can bring business, finance and technology to the home country. Similarly, by becoming active members of the foreign political economy, they can help to build favourable opinions about their

---

[7] This study draws on data collected simultaneously in the host and home countries between 2011 and 2012 as part of the project:'Migration, scientific diasporas and development: Impact of skilled return migration on development in India' on which this volume is based.

[8] The study included both skilled Indians in Europe and skilled Indian returnees and non-migrants in India. Chapter 6 of this volume provides further details of the methodology, scope and sample of the study.

Table 1 Financial channels of development engagement

	Professionals	Students	Others
Have sent remittances in the past 12 months	156 of 227 (68.7 %)	158 of 402 (39.3 %)	13 of 36 (36.1 %)
Have invested in India since moving to Europe	66 of 221 (29.9 %)	38 of 396 (9.6 %)	7 of 35 (20 %)

Source Field survey in Europe, 2011–2012

own source country. Our study indicated that the skilled Indian diaspora maintains strong links with the home country, and according to them it is very important to work for India's socio-economic development. The data highlighted that a large majority of respondents maintained systematic daily links with family and friends and with former colleagues in India. Their engagement with India was observed through engagement in four channels of migration for development: (1) financial channels, (2) knowledge transfer, (3) social remittances and (4) plans to physically return to the home country.

Financial channels: We found that among the financial channels, Indians abroad sent more money as remittances than they invested in India during the period they were in Europe. Half of the respondents have sent remittances to their homes in the past 12 months and most of these are sent to their family members. However, more professionals than students have sent remittances in the past year (see Table 1). Importantly, most of the remittances were sent for daily consumption, to build up savings and cover educational costs. Overall, FDIs from the Indian diaspora still remain very low. We found that most skilled Indians in the four European countries have not made any investments in their home country. Whatever investments have been made were spent on housing and stock market investments and the purchase of land. Hence, here we find that Indians abroad make very few investments in the home economy.

Knowledge Transfer: Since it is very difficult to quantify knowledge transfers, in our survey we observed these transfers through the migrants' responses regarding their participation in topics of discussion with people in India, through their membership of professional organisations in the home country and the frequency and purpose of their visits to India. The most discussed areas were personal affairs, matters related to the political and social situation in India and issues concerning opportunities for professional and scientific collaboration in India. Discussions with people in India were frequently related to job and training opportunities overseas as well as business prospects in India. The respondents viewed the diaspora knowledge networks in a very favourable way as tools for knowledge transfer to India insofar as they bring the highly skilled together. Besides, the active involvement of these networks in science and technology advancements in the home country is encouraged through various modes. Regarding the responses of all the respondents in the concerned European countries, only 11 % (70 respondents) said that they were members of any professional organisation in India. As we saw in an earlier section, there is a lack of trust in the

Table 2 Reported plans for the next 5 years ($n = 657$)

Migratory plans	Percentage of respondents
Will stay	28
Another country	20
Return to India	27
Don't know	19
Follow job/studies	5
Other	1
Total	**100**

Source Field survey in Europe, 2011–2012

Indian government and the hurdles involved do not facilitate any organised engagement by the diaspora.

Social remittances: The diaspora can also benefit the home country by transferring social views and mobilising social change. They can also help to accumulate social capital in the home country with the help of the contacts they have built up in the destination country and elsewhere. Our study found that most of the respondents said that they were aware of current social and political developments in India. The kept abreast of affairs at home by following the daily news. A majority of them discussed the political situation in India all the time or very often. The respondents were more interested in becoming members of humanitarian, leisure and religious organisations in the home country, and they were not interested in political parties. Among the migrants' perceptions regarding the economic and political situation in India, they viewed employment and business opportunities as well as the educational system as being good, while a majority of them felt that the political and social situation is bad. The migrants expressed their disappointment with the social and political system in India, and advocated changes to them.

Physical Return to the Home Country: Like the popular literature, migrants also feel that physical return to the home country is the most likely tool in terms of contributing to the development of the home country. The migrants indicated that they will return to India at some point in the future and that this will be their most important contribution to India's development. However, very few have actually planned to return to India in the near future (Table 2). A majority of them either planned to stay in the country where they are at present, or to move to some other country in Europe or to the USA.

Migrants had flexible plans to return or stay, and most of them have kept their options open, and they would allow these to be shaped in accordance with changing circumstances in the destination country, the home country and elsewhere. Compared to professionals, students are more certain about their future plans to return, which may be the result of the determined duration of the programmes they are enrolled in. Those respondents who view the economic and professional opportunities in India as being beneficial to them plan to return, as do

those who want to return for family reasons. Accordingly, we can see that their mobility plans are mostly based on a combination of both professional and family factors.

The results indicate that the migrants are very interested in developments in India, and at their own level they are making efforts to keep in touch with their home country and also are involved in several diaspora networks and home-based organisations. However, any substantial activity that can be overtly counted as contributing to the development process in India, even in financial channels where it leads the way in remittances and FDI, lags far behind other countries. This might be due to the absence of an enabling environment, and therefore, the Indian government is supposed to remove this hurdle.

5.2 Findings from Returnees and Non-migrants

It is said and known that whatever good schemes a government may bring for the members of its diaspora, they do not necessarily engage the home country because of problems such as bureaucracy, corruption and a lack of better opportunities compared with the destination country. It then becomes important to know what additional steps can be taken to encourage return migration of the highly skilled. In order to shed light on the details of the issues that hinder such engagement, we surveyed the returnees and non-migrants for their suggestions as to what needs to be done to produce an enabling environment for diaspora engagement. For this, we analysed the responses of the non-migrants and the returnees to India regarding what the Government of India needs to do to encourage the return migration of its skilled professionals. The top four suggestions from the non-migrants were provision of better infrastructural facilities, better remuneration packages, adoption of anti-corruption measures and maintaining a congenial work environment. Among the return migrants, the highest responses were also related to the provision of better infrastructural facilities, better remuneration packages, the adoption of anti-corruption measures and an increase in governmental support. Accordingly, the top three suggestions are the same for both returnees and non-migrants. The responses indicate that both returnees and non-migrants feel that the same factors are lacking in the home country, and therefore, in order to encourage people to return and work in the Indian economy, the most important measures that need to be taken are provision of better infrastructural facilities, better remuneration packages and the adoption of anti-corruption practices. The respondents also mentioned several other measures, including better research and development, an increase in governmental support, the provision of good living conditions, the removal of faulty bureaucratic practices and the creation of various job opportunities. What we wish to bring out here is that there is need for an overall improvement in the quality of life and the opportunities available in India, and the government needs to win the trust of the people by controlling and removing corrupt practices.

Table 3 Awareness among the Indian Diaspora of Government of India Programmes for Indians abroad

Incentive programme	Yes (in %)	No (in %)	Total number of respondents
Overseas citizenship of India (OCI)	25.4	74.60	878
Persons of Indian origin (PIO) card	27.90	72.09	878
Government investment incentives	3.19	96.81	878
NRI deposit schemes	19.36	80.64	878
Indian diaspora Day (Pravasi Bharatiya Divas)	17.65	82.35	878
Transfer of knowledge through the global Indian network of knowledge	4.55	95.45	878

Source Field survey in Europe, 2011–2012

6 Awareness of Government Programmes Among Skilled Indians Abroad and Returnees

Our study also sheds light on the level of awareness that both the Indian highly skilled diaspora and returnees have of the various ways envisaged by the Indian Government to leverage their potential for development.

Table 3 shows the awareness among the Indians surveyed in Europe of the Government of India programmes aimed at encouraging diaspora engagement. The table shows that OCI and the PIO card are the best known schemes among the Indian diaspora, followed by NRI deposit schemes and PBD. However, few knew about Government Investment incentives and the Global-INK. We already been mentioned the popularity of OCI and the PIO card when we discussed the nature of the benefits that these schemes provide to the Indian diaspora. This indicates that while the diaspora is aware of the schemes that provide them with benefits, they are less aware of other exchange programmes such as PBD, investment incentives and Global-INK. However, the overall awareness rate was very low. Only a maximum of 28 % of the total people surveyed were aware of PIO and 25 % were aware of OCI. So, if the Government of India wishes to engage its diaspora, this provides further indication of the need for it to run an extensive campaign to promote its policies.

Table 4 shows the awareness of the Indian highly skilled returnees regarding the various schemes that the Government of India has started to support the Indian diaspora and encourage them to engage with their home country and return to India.

A majority of the returnees were not aware of any of the Government schemes. The initiative that was most known to the returnees was the *Pravasi Bhartiya Divas*, which was known to 38.14 % of return migrants. However, it was clear that these schemes are not known to most of them, which indicates that these schemes might be available in practice, but they are not reaching migrants—the intended beneficiaries. Nevertheless, this might be due to the fact that these return migrants have returned within a limited span of time, and within such a short period such

Table 4 Knowledge of government of India incentive programmes among returnees

Incentive Programme	Yes (in %)	No (in %)	No answer/ missing value (in %)	Total number of respondents
Overseas citizenship of India (OCI)	30.55	64.33	5.12	527
Persons of Indian origin (PIO) card	26.38	67.55	6.07	527
Government investment incentives	16.13	77.42	6.45	527
NRI deposit schemes	27.51	66.22	6.26	527
Indian diaspora day (Pravasi Bharatiya Divas)	38.14	55.60	6.26	527
Transfer of knowledge through the global indian network of knowledge	13.47	79.89	6.64	527

Source Field survey in India, 2011–2012

schemes might not be of much use as they appeal more to long-term migrants, as can be seen from the nature of schemes such as OCI and the PIO card. The other reason might be that these initiatives are not reaching the people for whom they are intended, and therefore, they need to be promoted more extensively.

7 Concluding Remarks

The discourse on migration (or diaspora) and development falls within a completely different context in today's increasingly globalised world. Different diasporic communities are now becoming important entities, both economically and politically. The same applies to relatively large groups of Indians settled in different parts of the world. 'Indians abroad' are no longer a *foreign* entity for the Government of India. The government's attitude has changed dramatically from the Nehruvian period of indifference to recent appeals for cooperation. The earlier Gandhian ideals of connecting overseas Indians have been reinstated and their assistance and cooperation is sought in nation building. Accordingly, a number of measures have been put in place by the government of India to convert the different Indian diasporic communities into active partners of the development process. However, as our empirical data show, with the exception of *Pravasi Bhartiya Divas*, most of the schemes were unknown to most Indian highly skilled return migrants, even though the PIO and OCI schemes are known to be very popular among the diaspora. This could be explained by the fact that our sample primarily consisted of return migrants who had spent a relatively short period in the destination countries or it might be due to the fact that these initiatives are not reaching the people for whom they are intended, and therefore, they need to be promoted more extensively by the Government of India. Whatever the cause may be, future research should be undertaken on a sample of Indian professionals who are long-

term residents of the host countries, since schemes such as the OCI and the PIO card appeal more to long-term migrants.

What is more important in this context is to rise above the myopic view of seeing the diaspora through the lens of remittances and financial flows, since the development impact of the diaspora goes far beyond these pecuniary aspects. As knowledgeable and well-connected as the Indian diaspora may be, it can and does act as an important bridge that gives access to knowledge, expertise, resources and markets that can be used in the development of the India. The best example of this is the emergence of India in general, and Bangalore in particular, as a major hub for IT products and services. All this success is largely attributed to the Indian diaspora, especially return migrants (Khadria 2004).

It is evident from the relationship between the home country and the diaspora that engagement is only likely to be successful and encouraging if it works both ways. Therefore, while we expect our diaspora to contribute to the development of India, we must also be sensitive to the needs and expectations that the diaspora hold of India, their country of origin. It is only when a relationship of trust is developed that the diaspora will participate wholeheartedly in the development of India.

Oftentimes, there is a willingness among the people of the diaspora to contribute to their home country, but they are often unaware of the channels or the manner in which they can help their homeland. There is also a lack of faith in the Indian system among the diaspora and even among returnees. The Indian government should address this issue and create a welcoming and supportive interface to encourage the diaspora to engage in several ways. Accordingly, there may be willingness, and the infrastructure may exist, but there is a need for a catalyst in the form of an enabling environment. On the whole, the findings of both the surveys conducted in Europe and in India indicated the importance of improving the overall quality of life in India through the provision of better facilities. The lack of opportunities and basic facilities has been recognised as a cause of migration in various studies, and improving these factors might lead to the return of highly skilled migrants to India.

In conclusion, we can say that the potential development impact of Indian highly skilled professionals, whether they are in the destination countries or have returned back to the country, cannot be realised if the environment in the home country is not favourable. In other words, political, social and other contextual factors figure prominently, not only in the decision to return to one's home country but also in deciding to invest in that country. Extending these observations further, it can be safely argued that returnees tend to settle in a city that not only keeps them closer to their family and community members but which also provides opportunities for employment and self-development through better infrastructural facilities, the adoption of anti-corruption practices, the provision of good living conditions, and the removal of faulty bureaucratic practices. In the same way, diasporic communities would be more interested in playing an active role in the development process of the home country if they could be sure of finding a transparent and hassle-free environment.

Appendix I

Common Feature of a Diaspora

1. Dispersal from an original homeland, often traumatically, to two or more foreign regions;
2. Alternatively or additionally, the expansion from a homeland in search of work, in pursuit of trade or to further colonial ambitions;
3. A collective memory and myth about the homeland, including its location, history, suffering and achievements;
4. An idealisation of the real or imagined ancestral home and a collective commitment to its maintenance, restoration, safety and prosperity, even to its creation;
5. The frequent development of a return movement to the homeland that gains collective approbation even if many in the group are satisfied with only a vicarious relationship or intermittent visits to the homeland;
6. A strong ethnic group consciousness sustained over a long time and based on a sense of distinctiveness, a common history, the transmission of a common cultural and religious heritage and the belief in a common fate;
7. A troubled relationship with host societies, suggesting a lack of acceptance or the possibility that another calamity might befall the group;
8. A sense of empathy and co-responsibility with co-ethnic members in other countries of settlement even where home has become more vestigial; and
9. The possibility of a distinctive creative, enriching life in host countries with a tolerance for pluralism.

References

Agnew, V. (2005). *Diaspora, memory and identity: A search for home*. Toronto: University of Toronto Press.

Bhatia, S. (2002). Acculturation, dialogic voices and the construction of the diasporic self. *Theory and Psychology, 12*(1), 55–77.

Boas, E. (1995). *Jewish State or Israeli Nation?* Bloomington: Indiana University Press.

Brinkerhoff, J. M. (Ed.). (2008). *Diaspora and development: Exploring the potential*. London: Lynne Rienner Publishers.

Chernilo, D. (2011). The critique of methodological nationalism: Theory and history. *Thesis Eleven, 106*(1), 98–117.

Clifford, J. (1994). Diasporas. *Cultural Anthropology*, *9*(3), 302–338.

Cohen, E. H. (2004). Components and symbols of ethnic identity: A case study in informal education and identity formation in diaspora. *Applied Psychology: An International Review*, *53*(1), 87–112.

Cohen, R. (2010). *Global diasporas: An introduction* (2nd ed.). New York: Routledge.

De Haas, H. (2006). *Engaging diasporas: How governments and development agencies can support diaspora involvement in the development of origin countries*. Oxford: University of Oxford, International Migration Institute.

DST (2012). Annual report 2011–2012. Department of Science and Technology. New Delhi: Government of India.

Du Picq, C. A. (1921). Translated by C. J. N. Greely & M. R. C. Cotton. *The battle studies: Ancient and modern battle*. New York: The Macmillan Company.

Faist, T. (2008). Migrants as transnational development agents: An enquiry into the newest round of the migration development nexus. *Population, Space and Place. 14*, 21–42.

Gupta, M. G. (1987). *Rajiv Gandhi's foreign policy: A study in continuity and change*. Agra: M. G. Publishers.

Hall, S. (1990). Cultural identity and diaspora. In J. Rutherford (Ed.), *Identity: Community, culture, difference* (pp. 222–237). London: Lawrence & Wishart.

Huang, Y., & Khanna, T. (2003). Can India Overtake China? *Foreign Policy*, July/August 2003.

Hugo, G. (2003). *Migration and development: A perspective from Asia*. Geneva: IOM.

Kapur, A. (1987). Indian security and defence politics under Indira Gandhi. *Journal of Asian and African Studies, 22*(3/4), 176–193.

Kapur, D. (2003). Indian diaspora as a strategic asset. *Economic and Political Weekly, 38*(5), 445–448.

Kapur, D. (2010). *Diaspora development and democracy: The domestic impact of international migration from India*. New Jersey: Princeton University Press.

Khadria, B. (1999). *The migration of knowledge workers: Second-generation effects of India's brain drain.* New Delhi: Sage.

Khadria, B. (2004). Migration of highly skilled Indians: Case studies of IT and the health professionals. OECD Science, Technology and Industry Working Papers, 2004/6, OECD Publishing. doi:10.1787/381236020703

Khadria, B. (General Editor) (2012). *India migration report 2010–2011: The Americas*. New York: Cambridge University Press.

Khanna, T. (2007). *Billions of entrepreneurs: How China and India are reshaping their futures and yours.* USA: Harvard Business School Press.

Lal, B. V., Reeves, P., & Rai, R. (2006). *The encyclopedia of the Indian diaspora*. Singapore: Editions Didier Millet.

Lall, M. C. (2001). *India's missed opportunity: India's relationship with non–resident Indians*. UK: Ashgate Publishing.

Leonard, K. I. (2010). *Making ethnic choices: California's Punjabi Mexican Americans*. Philadelphia: Temple University Press.

Lowell, L., & Gerova, S. G. (2004). Diasporas and economic development: State of knowledge. Washington DC: Georgetown University, Institute for the Study of International Migration.

Lum, K. (2012). India's engagement with its diaspora in comparative perspective with China. CARIM-India AS2012/01. Robert Schuman Centre for Advanced Studies, San Domenico di Fiesole (FI): European University Institute.

Meyer, J-B. (2001). Network approach versus brain drain: Lessons from the diaspora. *International Migration. 39*(5), 91–110.

MOIA. (2012) Annual report 2011–2012, Ministry of Overseas Indian Affairs. New Delhi: Government of India.

Natarajan, N. (2009). Atlantic Gandhi, Caribbean Gandhi. *Economic & Political Weekly*, *44*(18), 43–52.

Nijhawan, S. (2003). Why has the Indian diaspora been Shunned by successive Indian Governments?. Unpublished MA dissertation, School of Oriental and African Studies, London.

Oonk, G. (2007). *Global Indian diasporas: Exploring trajectories of migration and theory*. The Netherlands: Amsterdam University Press.

Parekh, B. (1993). Some reflections on the Indian diaspora. *Journal of Contemporary Thought*, *3*, 105–151.

Patterson, T. R., & Kelley, R. D. G. (2000). Unfinished migrations: Reflections on the African diaspora and the making of the modern world. *African Studies Review*, *43*(1), 11–45.

Reuters. (2013). Patriotism will come at a price for rupee revival plan. https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDIQFjAA&url=http%3A%2-F%2Fin.reuters.com%2Farticle%2F2013%2F07%2F23%2Findia-markets-non-residents-id-INDEE96M07J20130723&ei=mvseUtWJOZHKrAfDqICgCg&usg=AFQjCNF_2DnA2lAwJP9Z4UhH2u3INqUuKg&bvm=bv.51495398,d.bmk. Accessed on 2 August 2013.

Safran, W. (1991). Diasporas in modern societies: Myths of homeland and return. *Diaspora*, *1*(1), 83–99.

Sarkar, S. (1983). *Modern India*. Madras: MacMillan.

Saxenian, A. (2006). *The new argonauts: Regional advantage in a global economy*. Cambridge, MA: Harvard University Press.

Singh, A. D. (2012). Working with the diaspora for development policy perspectives from India. Working paper no. 376. Bangalore: Indian Institute of Management.

Singhvi, L. M. et al (2001). Report of the high level committee on the Indian diaspora (2001). Government of India, Ministry of External Affairs, Non-Resident Indian and Persons of Indian Origin Division. http://www.indiandiaspora.nic.in

Sinha, K., & Kerkhoff, E. B. (2003). Eternal call of the Ganga: Reconnecting with people of Indian origin in Surinam. *Economic & Political Weekly*, *38*(38), 4008–4021.

Sobel, Z. (1986). *Migrants from the promised land*. New Brunswick: Transaction Publishers.

Tejada, G. (2012). Mobility, knowledge and cooperation: Scientific diasporas as agents of development. *Migration and Development, 10*(18), 59–92.

Tejada, G., & Bolay, J. C. (Eds.). (2010). *Scientific diasporas from developing countries in Switzerland: Empirical evidence and policy responses. Skilled migrants from Colombia, India and South Africa in Switzerland as partners in development*. Bern: Peter Lang.

Tololian, K. (1991). The nation state and its others: In lieu of a preface. *Diaspora*, *1*(1), 3–7.

Vertovec, S. (1997). Three meanings of "diaspora", exemplified among South Asians religions. *Diaspora*, *6*(3), 277–299.

Weisbrock, A. (2008). Return migration as a tool for economic development in China and India. Working paper no. 1, IMDS Working Paper Series Issue—December 2008. International Migration and Diaspora Studies, Jawaharlal Nehru University.

Wickramasekara, P. (2010). Development, mobility, and human rights: Rhetoric and reality. *Refugee Survey Quarterly, 28*(4), 165–200.

Wimmer, A., & Schiller, N. G. (2002). Methodological nationalism and beyond: Nation-state building, migration and the social sciences. *Global Networks*, *2*(4), 301–334.

Yingqi, W., & Balasubramanyam, V. N. (2006). Diaspora and development. *The World Economy*, *29*(11), 1599–1609.

Chapter 8
Globalisation Challenges and Knowledge Transfer from the Indian Scientific Diaspora

Jean-Claude Bolay and Gabriela Tejada

Abstract This chapter looks at the opportunities and uncertainties of globalisation in terms of the production of world knowledge, with an emphasis on the factors that limit the distribution and fair use of this knowledge for the benefit of less advanced countries. We show how existing disparities between developed countries and emerging and developing countries relating to the level of higher education, the resources available for research and access to technologies and innovation have made scientific cooperation an indispensable mechanism for advancement. Having established this context, we then turn our attention to the transfer of knowledge for the benefit of developing countries, as promoted by the scientific diaspora. Taking the case of India and its relationship with Europe as an example, we present a qualitative analysis based on interviews held with Indian students and researchers who are either living in Europe or who have returned to India, and with some other key informants. India is a paradigmatic case in terms of knowledge, science and technology insofar as the country is a source of skilled personnel for many developed countries, including the European countries that have become popular as new destinations. We look at three determinants for channelling knowledge transfer: institutional mechanisms for bilateral cooperation, transnational collaboration and the affective capital of migrants. We observe how these channels foster scientific cooperation and strengthen the critical mass in the country of origin. While our findings point to a trend whereby scientific diasporas become carriers of knowledge for their countries of origin in the South,

J.-C. Bolay · G. Tejada (✉)
Cooperation and Development Center, École Polytechnique Fédérale de Lausanne,
Lausanne, Switzerland
e-mail: gabriela.tejada@epfl.ch

J.-C. Bolay
e-mail: jean-claude.bolay@epfl.ch

there is a need for further studies to examine the specific level of impact that these forms of knowledge transfer generate in the Indian context and to see whether the local society obtains actual benefits from them.

1 World Changes and Globalisation

The world changes and it is now changing at an ever faster pace and in more globalised manner. To confirm this, we only need to consider present-day technological innovations that facilitate exchange and communication, the liberalisation of international rules that is encouraging the movement of people and goods, the internationalisation of models and references that leaves an imprint on cultures and social relations universally and the opening up of markets which is causing an explosion of economic production and the worldwide expansion of the distribution of commodities. There is increasing evidence that these elements of globalisation are having an impact on the global economy, on underlying strong growth and on the balance of the environment, which is now marked by inescapable climatic change and a permanent degradation of available natural resources. Globalisation has also led to social and cultural tensions in several countries, and this has called current national and international political structures into question. In this fast-moving international context, the world of knowledge is experiencing a broadening of educational systems and a diversification of learning models, but it is still unable to prevent the emergence of new disparities.

In an article published in the International Journal of Sustainable Development, Bolay (2004) endorsed some of the criteria most commonly cited by experts to describe the globalisation that we refer to today when we speak of international exchanges. Firstly, it should be remembered that for the last 30 years the expansion of economic flows has arisen mainly from a paradigm shift on the political front—even though the reality is often even more complex. For reasons related to a shared desire to boost international trade, all the countries represented at the United Nations (UN) and the World Trade Organisation (WTO) have gradually rejected a number of customs barriers in favour of a neoliberal policy. According to England and Ward (2007), the concept of an effective market is transcended into a driving force that targets a reduction in the scope of state involvement in the economy, in which individual dynamism is favoured over socially run companies.

The notion of globalisation encompasses two significant changes in our lives in relation to both space and time. The development and distribution of new communication technologies (e.g. mobile phones, TV, Internet, geographic information systems) that are increasingly efficient in speed and level of influence has led to a practical and symbolic compression of this space–time continuum (Chase-Dunn et al. 2000). We can maintain permanent and immediate contact with almost every corner of the world. In this new highly technological context, social interaction works on a multitude of levels and scales. We can interact with a large

number and a wide variety of people at the same time according to our needs and wants (as demonstrated on a daily basis by Facebook and other social networks). This may also be possible on various spatial levels, ranging from our work colleagues to our next-door neighbours, from a relative who may be somewhere in Europe to our fund manager in Singapore. In his three books on the Information Age, Castells (1996, 1997, 1998) clearly demonstrated that globalisation was made possible, thanks to technological advances, and this is precisely what is driving us towards an 'information society', which creates new social relationships on both an economic and a political level. This concept of globalisation has come in for some criticism on the grounds that the quest for 'new territories'—often military in its early stages before becoming commercial—has been a constant for many centuries. This 'globalisation' of trade has gradually established capitalism as a world system made up of strongholds and interconnections. Social theorists of capitalism have shown that such trade has been corroborated by a reproduction of socioeconomic inequalities in all the societies that are involved in these exchanges (Robinson 2001). Gunder Frank flamboyantly referred to this trend as the 'development of under-development' in 1975 (Gunder Frank 1975).

Yussuf (2001) defines the key aspects of globalisation as the growth of international trade, the increase in international capital flows and their investment potential, growing migration, more extensive information and communication and the spread of advanced and innovative technologies. Walby has suggested (2009) that the existence of increasingly interventionist international organisations on an international scale also deserves attention.

Joseph Stiglitz, the former Chief Economist at the World Bank and a critical and pragmatic thinker, noted in 2007 that anything is still possible but that it has been demonstrated that the current process of globalisation is producing unbalanced outcomes, both between and within countries. Five main issues seem to be at stake here: the rules that govern globalisation are unfair, being designed to benefit the advanced industrial countries; material values take precedence over concern for the environment; the management of globalised sectors has taken away much of the developing countries' sovereignty; plenty of evidence shows that globalisation produces many losers in both developing and developed countries; and the Americanisation of economic policy or culture causes resentment in many countries.

A link has thus been established between globalisation and development, knowing as we do that globalisation started on the pretext of opening up markets to benefit the better integration of all countries in world trade, with a strong emphasis on the manner in which the poorest countries could benefit from these new rules. However, facts are facts and the figures do not confirm this idyllic view. Some emerging countries have seen significant improvements at an economic level, yet many others among the least technologically advanced countries have actually experienced a decline. Even the best macroeconomic results have not led to an automatic reduction in social disparities. On the contrary, with the aid of World

Bank statistics, Stiglitz (2007) claims that, with the exception of China, poverty in developing countries increased from 36 % in 1981 to 40 % in 2001. For the same period, Africa, the continent most affected by this phenomenon, saw extreme poverty rise from 41.6 to 46.9 % (Stern 2002). On the other hand, a more recent study, conducted by Fosu in 2011 and based on statistical data provided by the World Bank, confirms a global reduction in poverty as a result of economic growth. However, the clear disparities between social classes and countries are having a direct impact on poverty terms. The stronger the disparity between the social classes in a given country, the more significant the poverty from both an individual and a financial point of view.

As defined by Sassen (2007), the sociology of globalisation allows one to 'problematise the notion of a global/national duality' and to distinguish how key elements of globalisation—within the field under consideration in this chapter—such as knowledge, and more specifically the role of scientific diasporas—are as much globalised trends that now influence all the countries and stakeholders concerned as they are strategies, policies and actions implemented at a national level.

This multifaceted global evolution is not inevitable since it is not a natural phenomenon but rather a modern social construction resulting from a technological revolution (Bellon 2007) as well as a strong international trend which is redefining the role of the state, the role of the productive sector and diplomatic and economic relations between countries.

2 From Globalisation to Development Issues

The phenomenon of globalisation once again raises the question of the driving forces of development in today's world. Without attempting to rewrite history, it is necessary to recall that this terminology—development, under-development, developing countries, etc.—dates from the post-World War Two period and therefore from the resolve of the leading powers to shape the world in the image of the industrialised nations that sprang up from the technological revolutions of nineteenth-century Europe. It was pragmatically vital to rebuild a Europe that had been destroyed physically and demographically after 6 years of bloody conflict. It was primarily with this aim that the International Bank for Reconstruction and Development (IBRD), better known as the World Bank, was created. As highlighted by Rist (1996), development is all about a Western belief system which is projected by one party onto another, the former taken by surprise when the latter does not in fact engage in this unequivocal model of economic growth, the impact of which should theoretically be beneficial to all. In his work on development theories (2002), Azoulay shows how thinking on the topic has changed from the 1950s to the present day and how, from the struggles for independence that marked Africa in the 1960s to the environmental battles of the 1970s as well as the

structural adjustment policies of the 1980s, we have gradually come to rethink development, whether from within or outside the market.

In more recent times, two dates are significant:

- The Earth Summit of 1992 held in Rio de Janeiro, which spread the concept of 'sustainable development' (WCED 1987; Brunel 2004) to a global level and supported the political will to try to reach a balance between environmental, social and economic issues.
- The year 2000, when the UN 'invented' its Millennium Development Goals (MDGs) to serve as action guidelines for all bilateral and multilateral agencies of development cooperation, all public authorities and all development stakeholders (Bolay 2012b).

Setting the context is useful as it enables us to make sense of the options chosen at an international level for the leading sectors of social life and then to compare these with the results achieved over the last few years. The World Commission on Environment and Development, appointed by the UN at the end of the 1980s (WCED 1987) to prepare the Earth Summit in 1992, established what would become 'the alphabet' of sustainability by hinging development on two essential components: the time factor, by emphasising that development can only be sustainable if it meets the needs of the present without compromising the ability of future generations to meet their own needs, and the balance between three fundamental elements delineating the sustainability of eco-development, as coined by Sachs (1997): social equity, environmental protection and economic efficiency. Social equity is one factor since the mechanisms to distribute existing wealth among the individuals of a society foster justice as well as productivity and ingenuity in all fields. Environmental protection is a second factor since natural resources are largely exhaustible and degradable and must therefore be used in a rational and optimal manner. Economic efficiency is a third factor since the laws of profit on their own do not cover the direct and indirect costs of production, which affect users and increase inequality between the 'beneficiaries of the system' and those who incur its real cost.

The turn of the millennium offered a major opportunity to thoroughly review the issue of development. The Millennium Declaration (United Nations 2000), adopted in September 2000 by the UN General Assembly, laid down the main principles which should collectively guide international action. Firstly, it raised the issue of collective responsibility to apply the basic principles of human dignity, equality and equity at a global level, in particular towards the most vulnerable populations, all the while promoting peace and justice at a national and an international level. Now that these options have been defined, the UN is proposing that they be converted into more specific actions so that globalisation can become a positive force for humanity, recognising that its costs and benefits have been unequally distributed until now.

To achieve these objectives, it is necessary to assert political priorities and implement development programmes to meet them, in particular to mitigate the

prevalence of extreme poverty in many countries. With regard to the framework for intervention, the approaches include the following: good governance, better access to financial resources, particular attention to the specific needs of the poorest countries as well as a better integration of their products in international markets, total debt relief for the poorest countries and appropriate treatment of other developing countries' debt as well as an increase in development aid. According to the UN, if these priorities are efficiently addressed, they should achieve the following significant results by 2015: halve the number of people in the world who are living on less than a dollar a day (i.e. 1.2 billion persons today), ensure that all children complete a full course of primary education, reduce the maternal mortality ratio by three-quarters and under-five mortality rates by two-thirds, halt and reverse the spread of HIV/AIDS, provide special assistance to HIV/AIDS orphans and improve the living conditions of 100 million slum dwellers.

The range of UN proposals was rapidly examined by the World Bank, which calculated their cost. Whatever the method used, an additional 40–60 million dollars needs to be made available every year by donors in order to be able to reach these goals (Devarajan et al. 2002), and this the equivalent of twice the amount of international aid granted in the first decade of the twenty-first century. It was highly unlikely that these commitments would be respected following the unclear decisions about development funding taken at the Monterrey Summit in March 2002.[1]

Lapeyre (2006) argues that the MDGs reflect a technocratic vision of development 'articulated in terms of target groups and vulnerable populations', which the world elites would support massively, forgetting that the 'poor' are not passive objects but that they take action in the face of the hardships that confront and destabilise their lives. Besides, the MDGs inevitably favour models from the North, which refer to governance (a less restrictive terminology) rather than democracy (Tujan 2006). Drawing on the highlights of numerous discussions on the issue, Melamed and Scott (2011) contend that after 10 years of existence the main successes of the MDGs are raising awareness among elites and political mobilisation for sustainable development and the fight against poverty. Criticism of this relates firstly to the fact that the entire strategy adopts a top-down approach, based on the UN system and donors, without ever taking into consideration how much of a challenge such goals are for the most disadvantaged countries and their populations. With this in mind, there are no real appropriate solutions for the most impoverished communities of the South, knowing by experience that in all development programmes, close to 10 % of potential beneficiaries end up being excluded, as they do not have the minimum resources to form part of these programmes. Looking beyond 2015, Melamed and Scott suggest four avenues that are worth exploring in terms of sustainable development and which have barely been

---

[1] United Nations International Conference on Financing for Development 18–22 March 2002, Monterrey, Mexico. http://www.un.org/esa/ffd/ (Accessed 13 February 2013).

contemplated since the beginning of this century: urbanisation; climate change; chronic poverty and the growth in inequality; and unemployment, under-employment and conditions of employability.

The final UN declaration of Rio+20, made in Rio de Janeiro in 2012 to mark the twentieth anniversary of the Earth Summit stated that the 20 years since the UN Conference on Environment and Development in 1992 have seen uneven progress, including in sustainable development and poverty eradication (United Nations 2012). Item 48 of the declaration recognises important contribution of the scientific and technological community to sustainable development. It states that UN is committed to working with and fostering collaboration among the academic, scientific and technological community, in particular in developing countries, in order to close the technological gap between developing and developed countries and reinforce the science–policy interface as well as to foster international research collaboration on sustainable development. The focal points of intervention will therefore be priorities that have been established for sustainable development: poverty eradication, changing unsustainable patterns of production and consumption, promoting inclusive and equitable economic growth, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion and promoting the integrated and sustainable management of natural resources and ecosystems.[2] In January 2013, but without being more precise, the General Assembly of the UN created a working group to redefine the sustainable development goals set by the international community for the post-2015 period[3] as a means of addressing new world challenges.

3 Development and the Production of Knowledge: the Role of Science and Technology

To return to the point that interests us here—knowledge and the means conducive to spreading its distribution and broadening its content—the Annual Reports of the United Nations Development Programme (UNDP) on the progress towards MDGs show that education is as important as health and the environment in development terms, but that the focus is exclusively on basic education, in order to ensure that by 2015 children everywhere, whether they be boys or girls, will be able to complete a full course of primary schooling. However, the MDGs do not address higher education, science or technology at all, and one might suggest that this implies that the UN does not see them as a focal point of development.

---

[2] http://www.un.org/french/documents/view_doc.asp?symbol=A/RES/66/288 (Accessed 13 February 2013).

[3] http://www.un.org/apps/newsFr/storyF.asp?NewsID=29680#.UQ-XcmdyF8E (Accessed 13 February 2013).

In its 2012 report on the MDGs, the UNDP[4] underlines both the progress made and the inability to reach the goals set within this programme and hence the need to pursue these goals beyond the 15 years initially planned. The number of children enroled in school to complete compulsory education in sub-Saharan Africa increased from 58 to 76 % between 1999 and 2010, which is remarkable in itself. However, tremendous efforts are still needed in this area, depending on the region. According to UNESCO,[5] there were still 775 million illiterate individuals in the world in 2010, equal to 16 % of the world adult population, and 64 % of these were women. The two most affected regions are southwest Asia and sub-Saharan Africa, the world's most rural regions where the illiteracy rate is 37 %.

4 Higher Education and Research

The issue of higher education has also been a topic of discussion for some time and relates as much to research as it does to the training of scientific and technological elites. This is all the more so since the establishment of what some experts like to refer to as a global post-modern society founded on a 'knowledge-based economy' (OECD 1999) with the help of technological innovations in which intangible capital (Gorz 2003)—meaning both intellectual work and the resulting products as well as the technologies that support it—becomes the main driver of economic growth, expansion and development. The knowledge-based economy poses new challenges for the educational sector including the need for investment from private and public stakeholders. It involves universities, research centres and knowledge institutions in a role allied more closely to economic market value. However, the knowledge-based economy also constitutes a new barrier between the countries and regions of the world. According to Castells and Cardoso (2005), it offers the technological capacity to provide new ways of conveying knowledge and information around the world—which are instrumental in driving innovation—yet it is not easily accessible in space or time. It also places technological and financial barriers to the detriment of the poorest countries, and as statistics show, investment in R&D clearly distinguishes the leading countries (USA, Europe, Japan and China) from the rest of the world, with the latter contributing only 18 % of world investment (Bolay 2012a).

Higher education, therefore, represents a crucial challenge for the world economy, especially in countries where this human capital has not yet reached the critical mass necessary to fully contribute to intellectual and technological emulation. Sub-Saharan Africa, a region with very rapid population growth, has seen a

---

[4] http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2012/English2012.pdf (Accessed 13 February 2013).

[5] http://www.uis.unesco.org/literacy/Documents/fs20-literacy-day-2012-fr-v5.pdf (Accessed 13 February 2013).

huge rise in the number of students over the last few decades. According to the UNESCO Institute for Statistics (2010a), the student population in this region increased more than 20-fold to 4.5 million between 1970 and 2008. However, the higher education sector has not benefitted from matching resources. A shift from standard universities to research universities is still wishful thinking in most African countries, and even though market opportunities have sustained high growth since 2000, they often remain uncertain because of a lack of consistency between the courses of study, learning and investigation methods and the needs of society. Things have started to change with the establishment of higher education systems directly derived from the European model, the creation of doctoral schools and a more significant role for scientific research. However, Jones et al. (2007) indicate that a lack of harmonisation among African academic establishments, states and donors makes it difficult to assess the progress that has been achieved up to now.

The UNESCO Science Report (2010b) provides a few indicators, which allow us to form a rough idea of the specific features, differences and impact of the knowledge sector at an international level. Hollanders and Soete (2010) note that the sector is increasingly part of the globalised economy. Two particular aspects are highlighted. First, the most powerful emerging countries—China, India, Brazil, Mexico and South Africa—are gradually investing more in R&D and transitioning countries such as Russia are doing the same. Second, over the last decade, the economic recession and world financial crisis have seriously weakened Western countries, particularly the USA and Europe, whereas businesses from emerging economies have experienced continued growth, based on—and this is a new trend—their own technological innovation processes and the development of autonomous production lines often linked to the involvement of the academic world in these innovations.

UNESCO reports that R&D investment increased from 790 billion to 1,145 billion dollars between 2002 and 2007. During this period, emerging and developing countries increased their R&D contributions from 17.2 % of the total amount invested to 23.7 %. The share of R&D in their GNP rose from 0.8 to 1.0 % in 2007. Only the least developed countries have stalled, contributing 0.1 % of the total world figure which represents 0.2 % of their GNP, and no noticeable change has been observed in either of these figures over the entire period.

The number of researchers in the world has also risen sharply, increasing from 5.81 million in 2002 to 7.2 million in 2007. This growth of about 25 % has essentially benefitted emerging and developing countries, and the world share of these countries has increased from 29.8 to 37.4 %. The least advanced countries have remained stable with a 0.5 % share of the total number of researchers. Again, only a handful of the leading countries are driving this change. China is at the forefront, and with 1.42 million researchers in 2007, it accounts for 19.7 % of world human resources in this field, almost on a par with the United States and Europe. In other parts of Asia, Japan remains strong with 710,000 researchers compared to only 155,000 in India. In comparison, Latin America as a whole has

257,000 researchers, while Africa has 158,000 and there are only 40,000 in sub-Saharan Africa, excluding the Arab countries and South Africa.

Generally speaking, the trends are positive with regard to the involvement of emerging and developing countries in the production of knowledge, research and higher education and their distribution in relation to R&D, technological innovations and transfers. It is still essential to stress the challenges that await the science sector in these regions of the world, which stretch beyond the progressive marginalisation of the poorest countries. Although it is obvious that these issues—whether they be scientific and technological advancement or investment in these areas—need to be addressed differently from country to country, it is possible to identify some common points.

Firstly, it should be recognised that expenditure (funds allocated to R&D and researchers) in developing countries remains substantially lower than in the industrialised countries. The OECD[6] showed that R&D expenditure, as a percentage of GDP, amounted to 2.14 % worldwide in 2011, which breaks down to 2.4 % for all OECD countries, 3.4 % for Japan, 3 % for Switzerland, 2.7 % for the USA, 1.9 % for the EU, 1.7 % for China, 1.1 % for Brazil, 0.9 % for South Africa, 0.9 % for India and 0.16 % for Colombia. With the exception of China, all emerging and developing countries invest less than 50 % of the amount allocated by industrialised countries, and very frequently this figure is closer to between 10 and 20 %. These discrepancies undoubtedly have an impact on the scientific strength of these countries and their capacity to be at the forefront of innovation. Africa is probably the continent that is the most symptomatic of such socio-spatial disparities. For the nations on this continent, R&D amounts on average to 0.3 % of GDP, though South Africa alone represents 90 % of the 3.5 billion dollars invested across Africa every year in this sector. The remaining African countries share a tiny fraction of research funding.

Gaillard (2010) adds that in most developing countries, which have relatively limited resources, research is carried out in a small number of establishments and these rarely offer the conditions required to have a sustainable impact on scientific production. Besides, there is an insufficient critical mass of researchers in many areas, inadequate pay, little or no modern equipment and an institutional governance that does not favour a balance between academic teaching and research. In many countries, notably those in sub-Saharan Africa, only one or two establishments carry out research and there is little emulation within the region or with the outside world. While the author argues that this is certainly one of the factors to explain why the most brilliant researchers emigrate to industrialised countries, he also points out that they may contribute to the transfer of knowledge and skills between developed and developing countries.

This situation has an impact on the number of publications per country and their citations by the international community. In general, fewer articles are published

---

[6] http://www.oecd-ilibrary.org/science-and-technology/gross-domestic-expenditure-on-r-d_2075843x-table1 (Accessed 13 February 2013).

by scientists from developing countries and they are less frequently quoted compared to those by researchers from leading countries. Most African, Latin American and Asian countries have an impact that is lower than or equal to 0.5, whereas North America reaches 1.4 and the European Union, 1.0 (The Royal Society 2011). On the other hand, it is interesting to note that the growing availability of means of communications has led to an increase in international cooperation in scientific research, particularly in the production of referenced papers in international journals. Co-authorship, which brings together researchers from at least two different countries, only accounted for 10 % of research in 1988, but this number had risen to 30 % by 2006. This figure reaches 36 % among the EU member countries and an average of 46 % in terms of collaboration including researchers from developing countries, e.g. more than 50 % for Africa and Chile, more than 60 % for Cuba and more than 80 % for Vietnam, Costa Rica or Senegal, overcoming the isolationist constraints linked to the number of researchers and poor investment, by making optimum use of scientific cooperation. Since major emerging countries like Brazil, India and China have objectively less need for it as they can count more easily on their own resources, the percentage of international collaboration only amounts to 20–25 % (The Royal Society 2011).

The opportunity afforded by international scientific cooperation means that researchers engaged in joint projects should have similar levels of education. This is still rarely the case. Such discrepancies between the regions of the world are especially evident in the comparatively low percentage of researchers with a PhD or even a Master's degree. Inevitably, this is reflected in the level of scientific skills and the capacity to participate in research. To draw a comparison, in 2011, Latin American countries as a whole delivered 29,613 PhDs,[7] the United States delivered 67,716 [i.e. one-third of the world's total according to *The Economist* (2010)], Brazil 11,314 and Mexico 4,167. There were only 1,504 PhDs delivered in Argentina, 369 in Chile and 208 in Colombia, which are nonetheless among the most scientifically recognised countries on the South American continent. Europe produces more than 90,000 PhDs each year (Eurostat 2007) and Germany 20,000, whereas Swiss universities alone attributed 3,566 PhD titles in 2010[8] for a population of 7.8 million. In other regions of the world, statistics also shed light on this issue: the figure in China has exploded, with an increase from 2,556 PhD graduates in 1992 to 23,446 in 2008 (Nerad 2010), India produced around 5,900 science, technology and engineering PhDs in 2004, a figure that has now grown to some 8,900 a year (Cyranoski et al. 2011). And there were 1,200 new PhDs in South Africa in 2009 (MacGregor 2009). Like with other indicators, this overview shows that there is consistent and strong growth among the most dynamic emerging countries, but there is also a continuing gap among industrialised countries and the vast majority of emerging and developing countries, with the notable exception of China.

---

[7] http://www.ricyt.org/ (Accessed 13 February 2013).

[8] http://www.bfs.admin.ch/bfs/portal/fr/index/themen/15/08/dos/blank/15/03.html#ExcelDateien (Accessed 13 February 2013).

5 International Scientific Mobility and Diasporas

Even though the context described above reflects some complexities and challenges that reveal an uncertain panorama in terms of overcoming global disparities, the value that knowledge holds for competitiveness and progress persists as something irrefutable. This prompts us to reflect on the possible alternatives to increasing efficiency in the production of knowledge and the means that facilitate its distribution and make its use fairer for the benefit of the less advanced countries. While science and the production of knowledge are increasingly dependent on international relations and exchanges, scientific collaboration has become an indispensable mechanism for the advancement of countries. In science terms, the current context has consolidated a broadening of the focus from national perspective to a global one, and this has been reinforced by the persistence of a new paradigm at a conceptual level, advocating cooperation and the creation of links that move beyond the traditional confrontation view of the centre–periphery focus (Tejada 2012). However, it should be pointed out that the academic and scientific internationalisation that characterises this context, in which new poles of science have emerged in the world, has not escaped from the competition between countries and research and higher education institutions as they seek to attract foreign talent (Tremblay 2005; Mosneaga 2014). Indeed, this competition has paradoxically increased at the same time as international cooperation has augmented.

The actions undertaken by scientists, academics and students originally from the countries of the South but living in the North offer new dimensions for cooperation between world countries and regions. Although development at a global level requires the effective transfer of knowledge from the areas or regions where it is in abundance (developed countries) to regions where it is scarce (developing countries), current migration flows of skilled people generally go in the opposite direction—that is, from South to North, as part of the total migration from developing to developed countries, which is in fact the fastest growing component of international migration (Özden et al. 2011a). Whereas OECD countries registered a twofold increase in the number of immigrants from developing countries with a third-level education between 1990 and 2000, there was only a 20 % increase in the number of immigrants with a primary education (Özden et al. 2011b). For the developing countries, this is a major concern because a reduction in their knowledge bank hinders their competitiveness. From the UNESCO viewpoint, Hollanders and Soete (2010) stress the gravity of the 'exodus' of human capital suffered by developing countries and its interrelated challenges, but they also point out the central role increasingly played by diasporas in innovative actions of technology transfer and knowledge spillover.

This vision is part of the perspective that emerged in the 1990s and which considers that skilled migrants tend to establish links with their home countries, acting as bridges to make contributions in the form of knowledge transfer, investment links or diaspora networks. Over the last few decades, this view has led to a change of focus within two areas mostly. On the one hand, the area of public

policies reflected in the growing interest of countries to implement innovative mechanisms that promote the transfer of the knowledge and other resources of their emigrated scientists and skilled professionals and which they no longer see as an irreversible loss. On the other hand, within the field of research, where more and more studies seek to provide empirical evidence of the determinants that are necessary to ensure that diasporas can have a positive influence on the development of their countries of origin. Several world examples have shown how skilled migration can lead to a reinforcement of the scientific and technological capacities of the countries of origin. One such instance is that of Indian and Chinese skilled professionals and technicians residing in the USA who encouraged knowledge, technology and investment linkages during the 1990s through their well-organised activities, contributing to a strengthening of their countries' scientific and technological competitiveness (Saxenian 2005, 2006). The case of Colombia shows how scientific collaboration promoted by Colombian researchers around the world has contributed to a reduction in the isolation of the local scientific community and a reinforcement of their capacities (Tejada 2010). Other cases have shown how countries with limited scientific capacities and resources have implemented programmes that focus on using the skills and experiences of the diaspora to fill knowledge and skill gaps, by engaging them in temporary return schemes. For example, the programme for the temporary return of Moldovan scientists and young researchers put in place recently by the International Organisation for Migration (IOM) in collaboration with the Academy of Sciences of Moldova (ASM) has helped to strengthen the links between Moldovan scientists abroad and the local scientific community, thereby increasing the international competitiveness of Moldova (EU, ASM, IOM 2012).

The term scientific diasporas was coined as part of this view (Barré et al. 2003) to refer to networks of emigrated individuals, scientists, engineers and professionals, who are mainly involved in producing and circulating new knowledge and creating cooperation opportunities with the country of origin, primarily within the areas of science, technology and academia. As knowledge communities (Foray 2004), scientific diasporas act collectively in organised systems or scientific networks, allowing the production of knowledge through decentralised cooperation procedures and encouraging the exploitation of its benefits. Here, the logic of diaspora connectivity based on the multiplier effect of the personal interest to participate in a community action is essential because it facilitates collective influence in the country of origin (Meyer 2001, 2011). Even though discussions of the scientific diaspora option occasionally include a strong regulatory component that can complicate its harmonisation with a broad vision that seeks to clarify the complexity of the processes of scientific mobility and the transfer of knowledge between the North and the South, the recognition of the flows of human capital as a part of the moral universalism of science is never called into question. As Caloz-Tschopp (2010) points out, the mobility of human capital cannot be confined to a purely utilitarian vision of the free movement of economic factors in terms of ends and means.

6 Cooperation and Scientific Mobility Between India and Europe

International cooperation has experienced a significant rise in recent years. This can be seen in the proliferation of scientific articles co-authored by researchers from institutions in different countries, a trend that is more significant for emerging and developing countries in view of the fact that in the last decade they have witnessed a greater increase in the number of countries with which they collaborate than that seen in developed countries (Vincent-Lancrin 2006). Despite the intensification of international cooperation between developed and developing countries, there are still many questions that need to be answered about the effects of this cooperation on scientific mobility and on diaspora knowledge transfer.

Taking the case of India and its relations with Europe as an example, we explore some determinants channelling knowledge transfer for the purpose of strengthening local research and knowledge capacities. Based on qualitative interviews with key informants as well as Indian students, researchers and skilled professionals who either live in Europe or who have returned to India, we try to identify some of the elements that facilitate the transfer of the knowledge of both the diaspora and returnees. A total of 30 in-depth interviews were conducted between 2011 and 2012 with scientists, skilled professionals and doctoral students from India living in Europe; beneficiaries of scientific collaboration programmes with India; and representatives from the embassies and consulates of France, Germany, the Netherlands and Switzerland in India. Four European countries were chosen as destination countries in the study, and India was selected as the country of origin. An analysis of these experiences is useful in terms of outlining trends on skilled migration and fostering public policies that promote the capitalisation of diaspora resources for the benefit of greater knowledge and improving science and research in developing countries.

India is a paradigmatic case in this discussion given its extreme inequalities in many social and economic dimensions. While the country has achieved a relevant world position in terms of economic growth and scientific and technological innovation, the other side of the coin shows huge disparities in education levels, an adult illiteracy rate no lower than 30 %, and the majority of the Indian population lacking a decent education (Drèze and Sen 2013). With about 4,000 organisations dedicated to research and development, important systems of organised knowledge production and millions of persons involved in knowledge-based activities within a selection of areas ranging from agriculture to the most specialised industries, together with the fact that the country boasts an immense diversity of natural resources, the opportunities of the potential results are immense (Banerjee 2009). Vincent-Lancrin (2006) measures international scientific collaboration by looking

at the number of countries with which scientific articles are co-authored,[9] and his analysis shows that India saw a 12 % increase in international collaborations, and the number of countries with which it collaborated rose from 90 to 101 between 1994 and 2001. Other emerging countries such as China, Brazil and South Africa witnessed more significant increases: Brazil went from 85 to 102 (20 %); China from 78 to 103 (32 %); and South Africa from 58 to 95 (63 %).

India plays an important role in the production of knowledge in science and technology at a world level, and despite contributing only 2.32 % to the world production of scientific publications, it occupies 10th place worldwide and there is a particular emphasis on physical sciences, life sciences, health sciences and engineering (Mehra and Pohit 2013). The country occupied third place in world terms among the countries that do not belong to the OECD, after China (6.50 %) and Russia (2.33 %) in 2008 (Banerjee 2009). The regions of the world with which India collaborates most are Europe and North America, which respectively account for 43.54 and 42.47 % of all its international collaborations.[10] In the order of importance, the countries with which it has the most collaborations are as follows: United States (37.3 % of the total), Germany (13.94 %), the United Kingdom (12.88 %), Japan (10.11 %), France (7.50 %), Canada (5.64 %), Italy (4.33 %), Australia (3.83 %), the Netherlands (2.98 %) and Switzerland (2.81 %). During the period between 1997 and 2007, India saw an increase in publications co-authored with Switzerland, Germany, France and the Netherlands, which are the four countries that we studied in the research that has produced this volume.

Cooperation strategies in science and technology between Europe and India have inspired various types of measures promoting bilateral collaboration. These are based on a focus that has gained strength in recent years and which will prevail in the future. This focus is based on three premises. First of all, confirmation that cooperation with India should be based on the establishment of partnerships among equals. The Minister Counsellor, Head of Science and Technology at the Delegation of the European Union to India in Delhi made a reference to this when he said: 'It is not the rich helping the poor, but it is actually two countries in different situations helping each other for something that is good for everybody' (P. de Taxis du Poet, personal communication, 14 September 2011).

Secondly, assessments of the mobility of human capital and the importance of implementing provisions that stimulate the exchange and circulation of students and researchers in both directions.

> If you want to build cooperation, it is very important to invest in people. I mean not only Indian students, researchers and professors willing to go to Europe, but also European students and researchers coming to India, because they will have a sort of inside knowledge which is important to build cooperation. (P. de Taxis du Poet, personal communication, 14 September 2011)

---

[9] With the database of the Institute for Scientific Information, Science Citation Index and Social Sciences Citation Index, CHI Research Inc.; and National Science Foundation, Division of Science Resources Statistics.

[10] Measured by average of co-authored scientific articles between 1997 and 2007.

Thirdly, bilateral scientific programmes promote collaboration in a complementary manner on the understanding that having high-level international partners with whom to pair the research work is essential in terms of ensuring that scientists and institutions receive mutual benefits. A lecturer in plant molecular and cellular genetics in Kolkata referred to this by saying:

> These days, research has become very competitive and technology more advanced. It is not always possible to find so much expertise in one person; you cannot be an expert in all fields. In India we do not have such advanced technology, and facilities and international exchanges are crucial.

Using scientific cooperation between India and Europe as our framework of study, we look at three basic determinants that influence how international cooperation, and the mobility of human capital linked to it, makes it possible to transfer the knowledge and other resources of the diaspora. These determinants are as follows: (1) institutional cooperation mechanisms; (2) the diasporas' transnational collaborations; and (3) the motivation of scientists and skilled professionals abroad to contribute to their country of origin. The following section examines each of these.

6.1 Institutional Cooperation Mechanisms

Bilateral collaboration agreements are one of the formal cooperation mechanisms currently being used by India and the four countries of this study. These have a particular relevance since they facilitate the development of cooperation at an institutional level among various universities and research centres in Europe and India, and they promote scientific and academic exchanges in areas that are of priority for the two signing countries. With Germany, there is the German–Indian Science and Technology Cooperation Agreement (STC), which has been in force for more than four decades and which consists of scientist and student exchanges, the launch of joint research projects and the organisation of workshops, conferences and reciprocal visits; these are promoted through the German Academic Exchange Service (DAAD), the Alexander von Humboldt Foundation and the German Research Association (DFG).

With Switzerland, the bilateral agreement on science and technology, signed in 2003, reinforced the existing dialogue between both countries and it established specific collaboration mechanisms. The Indo-Swiss Joint Research Programme and the Leading House of India established at the Swiss Federal Institute of Technology in Lausanne (EPFL) were created within this framework to foster collaboration research between scientists from both countries, promote exchanges of students and lecturers, facilitate access to specialist equipment and resources in the other country and encourage the transfer of technology between the two countries. Another initiative is the Indo-Swiss Collaboration in Biotechnology (ISCB), which during its four decades of existence has promoted collaboration and

scientific mobility in both directions within several areas of biotechnology, and it has also facilitated the transfer of technology to private industry.

With the Netherlands, the Memorandum of Understanding (MoU) on bilateral cooperation in science, technology and innovation, signed by the Indian Ministry of Science and Technology and the Dutch Ministry of Economic Affairs, guides bilateral collaboration that can have both a scientific focus and a focus more centred on innovation through public–private partnerships (PPP) within the priority areas: life and health sciences, food and nutrition, water and renewable energies. The MoU envisages the inclusion of programmes focused on training at a doctoral and postdoctoral level, which will facilitate scientific mobility.

There are three mechanisms to facilitate bilateral scientific and academic collaboration between India and France: research projects in partnership; exchanges of doctoral students; and the co-supervision of doctoral theses. Both countries recognise that for bilateral collaboration to be successful, it is necessary to facilitate the mobility of scientists and students. In this regard, they highlight the MoU of the Indo-French Educational Exchange Programme, as well as the Indo-French Consortium of Universities, which promotes student mobility within the framework of academic training, with the diplomas recognised in both countries. The Indo-French Center for the Promotion of Advanced Research (CEFIPRA) is a good example of an institutional mechanism that promotes collaboration between France and India. Centred on the promotion of bilateral scientific cooperation in basic sciences, start-of-the-art technologies and exchanges of scientists and researchers, CEFIPRA came about as an institutional response to the interest of scientists from both countries to collaborate. During its more than 25 years of existence, and with an annual production of about 100 publications in high-impact journals, it has become a successful model of scientific cooperation in science and technology, helping to strengthen the critical mass and facilitating the mobility of scientists and students between both countries.

We can observe that all these institutional mechanisms are based on the notion of the value of international exchanges for scientists and the advancement of science. The previous examples include structures that facilitate the mobility of scientists and students, which are common when the aim is to strengthen academic links and promote alliances within the field of international cooperation. While the return to the country of origin is seen as a part of the mobility process, this does not usually occur in practice due to a combination of personal reasons and the contextual structural factors of the countries involved. Reality shows us that even though research institutions in India stipulate that young researchers should have international experience before being contracted as faculty members, in the end they often do not have either the mechanisms or the suitable conditions required to attract them back and take advantage of their overseas exposure. The Director of CEFIPRA said:

> They must go out somewhere, learn research and teaching, gain experience spending some time out of the country, and only then come back. When thinking of brain gain, you must think about some mechanisms whereby you can give good facilities to scientists and some freedom and independence, so that they can come back and work here. (A. Amudeswari, personal communication, 16 September 2011)

We observe that the difference between the Indian Institutes of Technology (IITs) and the universities with regard to being able to offer attractive conditions places a limit on a balanced distribution among the various academic and research institutions in India of the scientists who return. Young Indian researchers want to return to the country with a permanent job that can offer them a good level of infrastructure, an adequate salary and sufficient resources, as well as freedom in their research tasks. They generally find this at the IITs but not at the universities. However, while the number of places at the IITs is limited and the competition is tough, the universities cannot provide the attractive conditions that the best candidates are looking for. The unbalanced distribution of scientists who return to academic and research institutions in India (mostly between the IITs and other selected top research centres, and all the rest) is linked to a broader and more complex problem related to the higher education system. As Drèze and Sen (2013) argue, the difference in the quality of the higher education offered by specialised institutions such as the IITs and Indian universities with regard to academic arrangements, facilities and salaries lies in the deficiencies of the Indian education system.

Institutional mechanisms tend to favour research conditions in India, and the scientists recognise this advantage. One lecturer at the Bose Institute in Kolkata referred to this point: 'This programme gave us a good amount of funds to purchase reagents, chemicals and instruments and develop our lab facilities. Only with such facilities can we pursue the type of work we are doing; otherwise it would not have been possible'.

However, comparing the contexts of European countries and India in relation to infrastructure conditions and practices during the research process, the Indian scientists who have returned see significant differences with regard to access to available financing. One assistant lecturer at IIT Delhi said: 'Resources are way ahead in Germany…. I will not say that India does not have money, but you have to be really choosy about the subject you work on; it has to be of national importance and only then do you get grants'.

6.2 Diasporas' Transnational Collaborations

The recognition of migrants' involvement in more than one context and belonging to several places at the same time has made transnationalism a common theoretical framework in recent studies on migration and its linkages to development (Portes 2001; Vertovec 2004). Appraising the connections with communities of origin that span borders, the study of diaspora transnationalism addresses migrants' involvement with their places of origin through sociocultural activities, economic ventures and diverse forms of collaboration as a response to their long-distance obligations with their home country (Levitt 2001). Diaspora transnationalism is influenced by several factors such as individual profiles of the migrants, their activity in the host country, their length of stay abroad and their reason for emigrating, as well as their plans to return to the home country.

In the case of skilled Indians living in Europe, we observe that they tend to cultivate their transnational links with the country of origin through different types of practices, encouraging scientific and academic collaboration. On the basis of their testimonies, we can see that the scientific links that they maintain with the scientific and professional community in India are mostly oriented towards two objectives: promoting collaboration and preparing their eventual return. As far as the first of these is concerned, we can see that India's professional and scientific community can access contact networks and increase its chances of establishing international collaborations, thanks to the transnational actions of the Indian diaspora. An assistant lecturer at IIT Delhi referred to the importance of creating networks and participating in them: 'Networking is always beneficial and equally important, whether it is Germany or India; the more you network, the more types of collaborations you have.'

We also see that the professional contacts acquired by skilled Indians abroad through scientific and academic exchanges usually intensify during the international exposure attained through participation in international conferences, and this can result in the establishment of alliances. A researcher at CERN in Geneva mentioned: 'Through international conferences and through journals we get to know each other, expand our networks and then become research partners.'

Furthermore, for the purpose of establishing collaborations of several types, the close relations created between teachers and students in India before the latter go to study or take up internships abroad are maintained and perpetuated over time. A lecturer at the Bose Institute in Kolkata referred to this saying: 'Seven postdocs are under my supervision in the USA now. Students who go abroad and stay there keep in touch. I have had strong collaborations with some of them. We keep writing papers together.'

With regard to the second objective, we observe that because of the motivation of the students and scientists to return to India, once they have completed their term abroad, they have a strong perception of the importance of maintaining personal and professional relations throughout their academic and scientific path in order to be able to position themselves professionally in the face of the opportunities that they may be offered there in the future. Skilled Indians abroad strategically invest their time and resources in creating networks and connections which could turn out to be important for their future return. One young assistant lecturer at IIT Delhi referred to this by saying: 'When I was in Germany contacts were made through emails with my previous professors in India and they provided me with professional advice about where should I apply. They were all guiding me to follow opportunities.'

Preparing for return is important since, as the empirical evidence on return migration has shown, it facilitates the ability to mobilise resources and stimulates the possibilities of the return to the country of origin being successful (Cassarino 2004; Sabates-Wheeler et al. 2009). As argued by Portes et al. (1999), transnational links in the form of collaborations, knowledge transfer and the transfer of other resources facilitate the migrants' reintegration into the society of the country of origin upon their return.

Group mobilisation and structures in the form of networks and associations are considered to be necessary conditions for the promotion of the diasporas' collective transnationalism and for increasing the potential impact and durability of their actions over time (Saxenian 2006). We observe that skilled Indians in Europe do not usually participate in migrants' organisations or diaspora associations which could boost the scale and impact of their actions to transfer knowledge. There are different reasons for this. The expansion of globalisation has made it easy for Indian migrants to feel close to their home country without having to meet up with other fellow nationals, as was the case in the past. Also, the temporary nature of their residence in the countries of destination in Europe, a lack of time and a lack of individual interest to get involved in community activities, together with the notion that their commitment to organisations or associations of this kind is going to prevent them from experiencing the culture of the country of destination are all factors that influence their reluctance to participate in organised communitarian activities aimed at their home country.

A doctoral student at the University of Lausanne referred to the diversity of the initiatives of Indians in Switzerland in the following manner:

> There are collective efforts as a 'we', the Indian diaspora, feel we should contribute there. (But) I think individually it is very diverse; it depends on the person. There are many individual initiatives; people do things and contribute to their family, their village, their neighbourhood or other things like that.

The observation of the testimonies of skilled Indians in Europe indicate that they deliver access to social and professional contacts as well as scientific and institutional connections with India and these open up cooperation opportunities for the local scientific community. Furthermore, through their collaborations, they seek to assist the development of science in their home country, reinforcing the educational system and strengthening its international scientific position. Assisting Indian students and young researchers (mostly those who cannot afford to go abroad), taking advantage of their own international networks and exposure for their research endeavours is another way that skilled Indians in Europe can contribute. Nevertheless, we see that knowledge transfer though transnational collaborations remains at an individual level for the most part and it lacks any collective associative type of organisation or network, and therefore, the efficiency to create and impact the sustainability of this type of actions is not ensured overtime. Other country case studies have shown how the members of the diaspora make an abundance of social capital available (Bourdieu 1986) by implementing collective action. This comes from the contacts, social and professional relationships and scientific and institutional links that are built. However, it should be pointed out that the availability of resources linked to these connections does not in itself ensure their positive impact. As Bruggeman (2008) pointed out, cohesion, social support and a favourable environment all play a role in determining that the creation of contacts and social networks generate benefits.

6.3 Motivation of the Diaspora to Contribute to the Country of Origin

The affective capital of migrants is understood as both a feeling of attachment to the home country and as a desire to participate in its progress (Tejada and Bolay 2010). Skilled Indians abroad attach importance to India's regional and national development, and they feel their overseas exposure can benefit India in one way or another. In specific terms, Indian scientists, students and skilled professionals who are active in the academic and research sector feel an attachment to India through their scientific and academic activity and they think that the best way to contribute is by addressing themes and questions in areas that are significant for India's development and by getting involved in research projects that link Indian institutions. A researcher based in the Netherlands said: 'I am currently researching renewable energy development in India. All my research here has been focused on development issues in India.'

In their pursuit to promote the transfer of knowledge, skilled Indians in Europe contribute through different types of collaborations through which they hope to be able to create benefits for Indian researchers and scientists as well as for the local society. A postdoctoral researcher at EPFL in Lausanne referred to this when she explained: 'The best way to help people in India is by working with people there. You make progress because you have the technology edge here and you get things done with people there, providing them with employment, and improving access to the high facilities that we have here.'

The affective capital of the Indian diaspora is also channelled through the provision of information about opportunities for training scholarships and internships at foreign institutions. Indians see this as a way of boosting the local critical mass and contributing to a strengthening of the country's scientific presence in the world. Skilled Indians also appreciate the complementarity of these collaborations, from which they also benefit. One researcher in biomedicine at the University of Lausanne explained:

> Facilities here might be easier to get to than in India, whereas India has manpower resources and raw materials. In immunology, you would never get the type of background, patient and samples that you get there over here. So I think that trying to set up mutually beneficial collaborations would be a great way to engage with India.

Our research also brought to light the plans of skilled Indians in Europe to return to the home country as part of their aspirations to contribute to the development of India. Imagining the possibility of contributing through their return is especially clear in the testimonies of students and young researchers who feel a commitment to transfer the knowledge they have acquired abroad to their community by going back there and helping to build capacities and improve education and research systems in India. An associate professor at IIT Delhi who returned to India after doing a doctorate in Switzerland said: 'I went abroad to learn something

useful, something meaningful and I wanted to implement those things in India, and that is one main reason that I wanted to come back.'

The observations of the testimonies of the skilled Indians in Europe show that there is a high level of motivation to aid home country development, and migrants make specific efforts to implement individual knowledge transfer actions. We can see that institutional mechanisms for cooperation and transnational collaborations together with high development aspirations help to channel the knowledge and other resources of skilled Indians abroad. However, further research is necessary in order to examine the concrete level of impact generated in the Indian context and to see whether the local society does actually benefit from these practices.

7 Conclusions

As we have attempted to demonstrate, there is a strong link between social and economic development and globalisation, and for old and emerging economies alike, this process is greater and more complex than opening up new markets. It is also characterised by the expansion of new technologies that ease the transfer and exchange of information, and by an acceleration of international migration. Against the backdrop of this more open economy, emerging and developing countries are acquiring new positions. In this reorganisation of the world, knowledge and education—which UN institutions see as two key elements of growth and development—will be two fundamental criteria of success. If all the layers of the education system are considered as important for the global progress being pursued by national governments, international institutions place their main emphasis on elementary education and the completion of primary schooling, knowing that we still have more than 700 million illiterate people in the world today. Even if the MDGs are not achieved by 2015 (as planned in 2000), advances have been made and the efforts have to be pursued. They form the basis of a more consistent involvement by emerging and development countries in scientific and technological production. While knowledge-based economies are the engine of innovation and economic growth and will increasingly continue to become so, they may also represent a new barrier between world countries and regions.

We have shown here that investment in higher education, research and innovation represents a huge expense and requires a series of efforts between states, international bodies and the private sector. However, even though the share that public budgets devote to R&D is increasing and the number of researchers in the world has also risen sharply, benefitting developing and emerging countries mostly, there is a need to avoid new forms of marginalisation so that least advanced countries with only 0.5 % of the total number of world researchers, limited scientific strengths and a low level of education will be able to follow this trend.

While arguing about the means that are conducive to disseminating the distribution of knowledge and broadening its content for the benefit of developing

countries, we placed researchers and scientists from the diaspora centre stage. Despite the intensification of international cooperation between developed and developing countries, there are still many unresolved issues about the effects on scientific mobility and the transfer of knowledge from the diaspora for the benefit of the home countries. Yet, the position held by scientists and students from the South living in the North and their transnational actions offers new dimensions for cooperation between developed and developing countries. In this chapter, we seek to contribute to the reflection on scientific cooperation between the North and the South, and taking India as a case in point, we set out to get a better understanding of some of the factors that influence the transfer of knowledge from skilled Indians based in Europe to their home country.

The analysis presented here looks at three interrelated determinants that channel the transfer of knowledge between Europe and India: institutional mechanisms for cooperation; diaspora transnational collaborations; and the aspirations of skilled Indians abroad towards the development of India. We have shown that institutional cooperation strategies in science and technology between Europe and India have inspired various types of measures promoting bilateral collaboration, such as scientific and academic exchanges in areas that are of priority for the two signatory countries. We found that while return to the home country is considered as part of the mobility process of Indian scientists in such structures, this does not necessarily occur due in practice to a combination of personal reasons and structural contextual factors. More often than not, Indian institutions do not have either the mechanisms or the adequate conditions to lure them back.

In terms of transnational cooperation, it becomes evident that the linkages of the Indian scientific diaspora with the scientific and professional community in India are mostly oriented towards two objectives: promoting collaboration and preparing an eventual return. Through their links with the home country, skilled Indians abroad provide the local community in India with access to social and professional contacts and with the scientific and institutional connections they have acquired and strengthened during their overseas exposure, and this influences the propensity to launch new cooperation opportunities. However, the availability of resources linked to these connections does not in itself ensure their positive impact. Furthermore, this type of knowledge transfer remains mostly at the individual level and lacks an associative type of organisation or network which has been shown to be necessary to ensure the durability of the cooperation and the impact overtime. Finally, our research sheds light on the interest and aspirations of skilled Indians abroad to contribute to the progress of India. While skilled Indians' motivation towards home country development is high and they also deploy efforts to implement knowledge transfer actions, further research is needed in order to verify the level of correspondence between transnational cooperation actions and the actual impact generated in the Indian context.

Our findings point to an interrelation between the three determinants that channel knowledge transfer and they let us anticipate a trend whereby scientific diasporas become carriers of knowledge for their countries of origin in the South and promoters of alternative research agendas in the host countries of the North.

Nevertheless, the ability to reap the potential benefits of skilled migration and increase the scientific and knowledge capabilities of the home countries varies according to both the structural context and local environments and the resources that skilled migrants count on. While this option cannot obviously be simply interpreted as a result of a North–South division, it is true that it is influenced by important cross-cutting global disparities. An important task that lies ahead is to promote a fuller understanding of the decisive factors that enable concrete benefits for the local society in developing countries as a consequence of the transfer of the knowledge of the scientific diaspora, considering the multiple dimensions of international migration and the complexity of global challenges.

References

Azoulay, G. (2002). *Les théories du développement*. Rennes: Presses Universitaires de Rennes.

Banerjee, P. (Ed.). (2009). *India, Science and Technology 2008*. New Delhi: Indian National Institute of Science, Technology and Development Studies (NISTADS).

Barré, R., Hernández, V., Meyer, J-B., & Vinck, D. (2003). *Diasporas scientifiques. Comment les pays en développement peuvent-ils tirer parti de leurs chercheurs et de leurs ingénieurs expatriés?*. Paris: Institute de la Recherche pour le Développement.

Bellon, A. (2007). Et Dieu créa la mondialisation. In: Manière de voir. *Le Monde Diplomatique* N° 91.

Bolay, J.-C. (2004). World globalisation, sustainable development and scientific cooperation. *International Journal of Sustainable Development, 7*(2), 99–120.

Bolay, J-C. (2012a). Appropriate technologies for sustainable development. In J-C. Bolay, M. Schmid, G.Tejada & E. Hazboun (Eds.), *Technologies and innovations for development. Scientific cooperation for a sustainable future* (pp. 3–15). Paris: Springer.

Bolay, J.-C. (2012b). What sustainable development for the cities of the South? Urban issues for a third millennium. *International Journal of Urban Sustainable Development, 4*(1), 76–93.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.

Bruggeman, J. (2008). *Social networks: An introduction*. New York: Routledge.

Brunel, S. (2004) Le développement durable. Que sais-je? Paris: Presses Universitaires de France.

Caloz–Tschopp, M-C. (2010). Scientific diasporas, migration and development. A perspective from philosophy and political theory. In G. Tejada & J-C. Bolay (Eds.), *Scientific diasporas as development partners. Skilled migrants from Colombia, India and South Africa in Switzerland: Empirical evidence and policy responses* (pp. 21–136). Bern: Peter Lang.

Cassarino, J.-P. (2004). Theorising return migration: The conceptual approach to return migrants revisited. *International Journal of Multicultural Societies, 6*(2), 253–279.

Castells, M. (1996). *The rise of the network society. The information age: Economy, society and culture* (Vol. I). Oxford: Blackwell.

Castells, M. (1997). *The power of identity. The information age: Economy, society and culture* (Vol. II). Cambridge and Oxford: Blackwell.

Castells, M. (1998). *End of millennium. The information age: Economy, society and culture* (Vol. III). Cambridge and Oxford: Blackwell.

Castells, M., & Cardoso, G. (2005). *The network society: From knowledge to policy*. Washington, DC: Johns Hopkins Centre for Transatlantic Relations.

Chase-Dunn, Ch., Kawano, Y., & Brewer, B. (2000). Trade globalization since 1795: Waves of integration in the world-system. *American Sociological Review, 65*(1), 77–95.

Cyranoski, D., Gilbert, N., Ledford, H., Nayar, A., & Yahia, M. (2011). Education: The PhD factory. The world is producing more PhDs than ever before. Is it time to stop? *Nature, 472*, 276–279.

Devarajan, S., Miller, M., & Swanson, E. (2002). Goals for development: history, prospects and costs. World Bank Policy Research Working Paper 2819. Washington, DC: World Bank. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2002/04/26/000094946_02041804272578/Rendered/PDF/multi0page.pdf. Accessed 26 August 2013.

Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. New Delhi: Penguin.

England, K., & Ward, K. (2007). Introduction: Reading neoliberalization. In K. England & K. Ward (Eds.), *Neoliberalization: States, networks, peoples* (pp. 1–22). Oxford: Blackwell.

EU, ASM, & IOM. (2012). *Success stories. Temporary return of representatives of the Moldovan scientific diaspora*. Chisinau: European Union, Academy of Sciences of Moldova, International Organization of Migration, Mission to Moldova. http://international.asm.md/images/Annex_023A__3.2.2_-__booklet_success_stories_scientists_EN.PDF. Accessed 13 August 2013.

Eurostat. (2007). Doctorate holders: The beginning of their career (Statistics in Focus—Science and Technology), 131/2007, http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-07-131/EN/KS-SF-07-131-EN.PDF. Accessed on 2 January 2014.

Foray, D. (2004). *Economics of knowledge*. Cambridge: MIT Press.

Fosu, A. K. (2011). Growth, inequality, and poverty reduction in developing countries: recent global evidence. Working Paper. World Institute for Development Economics Research. http://www.econstor.eu/bitstream/10419/54015/1/644542136.pdf. Accessed 13 February 2013.

Gaillard, J. (2010). Measuring research and development in developing countries: Main characteristics and implications for the Frascati manual. *Science Technology and Society, 15*(1), 77–111.

Gorz, A. (2003). *L'immatériel*. Paris: Editions Galilée.

Gunder Franck, A. (1975). *On capitalist underdevelopment*. Oxford: Oxford University Press.

Hollanders, H., & Soete, L. (2010). *Le rôle croissant du savoir dans l'économie mondiale. Rapport de l'UNESCO sur la science* (pp. 5–31). Paris: UNESCO.

Jones, N., Bailey, M., & Lyytikainen, M. (2007). Research capacity strengthening in Africa: Trends, gaps and opportunities. Overseas Department Institute. http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2774.pdf. Accessed 13 February 2013.

Lapeyre, F. (2006). Objectifs du millénaire pour le développement: outils de développement ou cheval de Troie des politiques néolibérales? In *Objectifs du millénaire pour le développement. Points de vue critiques du Sud 13*(1). Paris: Syllepse.

Levitt, P. (2001). *The transnational villagers*. Berkeley: University of California Press.

MacGregor, K. (2009). South Africa: Push to graduate more PhDs. *University World News*, Issue 30, 31 May, http://www.universityworldnews.com/article.php?story=20090529112249793. Accessed on 2 January 2014.

Mehra, K. & Pohit, S. (Eds.). (2013). *India. Science and technology (Vol. 2).* NISTADS. New Delhi: Cambridge University Press.

Melamed, C., & Scott, L. (2011). After 2015: Progress and challenges for development. Overseas Development Institute. Background Papers. http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7061.pdf. Accessed 13 February 2013.

Meyer, J. B. (2001). Network approach versus brain drain: Lessons from the diaspora. *International Migration, 39*(5), 91–110.

Meyer, J. B. (2011). A sociology of diaspora knowledge networks. In T. Faist, M. Fauser, & P. Kivisto (Eds.), *The migration-development nexus* (pp. 159–184). Basingstoke: Palgrave Macmillan.

Mosneaga, A. (2014). Student migration at the global trijuncture of higher education, competition for talent and migration management. In G. Tejada, U. Bhattacharya, B. Khadria, &

Ch. Kuptsch (Eds.), *Skilled Indian migration and development: To Europe and back*. New Delhi: Springer. (Chapter 5 in this volume).

Nerad, M. (2010). Increase in PhD production and reform of doctoral education worldwide. *Higher Education Forum, 7*, 69–85.

OECD. (1999). *Mesurer les économies fondées sur le savoir*. Paris: OECD.

Özden, C., Rapoport, H., & Schiff, M. (2011a). Five questions on international migration and development. *The World Bank Economic Review, 25*(1), 1–11.

Özden, C., Parsons, Ch., Schiff, M., & Walmsley, T. L. (2011b). Where on earth in everybody? The evolution of global bilateral migration 1960–2000. *The World Bank Economic Review, 25*(1), 12–56.

Portes, A. (2001). The debates and significance of immigrant transnationalism. *Global Networks, 1*(3), 181–194.

Portes, A., Guarnizo, L., & Landolt, P. (1999). The study of transnationalism: Pitfalls and promise of an emergent research field. *Ethnic and Racial Studies, 2*(22), 217–237.

Rist, G. (1996). *Le développement. Histoire d'une croyance occidentale*. Paris: Presses de Sciences Politiques.

Robinson, W. (2001). Social theory and globalization: The rise of a transnational state. *Theory and Society, 30*(2), 157–200.

Sabates-Wheeler, R., Taylor, L., & Natali, C. (2009). Great expectations and reality checks: The role of information in mediating migrants' experience of return. *European Journal of Development Research, 21*, 752–771. doi:10.1057/ejdr.2009.39

Sachs, I. (1997). *L'écodéveloppement. Stratégies pour le XXIe siècle*. Paris: Syros.

Sassen, S. (2007). *A sociology of globalization*. New York: Norton.

Saxenian, A. L. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development, 40*(2), 35–61.

Saxenian, A. L. (2006). *The new Argonauts. Regional advantage in a global economy*. Cambridge: Harvard University Press.

Stern, N. (2002). *Globalization, growth, and poverty: Building an inclusive world economy*. Washington, D.C: World Bank and Oxford University Press.

Stiglitz, J. E. (2007). *Making globalization work*. New York: Norton.

Tejada, G. (2010). The Colombian scientific diaspora in Switzerland. In G. Tejada & J-C. Bolay (Eds.), *Scientific diasporas as development partners: Skilled migrants from Colombia, India and South Africa in Switzerland. Empirical evidence and policy responses* (pp. 199–313). Bern: Peter Lang.

Tejada, G. (2012). Mobility, knowledge and cooperation: scientific diasporas as agents of development. *Migration and Development, 10*(18), 59–92.

Tejada, G., & Bolay, J-C. (2010). *Scientific diasporas as development partners: skilled migrants from Colombia, India and South Africa in Switzerland. Empirical evidence and policy responses*. Bern: Peter Lang.

The Economist. (2010). The disposable academic: Why doing a PhD is often a waste of time, 16 December. http://www.economist.com/node/17723223

The Royal Society. (2011). Knowledge, networks and nations. Global scientific collaboration in the 21st century. London: The Royal Society. http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/publications/2011/4294976134.pdf. Accessed 13 February 2013.

Tremblay, K. (2005). Academic mobility and immigration. *Journal of Studies in International Education, 9*(3), 196–228.

Tujan, A. (2006). OMD: réduire la pauvreté ou édulcorer la mondialisation néolibérale? In *Objectifs du millénaire pour le développement. Points de vue critiques du Sud 13*(1). Paris: Syllepse.

UNESCO. (2010a). Tendances dans l'enseignement supérieur: l'Afrique subsaharienne. Bulletin d'information de l'Institut de statistique de l 'UNESCO. No. 10. http://www.uis.unesco.org/FactSheets/Documents/fs10-2010-fr.pdf. Accessed 23 August 2013.

UNESCO. (2010b). *UNESCO Science Report 2010. The current status of science around the world*. Paris: UNESCO.

United Nations. (2000). Resolution adopted by the General Assembly 55/2: United Nations Millennium Declaration. New York: United Nations. http://www.un.org/millennium/declaration/ares552e.htm. Accessed 13 February 2013.

United Nations. (2012). The Millennium Development Goals Report 2012. Department of Economic and Social Affairs. New York: United Nations. http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf. Accessed 13 February 2013.

Vertovec, S. (2004). Migrant transnationalism and modes of transformation. *International Migration Review, 38*(3), 970–1001.

Vincent-Lancrin, S. (2006). What is changing in academic research? Trends and futures scenarios. http://www.oecd.org/edu/ceri/37481256.pdf. Accessed 23 August 2013.

Walby, S. (2009). *Globalization and inequalities. Complexity and contested modernities*. Los Angeles: SAGE.

WCED. (1987). *BrundtlandReport. World Commission on Environment and Development*. Oxford: Oxford University Press.

Yussuf, S. (2001). *Globalization and the challenge for developing countries*. World Bank: Washington, D.C.

Chapter 9
Experiences in the Host Countries and Return Plans: The Case Study of Highly Skilled Indians in Europe

Metka Hercog and Md. Zakaria Siddiqui

Abstract The objective of this chapter is to examine individual and host country factors that might influence the return plans of highly skilled Indian migrants in the medium term (5-year period). We used data we collected in a primary survey of Indian students and skilled workers currently based in four European continental countries; Germany, France, the Netherlands and Switzerland. This study is important as these destination countries are quite different in terms of institutional settings, language and culture from the usual destinations of skilled Indian migrants, i.e. the Anglo-Saxon countries. Returnees from these countries can bring new information, organisational and language skills that can help to diversify the Indian economy. We used binomial logit regression to discern the influence of each factor on the likelihood of having or not having a return plan. We saw that many of our results coincided with those of the existing literature. The duration of the stay abroad, knowledge of the local language and minority status in India all have an adverse effect on the likelihood of return in the medium term. Moreover, Indian skilled migrants who decide to return to India are not dissatisfied with their economic situation, but rather they show low levels of satisfaction with the possibilities of social integration within the host societies in Europe.

M. Hercog (✉)
Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
e-mail: hercog@ilo.org

M. Hercog
International Migration Branch, International Labour Office, Geneva, Switzerland

Md. Z. Siddiqui
Centre for Regulation and Market Analysis, University of South Australia Business School, Adelaide, Australia
e-mail: zakaria.siddiqui@unisa.edu.auzakaria.jnu@gmail.com

Md. Z. Siddiqui
Institute of Development Studies Kolkata, Kolkata, India

1 Introduction

Most host countries today are aware of the role that skilled migrants can play in increasing their competitiveness insofar as they add to the stock of global talent and act as bridges for developing new trade relationships or fostering existing ones. For this reason, governments have been introducing various measures aimed at mobilising and capitalising the resources of skilled migrants. Issues such as a country's research and business environment are central to its ability to attract talent and retain it, as are labour market regulations and migration policies. Empirical evidence shows that, in addition to several other economic and non-economic factors, institutional settings have a bearing on whether a country is able to attract skilled foreigners (Mayda 2005; Gross 2006; Docquier et al. 2006). Competition for talent does not only occur between immigration countries but it also exists between home and host countries. The benefits that highly skilled manpower can bring to the home countries are increasingly seen as being important for development, and many countries look for ways to encourage the return of migrants by offering incentive packages, subsidised mortgages and the like (Agunias 2006).

The objective of this chapter is to improve our understanding of what shapes the decisions of highly skilled migrants to either return to their home country or stay abroad. We pay particular attention to the influence that host country environments in the new destination countries play in this important decision. Considering that European countries are increasingly interested in attracting and retaining high-skilled migrants to meet labour market shortages in specific sectors, it is interesting to understand how the experiences of migrants shape their future intentions. We ask whether their migratory paths are planned and pursued accordingly, or whether their experiences abroad reshape their plans and cause them to stay longer or move on earlier.

Our results are based on a web-based survey of Indian students and skilled workers who are currently based in four European continental countries: Germany, France, the Netherlands and Switzerland. The data come from a quantitative survey conducted within the scope of the international research project 'Migration, Scientific Diasporas and Development: Impact of Skilled Return Migration on Development in India'. By taking the example of Indian skilled migration to Europe, this study examines a recent, and therefore under-researched, topic of experiences in new destination countries and the link to future plans. The migrants' particular situation in terms of integration possibilities for immigrants was also an important reason to study the selected host countries. All the observed host countries have a common disadvantaged position for Indian migrants in that English is not the native language. Moreover, contact opportunities with other fellow Indians are rather limited in the countries studied because of their relatively small and dispersed Indian populations.

This chapter contributes to the existing literature by examining the stay/return intentions of highly skilled Indians in new destination countries, based on their

experiences of the institutional settings and structural conditions in the destination countries. The aim of this chapter is to find the incidence of intentions to return in the near future, understand the determinants of such plans and discover how individual evaluations of migrants' experiences in the host country might impact location preference. Furthermore, we seek to add to the understanding of differences between host countries and their ability to retain foreign students and workers. In the case of international students in particular, we assume that while some country-specific structures work similarly in both attraction and retention terms, some apparent differences do exist between these two processes, making certain countries important destination countries for students, but with only a few staying on after they have completed their studies. Differences between host countries with regard to migrants' experiences can be expected to have an impact on the extent of their engagement and their incorporation in the host countries as well as their stated desire to stay.

The chapter starts by presenting the selection of case study countries, and it offers an overview of the Indian population in the selected European countries. Secondly, it presents the research design, explaining the method of the stated preferences approach in order to understand the intentions to move or stay. The chapter observes the intentions for future behaviour rather than the actual move itself. Furthermore, it explores the factors for return intentions that are theoretically and empirically discussed in other studies. Body of migration literature is not unanimous on the role played by the factors that influence migration flows. We provide a short survey of the literature with the intention of positioning the role of the host country environment in the model for the determinants of return decisions. We then give a short description of the most relevant descriptive statistics and present the model that is used for the quantitative analysis. The following section shows the empirical results of logistic regression and concludes with a discussion of the relevance of host county experience in future return plans.

2 New Destination Countries

Until recently the countries of continental Europe were barely present on the map of mobile Indian professionals and students. Since immigration from India is a rather recent phenomenon, we have little information about the activities and future plans of Indian professionals in Europe, leaving this topic particularly under-researched. This chapter aims to present a case study of highly skilled Indian migrants in four selected destination countries: Germany, the Netherlands, Switzerland and France. All four selected countries have emerged as new destinations for skilled Indians and they have seen a systematic increase in the inflows and stocks of the Indian population over the last few years (see Fig. 1). Likewise, the stock of Indian citizens in Switzerland has increased from 6,253 in 2000 to 13,016 in 2011 (Swiss Federal Office of Statistics for Switzerland, database STAT-TAB).
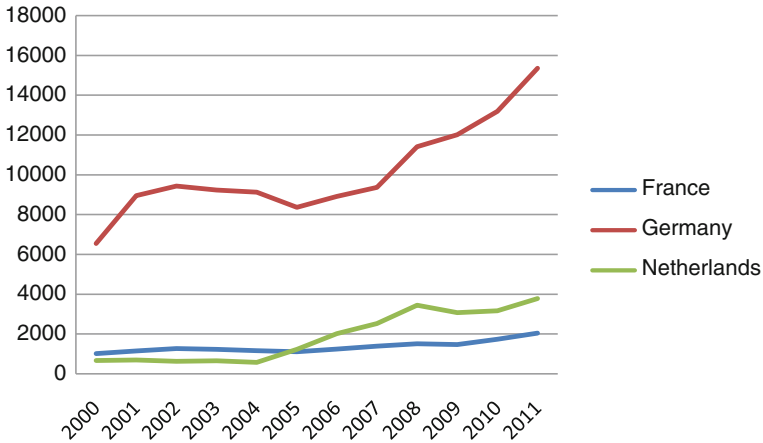
Fig. 1 Immigration flow of Indian population in selected countries (2000–2011). *Source* OECD.stat extracts (data extracted on 23 July 2013)

This is partly the result of new policies to attract skilled people or to adapt existing institutional settings in a trend that is moving towards the selection of immigrants, especially the highly skilled. In recent years, European companies have faced an increasing lack of qualified skilled labour in particular sectors. The shortages are particularly notable in engineering, information technology, the pharmaceutical industry, health care and education. The labour and skills shortages are expected to rise even further in the near future, resulting in high employment growth for highly skilled workers (Frattini 2007). Besides addressing the education and training of the national labour force, the countries of the case study have become increasingly involved in changing their labour migration policies in order to attract highly skilled migrants from third countries. Innovative immigration policies recognise the need for foreign skilled persons on a permanent basis or to allow them to stay longer, offer dual citizenship and give options to change resident status in order to be able to stay in the receiving country. International student policies have become an important tool in the international competition for skilled persons through the so-called two-steps migration, which involves attracting and retaining students when they complete their studies and incorporating them into the local labour market (OECD 2010). The policies of the observed countries have all established pathways for foreign graduates to become labour migrants. Such policy changes are a part of the reason why all four selected countries have recently been experiencing an increase in skilled immigration. Indians account for a large share of these immigrants; in the Netherlands, for instance, Indian nationals account for almost 30 % of all applications for knowledge migrants granted in the past few years.

Since this chapter is concerned with the future intentions of Indian migrants regarding their plan to stay in their current country of residence, it is interesting to observe what is known about the patterns of the duration of stay for Indian

migrants. The database on immigrants in OECD countries (DIOC) only allows a comparison between Switzerland and France.[1] In France, a majority of Indian migrants across different skill levels usually stay for more than 10 years. The stay in Switzerland is of a more temporary nature, especially for highly skilled migrants. Nearly half of all Indians with a tertiary education stay in Switzerland for less than 5 years (Table 1 in the Appendix). The duration of the stay is country specific, which would seem to indicate that stay or return plans differ among the studied countries.

3 Data Collection and Research Design

This chapter builds on data obtained from the online survey on 'Skilled Indians abroad and development', which has been applied to both skilled professionals and students of Indian origin, who currently reside in the four case study countries. The primary data were collected during the period between June 2011 and April 2012. After excluding certain survey responses, which did not match the criteria of the target group, the sample of Indian students and professionals living in the four selected countries comprised 835 individuals. In order to be eligible for the survey, respondents had to be Indian-born professionals or students, currently residing in one of the four selected countries and who are specialised in the fields of information and communication technology, financial and management services, biotechnology and the pharmaceutical industry. We targeted respondents working in industry as well as people in the academic and research field.

   This case study uses the stated preferences approach. The method of asking people to state their intentions rather than observing their actual movements is being used more and more in migration studies (Frieze et al. 2004; Liebig and Souza-Poza 2004; De Jong 2000; Van Dalen et al. 2005; Drinkwater and Ingram 2009). The question we put to the respondents is purposely specific about their future plans regarding location choice within an exact time frame (5 years).[2] Respondents had to answer about their intentions for the following 5 years on whether they planned to stay in the current country, wanted to return to their home country or wanted to go to a different, third country to pursue their future career. The analysis of moving intentions serves for generating insights into the differences between potential returnees and those who want to stay abroad. Nevertheless, and despite the liberalisation of international mobility for the highly skilled migrants, they still do not have complete freedom of choice as far as staying in a certain host country or moving to a desired new destination is concerned and this

---

[1] DIOC does not provide information on the duration of stay for the immigrant population in Germany and the Netherlands.

[2] Behavioural intentions are considered good predictors of actions if they measure somewhat specific behaviour in a restricted time span in which an individual has a lot of freedom of choice (Van Dalen and Henkens 2008).

creates gaps between plans and actual future behaviour. Besides overcoming formal barriers, the stay abroad also depends on job offers. The fact that future plans are not only guided by the location is also evident from the answers, as many respondents commented during the survey that they would follow their job, regardless of the place. Bearing these shortcomings in mind, for various reasons not all stay or return plans are converted into actual behaviour. However, for the studied group with highly transferrable skills, which are in demand across the board, we consider the stated intentions to be based on rational expectations, and therefore to a large extent, we expect them to coincide with future behaviour.

Our main contribution to the discussion on the determinants of return migration is to find out in what way an individual's position in the host country and his/her evaluation of experiences in the host country might have an impact on the location preference. When discussing return migration, the perspective of the push and pull model of migration changes. In this case, pull factors are those conditions in a home country that attract the migrant to return, while the push factors are the conditions in the destination country that encourage the migrant to leave the host country. In addition to push and pull factors, stay factors work as conditions in the host country that make the migrant want to stay (Wijk 2008). In explaining the decision-making process of wanting to stay abroad as opposed to returning home and in focusing on the effect of the host country environment on the decision-making process of return, push and stay factors are of particular relevance for this chapter.

4 Conceptual Framework

Earlier empirical research indicated that the factors influencing the likelihood of return plans were personal characteristics and family background, educational background and migration history (Zweig and Changgui 1995; Güngör and Tansel 2006; Soon 2008). These factors are similar to those found in cost-benefit calculations about emigration decisions. The differences occur because migrants are more prone to remigrate and they are better informed about the settings in the host and the home country (Grundel and Peters 2008). For this reason, we include the importance of migration experience in our analysis, by observing the relevance of the duration of stay in the studied country, type of residence permit, previous migration experiences and the level of knowledge of the host country's language. In addition to more objective facts, we extend earlier research by including migrants' perceived satisfaction of living in a certain country. We are interested in examining how migrants' observations and perceptions about the host country environment might help us to explain their future intentions. By analysing their perceptions of the host country environment (i.e. ease of obtaining a residence/work permit, employment/career opportunities, tolerance of foreigners and integration opportunities), this chapter evaluates the implications of migrants' experiences and the related host country environment for attracting and retaining foreign human capital. Do people return to their home countries because of

dissatisfaction in the host countries? If migrants can be more productive abroad, then there is no incentive to return according to the view of migration as an investment in human capital. In this view, economic and sociocultural integration in destination countries will have a negative effect on any plans to return. The opposite view claims that migrants will return once they have accumulated sufficient financial and human capital abroad, and as such, they see return as a measure of a successful migration experience (de Haas and Fokkema 2011). This study tries to discover which of the two opposing views of the link between migration experience and return plans holds truest in the studied case.

Better possibilities for career advancement in highly developed countries correspond to often cited professional aspects as the main motivation for moving and staying abroad (Gibson and McKenzie 2009; Körner 1999). Besides satisfaction with private goods such as working conditions and income, satisfaction with public amenities is also expected to play a role in migration decisions. Van Dalen and Henkens (2013) show the negative evaluation of the public domain as one of the most important factors for emigration in the case of the Netherlands. They found that societal problems such as people's mentality and environmental quality push people to move abroad more than dissatisfaction with private living conditions does. Therefore, our hypothesis is that perceptions of the quality of institutions and environment in a host country do affect people's decisions to live abroad. While amenities are important for all residents of the host country, some other aspects within the public domain affect foreigners to a different extent or are specific to their situation. Social problems related to tolerance of foreigners, the possibilities to integrate and communicate with local people and the social welfare system (e.g. schooling, health care, childcare facilities) are distinctive features for foreigners. A relevant aspect of an immigrant's experience also pertains to immigration policies, and therefore, we asked the respondents to rate the ease of obtaining a residence and a work permit.

Our study pays attention to the individual characteristics of migrants since they are believed to underlie the expected benefits of living abroad. Age, gender, belonging to a minority community of the home country, relationship status and main activity in the host country are considered relevant to the study of migration plans. We will now expand on each of the factors included in the study.

Age has been found to be a significant factor in people's migration decisions (Chen and Su 1995; Gibson and McKenzie 2009; SVR 2012). Migrants are more likely to return to the home country when they are at the family formation stage of the life cycle. Hazen and Alberts' (2006) study of international students at the University of Minnesota shows that factors related to professional development encourage students to remain in the USA after they complete their studies, while social and family factors motivate students to return home. Accordingly, return is more likely at an age when social and family factors prevail over the importance of professional opportunities. Such behaviour regarding the migration decision of skilled individuals can be rationalised as a part of optimal life cycle planning, where a certain period of time abroad is required to enhance skills which can also be used back home (Roed and Stark 1998).

Because of different gender roles, women respond differently in their return intentions. Contrary to general expectations, skilled women have higher emigration rates than skilled men (Docquier et al. 2007; Dumont et al. 2007; Faggian et al. 2007). Feminist migration scholars (Pessar and Mahler 2003; Silvey 2004) also show that gender relations and social positions are redefined during the stay abroad, and this can lead to changes in the future plans. Zweig and Changgui (1995) find that among Chinese students in the USA, females are less likely to return to the home country after their studies. Especially in the case of women, staying abroad is seen as offering better career opportunities compared to their home country. This could also be explained by gender discrimination in the labour market of the home country (Faggian et al. 2007). In the light of what we have just stated, one would expect women to be more intent on staying abroad. In the case of Indian immigration in Europe, this assumption is less straightforward. It is typically male dominated with most residence permits granted to men for the purpose of employment, while women predominantly hold residence permits for family reunification. If we consider that most Indian women in Europe are trailing spouses, it can be expected that they are not making independent decisions and will therefore follow their spouses in their future plans. Furthermore, when people are in a relationship, they are less likely to move from place to place as they are likely to take partnering issues into account (Guth 2007; Smith 2004; Koser and Salt 1997). They must first see whether migration is also a viable option for their partner and other family members. It is not only the relationship status which matters but the location of the partner and children as well. People often live apart for certain periods of time, and this is especially true in the case of dual-career couples. If a partner is based in India, we can expect an increase in the likelihood of intending to return to India. On the other hand, when one's partner (and children) is based in the same country as the respondent, we can expect the inclination to return to be lesser.

The minority status of Indian migrants is included in the analysis because of prevalent discrimination in the Indian labour market and in Indian society at large. Minority groups are overrepresented among those who intend to stay abroad (Thorat and Newman 2010). People from a non-Hindu background may find it more difficult to find a good job in India despite their high qualifications. As a result, moving abroad can be used as a compensation mechanism for lack of good options in the home country. By migrating, non-Hindu Indians can become part of a different system, in which their minority status and religion are less relevant.

Several studies have shown that the employment status of immigrants is an important determinant for remigration (Constant and Massey 2003; Grundel and Peters 2008). Employed people are less likely to return to a home country than people who are unemployed or inactive. Since our sample includes a large share of students, they can be expected to return more often as they may be forced to return to the home country in the event of not having a job offer after completing their education. We also include the length of stay abroad in the analysis. The more time a person spends away from the home country, the less likely it is that that person will return (Massey 1987; Zhao 2001; Güngör and Tansel 2006; Soon 2008). A

longer stay in a host country allows one to adjust better to the society, rules and culture. Returning to the home country might bring readjustment problems for those who have stayed away for a long time. Social networks change and the migrant might not have contacts that would be helpful in finding employment, especially in societies where informal networks are an important factor in job recruitment (Güngör and Tansel 2006). After years living and working abroad, the network abroad is likely to be stronger. A longer duration of stay in the host country can also be an indicator of a general preference to live abroad. This preference is even clearer, however, for those who have previously lived outside their home country. Mobility experiences enhance the information available, and so they reduce the cost and risks associated with mobility. At the same time, international experiences facilitate adaptation. Parey and Waldinger (2008) and de Grip et al. (2009) find that studying abroad significantly increases an individual's probability of working in a foreign country. Previous experience of living abroad might be for education, work or travel purposes or to accompany the family; it is an indicator of a person's mobility and familiarity with the cost of migration. Therefore, migrants with previous migration experience can be expected to be less likely to return home.

As we mentioned previously, international migrants do not have complete freedom to choose their location. Their right to stay in the country depends on their residence status. Our hypothesis is that those migrants who possess long-term residence permits (including citizenship in some cases) are less likely to express plans to return. For example, Grundel and Peters (2008) found that immigrants who received German nationality are much less likely to remigrate from Germany than who still hold non-EU citizenship. Besides legal residence status, incorporation in the host society can be expressed by affiliation with a local organisation and knowing the local languages. In particular, proficiency in, and use of, the majority language is one of the most important elements of sociocultural integration and forms the basis for establishing social contacts and lessening the distance between immigrant communities and the rest of society (Vancluysen and van Craen 2010). It is also an important job qualification.

In the following section, we present some descriptive statistics of variables, which are found to be important in the decision-making process of skilled migrants.

5 Descriptive Statistics

We present summary statistics of factors that skilled migrants consider for their migration planning. Table 2 (in the Appendix) presents descriptive statistics for the basic characteristics of the sample. The survey was filled out by 348 Indians who currently live in France, 242 in Switzerland, 154 in Germany and 97 in Switzerland. More than 60 % of all respondents are in education or training, while the rest (33.5 %) are professionals in paid employment, with a few (44 persons) either looking for work, doing housework or retired. In line with the age and

Fig. 2 Reported plans for
the following five years.
Source Field Survey in
Europe (2012)
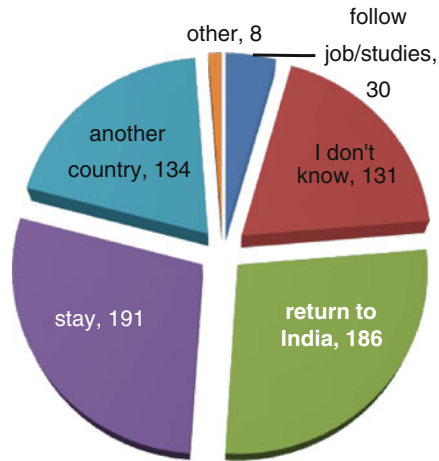
gender distribution of the targeted population, most respondents in the sample are young men. The majority are in their twenties with an average age close to 29 years. The majority of our respondents are single and do not have children. The distribution of the religious belonging of respondents in the study is representative of the religious composition of the Indian population as a whole, with its predominantly Hindu population (78.6 %).

Out of the whole sample, 657 respondents reported their plans for the following 5 years (Fig. 2). About 28 % intend to stay in their current host country and an almost equal share say they plan to return to India (27 %). One hundred and thirty-four (20 %) of respondents plan to move to another country, with most of these planning to move to another European country or to the USA. The rest have not made up their minds about their future plans and either say they will follow the best career opportunities or they do not know where their location will be in the coming 5 years. The options are left deliberately open for future opportunities, and so they do not make plans in terms of geographical allocations.

To understand the factors that influence future plans, we first observed whether those respondents who wish to return home differed substantially in characteristics from those who wished to stay abroad. We divided the respondents into two groups: the first contained those who say they plan to return to India in the next 5 years, and the second included all the others, including those who say they intend to stay in the host country, move to another country or those who have not yet decided their plans. We also decided to include the answers of those who do not know about their future location in the second group, since they did not select return from among the options presented and are therefore less likely to return.

Table 3 illustrates the differences between the two groups. We observe that there are proportionally less female respondents among those intending to return home, which corresponds to the results of the study on Chinese students in the USA (Zweig and Changgui 1995). There were 17.9 % of female respondents in the

group expressing plans to return home, while females accounted for 24 % of the respondents without any such plans. Contrary to our expectations, age does not play a role in plans related to return. The age distribution among those wanting to return is similar to that of respondents who do not report a return plan. With respect to respondents' sense of belonging to a community, we noticed that respondents from the Hindu community were highly represented among those with return plans. Respondents from the Hindu community represented 82.4 % of those with return intentions, while they represent only 77.9 % in the group with no return aspirations. Compared to professionals, students fall in line with expectations and are more likely to declare return plans. In relation to the respondents' relationship status, we observed no correlation with mobility plans. Respondents who are married or in a relationship indicated the same intention to return as single people. Likewise, we did not find any differences between people who have children and those who do not. As we attempt to observe the difference in return plans while considering the current residence of skilled migrants, it is very relevant to note that among the respondents with return plans, the representation of Indians in Germany is higher than in the overall distribution. It is interesting to take a closer look at this and to discover whether this distribution has to do with the sample profile in Germany or with the experiences and expectations of migrants in this specific destination country.

As other earlier empirical studies have found the more time a person spends away from home, the less likely that person is to return (Massey 1987; Zhao 2001; Güngör and Tansel 2006; Soon 2008). With a longer experience in a host country, migrants are able to gain social and economic capital, which allows them to settle abroad (Massey 1987). In the group of respondents with return plans, we see a higher representation of respondents who have been in the particular host country for up to 2 years. On the contrary, when we observe the group with no return plans, there are more respondents who have lived in the host country for 5 years or longer. The average number of months spent abroad for those who plan to return is less than 25, while the average in the other group is just over 50. Besides, when we observe the situation of the respondents' residence permits, we see that those who have a long-term permit or those who have acquired citizenship are less likely to return. Those with short-term permits are more likely to report return intentions. On the contrary, a migration experience prior to the present one does not appear to have an impact on declared future plans. As an indicator of incorporation in the host society, knowledge of the host country's major language is also shown to be clearly linked to future plans. This is especially noticeable at the extremes of the excellence scale: those who do not have any language skills in the local language stand out in the group with intentions to return, while those who know the language very well are highly represented in the group with no return intentions.

Pearson's chi-square test was used to observe whether people with different characteristics also differ in terms of the frequency with which they report future plans to move or stay (Table 3 in the Appendix). Despite some differences between the two groups, we find that in most cases they are not statistically significant. For example, gender difference is not statistically significant, and the

same applies to age groups, different communities or the different activities or respondents. However, the difference between host countries and their link to return plans is statistically significant at a 99 % confidence level. Similarly, length of stay, residence status in the host country and knowledge of the local language influence future plans in a statistically significant way. The distinct situation experienced by immigrants in the host country appears to be relevant for their future intentions. The following section takes a closer look at the subjective experience of the host country environment.

6 Evaluation of the Host Country Environment and Return Plans

In addition to competence in the local language, length of stay abroad and residence permit situation, we also explore the subjective evaluation of living conditions in the host country as a measure of the experiences of skilled Indians abroad. The migrants were asked to rank a list of nine factors in the given host country environment on a five-point Likert scale (from 1 [very bad] to 5 [very good]), indicating the satisfaction they ascribe to each factor for the given host country. If we observe the individual factor satisfaction in Fig. 3, we can see general agreement across the groups of respondents in the different countries, with a few exceptions. All respondents rank living environment and amenities very highly and they also agree on the least satisfying areas. Possibilities to integrate and the possibility to communicate with the local population are ranked relatively low for all respondents, with the exception of the Netherlands. Not knowing the Dutch language is not a barrier for communication given the wide use of English and fluency in that language among the Dutch. Moreover, satisfaction with obtaining a residence and work permit is ranked low, especially in the case of Switzerland and France.

In this section, we examine how satisfaction with the host country environment influences the plans of Indian migrants regarding their future mobility. We are interested to see whether there are differences in terms of satisfaction with the factors described below between the people who plan to move back home and those who do not have such plans. Chart 3 presents the mean of responses for each factor separately for the two groups. Our hypothesis is that those who are not satisfied with their opportunities and lifestyle in the host country will prefer to return to their home country. However, this hypothesis is only partially proven. Observing the individual satisfaction factor, we notice a general agreement across both groups of respondents. We can observe that all of them rank living environment and amenities the highest, regardless of their future plans to move. Instructions in the questionnaire mentioned housing and transportation as an illustration of this category. Respondents are also highly satisfied with the social welfare system (e.g. schooling, health care, day care facilities for children). Both domains are public, and from the high-ranking results we can make a broad assessment that government institutions
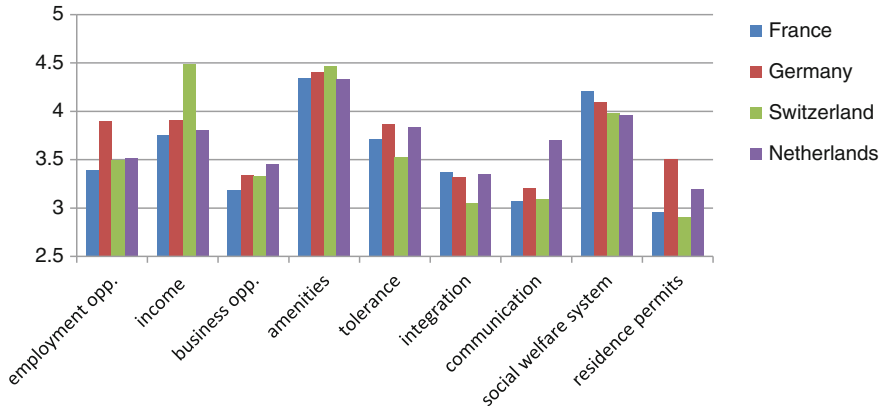
Fig. 3 Satisfaction with local conditions (scale from 1 = very bad to 5 = very good). *Note* Question: Given your experiences, how would you rate each of the following qualities in your current country of residence? Answers on a scale from 1 to 5 (1 = not important at all, 2 = somewhat unimportant, 3 = don't know/neutral, 4 = somewhat important, 5 = very important). *Source* Field survey in Europe (2012)

and their services are perceived as being of a high quality. The two factors mentioned are in the form of the questionnaire that is not specific to immigrants as they concern all residents. The other assessed domains in the host country mostly affect foreigners. The social environment of host countries estimated by the level of tolerance of the local population towards foreigners, the possibilities for integration into local society and language-related communication options ranked relatively low for all respondents. Business opportunities are also ranked low, although this factor could be explained in several different but possibly interrelated ways: either that a general climate for starting a business in the concerned country is not satisfying or that this situation is particularly difficult for foreigners. Another possible explanation is that relatively few of the people in our sample are engaged in business, and therefore, they might have a low level of interest in this aspect of the economic environment of the country (Fig. 4).

   The most relevant factors for this study are those that are viewed differently by respondents who plan to return home and those who do not plan to go back. The biggest difference between the two groups was observed in the satisfaction levels regarding communication possibilities with the locals. As expected, those who plan to return are less satisfied in this respect. In a similar vein, they are also less satisfied about the possibilities of integration. A relatively big difference is also found in satisfaction about obtaining residence and work permits, with those who plan to return being more satisfied in this area. Although we would expect a different relationship and assume that people wanting to return would be less satisfied, a possible explanation could be that people who have already made a decision about return value the question of obtaining a work or a residence permit differently and possibly with less personal interest. Since they are not planning to stay abroad longer, they do not need to obtain or renew a permit. On the contrary,
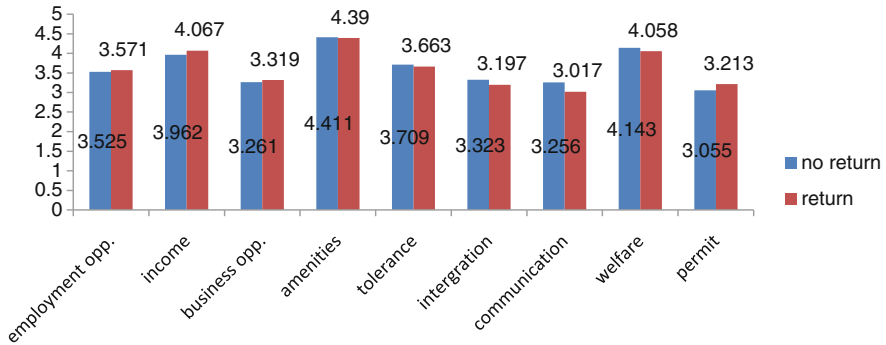
Fig. 4 Satisfaction with different factors in the host country. *Source* Field survey in Europe (2012)

those who wish to stay are often faced with problems related to obtaining or changing their immigration papers.

We have so far demonstrated that there are characteristic differences between people with plans to return and those with plans to stay, as well as different degrees of satisfaction with opportunities in the host countries. In the following next section, we will use a logistic regression analysis to identify which of these factors really increase the likelihood of respondents expressing plans to return.

7 Empirical Analysis of Return Intentions

As we stated in the introduction to the chapter, our main focus is the existing disposition of a respondent to move to the home country within the next 5 years. For the empirical analysis, this variable is based on the answers in the survey to the question: 'What do you plan to do in the following 5 years?' There were five possible answers to this question, which we grouped into two options: return and no return, which allows us to use the binary logistic model.[3] As we explained in Sect. 5 above, those who answered anything other than planning to return home (those replying they would stay in the host country, move to another country, or had not decided their future plan) were grouped together in one group as were those who did not have a return plan.

The dependent variable 'return to home country' is a binary variable where

$$Y_i = \begin{cases} 1; & \text{if the respondent intends to move to India} \\ 0; & \text{if the respondent does not plan to move to India} \end{cases}$$

---

[3] The answer options were (1) I don't know, (2) I plan to stay in my current country of residence, (3) I plan to return to India, (4) I intend to move to another country, (5) other plans, specify.

with $p(x_i) = p(y_i = 1 | X = x_i)$ as the conditional probability of $y_i = 1$ given the covariate $X = x_i$.

The independent variables are a vector of the individuals' characteristics and perceptions, which are used to predict which individuals are more likely to plan a return. Logistic regression allows the estimation of a discrete outcome from a set of independent variables that can be categorical, continuous, dichotomous or a mixture of these types. The results of the logit probability model will show us which variables increase or decrease the likelihood of having plans to return and whether these influences are significant. Most answers in the questionnaire were not obligatory, which resulted in missing values. Because of item non-response, not all variables are available for every respondent. Therefore, we will first investigate the role of various sets of variables before combining all of them together in the final model. The variables observed above in the descriptive statistics will be included in the regression. Since the estimations in different models have different numbers of observations, it is difficult to interpret R2. To have a measure that is comparable across models, we use a measure of goodness of fit (GOF), which shows the percentage of correctly estimated cells. GOF describes how each model fits the set of observations.

The first model in Table 4 (in the Appendix) looks at the role of personal characteristics and shows significant results for gender, belonging to a Hindu community and whether a person was unemployed or retired at the time of the questionnaire. In line with our expectations, women are less likely to express an intention to return to India compared to men. Individuals from non-Hindu communities are also less likely to have return plans compared to individuals from Hindu community. The relationship status of the respondent does not have an effect on having return plans and neither does having children. Even though their negative sign is that suggested by the literature, the parameters are not statistically significant and this may occur because our sample is not large enough. People who are either unemployed or retired are less likely to have return plans. We did not find any differences between different age groups because the entire sample is quite homogenous in terms of age, as shown in the descriptive statistics section. This is the base regression model, which does not include information about the individual with respect to his or her specific migration situation.

The second model expands on the first model and investigates the role of host country situation on future plans. We include the effect of the host country, the length of stay abroad, experience with previous migration, the type of residence permit they hold in the current host country and competence in the local language. We include age, gender and community belonging as control variables. Our finding is that the residence status of migrants holds a clear significance for their future plans. Compared to migrants in Germany, Indians in the other three countries are less likely to have return plans. If an individual stayed abroad for up to 1 year, he/she is more likely to have return plans, but the results here are not significant. Compared to short-term residence holders, migrants with a long-term residence permit or those who are citizens of the host country are significantly less likely to plan a return. Moreover, speaking the local language well or reasonably

well makes people want to stay abroad. The effect of gender and community belonging also remains significant after including variables that are specific to the migration situation.

In the third model, we investigate the role of all independent variables together, including the preference variables that represent the respondents' satisfaction in the host country. We include those satisfaction variables which turned out to be most different between those who plan to return and those who do not. The assessment of how satisfied respondents are with their possibilities to communicate with local people has a statistically significant impact on return plans in a negative way, meaning that those who are satisfied are less likely to return. Satisfaction with the income level has a positive effect and this is in line with the results of Dustmann and Kirchkamp (2002). They predict that those with better access to income will return home earlier as they will complete their objectives sooner. This reaffirms our idea that the migration decisions of skilled individuals are often a part of their optimal life cycle planning. We also find out that being satisfied with the immigration policy situation makes one more likely to plan return. This result apparently runs contrary to our expectations. Such an outcome is possible because we are unable to control the intensity of the personal interest with which individuals look at the issue of immigration policy. Individuals with a strong interest in staying abroad for a period beyond what their current residence permit allows would put a greater effort into informing themselves about opportunities and offers of immigration policies compared to those individuals who are indifferent or opposed to staying in the country of their current residence. The most comprehensive model (model 3) also shows us the positive effect on return plans of working abroad as opposed to studying, i.e. professionals are more likely to plan their return. As hypothesised, the duration of stay abroad has a statistically significant effect on return, i.e. the longer you have stayed abroad the less likely you are to return. In summary, the results of model 1 and model 2 are further consolidated as a result of adding a more explanatory variable that is related to satisfaction with the specific context and income of the host country.

8 Discussion

The main objective of this chapter is to examine individual and host country factors that influence the likelihood of skilled Indians who are currently living in continental European countries having plans to return to India within a 5-year period. In a situation where their numbers are on the rise, such a study is important as the observed host countries are quite different in terms of institutional settings, language and culture from the usual migration destination countries, i.e. the Anglo-Saxon countries. First of all, we find that almost a third of respondents plan to return to India in the medium term. This share is relatively high compared to the study of current and recent Indian graduates from US universities, where only 7 % of respondents clearly stated they plan to return to India (Finegold et al. 2011), and

it clearly shows that staying in European countries is seen as being much more temporary compared to staying in the USA or other Anglo-Saxon countries. Secondly, in terms of understanding the determinants of return plans, our findings are similar to the prevailing knowledge in many aspects. Longer stays abroad, knowledge of the host country's language and minority status adversely affects the likelihood of returning to India in the near future. However, our findings are at odds with the literature with regard to the impact of relationship status on return plans. In our case, relationship status does not hamper the likelihood of return plans. The finding that the members of minority groups are less likely to have return plans leads us to believe that social and economic discrimination faced by members of a minority community in India are still prevalent and this motivates them to remain abroad. However, Tejada and Siddiqui (this volume) point out that people from a minority background may be important drivers of social change once they return, and therefore, it is important for Indian policymakers to pay special attention to this group of migrants.

It is quite encouraging to see that professionals are more likely to have return plans than students are, as this implies that India may expect to gain experienced brains rather than fresh foreign graduates. The return of foreign experienced professionals can produce benefits for the Indian economy from global professional networks in addition to bringing much-needed technical and organisational skills. Returnees from new European destinations are likely to bring different and new skills, at least in terms of organisational aspects, as these countries are quite different from the usual destinations of skilled Indian migrants.

With respect to the question of whether people return to their home countries because of unsatisfactory experiences in host countries, the answer is not a forthright yes or no. Against the common public perception that people return to the home country if they have not managed to achieve objectives abroad, we find that it is actually those who are satisfied with working and payment conditions in the host country that plan to return to India. Return can therefore be seen as an indication of economic success. However, at the same time, it is also a sign of unsuccessful integration in the host society at a social level based on our results indicating that dissatisfaction with communication possibilities in the host country leads Indian migrants to return back home. We find that the possibilities for integration, and specifically the possibility to communicate with the local population, are ranked relatively low for all respondents in the survey. An important implication of this result, with special relevance for the studied host countries, is that economic opportunities alone cannot foster the retention of skilled migrants. As we mentioned in our introduction, we chose a case study of continental European countries because these countries are different from traditional immigration countries for Indian migrants, since they do not have English as their native language. Regarding our finding that social life considerations weigh strongly in the decision of where one wants to live, we emphasise that it is important for European host countries to create an attractive environment for professionals and their families. In the competition for talent, continental European countries should be aware of their disadvantages and they should attach more attention to the language issue.

Appendix

Table 1 Duration of stay of Indian population in France and Switzerland, by country of birth

Duration of stay		Up to 5 years	5–10 years	More than 10 years	Unknown
France	All	4,270 (16.2 %)	3,737 (14.1 %)	13,804 (52.3 %)	4,592 (17.4 %)
	ISCED 5/6	1,003 (18.5 %)	674 (12.4 %)	2,875 (53.1 %)	864 (16 %)
Switzerland	All	4,343 (36.5 %)	926 (7.8 %)	3,135 (26.4 %)	3,476 (29.3 %)
	ISCED 5/6	2,708 (49.8 %)	474 (8.7 %)	1,023 (18.8 %)	1,235 (22.7 %)

Source Own calculation based on OECD.stat, extracted on 26 October 2011

Table 2 Descriptive statistics of personal characteristics

Personal characteristics	Values	Descriptives
Age $N = 602$	Average age in years (std. dev)	28.76 (7.52)
	Less than 30	69.60
	30–39	24.25
	40 and older	6.15
		Percentages
Gender $N = 599$	Female	22.20
	Male	77.80
Community $N = 634$	Non-Hindu communities	20.66
	Hindus	78.55
	Not given	0.79
Activity $N = 747$	In education and training	60.64
	Professional	33.47
	Other	5.89
Relationship $N = 618$	Single	50.97
	Relationship (boyfriend/girlfriend)	16.67
	Married	31.23
	Divorced	0.81
	Widowed	0.32
Children $N = 638$	No children	84.64
	Children	15.36
Host country $N = 841$	France	41.38
	Germany	18.31
	Switzerland	28.78
	The Netherlands	11.53

Table 3 Comparison of respondents by main characteristics

	What do you plan to do in the following 5 years?					
	No return to India		Return to India		Total	
Total	478	72.75 %	179	27.25 %	657	100 %
Gender	425		173		598	
Female		24 %		17.9 %		22.2 %
Male		76 %		82.1 %		77.8 %
Pr = 0.105						
Age	432		170		602	
Average in years	28.7		28.8		28.8	
Less than 30	302		117		419	
		69.9 %		68.8 %		69.6 %
30 and older	130		53		183	
		30.1 %		31.2 %		30.4 %
Pr = 0.795						
Community						
N	458		170		628	
Hindu		77.9 %		82.4 %		79.1 %
Non-Hindu		22.1 %		17.6 %		20.9 %
Pr = 0.227						
Main activity	478		179		657	
In training and education		59.6 %		63.1 %		60.6 %
Professionals		34.3 %		33.5 %		34.1 %
Other		6.1 %		3.4 %		5.3 %
Pr = 0.352						
Relationship	442		175		617	
In a relationship/married		48 %		48 %		48 %
single		50.9 %		50.9 %		50.9 %
Other (divorced/widowed)		1.1 %		1.1 %		1.1 %
Pr = 1.000						
Children	460		177		637	
No children		84.8 %		84.2 %		84.6 %
Children		15.2 %		15.8 %		15.4 %
Pr = 0.850						
*Host country*****	478		179		657	
France		43.5 %		37.4 %		41.9 %
Germany		15.5 %		26.8 %		18.6 %
Switzerland		28.9 %		26.3 %		28.2 %
The Netherlands		12.1 %		9.5 %		11.4 %
Pr = 0.010						
*Lengths of stay abroad******	463		173		788	
Average number of months	51		24.6		48.2	
Up to 1 year		14.9 %		22 %		16.8 %

(continued)

Table 3 (continued)

	What do you plan to do in the following 5 years?		
	No return to India	Return to India	Total
Up to 2 years	30.9 %	37 %	32.6 %
2–5 years	35.9 %	33.5 %	35.2 %
More than 5 years	18.4 %	7.5 %	15.4 %
Pr = 0.002			
Previous migration experience 474		176	650
No	56.5 %	58 %	56.9 %
Yes	43.5 %	42 %	43.1 %
Pr = 0.746			
Resident status*** 477		179	656
Citizen	6.5 %	1.1 %	5 %
Long-term	3.8 %	1.7 %	3.2 %
Short-term	86.8 %	97.2 %	89.6 %
Other	2.9 %	0 %	2.1 %
Pr = 0.001			
Language knowledge*** 477		179	656
Not at all	8.2 %	14 %	9.8 %
A little bit	49.3 %	59.2 %	52 %
Reasonably well	28.9 %	21.2 %	26.8 %
Very well	13.6 %	5.6 %	11.4 %
Pr = 0.001			

Table 4 What determines plans to return to the country of origin? (Marginal effects after logit regression)

Dependent variable: plan to return in the following 5 years			
	Model 1	Model 2	Model 3
Age			
(reference: 30 and older)			
Younger than 30	−0.026 (0.058)	−0.024 (0.060)	−0.027 (0.685)
Female	−0.097*** (0.021)	−0.075*** (0.010)	−0.094*** (0.007)
(reference: from a Hindu community) from a non-Hindu community	−0.071*** (0.022)	−0.096*** (0.016)	−0.100*** (0.020)
(reference: single as a reference)			
In a relationship/married	−0.008 (0.021)		0.004 (0.012)
Other	0.011 (0.237)		0.076 (0.256)
Has children	0.010 (0.029)		−0.005 (0.024)
(reference: in training or education)			
Unemployed/retired	−0.140* (0.082)		−0.017 (0.098)
Professional	−0.013 (0.054)		0.094** (0.040)
Host country (reference Germany)			
France		−0.137*** (0.012)	−0.114*** (0.010)

(continued)

Table 4 (continued)

Dependent variable: plan to return in the following 5 years

	Model 1	Model 2	Model 3
Switzerland		−0.120***	−0.110***
		(0.008)	(0.009)
The Netherlands		−0.121***	−0.046***
		(0.016)	(0.017)
Length of stay abroad (reference: up to 1 year)			
Up to 2 years		−0.039 (0.074)	−0.052 (0.077)
2–5 years		−0.074* (0.045)	−0.092**
			(0.044)
More than 5 years		−0.086 (0.080)	−0.109**
			(0.048)
(reference: no previous migration experience) Has previously lived abroad		0.010 (0.021)	0.018 (0.026)
Residence permit (reference: short-term residence permit)		−0.231***	−0.237***
		(0.024)	(0.033)
Citizen and long-term residence		−0.134**	−0.159***
		(0.065)	(0.049)
Other			
Language (reference: speaks reasonable well or very well the local language)		0.077*** (0.009)	0.020 (0.017)
Speaks a little or no local language			
Income satisfaction			0.066*** (0.011)
Possibility to communicate with local people			−0.056***
			(0.008)
Ease of obtaining residence/work permit			0.021** (0.010)
Number of observations	555	542	506
Pseudo R^2	0.016	0.070	0.078
GOF	71.35 %	71.77 %	70.75 %
Pearson chi^2	73.90 (0.12)	222.62 (0.49)	487.46 (0.37)

Notes All models are estimated by logistic regression. Dependent variable is the plan to return to country of origin. All standard errors (in parentheses) are robust and clustered by host countries
Significance levels ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$
GOF is a percentage of correctly classified data points. Pearson is a chi-square goodness of fit test. Number in parenthesis is the p value of the Pearson's test

References

Agunias, D. R. (2006). Remittances and development: Trends, impacts, and policy options. Report commissioned by the Inter-American Development Bank. Washington DC: Migration Policy Institute.

Chen, T.-J., & Su, H.-Y. (1995). On-the-job training as a cause of brain drain. *Weltwirtschaftliches Archiv, 131*(3), 526–541.

Constant, A., & Massey, D. S. (2003). Self-selection, earnings, and out-migration: A longitudinal study of immigrants to Germany. *Journal of Population Economics, 16*, 631–653.

de Grip, A., Fourage, D., & Sauermann, J. (2009). What affect international migration of European science and engineering graduates? *IZA discussion papers* (Vol. 4268). Bonn: Institute for the Study of Labor (IZA).

de Haas, H. & Fokkema, T. (2011). The effects of integration and transnational ties on international return migration intention. *Demographic Research*, 25, 755–782.

de Jong, G. F. (2000). Expectations, gender, and norms in migration decision-making. *Population Studies, 54*(3), 307–319.

Docquier, F., Lohest, O., & Marfouk, A. (2006). What determines migrants' destination choice? Working paper, Louvain-la-Neuve: IRES—Université Catholique du Louvain.

Docquier, F., Lowell, A., & Marfouk, B. L. (2007). A gendered assessment of the brain drain. *IZA discussion paper* (Vol. 3235). Bonn: Institute for the Study of Labor (IZA).

Drinkwater, S., & Ingram, P. (2009). How different are the British in their willingness to move? Evidence from international social survey data. *Regional Studies, 43*(2), 287–303.

Dumont, J. C., Martin, J. P., & Spielvogel, G. (2007). Women on the move: The neglected gender dimension of the brain drain. *IZA discussion paper* (Vol. 2920). Bonn: Institute for the Study of Labor (IZA).

Dustmann, C., & Kirchkamp, O. (2002). The optimal migration duration and activity choice after re-migration. *Journal of Development Economics, 67*, 351–372.

Faggian, A., MCCann, P., & Sheppeard, S. C. (2007). Some evidence that women are more mobile than men: Gender difference in UK graduate migration behaviour. *Journal of Regional Science, 47*(3), 517–539.

Finegold, D.L., Venkatesh Kumar, B., Winkler, A-L., & Argod, V. (2011). Will they return? The willingness of potential faculty to return to India and the key factors affecting their decisions. Research report, Rutgers: School of Management and Labour Relations.

Frattini, F. (2007). Enhanced mobility, vigorous integration strategy and zero tolerance on illegal employment: A dynamic approach to European immigration policies. In *High-level conference on legal immigration, Lisbon*. Retrieved September 13, 2007.

Frieze, I. H., Boneva, B. S., Sarlija, N., Horvat, J., Ferligoj, A., Kogovsek, T., et al. (2004). Psychological differences in stayers and leavers: Emigration desires in central and eastern European university students. *European Psychologist, 9*(1), 15.

Gibson, J., & McKenzie, D. (2009). The microeconomic determinants of emigration and return migration of the best and the brightest: Evidence from the Pacific. *IZA discussion paper* (Vol. 3926). Bonn: Institute for the Study of Labor (IZA).

Gross, D. M. (2006). Immigration to Switzerland: The case of the former Republic of Yugoslavia. *World bank policy research working paper*, 3880. Washington DC: World Bank.

Grundel, S., Peters, H. (2008). What determines the duration of stay of immigrants in Germany? Evidence from a longitudinal duration analysis. *SOEP papers on multidisciplinary panel data research* (Vol. 79). Berlin: Deutsches Institut für Wirtschaftsforschung.

Güngör, N., Tansel, A. (2006). Brain drain from Turkey: An investigation of students, return intentions. *IZA discussion papers* (Vol. 2287). Bonn: Institute for the Study of Labor (IZA).

Guth, J. (2007). Triggering skilled migration: Factors influencing the mobility of early career scientists to Germany. *Focus migration policy brief* (Vol. 6). Hamburg: Hamburg Institute of International Economics (HWWI).

Hazen, H. D., & Alberts, H. C. (2006). Visitors or immigrants? International students in the United States. *Population, Space and Place, 12*, 201–216.

Körner, H. (1999). "Brain Drain" aus Entwicklungsländern. In P. Marschalack (Ed.), *IMIS-Beiträge, Nr. 11* (pp. 55–64). Osnabrück: ISIM.

Koser, K., & Salt, J. (1997). The geography of highly skilled international migration. *International Journal of Population Geography, 3*(4), 285–303.

Liebig, T., & Souza-Poza, A. (2004). Migration, self-selection and income inequality: An international analysis. *Kyklos, 57*(1), 125–146.

Massey, D. S. (1987). Understanding Mexican migration to the United States. *American Journal of Sociology, 92*(6), 1372–1403.

Mayda, A. M. (2005). International migration: A panel data analysis of economic and non-economic determinants. *IZA discussion paper* (Vol. 1590). Bonn: Institute for the Study of Labor (IZA).

Parey, M., & Waldinger, F. (2008). Studying abroad and the effect on international labor market mobility: Evidence from the introduction of ERASMUS. IZA discussion paper, 3430.

Pessar, P. R., & Mahler, S. J. (2003). Transnational migration: Bringing gender. *International Migration Review, 37*(3), 812–846.

Roed, M., & Stark, O. (1998). On the optimal duration of migration. In Y. Mundlak (Ed.), *The Eleventh World Congress of the International Economic Association* (2nd ed., pp. 133–146). Labour, food and poverty.

Silvey, R. (2004). Power, difference, and mobility: Feminist advances in migration studies. *Progress in Human Geography, 28*, 117.

Smith, D. P. (2004). An 'untied' research agenda for family migration: Loosening the 'shackles' of the past. *Journal of Ethnic and Migration Studies, 30*(2), 263–282.

Soon, J.-J. (2008). The determinants of international students return intention. *Economics discussion papers* (Vol. 0806). Otago: University of Otago.

SVR. (2012). Mobile talent? The staying intentions of international students in five EU Countries. Berlin: Sachverständigenrat deutscher Stiftungen für Integration und Migration (SVR) GmbH.

Thorat, S., & Newman, K. S. (Eds.). (2010). *Blocked by caste: economic discrimination in modern India*. New Delhi: Oxford University Press.

Van Dalen, H. P., Groenewold, G., & Schoorl, J. J. (2005). Out of Africa: What drives the pressure to emigrate? *Journal of Population Economics, 18*(4), 741–778.

van Dalen, H. P., & Henkens, K. (2008). Emigration intentions: Mere words or true plans? Explaining international migration intentions and behavior. *Discussion paper* (Vol. 2008–60): CentER. Tilburg: University of Tilburg.

Van Dalen, H. P., & Henkens, K. (2013). Explaining emigration intentions and behaviour in the Netherlands, 2005–10. *Population Studies, 67*(2), 225–241.

Vancluysen, K., & van Craen, M. (2010). *Integration and perceived discrimination: Two competing hypotheses tested among persons of Moroccan and Turkish descent in Belgium.* Paper presented at the QMSS2/ESF seminar measuring integration and discrimination. Paris: INED. Retrieved July 5–6, 2010.

Wijk, J. V. (2008). Reaching out to the unknown: Native counselling and the decision-making process of irregular migrants and rejected asylum seekers on voluntary return. In IOM (Ed.), *Out of sight: Research into the living conditions and decision-making process of irregular migrants in the main cities of The Netherlands, Germany and Austria*. The Hague: International Organization for Migration.

Zhao, Y. (2001). Causes and consequences of return migration: Recent evidence from China. Beijing: Beijing University, China Center for Economic Research.

Zweig, D., & Changgui, C. (1995). *China's brain drain to the United States: Views of overseas Chinese students and scholars in the 1990s*. Berkeley: Institute of East Asian Studies, University of California.

Chapter 10
Transferring Skills Upon Return: Matching Aspirations in the Host Countries with the Reality Back in India

Gabriela Tejada and Md. Zakaria Siddiqui

Abstract This chapter discusses the factors that influence the development aspirations of skilled Indians living in Europe and of those who have returned to India. While India is seen as a country that benefits from the positive effects of skilled migration, we have yet to develop a comprehensive understanding of the individual motivations that cause skilled Indians to apply their foreign-earned knowledge and skills to the development of the home country. There is also a shortage of evidence about whether these motivations actually materialise after return. Our analysis is an effort to uncover the factors that encourage motivated skilled returnees and diaspora members to effectively share their experience and knowledge for the broad-based development of India. Using a quantitative and qualitative analysis of the perceptions and expectations of skilled Indians, we identify the individual and home country factors that influence both their development aspirations and the changes to their social position after they return to India. While skilled Indians in Europe link their development aspirations to their return plans and believe that Indian society can benefit from their accrued expertise, they face several obstacles during the process of transferring knowledge to the local context. We observe that the desire to contribute to development is associated with disadvantageous identities and that socially underprivileged people

G. Tejada (✉)
Cooperation and Development Center, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
e-mail: gabriela.tejada@epfl.ch

Md. Z. Siddiqui
Centre for Regulation and Market Analysis, University of South Australia Business School, Adelaide, Australia
e-mail: zakaria.siddiqui@unisa.edu.auzakaria.jnu@gmail.com

Md. Z. Siddiqui
Institute of Development Studies Kolkata, Kolkata, India

register the greatest positive effects in terms of social position and influential role in society as a result of their foreign exposure. The findings point to important policy implications at an organisational and a country level i.e. for India and the European countries. At an organisational level, we suggest changes to the local work culture and structures to allow the skills and experience of the returnees to be recognised and harnessed effectively. At a country level, our analysis shows the need of policies and environments that facilitate the transfer of knowledge by returnees so that it can be used to promote balanced development in India.

1 Introduction

The link between migration and development has emerged as an important focus of scholarship in recent years, with studies showing that skilled migrants can assume an agency role, act as important bridges and help to promote the transfer of knowledge and skills between countries. In specific terms, skilled migrants in destination countries often undertake activities through scientific and academic collaboration as well as through entrepreneurial and investment projects that benefit their home country from a distance. If they decide to return to their home country, their foreign exposure may bring improved levels of knowledge, technical skills and further accumulation of human capital, thereby providing them with the potential to assume a leadership role within society and in their place of work. Return migration can also generate employment and raise productivity and might be viewed as a feedback effect of skilled migration.

Return migration operates within a particular context and, consequently, the social and institutional factors in the home country have a crucial role to play in enabling or hindering its positive effects. Evidence has shown that various determinants at a personal level, such as the nature of the skills flowing in and the length of the stay abroad (Cerase 1974; Gmelch 1980; King 1986) as well as those at a structural level, such as the type of opportunities available, can influence the potential of migrants to bring about innovation on their return and boost their chances of acting as carriers of social change in the home country (Black et al. 2003; Saxenian 2006; Chacko 2007). Studies suggest that thriving returnees successfully combine access to productive employment and an enabling environment, with the resulting possibility of influencing the home country.

This chapter looks at Indian skilled migration from a twofold perspective: countries of destination and country of origin. It examines two proximate determinants of migrants' behaviour towards the development of their home country; firstly, the aspirations of skilled Indians abroad towards the development of India based on an analysis of their perceptions and expectations with regard to the potential impact of their current activities in destination countries (diaspora); and secondly, the incidence of their international exposure on their professional and social position after their return to India, and the difficulties they face in the

dynamics of transferring the skills they have gained abroad (returnees). Evidence from past research into skilled Indians points to the contributions they make at an individual or community level by transferring their knowledge, skills and ideas either from abroad or upon their return. However, there is a lack of comprehensive understanding of both the development aspirations of skilled Indians abroad and whether these materialise after they return, and of the significance of different determinants, including the perception of opportunities that influence both their aims and their potential contributions. This chapter attempts to fill these gaps by offering new empirical evidence.

2 Conceptual Discussions on Return Migration

Recent developments in conceptual discussions calling for new approaches to international migration have been mainly based on two points. The first of these is the growing acknowledgement of current migration dynamics and patterns as being very diverse, complex and context specific (Özden et al. 2011; Collinson 2009; Wickramasekara 2002), while the second is the growing interest in the migration and development nexus. There is an increasingly common understanding that the extent to which migrants can positively impact their home country hinges on broad structural conditions, and this has swayed the change in key theoretical trends from a rather micro-level approach of individual behaviours to an understanding of migrants' decisions, strategies and consequences as influenced by broader transformation and development processes (de Haas 2008, 2012). Consequently, different approaches emphasise both the agency role of individuals, validating the spill-over effects of emigration benefits at the micro-level (Taylor 1999), and the structures that influence the actions of migrants and migration patterns in the broader sense (Cassarino 2004).

The study of return migration, which has gained prominence in both scholarly research and policy discussions as a consequence of the growing number of migrants who have returned to their home countries in recent years, also follows this conceptual trend. An attempt has been made to find the right balance between the agency role of migrants and the structural context that influences mobility decisions. The structural approach to return migration sees return as something influenced by the context, and it proposes moving the analysis beyond the experiences of individual migrants in order to take the socioeconomic conditions and policies of both the host and the home countries into consideration (Cassarino 2004; de Haas 2008). Adopting this perspective, recent studies have also examined the influence of particular situational and structural factors on migrants' strategies for transferring their skills and resources upon return, as well as on how these are used in the home countries, showing a combination of both migrant profiles and migration patterns on the one hand, and the socioeconomic conditions and policies in the home country on the other (Iredale et al. 2003).

Evidence shows that the main impact of return is at the micro (personal and household)- and meso (community)-levels, with a lesser impact at a macro (country)- level. At a personal level, the international exposure of migrants is associated with self-improvement relative to their circumstances prior to emigrating. This may be reflected in higher living standards as well as educational and professional benefits, which can be expected to influence their position in society and within their family and community upon their return. The leadership role that return migrants often play in their community, which involves behaviour and attitudes in the workplace and during social interaction and which is acquired by the migrants while abroad, is seen as a significant sociocultural impact of return migrants (Cerase 1974; Black et al. 2003; Black and King 2004). The motives or intentions, the age and career stage at the time of return, the length of the stay abroad as well as the specific host countries where the migrants lived all influence the level and forms in which migrants can impact their household or community. The length of stay abroad is important because people who have spent a reasonable period of time in a foreign country may have accumulated more work experience, skills and social capital in the form of networks, contacts and linkages (Bourdieu 1986) than those with shorter stays. As King (1986) has stressed, a sufficient, not too short stay abroad is necessary if migrants are to be of any use in terms of fostering modernisation in the homeland.

The magnitude of the contributions is also mentioned when the development impact is being assessed. For example, Wiesbrock (2008) shows that investments made by Indian and Chinese returnees, and the transfer of the expertise and specialised knowledge that they have accumulated abroad upon their return, do not occur on a massive scale and, therefore, she concludes that the impact on economic development for their countries is not all that substantial.

A question that has often been raised in recent research on return migration is whether returnees impact the home country by introducing new technical skills, knowledge, ideas, attitudes and working experience that are necessary for its socioeconomic development. Gmelch (1980) says that it is conceivable that in a society in which people are receptive to new ideas, returnees might play a significant role in bringing about change. However, various empirical studies highlight the difficulties that arise within the process of transferring knowledge and expertise acquired abroad after return to the home countries (Cerase 1974; King 1986; Ghosh 2000; Ammassari 2003; Black et al. 2003; Müller 2005; Wiesbrock 2008). One of the main observations of such studies underlines the significance of structural issues in the home country for enabling or hindering the transfer of skills and knowledge.

The contributions of return migrants are varied and depend on the nature of the environments to which migrants have returned. Going beyond the profiles and skills of the returnees, the impact of return migration is shown to be context specific. Iredale et al. (2003) show that the economic, social and political environment of the receiving home countries determines the potential contributions. The lack of an enabling institutional framework, which prevents return migrants from using the accumulated resources and skills gained abroad to their full potential, is also studied in the literature (King 1986). Diverse examples have

shown that benefitting from the return of skilled migrants is only possible when the home countries offer both an adequate infrastructure and suitable socioeconomic and political conditions (Gow and Iredale 2003; Saxenian 2006, 2011). In her studies on India and China, Saxenian (2011) argues that doing business upon return in large enough numbers is necessary to develop cross-regional networks in the home county and this requires political stability, economic openness and a certain level of economic development. There is a need to develop a local skills base and an entrepreneurship-supported infrastructure without any institutional obstacles to entrepreneurship-led growth. In other words, the way returnees act and how they see success are influenced by the constraints and enablers of the situation they have come back to.

Diverse empirical studies have offered evidence of specific obstacles. For example, in his study on Italian returnees from the USA, Cerase (1974) showed that local power structures together with scarce and limited material resources in the context of the home country significantly hinder the returnees' actions. He sees return as something innovative and influential only if the returnee's actions affect the economic structure and power relations of the community. Restrictive policies might also represent an obstacle to change; for example, studies of Chinese returnees have shown the need for institutional change and policies to enable entrepreneurial activities upon return (Müller 2005). In a similar vein, Khadria (2004) highlights the value of the knowledge, experiences and contact networks of skilled Indian returnees and laments the insufficiency of official efforts to tap into these resources.

The literature cites four main issues as influencing the possibility of applying specialised knowledge that has been acquired abroad: the sector of activity; the type of professional engagement (whether returnees go into paid employment or start their own business); the match between qualifications and labour market requirements; and the specific location that migrants return to. A recent empirical study on Indian returnee entrepreneurs concludes that while they are able to transfer the technical and specialised expertise acquired abroad to establish their businesses, they find it difficult to transfer the soft skills they have accumulated abroad, such as managerial expertise and professional culture (Biswas 2014). An open mind to change among work colleagues, an adequate infrastructure and a good business and entrepreneurial climate are important enablers of the capacity of migrants to apply the skills and resources gained overseas (Black et al. 2003; Ammassari 2003). Wiesbrock (2008) examines Indian returnees' experiences and shows that they are unable to apply their expertise in a satisfactory manner after their return because the home country lacks the capacity to process and take advantage of the technologies and specialised knowledge that they have acquired overseas.

A major concern when examining the transfer of skills upon return is the mismatch between the returnees' qualifications and the labour force requirements of the home country. Various studies show that some of the skills acquired abroad do not represent a higher productive capacity in the home country, and therefore, they are less useful within the local labour dynamic (Cobo 2008). Thomas-Hope's study (1999) on return migration to Jamaica in the late 1990s shows how that

country's need for engineers and skilled professionals went unfilled by returnees, who were mostly engaged in service sector activities, small farming or other areas that were not of primary importance for development. The location that migrants return to is also important. Gmelch (1980) states that the technical or industrial skills acquired by migrants are often not applied upon return, especially in rural areas which lack the necessary infrastructure. Recent research (CODEV-EPFL et al. 2013) shows that while the available infrastructure and employment prospects of the urban context are important pull factors that influence the location preferences of returnees, the people who return might be able to exercise a greater influence on the local community in rural areas where these facilities are lacking.

Further studies shed light on the influence that migrants' perceptions of the comparative aspects of socioeconomic environments regarding job and career opportunities, wage competitiveness, working atmosphere, lifestyle and living environment, etc. in home and host countries have on their migration projects in general, and on their return intentions to their home country in particular (Waldorf 1995; de Jong 2000; Iredale et al. 2003; Güngör and Tansel 2006; Soon 2008; Hercog and Siddiqui 2014). Van Dalen and Henkens (2008) found that dissatisfaction with the public domain in the home country influences both emigration intentions and actual emigration itself. Other studies show that the behaviour of migrants in the host society and their professional advancement and accumulated knowledge and skills are intertwined with the planning of their migration project. A recent study on African immigrant groups in Spain and Italy along these lines undertaken by de Haas and Fokkema (2011) illustrates the positive effect of education on return migration intentions and shows how the propensity of migrants to accumulate valuable work experience and skills while abroad might be seen as a response to their interest to increase their human capital, and consequently their productivity, when they return to their home country.

3 Analytical Strategy Based on Migrants' Perceptions and Expectations

This study offers a twofold analysis of both the Indian diaspora and returnees. Firstly, we explore the aspirations of skilled Indians abroad towards the development of their home country. Secondly, we examine the effect of the international exposure of skilled Indians on their professional and social position upon their return to India and the difficulties they face in the dynamics of transferring the accumulated skills they have gained abroad. We base our analysis on skilled Indians' perceptions and expectations, which are decisive factors in their behaviour. Migrants' expectations are a sum of both personal motivations and their subjective evaluation of the likelihood of achieving specific aims. Individuals' expectations regarding their goals determine their perceptions of the environment and their experiences. De Jong (2000) describes expectations as 'the act of looking

forward in anticipation of the future' (p. 307) and sees expectations as a dynamic concept in migration decision-making in the sense that they capture the process of assessing the future outcomes of alternative choices. If expectations are fulfilled, migrants will feel satisfied. On the contrary, they will feel disappointed if these expectations are not satisfied. Expectations could be influenced by the activity profile of migrants, their own professional and academic skills and their insights into available opportunities.

Some studies analyse the successful or failed experiences of returnees and consider the connection between migrants' expectations and the reality of the home country environment they are exposed to. The expectations 'lens' has been used as an analytical framework in the study of return migration to explain the linkage between migrant's perceptions of the environment and their expectations in terms of accomplishing their migration projects in such settings. The literature offers studies of migrants' expectations with regard to both the host countries—as part of their emigration plans—and the home countries—as part of their return plans. For example, an expectation-based approach was used some time back by Cerase (1974) to study the divergence between Italians immigrants' expectations and their actual life in the USA.

Similarly, Gmelch (1980) addresses the problem of transferring skills and resources gained abroad upon return from the perspective of the migrants' difficulties to readjust to the home country society because of the unrealistic expectations they often have of what the country will offer them. He argues that the process of readjustment upon return depends not only on the actual conditions and opportunities of the home country environment but also on the expectations of the migrants. Accordingly, he suggests addressing the issue of skills transfer upon return from two standpoints. Firstly, the socioeconomic conditions of returnees: whether they find a job that corresponds to their capacities, skills and expectations, which offers them the possibility of developing personal relationships and career prospects. From this viewpoint, re-adaptation is analysed and evaluated in terms of the satisfaction or dissatisfaction that the migrants express with regard to the previously mentioned objective criteria. Secondly, consideration is given to the migrant's own subjective perceptions of their readjustment process and the extent to which the home country has fulfilled, or not, their expected self-defined needs and imagined prospects, providing a sense of satisfaction or dissatisfaction.

How migrants prepare themselves for their move is important. Cassarino (2004) argues that migrants' preparation for their return to their home country determines their tendency to influence social change there. He stresses that the migrants' higher level of preparedness—willingness and readiness—to return enables a greater ability to mobilise resources on their own and influences greater possibilities for a successful return and a propensity to make a stronger contribution to development. In a similar way, a study on return migration to Ghana highlights the influence that information can have on a migrant's expectations. Beyond the significance of the propensity of returnees to adapt and a concrete enabling setting, the migrant's access to information regulates the pace of such an adaptation (Sabates-Wheeler et al. 2009); keeping abreast of the situation and opportunities in

the home country is necessary if false expectations are to be avoided. Portes (2001) points out that transnationalism and transnational linkages, such as the exchange of knowledge and ideas, regular visits and sending financial and social remittances, enable and facilitate migrants' reintegration in the local society upon their return.

4 Research Methods and Scope

This study draws on data collected simultaneously in the host and home countries between 2011 and 2012. On the one hand, we examined Indian scientists, students and skilled professionals residing in four European destination countries (France, Germany, the Netherlands and Switzerland). On the other hand, we studied Indian skilled returnees in the home country (India).[1] The operational definition of 'skilled Indian migrant' used for this study refers to Indian professionals or students residing in one of the four selected countries and who are specialised in ICT, finance and management, the biotechnology and pharmaceutical industry, academia and research, which were the four sectors chosen as a means of improving the representativeness of the sample. Respondents had to be first-generation migrants. The operational definition of 'Indian return migrant' used is a past or present non-resident Indian (NRI) or person of Indian origin (PIO—either the migrant or his/her parents should have been born in India), who had stayed abroad for at least a total of 6 months before returning to India (the total duration may include multiple stays abroad), who holds present employment status in India and has at least a Bachelor's degree.

The primary information was gathered in two complementary surveys. In the first survey, which was applied online, skilled Indians in the selected European destination countries were asked about their motivations for emigrating, their experiences in the host countries, their links with their home country, their future plans and their perceptions of their potential to contribute to the development of India. In the second survey, skilled Indian returnees were asked about their experience abroad, their motivations to return, their experiences upon return, the difficulties experienced when transferring the skills gained abroad, and their motivation to participate in the development process of India. This survey was applied face-to-face in six fieldwork locations: Kolkata, the National Capital Region (Delhi, Noida and Gurgaon), Hyderabad, Bangalore, Mumbai and Pune. These data were controlled with a group of skilled Indians without international exposure. The first survey was answered by 878 skilled Indians abroad,[2] and the second by 673 skilled Indians (527 returnees and 146 non-migrants).[3]

---

[1] This study is part of the project: 'Migration, scientific diasporas and development: Impact of skilled return migration on development in India' on which this volume is based.

[2] The total sample we used for the analysis included 835 individuals.

[3] See Chap. 6 of this volume for further details of the sample and methods.

In addition to the survey questionnaires, 30 in-depth interviews were conducted with professionals and postgraduate students of Indian origin residing in Europe; beneficiaries of scientific collaboration programmes with India; and some representatives of the embassies and consulates in India of France, Germany, the Netherlands and Switzerland.

5 Empirical Evidence from Europe: Diaspora

5.1 Development Aspirations from the Host Countries

Skilled Indians abroad show a high level of interest in India's regional and national development. Nearly 77 % of all respondents (or 529 people) consider it to be very important and 20 % (or 135 people) regard it as somewhat important (see Fig. 1).

Considering this high level of interest, we aim to assess the development aspirations of skilled Indians by examining their perceptions as to whether the activity they are carrying out in the host country could influence the socioeconomic development of India. The basic question guiding the analysis is: *Do you think your present activity could have an impact on the socioeconomic development of India?* We can observe that the vast majority of respondents (70.3 %) say that their present activity could have an impact on the socioeconomic development of India. In order to understand the aspects that influence their motivations, we analyse three factors: the skilled Indians' length of stay in the host country, their activity profile and their perceptions of the opportunities offered by India.

We can see that the length of stay and the main activity in the host country are two key determinants that influence skilled Indians' aspirations towards India's development. We see that the great majority of those Indians who had stayed in the destination country for between 1 and 6 years by the time of the survey are more likely to think that the activity they do can positively influence India. This also corresponds to more recent Indian migrants with stays of less than 1 year abroad. However, this all changes when we consider respondents with longer stays (more than 6 years). While the majority of these cohorts still feel that their present activity can have an impact, they do not feel so strongly about the possibility of influencing development in India. This shows that once the period of stay goes beyond 6 years, there is a significant fall in the ratio of people who think strongly that their current activity will benefit their home country (see Table 1).

Our results are in line with the outcomes of other research, supporting the idea that living abroad for longer tends to result in migrants integrating better into the local society, thus weakening their ties with the home country. Similarly, those who have been abroad for longer periods may be alienated from their social network in the home country. However, the literature has shown that being able to determine whether migrants' transnationalism and their interest in home country development is concurrent with their integration in the host country (Itzigsohn and

Fig. 1 Skilled Indians interest in home country development. *How important is the regional and national development of India to you?* *Source* European survey 2011–2012
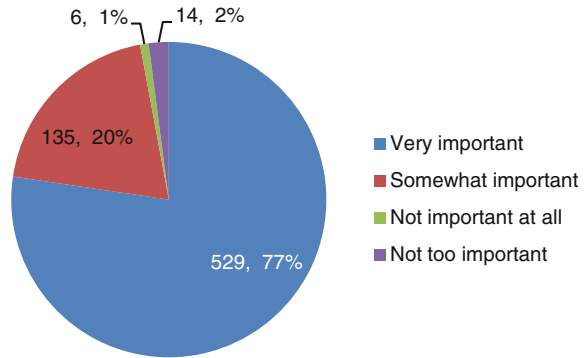

Table 1 Skilled Indians' interest in home country development by the length of their stay abroad

Length of stay abroad	Not interested (in %)	Interested (in %)	Total (persons in sample)
Arrived in 1990 or earlier	40.91	59.09	22
Arrived between 1991 and 2000	46.67	53.33	15
Arrived between 2001 and 2005	43.75	56.25	48
Arrived between 2006 and 2010	27.35	72.65	446
Arrived in 2011 or after	27.19	72.81	114
Total	29.46	70.54	645

Source European survey 2011–2012

Giorguli-Saucedo 2002) or whether it works along a different pathway (Portes et al. 2002) remains an empirical question that is still pending clarification.

The activity profile shows interesting qualitative differences between students and professionals with regard to the influence that the main activity of such skilled Indians in the host country has on their aspirations towards home country development. We can see that skilled Indians in training and education have a higher percentage of positive feelings about the possibility of impacting India's development through their present activity than professionals in paid employment (see Table 2). This may be due to the fact that students believe that the education and skills gained abroad can easily have a direct socioeconomic influence in India because they are still strongly rooted in their home country for social and emotional well-being. However, their real contribution might not be so significant because they lack the support of a social and intellectual network and also lack physical capital, while employed people can count on such support. Therefore, even if students are very concerned about India's development, this may not translate into real action, whereas a smaller percentage of concerned employed people can have a greater impact on development since they have the necessary infrastructure and the resources to back their intentions.

If we examine employed Indian skilled professionals only, we can observe that those working in academic and research institutions have more positive feelings about the possibility of impacting India (70.6 %) than those employed in the

Table 2 Distribution of the perceptions of one's current activity having an impact effect on the development of India

Activity	Not interested (in %)	Interested (in %)	Total (persons in sample)
Employed	65.2	34.8	221
In training and education[a]	75.1	24.9	413
Other[b]	55.4	44.6	56
Total	70.3	29.7	690

Source European survey 2011–2012

[a] *In training and education* includes persons on internships, MBA and PhD students as well as students with jobs

[b] *Other* includes people involved in housework, self-employed, retired and unemployed people

private sector (either in a multinational company (MNC) not originating from India, a local company or as self-employed), whose feelings are less positive (53.2 %). Only Indians working in a MNC originating from India have more positive feelings (90 %) about the possibility of impacting India (see Table 3).

An observation of the testimonies of our respondents indicates that skilled Indians who are academic and research professionals believe in the impact of science on society and they feel an attachment to their home country through their scientific activity. Since Indian scientists and researchers believe Indian society can absorb direct benefits from their activities, it is not surprising to see them address issues of significant importance in their research within areas that affect people both socially and economically. This is clear from the statement of one Indian scientist who said: 'I am currently researching renewable energy development in India. All my research in the Netherlands has been focused on development issues in India'.

Neuroscience, health, nutrition, agriculture, biotechnology, energy systems, epidemiology and labour and economics are some of the areas in which skilled Indians promote research collaborations with Indian scientists and encourage technology transfer and knowledge sharing. Furthermore, through their collaborations with India, they expect to potentially help students within their research fields to take advantage of international networks and exposure, especially those talented students who cannot afford to go abroad. They believe that they can contribute to the development of science in India, strengthen educational and research policies and reinforce India's scientific presence in the world. Enhancing economic opportunities was also mentioned as an important objective of Indian students. One said: 'Since I am pursuing my MBA, I can make a difference to the economy of India by creating opportunities, generating employment and business flows, and improving the quality of life of the masses'.

Other Indians believe that being part of a well-educated work force with enhanced skills and world-class managerial training is an asset for the development of the Indian economy; and their knowledge of Western cultures and environments would be useful for Indian companies seeking an ever-increasing share of foreign markets. Entrepreneurial ventures and business investments leading to

Table 3 Activity profile of skilled Indians employed and aspirations towards home country development

Categories of employment	No answer (in %)	Not interested (in %)	Interested (in %)	Total number of respondents
MNC originating elsewhere	11.9	40.48	47.62	42
MNC originating from NL/CH/FR/DE	6.49	38.96	54.55	77
MNC originating from India	0	10	90	10
Academia and research	4.41	25	70.59	68
Self-employed	23.81	23.81	52.38	21
Local company/institution	9.68	32.26	58.06	31
Total	21.5	23.32	55.18	249

Source European survey 2011–2012

employment opportunities is another way in which skilled Indians see themselves contributing, and indeed some of them have concrete plans to start their own businesses once they return. This is important for the home country—assuming these skilled Indians do actually return and have the capacity to establish formal business ventures—as they will create jobs and deliver income to the national authorities in the form of taxes.

We can observe that many Indians based in the European countries of the study imagine the possibility of impacting India through their return to the home country. Their specific return plans to accomplish their migration project back in India arise as a crucial motivation for their positive feelings regarding their potential contribution to development. The idea of giving something back to the motherland through their return is clearly visible in the testimonies of Indians in training and education, who are enthusiastic and feel committed to helping to build capacities and improve both research and education prospects there through the transfer of skills, specialised technical expertise and knowledge gained abroad. One of them said: 'Yes, I would like to contribute to my country by going back and taking up a teaching position at a public institution'. Another stated: 'I want to go back to India after my Postdoc and play a part in creating a big and productive mathematics research group'.

We can see also how skilled Indians are aware of the importance of preparing themselves for their return. A researcher based in Switzerland referred to this by saying:

> I was getting used to the idea of relocating to Bangalore. I am the type who wants to be professionally active, to be comfortable and to feel to fit in. I surely wanted to work and that's how I kind of plan to start my professional integration and I started to contact institutes and build a little professional network.

A prepared return increases the migrants' possibility of reintegrating successfully in the local context and raises their propensity to contribute to it (Portes 2001; Cassarino 2004).

5.2 Perception of Opportunities in India

Considering that available opportunities and perceptions of the environment determine migration projects, analysing the perceptions of living conditions in the home country can provide insights into return potential. As other empirical studies have shown, mobility plans are mostly based on a combination of both professional and family factors and our study of skilled Indians in the European countries examined confirms this trend. The return plans of skilled Indians are a reaction to a positive evaluation of the economic and professional prospects that India has to offer and are also a response to family ties. Therefore, we can state that the intentions of skilled Indians to return, and those who actually do return, may increase if they believe their home country can really provide them with an enabling socioeconomic environment setting with specific career and future prospects as well as being socially safe and trustful for living.

Skilled Indians were asked to rank five factors prevailing in India on a five-point Likert scale, indicating the evaluation they ascribe to each of them[4] (see Table 4). Observing their evaluations for each factor, we can see that the environment for work, education, business and investment opportunities are stronger attractions for skilled Indians than the social security and political situation. This is important insofar as it shows that they perceive the signal from the government that the economic, educational and business environment is improving, notwithstanding the fact that skilled Indians abroad may not be fully aware of specific government incentive programs. This is also supported by India's recent GDP growth rate in the overall context of global economic slowdown. However, this is not the reason for their evaluation of the social security and political situation, which they think is rather bad, and for which they suggest improvements in order to ensure a more secure and less corrupt setting that can properly cover their governance and environment needs. While their expectations in these issues may have increased after experiencing the social security systems and governance of European countries, there is also a general resentment, even within India, of the pervasive corruption and the unbalanced development.

Surprisingly, we found that the opportunities they feel India offers them in terms of jobs, education, business and investments and an adequate social and political environment do not influence their feelings with regard to their possibilities of impacting India's development. Accordingly, the discussion of our observations leads us to the conclusion that skilled Indians' aspirations to contribute to development of India are an emotional notion, based on a feeling of patriotism towards their motherland, and they are not formed on the basis of a factual evaluation of the opportunities that are currently available.

---

[4] Indian migrants were asked to rank their level of satisfaction with several social, economic and political factors that currently prevail in India. The participants were told to rate the satisfaction they ascribe to each factor using a five-point Likert scale which ranged from 1 (very bad) to 5 (very good).

Table 4 Perceptions of skilled Indian migrants about various factors currently prevailing in India

Ranking	Perceptions about various factors prevailing in India (in %)				
	Jobs	Education	Business	Social security	Political situation
Very good	18.44	12.15	19.7	3.11	1.63
Good	42.77	44.89	49.09	15.24	10.07
Neither good nor bad	27.14	30.37	24.24	31.51	29.78
Bad	8.55	8.89	5.15	34.17	31.7
Very bad	3.1	3.7	1.82	15.98	26.81
Total number of respondents	678	675	660	676	675

Source European survey 2011–2012

The skilled migrants' length of stay abroad, their activity profile and their perception of opportunities are three factors that are associated with the skilled migrants' aspirations towards their home country. An analysis of these determinants provides a picture of the different range of feelings of skilled migrants with regard to their conviction that their current activity in the host country could impact socioeconomic development in India. A larger proportion of skilled migrants with shorter lengths of stay abroad, those in training and education and those active in the research and academic sectors have positive feelings about the possibility of impacting socioeconomic development in India, which seems to make them feel confident of the knowledge and skills sets they possess and are willing to offer. These feelings may be rooted in an emotional well-being they associate with their home country rather than actual tangible actions and the possibility of exerting their accumulated knowledge and skills. Furthermore, skilled migrants' subjective perceptions of the return environment offered by India do not determine their motivation and predisposition to influence India in one way or another. We can therefore say that in this case Indian skilled migrants' expectations are not necessarily influenced by their insights into the prospects available in the home country.

6 Empirical Evidence from India: Returnees

This section presents some observations that skilled Indian returnees made on the survey. These observations are related to their development aspirations for their home country and the determining factors at a personal level and in terms of their social and professional position that influence their motivation to use the accumulated knowledge and technical skills gained abroad for the benefit of India. We also examine the impact of their return on society. Return is commonly thought of as a strong development factor when returnees are able to exert the resources, skills and knowledge gained abroad in the local context and to take advantage of their transnational networks and contacts for the benefit of the home country. By studying the dynamics of knowledge transfer by skilled migrants upon their return

and the difficulties that they face, we observe the terms in which they perceive that their international exposure has affected their professional and social position as well as their propensity to influence the people around them. In line with the notion of the expectations lens as a critical framework (Gmelch 1980), our analysis is based on the skilled migrants' own subjective perceptions of their readjustment process and their own assessment of their situation compared with the prospects that they had previously imagined.

6.1 Development Aspirations Upon Return

The respondents to our survey were asked if they had ever thought of participating in the development of India in a specific way (*Have you ever thought of taking part in the development of India?*). As we can see from the responses, a majority of the skilled Indian returnees surveyed (325 out of 527 i.e. about 70 %) had already thought about taking an active part in the development process of India by applying the accumulated knowledge and technical skills they gained abroad through research, academic training, social services, business and job creation. While this majority is to be found in all selected sectors of activity of the sample, there was a higher incidence among skilled Indians in academic and research positions where 87 and 75.3 % (77 and 154 persons), respectively, had already considered taking part in home country development (see Table 5).

We can also see that those returnees with a length of stay abroad of more than 2 years (75.5 % or 245 persons) have a higher incidence of considering taking an active part in India's development (see Table 6).

By analysing the influence of individual attributes on development aspirations, we can observe that the skilled Indians who have higher aspirations to contribute to India's development tend to be associated with disadvantaged identities in terms of gender, caste, religion and medium of elementary education. For example, 85 % of the female respondents to our survey have considered taking part in India's development while only 68 % of their male counterparts have felt the same. Similarly, 83 % of Indians belonging to a lower social category (reserved) feel strongly about contributing to India's development against 70 % of those who said they belonged to a higher social category (general), while the figure is 89 % for Muslims and 70 % for Hindus. We can also observe that Indians who received their schooling through a vernacular medium have stronger thoughts about taking part in home country development than those whose schooling was in English (76 % against 67 %). The fact that socially disadvantaged people such as women, dalits and Muslims feel more strongly about contributing to development might be a result of the contrast between the situation of inequality and deprivation that they faced in the home country and the freedom and rights they enjoyed in the host countries.

We found a positive association for development aspirations with education and age. The higher the education level and age of the skilled Indians, the greater their interest in home country development. This might be the result of an increase in

Table 5 Interest of returnees in home country development by type of position held

Type of position held	Yes (%)	No (%)	No answer (%)	Total number of respondent
Managerial	61.11	37.3	1.59	126
Technical	60.78	37.91	1.31	153
Researcher	75.32	9.74	14.94	154
Academic	87.01	10.39	2.6	77
Others	70.59	23.53	5.88	17
Total	69.26	25.05	5.69	527

Have you ever thought of taking part in the development of India?
Source Indian survey 2011–2012

Table 6 Interest of returnees in home country development by length of stay abroad

Length of stay abroad	Yes (in %)	No (in %)	No answer (in %)	Total number of respondents
Less than 6 months	63.16	35.53	1.32	76
From 6 months to 1 year	60.16	33.33	6.5	123
Between 1 and 2 years	69.88	26.51	3.61	83
More than 2 years	75.51	17.14	7.35	245
Total	69.26	25.05	5.69	527

Have you ever thought of taking part in the development of India?
Source Indian survey 2011–2012

people's consciousness about society at large, with higher accumulated experience and knowledge acquired through age and further education. We also observed that skilled Indians working in science, research and academia, which are sectors of activity that typically offer environments with a high level of freedom to participate in creative thinking, feel more strongly about contributing to India's development than people in managerial and technical positions, probably because they are more closely related to the local population and believe that society can absorb direct benefits from their actions. They might also be more willing to address issues of critical importance to the development of India in their scientific and research accomplishments.

6.2 Changes in Skilled Migrants' Position in Society and Their Influence on People Around Them

A question raised by our research is whether returnees impact home country development at a social level and in specific terms through the introduction of new skills, knowledge and ideas. We are interested in the effects that the international exposure of skilled migrants has on their position in society and on the people around them once they return to the home country. Skilled Indians gave their own

perceptions of the changes they have been able to introduce, firstly, to their own position in society, and secondly, to the people around them.[5] We observed that the foreign exposure of skilled Indians enables them to accumulate knowledge and skills, thus providing them with the possibility of influencing changes in their position in society. While 71 % of the skilled Indian returnees surveyed feel that their position in society has been positively or very positively affected by their overseas exposure, we can see interesting qualitative differences in the perception of such changes according to individual profile, activity profile (type of firm/institution, sector of activity, level of seniority), age, level of education and length of stay abroad.

6.2.1 Social Position

A larger proportion of people from a rural background (74 %) than their urban counterparts (71 %) feel that their social position was positively influenced by their overseas exposure. In addition, a higher share of women (77 %) than men (70 %) feel their foreign exposure has improved their position in society. Likewise, a larger proportion of Muslims (78 %) than Hindus (72 %) feel their social position improved as a result of their overseas exposure. The fact that women and people from religious minorities perceive a greater change in their social position is partially explained by the fact that they think they have been empowered against the discrimination and disadvantages they face in India. Surprisingly, a marginally higher proportion of respondents from the upper casts feel a positive change in their position in society compared to respondents from lower castes (71 and 66 %, respectively). This is partly because many people in the sample did not reveal their social category, and for those people, the feeling of positive change in their social position was very high (84 %).

  A higher proportion of respondents in research, academia and technical positions (76, 74 and 72 %, respectively) feel their social situation was positively affected by their foreign exposure, compared to respondents in managerial positions (65 %). This might be because of the fact that their profession allows them relatively more freedom to think and act. This is especially the case of those in research and academia, who have an opportunity to influence society more directly through their activities and are grateful for the fact that they can do so. As far as the type of institution in which skilled Indians work is concerned, we can see that a higher proportion of people working in academic and research institutions and national companies feel they have experienced positive personal development (84 and 87 %, respectively) than those working in MNCs or those who are self-employed (65 and 67 %, respectively). This might be down to two things; firstly,

---

[5] The two questions referring to these points put to skilled Indian returnees were: *In what way has your position in society been affected by your overseas exposure?*; and *In your opinion, how much influence do your ideas and opinions have on people around you?*

working conditions in MNCs are often very similar in India and abroad, and consequently, the feeling of positive change might not be so apparent to Indian professionals; secondly, self-employed people face specific difficulties to transfer their managerial expertise and professional culture back to India as shown by Biswas (2014), and these particular constraints have a negative effect on their feelings of personal development.

We observe that a higher proportion of middle-aged Indians (between the ages of 36 and 50) (76 %) experienced positive changes due to their foreign exposure in comparison to the younger (between the ages of 22 and 35) (67 %) and older age cohorts (between the ages of 50 and 99) (70 %). We also found a positive association between the level of education and personal development. A higher proportion of skilled Indians holding a PhD (75 %) experienced positive changes in their position in society compared to those with a Bachelor's (64 %) or a Master's degree (70). This might be the result of an increase in people's professional opportunities and social recognition with higher accumulated experience and knowledge acquired through age and further education. Furthermore, we can see a positive association between the level of seniority within the professional activity of skilled Indians and their personal development. A higher share of people at a senior level (72 %) experienced positive changes in their position in society compared to those in mid-level and mostly to those in entry-level positions (71 and 66 %, respectively). This shows that the higher the level of seniority, the greater the accumulated experience, and this in turn has an impact on personal development.

We found a positive association between the length of stay abroad and one's position in society. A higher proportion of those skilled Indians with a length of stay of 2 years or longer (75 %) experienced positive changes in their position in society in comparison to those with stays of 1–2 years (70 %) and those with even shorter stays (63 %). Migrants who have been abroad for a short period of time might not have experienced enough of the culture and new working methods in the host countries to have much of an influence in the home country. As King (1986) says, during short stays abroad, migrants only gain a little experience that is of any use in fostering modernisation in the home country. This shows that the longer skilled Indians stay abroad, the higher the accumulated experience they gain, and this in turn will make them experience personal development.

6.2.2 Influencing People Around

A further part of our research shows that the overseas exposure of skilled Indians grants them the possibility of influencing people around them as a result of the leadership role they might acquire, introducing changes to attitudes in the workplace and in society at large through their social interaction. Here, we also observed that the individual profile of migrants, their length of stay abroad, their activity profile and their social and professional position, including gender, determine the returnees' perceptions of the effect they have on people around them.

Table 7 Returnees' length of stay abroad and their influence on people around them

	Less than 6 months	Between 6 months and 1 year	Between 1 and 2 years	More than 2 years	Total
No influence at all	12.16	6.61	4.94	2.95	5.46
Little influence	52.7	42.98	40.74	36.29	40.94
A lot of influence	32.43	47.93	50.62	53.16	48.54
No answer/missing value	2.7	2.48	3.7	7.59	5.07
Total	74	121	81	237	513

Source Indian survey 2011–2012

We saw that women are more likely to influence their surrounding community, as a larger proportion of them (61 %) compared to men (47 %) feel that they have a lot of influence on the people around them. We also observed how age is very strongly related to the effect that respondents will have on others; 63 % of people from the oldest age cohorts (between the ages 51 and 99) think they have a lot of influence on people around them compared to younger cohorts (49 % for the 36–50 age group, and 41 % for those in the 22–35 age group). A larger proportion of people from rural backgrounds (60 %) than their urban counterparts (46 %) feel they have a lot of inspiration on the surrounding community and a higher share of respondents from the lower casts (58 %) than from the upper casts (46 %) also feel that they have a lot of influence on people around them.

Length of stay abroad is positively related to the possibility of exerting social influence. Accordingly, as the length of stay abroad increases, the influence that skilled Indian returnees have on people around them rises correspondingly. A higher proportion of those skilled Indians with a length of stay of 2 years or longer (53 %) feel they have a lot of inspiration on people near them in comparison to those with stays of 1–2 years (51 %), and those with even shorter stays (see Table 7).

We can observe that more people in academic and research positions (64 and 52 %, respectively) than those working in managerial and technical positions (50 and 36 %, respectively) feel they have a lot of inspiration on the surrounding community. About 60 % of people employed in senior positions reported that they have a lot of influence on people around them compared to 39 % of those in mid-level positions and 45 % of those at entry level.

6.3 Application of Skills Gained Abroad

Following our interest in identifying specific ways in which skilled Indians transfer their skills after their return through diverse and specific activities carried out in the home country, in an open question of the survey, the respondents in our study

Table 8 Examples of the application of foreign-earned skills by returnees in India

Examples	Number of respondents	(%)
Research and development	87	16.51
Teaching and training	89	16.89
Development of work culture and environment	82	15.56
Providing better services to the organisation	54	10.25
Consultancy services and development of own business	4	0.76
Sharing/transferring knowledge or expertise	57	10.82
Others	16	3.04
No answer/missing value	138	26.19
Total	527	100

Source Indian survey 2011–2012

were asked to give examples of how they have used the skills, experience, knowledge and ideas they gained overseas to contribute to their company, institute or business. While compelling proof of the transfer of knowledge is to be found in the regular communication between European and Indian professionals on issues that are important for development in India, our research does indeed show some of the more specific ways in which skilled Indians apply the skills they have gained abroad (see Table 8).

Skilled Indians in research and academic positions and those working in the academic sector mentioned exerting their skills gained abroad mostly in research and development activities and in teaching and training, while those in technical positions said that they mostly applied the skills gained overseas in the development of a work culture and environment and in providing better services to their organisation, and sharing and transferring their knowledge or expertise in their workplace. Even in the case of multinational companies, we observed that skilled Indians use the skills, experience, knowledge and ideas they have gained overseas to contribute to the development of a work culture and environment and to provide better services to their organisations and share and transfer their knowledge or expertise in the workplace. We can also see that skilled Indians professionals at a senior and middle level are those with the highest propensity of exerting the specialised skills and knowledge gained abroad to contribute to their institute, company or business. A majority of the returnees (73.6 %) felt that they effectively use their foreign-earned experience and knowledge in their current job. A small portion of our respondent returnees faced difficulties related to work culture (12 %) and infrastructure (12 %) in their current organisation, implying that the organisation would gain more if infrastructure and work culture issues could be resolved. Moreover, a few found it difficult to deal with the bureaucratic system of India (12 %) and this would have definitely affected their efficiency at work. Consequently, we can say that some individuals do face genuine hindrances in sharing and transferring the knowledge and skills they have gained abroad after they return to India.

7 Conclusions

This chapter looks at the perceptions and expectations of both diaspora members and returnees, and it examines the individual and home country factors that influence their actions towards the development of their home country. It observes the impact of the international exposure of Indian skilled migrants on their professional and social position upon their return to India.

Our study shows that the individual profile of Indian skilled migrants, their social identity, professional position and activity and their length of stay abroad determine their level of motivation and their aspirations to use their foreign-acquired knowledge and skills for the benefit of India. We found that education, age and length of stay are positively associated with development aspirations: the higher the level of education and the age of the skilled Indians and the longer the length of stay abroad, the greater their interest in taking part in home country development. This might be the result of an increase in people's awareness of society at large, with higher accumulated experience and knowledge acquired through age and further education.

Significant qualitative differences were found among the activity profiles of the skilled Indians with regard to the influence that their main activity in the host country has on their development aspirations. Skilled Indians working in research and academia feel a stronger commitment to India's development than people in managerial and technical positions do. This could be because they feel closer to the local population and believe that Indian society could absorb direct benefits from their scientific and research activities, or else this might be due to the high level of freedom to participate in creative thinking offered in those areas. Furthermore, a larger proportion of skilled Indians in training and education than professionals in paid employment have positive feelings about the possibility of contributing through their current activity. The discussions indicate that these feelings originate because of their emotional links to the homeland and their aspirations might not necessarily turn into tangible actions, whereas professionals in paid employment have stronger social and intellectual capital, providing them with a higher propensity to put their intentions into effect. By examining the influence that skilled Indians' perceptions of the local context in India has on their development aspirations, we found that the ambitions of migrants are not shaped by a real assessment of the opportunities and local environment offered by the home country, but rather they are an emotional construct grounded on a sense of loyalty towards the homeland.

Beyond development aspirations, our study also examined skilled Indian migrants' perceptions of how their accumulated knowledge and skills from their overseas exposure affect both their social position and their influence on Indian society after their return to India. At an individual level, qualitative differences in their perceptions of such changes arose according to their personal characteristics, social identity (including gender), professional position, level of education and length of stay abroad. For example, we found that women, people from religious

minorities and people from a rural background perceive a greater change in their social position. Moreover, a higher proportion of respondents in research and academia feel their social situation was positively affected by their foreign exposure, compared to respondents in managerial positions.

At a meso-level, we found that returnees' perceptions of the influence they have on people around them also differ according to their individual profiles, social identity, professional position and length of stay abroad. We found that length of stay abroad and age are positively associated with the returnees' level of influence on the people around them, and that more women than men feel their international exposure has a higher impact on the society.

We also found that skilled Indians in Europe—mostly students and researchers—link their development aspirations to their return plans and they believe that Indian society can benefit from their accumulated knowledge, skills and academic and scientific networks. However, the results of the Indian data show that they face a number of obstacles within the local system once they return to India. These are related to differences in work culture, resistance to change, the lengthy bureaucratic process and the lack of a suitable infrastructure, and these all hinder the transfer of the skills and knowledge they have accumulated abroad. Such obstacles have implications for both employers and policymakers.

A key finding of this study is that the desire to participate in development is associated with disadvantageous identities. By analysing the influence of individual attributes on development aspirations from both skilled Indians abroad and from returnees, we can see that those who have higher aspirations to participate in India's development tend to be associated with disadvantaged identities related to gender, caste, religion and the medium of elementary education. The fact that socially disadvantaged people such as women, dalits and Muslims feel more strongly about contributing might be the result of the contrast they experienced between a situation of deprivation and social inequality in the home country, and the freedom and rights they enjoyed in the host countries, and it might be that they would like to work for greater social equality. This suggests important policy implications, given that the knowledge transferred by these people would directly affect development among the deprived communities since they are intimately connected to the disadvantaged social groups of India. Enabling conditions at work and in the communities that support their engagement in social and professional activities upon their return and facilitate the transfer of their skills would help promote balanced development in India.

These findings invite us to a further discussion that should be contextualised in a broader and more complex problem related to deficiencies in the Indian education system and the country's broad social divisions. Drèze and Sen's (2013) argument stating that the Indian educational system ensures that only a few young Indians 'out of a huge pool' manage to attain an excellent education (including the possibility of going abroad) is in line with the general division between 'the privileged and the rest' in Indian society. According to the authors, this separation is not driven by specific purposes, but rather by 'economic and social inequality related to class, caste, gender, location and social privilege' (p. 128).

Our results also suggest that immigration policy in Europe should be friendlier to disadvantaged communities in the country of origin. Since the members of the disadvantaged community feel a strong commitment to home country development and intimately associate or socially connect with people who are worse off, their transfer of knowledge and their physical return are likely to impact where it is most needed. In other words, the marginal impact on India's development of a returnee or a diaspora member from a disadvantaged community would be far greater than a returnee who does not belong to such a community. This can be achieved through targeted scholarships for international students and by adapting already existing equal opportunity policies for admissions to universities and academic institutions and for hiring immigrants in the private and government sector in destination countries so that they correspond to patterns of discrimination prevalent in countries of origin rather than the destination countries.

Finally, since this study only focused on the private individual development perceptions and aspirations of skilled Indian migrants and did not include those who are actually affected, our research would benefit from further studies that examine the insights into other actors, from the immediate circles of the migrants and from society at large, who are influenced by skilled migration.

References

Ammassari, S. (2003). From nation-building to entrepreneurship: The impact of elite return migrants in Côte d'Ivoire and Ghana. Working paper. Sussex Centre for Migration Research. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.200.2376&rep=rep1&type=pdf. Accessed 13 March 2013.

Biswas, R. R. (2014). Reverse migrant entrepreneurs in India: motivations, trajectories and realities. In G. Tejada, U. Bhattacharya, B. Khadria, & Ch. Kuptsch (Eds.), Indian skilled migration and development: to Europe and back (Chap. 12 in this volume). New Delhi: Springer.

Black, R., & King, R. (2004). Editorial introduction: Migration, return and development in West Africa. *Population, Space and Place, 10*(2), 75–83.

Black, R., King, R., & Tiemoko, R. (2003). Migration, return and small enterprise development in Ghana: A route out of poverty? Working paper. Sussex Centre for Migration Research. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.2829&rep=rep1&type=pdf. Accessed 13 March 2013.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.

Cassarino, J. P. (2004). Theorising return migration: A conceptual approach to return migrants revisited. *International Journal on Multicultural Societies, 6*(2), 253–279.

Cerase, F. P. (1974). Expectations and reality: A case study of return migration from the United States to southern Italy. *International Migration Review, 8*(2), 245–262.

Chacko, E. (2007). From brain drain to brain gain: Reverse migration to Bangalore and Hyderabad India's globalizing high tech cities. *GeoJournal, 68*(2), 131–140.

Cobo, S. (2008). Cómo entender la movilidad ocupacional de los migrantes de retorno? Una propuesta de marco explicativo para el caso mexicano. *Estudios demográficos yurbanos 23*(1), 159–177.

CODEV-EPFL, IDSK, JNU, & ILO. (2013). Migration, scientific diasporas and development: Impact of skilled return migration on development in India. Final research report. http://infoscience.epfl.ch/record/188059/files/CahierCoop8-2013.pdf. Accessed 15 August 2013.

Collinson, S. (2009). The political economy of migration processes: An agenda for migration research and analysis. Working paper 12. Oxford: University of Oxford, International Migration Institute. http://www.imi.ox.ac.uk/pdfs/imi-working-papers/wp12-collinson. Accessed 13 March 2013.

De Jong, G. (2000). Expectations, gender and norms in migration decision-making. *Population Studies, 54*(3), 307–319.

Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. New Delhi: Penguin.

Ghosh, B. (2000). Return migration: Reshaping policy approaches. In B. Ghosh (Ed.), *Return migration: Journey of hope or despair?* (pp. 181–226). Geneva: International Organization for Migration.

Gmelch, G. (1980). Return migration. *Annual Review of Anthropology, 9*, 135–159.

Gow, J., & Iredale, R. (2003). Socioeconomic impacts of return migration: Developing a comparative framework. In R. Iredale, F. Guo, & S. Rozario (Eds.), *Return migration in the Asia Pacific* (pp. 169–180). Cheltenham and Northampton: Edward Elgar.

Güngör, N. D. & Tansel, A. (2006). Brain drain from Turkey: An investigation of students' return intentions. IZA discussion paper no. 2287. Bonn: Institute for the Study of Labor. http://www.econstor.eu/dspace/bitstream/10419/33812/1/529960982.pdf. Accessed 13 March 2013.

de Haas, H. (2008). Migration and development: A theoretical perspective. Working paper 9. Oxford: University of Oxford, International Migration Institute. http://www.imi.ox.ac.uk/pdfs/imi-working-papers/WP9%20Migration%20and%20development%20theory%20HdH.pdf. Accessed 13 March 2013.

de Haas, H., & Fokkema, T. (2011). The effects of integration and transnational ties on international return migration intentions. *Demographic Research, 25*(24), 755–782.

de Haas, H. (2012). The migration and development pendulum: A critical view on research and policy. International Migration, 50(3), 8–25. doi: 10.1111/j.1468-2435.2012.00755.x.

Hercog, M. & Siddiqui, Z. (2014). Experiences in the host countries and return plans: the case study of highly skilled Indians in Europe. In G. Tejada, U. Bhattacharya, B. Khadria, & Ch. Kuptsch (Eds.), Indian skilled migration and development: to Europe and back (Chap. 9 in this volume). New Delhi: Springer.

Iredale, R., Guo, F., & Rozario, S. (2003). *Return migration in the Asia Pacific*. Cheltenham and Northampton: Edward Elgar Publishing.

Itzigsohn, J., & Giorguli-Saucedo, S. (2002). Immigrant incorporation and sociocultural transnationalism. *International Migration Review, 36*(3), 766–798.

Khadria, B. (2004). *Human resources in science and technology in India and the international mobility of highly skilled Indians*. OECD STI working paper 2004/6. Paris: OECD. doi:10.1787/18151965

King, R. (1986). Return migration and regional economic development: An overview. In R. King (Ed.), *Return migration and regional economic problems* (pp. 1–37). London: Croom Helm.

Müller, C. (2005). Gründungspolitik und Transformation. Zur Rolle von Gründungen chinesischer Remigranten für die Entwicklung von Unternehmertum in Shanghai. *Zeitschrift für Wirtschaftsgeographie 49*(3/4), 237–254.

Özden, C., Parsons, Ch., Schiff, M., & Walmsley, T. L. (2011). Where on earth in everybody? The evolution of global bilateral migration 1960–2000. *The World Bank Economic Review, 25*(1), 12–56.

Portes, A. (2001). The debates and significance of immigrant transnationalism. *Global Networks, 1*(3), 181–194.

Portes, A., Haller, W., & Guarnizo, L. (2002). Transnational entrepreneurs: An alternative form of immigrant economic adaptation. *American Sociological Review, 67*(2), 278–298.

Sabates-Wheeler, R., Taylor, L., & Natali, C. (2009). Great expectations and reality checks: The role of information in mediating migrants' experience on return. *European Journal of Development Research, 21*, 752–771. doi:10.1057/ejdr.2009.39

Saxenian, A.-L. (2006). *The new argonauts: Regional advantage in a global economy*. Cambridge: Harvard University Press.

Saxenian, A-L. (2011). *The new argonauts*. Dublin: Diaspora matters. http://diasporamatters.com/wp-content/uploads/2011/05/Diaspora-Toolkit-Booklet-1.pdf. Accessed 13 March 2013.

Soon, J-J. (2008). The determinants of international students' return intentions. Economic discussion papers no. 0806. Dunedin: University of Otago. http://otago.ourarchive.ac.nz/bitstream/handle/10523/1131/DP_0806.pdf. Accessed 13 March 2013.

Taylor, J. E. (1999). The new economics of labour migration and the role of remittances in the migration process. *International Migration, Special Issue: Migration and Development, 37*(1), 183–203.

Thomas-Hope, E. (1999). Return migration to Jamaica and its development potential. *International Migration, 37*(1), 183–207.

Van Dalen, H. P. & Henkens, K. (2008). Emigration intentions: Mere words or true plans? Explaining international migration intentions and behavior. Center for Economic Research Center. Discussion paper no. 2008–60. Tilburg: University of Tilburg. http://arno.uvt.nl/show.cgi?fid=80064. Accessed 15 August 2013.

Waldorf, B. (1995). Determinants of international return migration intentions. *Professional Geographer, 47*(2), 125–136.

Wickramasekara, P. (2002). *Asian labour migration: Issues and challenges in an era of globalization*. International migration papers no. 57. International Migration Programme. Geneva: International Labour Office. http://training.itcilo.it/actrav/courses/2005/A3-00391_web/resources/migrant_labour/asian_labour_migration.pdf. Accessed 13 March 2013.

Wiesbrock, A. (2008). *Return migration as a tool for economic development in China and India*. IMDS working paper 3. New Delhi: International Migration and Diasporas Study Project (IMDS), JNU. http://www.jnu.ac.in/library/IMDS_Working_Papers/IMDS_Dec_2008_WP_3_31-500001.pdf. Accessed 13 March 2013.

Chapter 11
Return Migration and Development: Evidence from India's Skilled Professionals

Perveen Kumar, Uttam Bhattacharya and Jayanta Kr. Nayek

Abstract This chapter examines the contribution that skilled Indian return migrants make to the development of India, placing specific focus on the transfer of knowledge, skills and financial resources. The chapter offers convincing evidence to show that even though the decision 'to return or not to return' in contemporary migratory patterns falls largely within the domain of the employer and the immigration laws of the destination countries, opportunity structures available in India also have a crucial role to play. Besides contributing to personal development and living standards, overseas exposure has significant implications for the professions and organisations of migrants. Return migrants, especially academics and medical practitioners, see overseas exposure as an important component of image makeover in developing societies like India. Finally, the chapter argues that return migration could become an important lever for development, provided that the knowledge, skills and expertise gained abroad are channelled into the production process and suitable institutional infrastructure is created to support the endeavours of returnees.

P. Kumar (✉)
Sadanand Degree College, Chheolaha, Fatehpur, India
e-mail: perveen255@gmail.com

U. Bhattacharya · J. Kr. Nayek
Institute of Development Studies, Kolkata, India
e-mail: uttam.bhattacharya@gmail.com

J. Kr. Nayek
e-mail: j.nayek@gmail.com

1 Introduction

In the post-World War II period, and especially during the 1960s and ensuing decades, when migration was gradually recognised as part of a 'virtuous interaction' in which development is enhanced in the destination country as well as in the source country (Black et al. 2003), the issues of remittances and return in migration discourses have taken on a greater significance (Cassarino 2004). This understanding emerged primarily as a result of the growing scale of migration, particularly emigration from developing source countries to developed destination countries on the one hand, and the observations of scholars in the global North in mapping out the contribution of migration, perceived or potential rather than empirical or actual, to the countries of the global South on the other. Migration was largely perceived as a function of opportunities arising from labour shortages in the global North, and remittances and the eventual return of migrants lead to the development of the home countries, particularly those located in the global South. The emigration of surplus labour from developing countries to the countries of the developed North was seen as creating a balance between capital and labour that would eventually result in the development of the source countries of the migrants, most of which were located in the global South (Faist 2008). Consequently, 'remittances' and return migration emerged as the 'new development mantra' (Kapur 2004) in the contemporary discourse on migration, in which the movement of people across national borders can be viewed as an inevitable consequence of global economic policies and an essential requirement for the development of the source country as well as the receiving country.

Moving ahead from earlier paradigms (especially those of the twentieth century) where a majority of migrants moved to settle permanently in the destination countries, most of today's migration is temporary (GCIM 2005) and it involves frequent movement between the source and destination countries. Because of short periods of stay abroad and subsequent return and re-return, migration has attracted the attention of many, especially policymakers, state authorities and the civil society across countries, and it does so for a variety of reasons, ranging from security to the flow of financial resources, the transfer of knowledge, technology and skills, and above all, the contribution of various types of resources that are important for home country development. It is widely presumed that migration has important implications for the labour markets, distribution of national resources, equity considerations and human resource requirements of the country of origin as well as for the country of destination.

However, because of a lack of quantitative data about returnees and the relevant dimensions of their actual or intended expenditure and investment decisions, our knowledge of the magnitude and role of return migration in home country development has remained rather limited. Therefore, it seems quite pertinent to dwell, at least briefly, on the conceptual formulations of return migration, and then on the measureable dimensions of the contribution return migrants make to the home country. More specifically, it is necessary to identify the reflections or

empirical evidence on questions such as what is return migration? why do some people intend to stay permanently in the destination countries while some others return to their homelands? and how does return migration contribute to the development of the home country, i.e. which sectors get most out of the knowledge, skills and financial resources that returnees have gained while abroad? Keeping these questions in mind, the following section attempts to provide a brief overview of the debates concerning 'migration and development' in general and the role of return migration in home country development in particular.

2   Return Migration and Development: A Brief Conceptual Overview

The United Nations Department of Economic and Social Affairs estimates that the number of international migrants went up from 155 million in 1990 (2.9 % of the total global population) to about 214 million in 2010 (representing 3.1 % of the total global population) (UNDESA 2011). The increasing proportion of the migrant population indicates the importance of migration in the lives of people, whether it be as a means of searching for better economic, educational or social opportunities or avoiding the hazards of life. There are numerous studies about the motivations of people to migrate, their experiences in the new homes and the kind of hurdles they face to make their life liveable in the destination countries [e.g. Lazaridis (2000); Richards (2004); Mishra (2007); Wickramasekara (2008)]. Despite involving uncertainties and hardships of several kinds, migration provides the hope for a better life on the other side of the border. However, the notion of a 'better' or 'improved' life is becoming increasingly volatile, and to a certain extent, it is also becoming increasingly subjective. At a particular moment, one might decide to migrate to another country having perceived that there are better opportunities there, but this perception might change after a certain period and the same individual might return to the home country or migrate to another country, depending on the experiences and changing perception of 'better' opportunities. This tendency is more prominent among skilled professionals as they are the people who are best equipped to take advantage of the opportunities that open up in overseas destinations. Furthermore, it is also important to note that the forces of globalisation and constantly improving technology have increased the migration, eventual return and subsequent re-migration or re-return of skilled professionals among the countries of origin and destination.

Because of increasing complexities in contemporary migration patterns, especially those related to the skills composition of migrants, the diversification of destinations, and return to the home country or move to a third country, a precise definition of return migration is hardly feasible. However, two elements are very important when conceptualising return migration: the nationality of the migrants and the period of stay in a particular destination country or countries. This could refer to the return of those who stayed in a destination country or countries for a

few years as well as those who spent a large part of their career abroad before returning to their home country (Jonkers 2008). The period of stay in the country of origin may also be an important consideration. For example, the United Nations Statistics Division defines return migrants as 'persons returning to their country of citizenship after having been international migrants (whether short term or long term) in another country and who are intending to stay in their own country for at least a year' (UNSD 1998).

However, whatever factors are taken into account, the most essential question remains the same, i.e. why do migrants return and how does their return contribute to development in the country of origin? This central question has been dealt with from various viewpoints in the literature on migration. According to neoclassical economics, people migrate because of wage differentials between the sending and the receiving countries (Todaro 1969) and they would return to their home countries if their human capital were not rewarded in the manner they expect. On the contrary, the new economics of labour migration posits that return migration is the outcome of a calculated strategy and a result of the successful achievement of goals (Stark and Bloom 1985). The structuralist perspective contends that contextual factors, especially the social and institutional structure at home, play a crucial role in return migration. The contribution of returnees largely depends on the facilitating environment in the home society. If local structures do not support the adjustment of returnees, they might consider re-migration (Richmond 1984). Transnationalists emphasise the importance of capacity building, particularly in terms of financial and informational resources, and interconnections between the source countries and the receiving countries (Portes 1997; Green et al. 2008). Recognising the importance of social capital, inherent in relations between and among actors (Coleman 1988), social network theorists emphasise the role of social and economic relationships that returnees maintain and return only constitutes a step in the individual's overall migration project, with further opportunities for remigration and re-return (IOM 2005).

With the exception of the neoclassical perspective, the preceding discussion shows that each theoretical approach underlines the importance of return migration for the development of source countries. Solimano (2010) argued that among other things, return migration could increase the production of goods of superior technological content, the transfer of new technology and ideas to the source countries and the establishment of new contacts with advanced countries. By and large, the following factors determine the impact of return migration in the home country:

(a) annual flows and stocks of migrants in the destination country, i.e. the proportion of migrants out of the total population of the country,
(b) annual flows and stocks of migrants from the source country,
(c) duration of stay abroad and possibilities of obtaining permanent residence status in the destination country,
(d) development status (e.g. per capita income, technological advancement) of the destination country,
(e) skill composition of the migrants, i.e. highly skilled or low skilled or semi-skilled,

(f) investment opportunities in the home country and rate of return on investment compared to the destination country,

(g) governance and bureaucratic structure in the destination country and in the country of origin,

(h) basic infrastructure, including health and education,

(i) security concerns.

This is not an exhaustive list, and it could be extended further. However, in the current context, we might expect an empirical examination of these factors to provide some useful insights. Building upon some of these essentials, this chapter examines the contribution that highly skilled return migrants make to India in terms of the transfer of knowledge and skills, financial resources and the impact on their social position. This chapter is based on the empirical data collected for the study titled, 'Migration, scientific diasporas and development: Impact of return skilled migration on development of India'. The data were obtained from returned skilled Indians professionals engaged in five sectors: information and communication technology (ICT), finance and management, pharmaceutics and biotechnology, medicine (doctors), and academia in the field of science and technology. The total sample for the study consisted of 673 respondents—527 skilled return migrants (those who have stayed abroad for at least 6 months in their career) from these five sectors and 146 non-migrant skilled Indian professionals (those who have not been abroad for work but who intend to migrate if given a chance in the future) from the same sectors. With the exception of migration experience, the non-migrants possess almost the same qualifications and experience. The field work for the study was conducted between July 2011 and March 2012 at five major hubs for return migrants—Delhi NCR, Kolkata, Bengaluru, Hyderabad, and Mumbai and Pune.[1]

3 Return of the Skilled Indian Professionals: The Context and Motivation

Ever since migration first started to attract the attention of people some time ago, a good amount of literature has been produced on the motivation to migrate. Numerous studies have found that people mostly migrate to find better opportunities and improve their social and economic status (McKeown 2004; de Hass 2010). However, the scholarship on the motivation to return and its development impact in the home country, especially with regard to the return migration of skilled professionals, is rather naive and limited. Return migration began to capture the attention of academics and policymakers during the last quarter of the twentieth century and the emphasis was on how return migrants could bring knowledge, skills, financial resources, investment capability and social capital

---

[1] A detailed profile of the sample respondents is given in Chap. 6 of this volume.
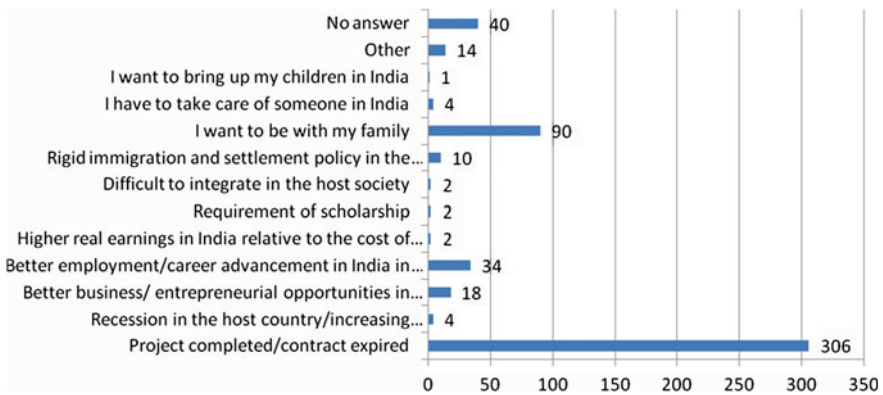
Source: Field survey in India, 2011–2012

Fig. 1 Motivation for returning to India

with them and how these could be used for the development of their home countries (King 1986; GCIM 2005; ILO 2007; Chacko 2007; Klagge et al. 2007).

India, a developing source country, experienced a massive exodus of its highly skilled human resources to developed countries throughout the latter half of the twentieth century (Khadria 1999). The migration of engineers and doctors from the leading higher education institutions was especially notable and the country lately embarked on a policy of recognising the (potential) contribution that the diaspora makes to its development (Kapur 2010). Besides focusing on the financial contributions of the Indian diaspora, attempts have also been made to attract highly skilled Indians from abroad by providing better infrastructure and creating an environment that is conducive to investment and employment. As a consequence, some of the country's cities, such as Bengaluru and Hyderabad, have became hubs for skilled Indian returnees (Khadria 2004). In order to further examine the prevalence of the return migration of highly skilled Indian professionals, this section seeks to identify the specific factors that have motivated them to come back to India.

In the context of the contemporary patterns of skilled migration, it is important to note that the decision to return (or not return) falls primarily within the domain of the employer. As shown in Fig. 1, a large majority of returnees (306 out of 527 representing 58.06 %) returned to India because they had completed their projects. The reason for 'project completed/contract expired' being singled out as the most important factors might be due to the nature of the sample, as almost half of the returnees included came from two sectors, ICT (36.81 %) and finance and management (11.39 %). A fairly significant proportion of employees in these sectors went abroad on short-term contracts and return formed part of the contract itself. Moreover, quite a large number of those in academia (44.02 % of the returnees in the sample) had experienced overseas exposure on specific academic assignments

and they had no choice but to come back after the expiration of their term. A desire to reunite with the family was the second most important factor, motivating over 17 % of the migrants to come back to India. Better employment opportunities and career advancement in the sector concerned, together with better business and entrepreneurial opportunities in India relative to the destination country, motivated about 10 % of returnees to come back to India.

These findings reveal that whereas majority of Indian migrants returned to India after the completion of their project assignments, some of the skilled returnees came back with a view to exploiting the new growth opportunities available or emerging in India. These findings corroborate the results of Chacko (2007), who argues that Indians are motivated to return by the exciting work experience and opportunities for growth, and the possibility to reintegrate with their family. Interestingly, 'recession in the host country/increasing unemployment rate in the labour market overseas' was not found to be a prominent cause of return. Furthermore, it is important to note that 10 returnees mentioned 'rigid immigration and settlement policy in the destination country' and another two returnees cited 'difficulties in integration in the host society', as major determining factors for their return to India. Considering the size of the sample, these numbers may not appear to be representative, but they certainly point towards significant issues and corrective measures that need to be addressed by the migration policy of the destination countries.

The study also examined the factors that helped returnees to choose a particular city in which to locate after their return to India. Hometown (28.08 %), location of place of work (22.20 %), determined by employer (21.44 %) and residence of parents or close relatives (17.46 %) were found to be major influencing factors determining the Indian city in which to locate. Parents or close relatives living in that city (26.03 %), hometown (25.34 %), company or sector of choice is based in the city (18.49 %) and employer's decision (15.75 %) were found to be major influencing factors in the case of the non-migrants (Table 1). It is clear that the reasons for selecting a particular Indian city were found to be somewhat similar for both returnees and non-migrants. These findings further validate and reaffirm the argument that returnees tend to settle in a city that not only keeps them closer to their family and community members but also provides opportunities for employment and self-development (Beaverstock and Smith 1996; Yeoh and Chang 2001; Yusuf and Wu 2002; Castles and Miller 2009).

4   Return of Skilled Indian Professionals and Development at Home: A Subjective Assessment

While there is a considerable amount of literature on the impact that international migration has on receiving countries, the evidence about its impact on source countries (Hanson 2010), especially the impact of skilled returnees, is still limited. In order to fill this gap, this study examined the perceptions and experiences of

Table 1 Major influences on decision to locate in a particular city upon return (%)

S. N.	Influences on decision	Returnees	Non-migrants
1	My parents/close relatives live here	17.46	26.03
2	My hometown	28.08	25.34
3	Decided by my employer	21.44	15.75
4	The company/sector I wanted to work in is based here	22.20	18.49
5	Scope for self-employment/entrepreneurship	0.38	0
6	Emerging state government support	0.19	0.68
7	Better remuneration packages relative to cost of living	0.19	0.68
8	Good educational institutions for children	1.90	2.74
9	Good health facilities	0.19	0
10	Living environment of the city	1.71	2.74
11	Other	0.57	1.37
12	No answer	5.69	6.16
	Total	**100**	**100**

Source Field survey in India (2011–2012)

return migrants and non-migrants with regard to the impact that highly skilled returnees have on India's development. A majority of respondents from both groups, representing almost four-fifths of the returnees and non-migrants, felt that it would have an impact (Fig. 2). Importantly, 15 out of the 527 returnees expressed disagreement, mainly for reasons such as the unhealthy bureaucracy, which is a dominating feature of the institutional culture of India, rather than as a result of the limitations of the return migration *per se* (Box 1). Moreover, 16 non-migrants (about 11 %) also expressed their disagreement with the development impact of return migrants.

Table 2 contains the perceptions of returnees and non-migrants of the potential ways that skilled Indian returnees can contribute to the development of India. It is interesting to note that more than half of the respondents from both groups said that 'highly skilled Indian returnees can contribute 'substantially through their knowledge, skills and experiences, especially in the field of scientific and economic research and development'. Other important channels of engagement could be the development of a good work culture, upgrading infrastructural facilities, bringing innovation, opening up of more investment avenues and creating better employment opportunities. Some returnees also expressed their apprehension about the possibility of the contributions of returnees being related to the personal traits of the individual return migrant on the one hand, and the bureaucratic environment and inefficient administration in the country on the other (Box 1). Based on these perceptions, the present section attempts to stimulate discussion on return migration and its development impact in India. It examines the development consequences of return migration through three main channels: the transfer of knowledge capital, financial resources and changes in social status.
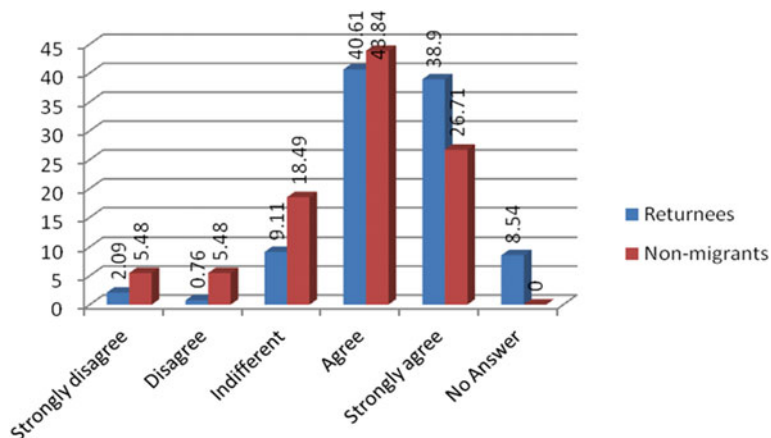
Source: Field survey in India, 2011–2012

Fig. 2 Perceptions of returnees and non-migrants regarding the impact of skilled returnees on India's development (%)

Table 2 Perception of returnees and non-migrants about the potential ways of contribution of skilled return migrants in India (%)

S. N.	Potential ways in which return migrants contribute to the development in India	Returnees	Non-migrants
1	Highly skilled Indian returnees can contribute substantially through their knowledge, skills and experiences, especially in the field of scientific and economic research and development	56.79	56.16
2	They can bring a good work culture, better investment and innovative ideas	9.11	8.22
3	Return migrants can contribute to infrastructural development and supplement governmental support in the social sector	3.42	6.16
4	They can create better employment opportunities and give a qualitative uplift to people	2.09	0
5	They come for personal development, not for the sake of the nation	0.76	5.48
6	India does not need any returnees because it has an abundance of highly skilled human resources	0.59	3.42
7	The return depends on the individual's choice	3.04	4.79
8	It is difficult for returnees to contribute fully in the current bureaucratic environment	0.76	0
9	Others	5.69	4.11
10	No answer	18.41	11.64
Total		**100**	**100**

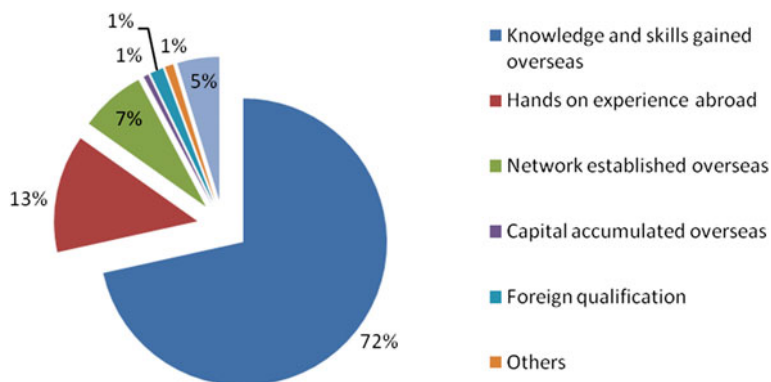*Source* Field survey in India (2011–2012)

Box 1: Structural Bottlenecks Limiting the Development Impact of Return Migration

A number of respondents—returnees as well as non-migrants—especially those in academia, made candid observations about the bottlenecks that limit returnees from fully contributing to the cause of development in India. For example, a lecturer at the Indian Institute of Science (IISc) in Bengaluru expressed his angst and frustration with the bureaucracy and red-tape that is prevalent in the country. He pointed out that it takes a very long time for a paper to pass through several channels before the work finally gets done. Moreover, one cannot be sure whether the paper will get all the necessary clearances without having to personally approach the authorities concerned. His frustration represents the common observations of returnees (and non-migrants as well) about the larger issues of corruption in society and their perilous linkages to development. For people such as this lecturer, the skills and resources of return migrants are important, but what is more important is to have a system in India that is conducive to development.

4.1 Knowledge Capital: Transfer of Knowledge, Skills and Experiences Upon Return

A host of migration scholars have argued that returnees are the 'bearers of newly acquired skills and innovative and entrepreneurial attitudes' (King 1986). Return migrants, especially highly skilled ones, can play a significant role in the social and economic development of their home countries by supporting or facilitating knowledge transfer from abroad. This view is also reflected in the address that Indian Prime Minister Atal Bihari Vajpayee made on the occasion of the first Pravasi Bhartiya Divas (Overseas Indians Day) in January 2003 when he made an appeal to the 'distinguished' participants stating that '… we want your ideas. We do not want your riches; we want the richness of your experiences' (quoted in Kapur 2010). A large majority of respondents in the present study were also of the view that the transfer of knowledge capital could be an important channel of engagement between return migrants and India.

Figure 3 shows that a majority of returnees felt that their overseas exposure, particularly their knowledge and skills, had had a substantial impact on their personal development. 'Knowledge and skills gained overseas' was identified as the most important element for the current work or business of the returnees. This was followed by 'hands-on experience abroad', while 'networks established overseas' was the third most important element used by the returnees in their current occupation. Surprisingly, only a very small proportion of the returnees felt that the capital accumulated overseas and their foreign qualifications were of any

Source: Field survey in India, 2011–2012

Fig. 3 Most influential element of foreign stay in the current occupation of returnees

significant value for their current job. When asked to expand upon the exact nature of the application of their overseas exposure in their current occupation (i.e. its application in the development of their company, institute or business), about half mentioned activities such as research and development, teaching and training, and changes in the work culture and environment. About one in ten of the returnees felt that they added to the growth of their organisation by providing better services. It is also worth mentioning that about a quarter of the returnees were not able to identify the exact nature of the contribution that their overseas exposure made to their present occupation (Table 3). However, during the field work it was widely observed that a relatively significant number of returnees, especially those from the academic sector, were apprehensive about the contribution of return migrants to development at home. Some of them were of the opinion that it largely depends on the adjustment capabilities of the returnees on the one hand, and the kind of support structures provided by the institutional surroundings on the other (Box 2).

> **Box 2: Global Knowledge, Local Context**
> A lecturer in life sciences at Hyderabad Central University said that he had returned to India a long time ago, after completing his PhD abroad. He had continued his research in similar areas with his students, using the tools and methodology that he had been exposed to during his time abroad. However, now as he nears his retirement, his feeling is that replicating foreign models in the local context is not valuable enough. He thinks that it would have been better if he could have identified specific local needs and mobilised resources for the benefit of society. Observations of this kind can also be found in other scholarly discourses on migration. For example, Castles and Kosack (1973) argue that migrants are often unable to apply their knowledge and skills in their home country, especially since they find it difficult to match the cultural context.

Table 3 Application of knowledge, skills and experience gained overseas to contribute to the company/institute/business at home

Contribution Sector	Research and development	Teaching and training	Development of work culture and environment	Providing better service to the organisation	Consultancy services and development of own business	Sharing and transfer of knowledge and experience	Others	No answer	Total
Information and communication technology (ICT)	12 (6.19)	29 (14.95)	41 (21.13)	38 (19.59)	1 (0.51)	31 (15.98)	6 (3.09)	36 (18.56)	194 (100)
Finance and management	4 (6.67)	6 (10.00)	14 (23.33)	6 (10.00)	1 (1.67)	4 (6.67)	1 (1.67)	24 (40.00)	60 (100)
Pharmaceutics/ Biotechnology	1 (6.25)	6 (37.50)	1 (6.25)	1 (6.25)	0 (0.00)	7 (43.75)	0 (0.00)	0 (0.00)	16 (100)
Medicine	1 (7.69)	0 (0.00)	4 (30.77)	2 (15.38)	1 (7.69)	1 (7.69)	0 (0.00)	4 (30.77)	13 (100)
Academia	66 (28.45)	47 (20.26)	21 (9.05)	6 (2.59)	1 (0.43)	14 (6.03)	9 (3.88)	68 (29.31)	232 (100)
Other	3 (25.00)	1 (8.33)	1 (8.33)	1 (8.33)	0 (0.00)	0 (0.00)	0 (0.00)	6 (50.00)	12 (100)
Total	**87 (16.51)**	**89 (16.89)**	**82 (15.56)**	**54 (10.25)**	**4 (0.76)**	**57 (10.82)**	**16 (3.04)**	**138 (26.19)**	**527 (100)**

Note Figures in parentheses denote percentages.
Source Field survey in India (2011–2012)

Table 3 shows a sector-wise analysis of the application of knowledge, skills and experience gained overseas by returnees to their current organisation in India. A careful observation of the table reveals some notable differences among the return migrants in the five sectors studied in this research. It shows that a significant majority of the returnees from the ICT (21.13 %) and 'finance and management' (23.33 %) sectors apply their knowledge, skills and experience gained overseas to the development of a work culture in their present occupation. 'Providing a better service to the organisation' (19.59 %), sharing and transferring knowledge and experience' (15.98 %) and 'teaching and training' (14.95 %) were other important ways of applying the knowledge and experience identified by the returned skilled professionals from the ICT sector in the development of their organisation in India. Notably, only a very small number of returnees from ICT, finance and management, pharmaceutics/biotechnology and medicine were found to be using the skills and experience gained overseas in research and development. On the contrary, almost half of the returnees from the academic sector utilise their overseas experience in research and development, and teaching and training. Only one-tenth or so of the returnees from the academic sector said that they used their skills in the development of a work culture. The pharmaceutical sector was the only sector where about half of the returnees were found to be applying their overseas knowledge within their organisations through the sharing and transfer of experience.

## 4.2 Financial Resources: Remittances and Investment

Remittances have gained wide recognition in the discourses on the linkages between migration and development (Appleyard 1992; Faist 2008). In many countries of origin, remittances constitute 'an important and stable source of development finance' (World Bank 2003) and make a significant contribution to Gross Domestic Product (IOM 2010). Being recognised as one of the largest recipient countries of remittances in the world, India has also attracted a lot of attention in recent decades. With an estimated US$69 billion in 2012, India was the largest remittance-receiving country in the world (World Bank 2013). It was within this context that the present study tried to find the beneficiaries of remittances [i.e. those to whom the migrants (now returnees) sent remittances], and for what purpose. Table 4 reveals that an overwhelming majority of returnee respondents (62.43 %) did not disclose any information related to the sending of remittances while they were abroad. This might be due to a general hesitance among the returnees to reveal their financial matters, which is a very common characteristic of Indian society. Therefore, the analysis of the transfer of financial resources is based on the information shared by the remaining (about 38 %) returnees. Further, it is interesting to note that the non-response rate is the lowest in the academic sector (53.45 %), while the highest rate is in the medical sector (above 90 %).

Table 4 Major recipients of remittances from returnees (while they were abroad)

Sector/Recipient	ICT	Finance and management	Pharmaceutics/ Biotechnology	Medicine	Academia	Other	Total
Family member	61 (31.44)	23 (38.33)	4 (25.00)	0 (0.00)	107 (46.12)	1 (8.33)	196 (37.19)
Charity organisation	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.43)	0 (0.00)	1 (0.19)
Any other	0 (0.00)	0 (0.00)	0 (0.00)	1 (7.69)	0 (0.00)	0 (0.00)	1 (0.19)
No answer/Missing value	133 (68.56)	37 (61.67)	12 (75.00)	12 (92.31)	124 (53.45)	11 (91.67)	329 (62.43)
Total	**194 (100)**	**60 (100)**	**16 (100)**	**13 (100)**	**232 (100)**	**12 (100)**	**527 (100)**

*Note* Figures in parentheses denote percentages.
Source Field survey in India (2011–2012)
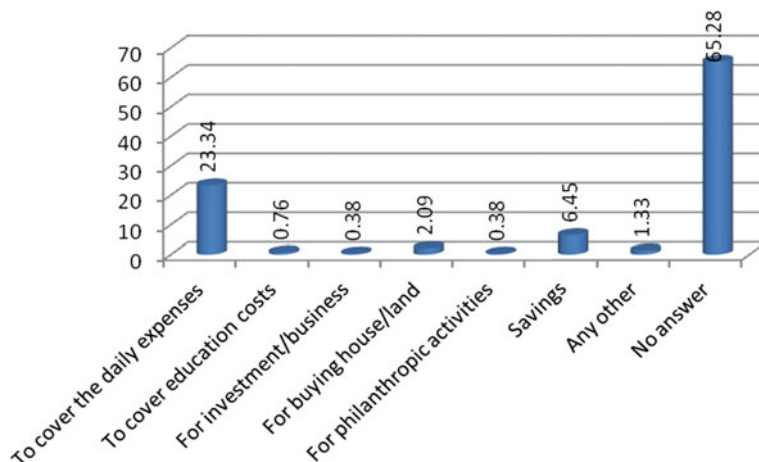
Source: Field survey in India, 2011–2012

Fig. 4 Purpose of sending remittances by returnees (%)

Various studies have found that a large part of remittances is spent on various consumer goods, with the remaining small part being saved, invested or spent on entrepreneurial or philanthropic activities (Russell et al. 1990; Fischer et al. 1997). For example, a study conducted by the Reserve Bank of India showed 61 % of remittances being 'utilised for family maintenance (i.e. to meet the requirements of migrant families in food, education, health, etc.)', about 20 % is deposited in bank accounts and about 4 % is used for land-related property (RBI 2010). This study found that nearly one quarter of the remittances were sent to meet the day-to-day expenses of family members during the time that these returnees were living abroad, while the proportion of remittances saved or spent in the social sector on aspects such as education and other philanthropic activities is very meagre (Fig. 4). One important reason for this deviation from the earlier evidence, as observed during the field work, might be the fact that a majority of return migrants could only send small amounts to their families as they had gone abroad for a short duration, and these sums were not sufficient to invest in land or to make substantial contributions to philanthropic causes. The study also examined the investment patterns of returnees and non-migrants during the last 5 years and it found striking similarities between the two groups. A majority of the respondents in both groups invested in housing. Besides housing, durable consumer goods used up a considerable share of their financial resources. After attending to the basic consumption requirements of their families, both the returnees and the non-migrants tended to invest in business and the stock market, and they spent a small proportion on social services (Fig. 5). It is evident from these findings that short-term stays abroad have a limited impact on development through the financial channel.
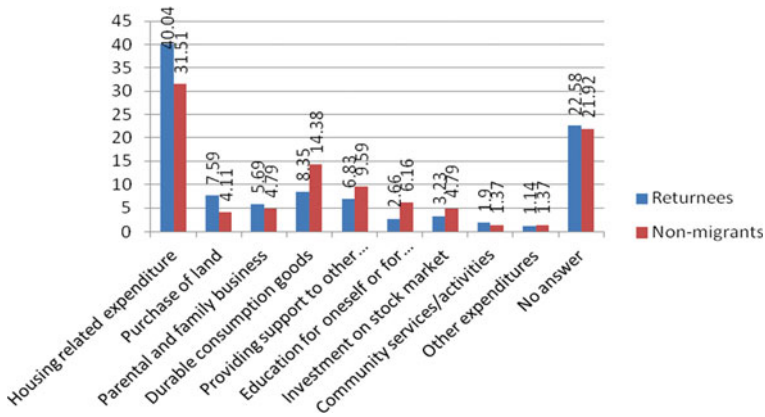
Source: Field survey in India, 2011–2012

Fig. 5 Investment by returnees and non-migrants in India, by purpose (%)

4.3 Impact of Overseas Exposure on the Status of Return Migrants in Society

Migration allows individuals to come into contact with other people and interact with locals as well as other immigrants in the host societies. This interaction would have obvious consequences for the migrants after they return and for the societies that they return to. However, the impact of such interactions largely depends on the 'absorptive capacity' of the region (Cohen and Levinthal 1990) on the one hand, and the accommodating capacity of people in the home society on the other (Bastian 2006). In this context, the present section examines the impact of foreign exposure on the position of returnees in society, through variables such as the earnings of returnees, the standard of living, the influence on the people around them.

Table 5 compares the earnings of return migrants in India with their earnings while they were abroad. It shows that the earnings of about one-third (36.81 %) of the returnees had not changed much since their return. This could be primarily due to the fact that many returnees only spend a short period abroad and re-join their organisation in India in the same capacity after their return. What is really surprising, however, is that the income of approximately 30 % of returnees is lower than it was when they were abroad. Two important conjectures are worth mentioning in this regard: one, the withdrawal in India of the local allowances that the returnees received while abroad, particularly in the ICT and finance and management sectors, and two, some returnees, especially those who were not linked to any contractual project or assignment, could not find a job commensurable with their qualifications and expectations. For example, one respondent, who had been in Europe for more than a year, returned to India after losing his job because of the recession. Being highly educated, the returnee expected to find a decent job in

Table 5 Annual earnings of returnees in India compared to their income abroad

Sector	Current annual income of returnees in comparison to earlier income earned abroad						Total
	Much lower than before	Lower than before	Not much change	Higher than before	Much higher than before	No answer	
Information and communication technology (ICT)	6 (3.09)	48 (24.74)	81 (41.75)	44 (22.68)	1 (0.52)	14 (7.22)	194 (100)
Finance and management	2 (3.33)	17 (28.33)	23 (38.33)	14 (23.33)	1 (1.67)	3 (5.00)	60 (100)
Pharmaceutics/Biotechnology	1 (6.25)	8 (50.00)	4 (25.00)	1 (6.25)	0 (0.00)	2 (12.50)	16 (100)
Medicine	0 (0.00)	1 (7.69)	5 (38.46)	4 (30.77)	0 (0.00)	3 (23.08)	13 (100)
Academia	36 (15.52)	33 (14.22)	73 (31.47)	37 (15.95)	5 (2.16)	48 (20.69)	232 (100)
Other	0 (0.00)	3 (25.00)	8 (66.67)	0 (0.00)	1 (8.33)	0 (0.00)	12 (100)
Total	**45 (8.54)**	**110 (20.87)**	**194 (36.81)**	**100 (18.98)**	**8 (1.52)**	**70 (13.28)**	**527 (100)**

Note Figures in parentheses denote percentages.
Source Field survey in India (2011–2012)

Table 6 Change in family standard of living of the returnees

Change in family standard of living	Number of returnees	Percentage
In a very negative way	2	0.38
In a negative way	7	1.33
No change	182	34.54
In a positive way	239	45.35
In a very positive way	51	9.68
No answer	46	8.73
Total	**527**	**100**

Source Field survey in India (2011–2012)

India that matched his qualifications, but he was not successful. This failure led to a sense of frustration and it distorted his perception of his position in society. This was further aggravated by family expectations. Only about one-fifth of returnees reported that their real earnings were higher in India than they had been abroad. This may be due to the fact that some returnees were promoted after their return, while others left the organisations for higher pay packages after fulfilling their minimum obligations with their original organisations.

When the respondent returnees were asked whether there had been any change in the family's standard of living in the past 5 years because of their foreign exposure, more than half (about 55 %) responded positively. However, in contrast to the replies of the majority of the respondents, about one-third of the returnees said that they did not observe or notice any change in their family's standard of living as a result of their foreign exposure (Table 6). The standard of living depends on the financial position of the returnees, and if their foreign exposure had little impact on their financial position, it would certainly not have much impact on their family's standard of living. However, foreign exposure, even for a short duration, might also have significant implications for one's image in the host society. Our study also found substantial evidence to show that foreign exposure had a positive impact on the position of the returnees in society (Table 7). Quite contrary to the experiences of the majority of returnees, a small proportion of respondents (12 or about 2 %) were of the view that their foreign exposure had impacted negatively on their position in society. Even though few of them were able to clarify the reasons for the negative impact, during the interaction it was suggested that the loss of job in the destination country and subsequent engagement in low profile jobs in India after their return (i.e. skills mismatch) might be behind the reason for their discontent.

Another important component of the (potential) contribution of returnees to the home country is the influence they have on the people around them. A majority of the respondents felt that people value the experience and ideas of returnees. About half of the respondents from both groups said that foreign exposure could have a 'lot of influence' on the people around while another 40 % felt that it would have a 'little influence' (Fig. 6). One returnee observed that when he joined an academic institution about two decades ago, foreign returnees like him were seen as symbols

Table 7 Impact of overseas exposures on the position of returnees in society

Impact of overseas exposure on the position in society	Number of returnees	Percentage
Very negatively	4	0.76
Negatively	8	1.52
Not much change	115	21.82
Positively	270	51.23
Very positively	96	18.22
No answer	34	6.45
Total	**527**	**100**

Source Field survey in India (2011–2012)
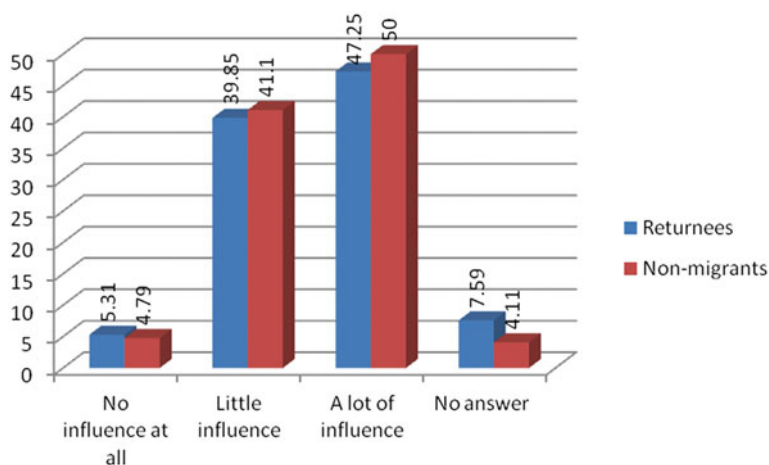
Source: Field survey in India, 2011–2012

Fig. 6 Influence of returnees' ideas on the people around them (%)

of 'quality'. They were in great demand in those days. The returnees were provided with all the required facilities, such as schooling for children, an on-campus residence and many other such necessities that were difficult to attain in the 'non-secure' world outside. But he said the scenario has changed now and the euphoria is slowly disappearing. Notwithstanding this slow erosion of the image of return migrants as symbols of quality, the study provides convincing evidence to show that the knowledge and experiences gained abroad still play a significant role in determining one's position in Indian society.

5   Concluding Observations and Policy Implications

Migratory patterns in the contemporary global age are predominantly characterised by frequent movement between the source and the destination countries and, consequently, by short-term stays. This phenomenon is widely prevalent among

highly skilled Indian professionals, who primarily tend to migrate to the countries of the global north. In this context, this chapter contends that the migration of individual professionals is being institutionalised as the decision to migrate or return largely falls within the domain of employers and the immigration policy of the destination countries, which apparently favours temporary movements rather than stable or long-term migration. Besides these two important factors, the emergence of certain locations in India (including those selected for the present study) in the last two decades as hubs of high-end technical, managerial and professional tasks for a large number of well known companies and organisations has also induced many highly skilled Indian professionals to return. The chapter also identifies long absences from the family as another, equally important, concern that induces the incidence of return.

These findings have important implications for the destination countries as well as for the source country, India. Whereas the destination countries are expected to bring more stable and migrant-friendly policies that focus on the promotion of family unification, India needs to work on fostering the development agenda in many more locations throughout the country, and it also needs to minimise the long-term drain of its human resources. Moreover, tenure-based mobility limits the opportunities that allow return to have a potential development impact. Accordingly, India should negotiate with the destination countries in order to maximise the benefits of return migration and create a space for reasonable medium-term mobility (i.e. the predefined caps on the stay of highly skilled professionals in some destination countries should be quite flexible).

The chapter finds significant differences between the returnees from various sectors, especially with regard to the notion of 'contribution'. Returnees engaged in sectors such as ICT and finance and management generally feel that they can contribute to society through social service or charity. On the other hand, professionals from the medical and academic sectors widely believe that their profession itself implies a social service, and that the best way for them to contribute to development would be to apply their experiences, skills and other resources to their professional accomplishments.

Far from the euphoria resulting from the notion that return migration would be a supplement to 'brain drain' and lead to 'brain gain' for the source countries, the present chapter finds that the suffocation among returnees concerning their feelings of inadequacy with regard to making a contribution to the development process in India, is widespread. Limited and pre-defined overseas exposure has enabled them to attain only a limited amount of additional skills, knowledge, experience and financial resources. Differences in technology, delivery mechanisms, a resistance to change and other structural obstacles in India further discourage returnees from making a potential contribution. Despite these limitations, the return of highly skilled professionals has significant implications for the individuals as well as for society. Besides improving the financial health of individuals, it contributes positively to the standard of living and enhances the position of migrants in society. Return migrants could play a more prominent role in India's development by applying the knowledge, skills and expertise they have gained abroad, provided that a suitable institutional infrastructure can be created to support their endeavours.

References

Appleyard, R. T. (1992). Migration and development: A critical relationship. *Asian and Pacific Migration Journal, 1*(1), 1–18.

Bastian, D. (2006). Modes of knowledge migration: Regional assimilation of knowledge and the politics of bringing knowledge into the region. *European Planning Studies, 14*(5), 601–619.

Beaverstock, J. V., & Smith, J. (1996). Lending jobs to global cities: Skilled international labour migration, investment banking and the City of London. *Urban Studies, 33*, 1377–1394.

Black, R., King, R., & Tiemoko, R. (2003). Migration, return and small enterprise development in Ghana: A route out of poverty? *Sussex Migration Working Paper,* No. 9, Sussex Centre for Migration Research.

Cassarino, J.-P. (2004). Theorising return migration: The conceptual approach to return migrants revisited. *International Journal on Multicultural Societies, 6*(2), 253–279.

Castles, S., & Kosack, G. (1973). *Immigrant workers and class structure in Western Europe*. London: Oxford University Press.

Castles, S., & Miller, M. J. (2009). *The age of migration*. UK: Palgrave-Macmillan.

Chacko, E. (2007). From brain drain to brain gain: Reverse migration to Bangalore and Hyderabad, India's globalizing high tech cities. *GeoJournal, 68*(2), 131–140.

Cohen, W. M., & Levinthal, A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly, 35*(1), 128–152.

Coleman, J. (1988). Social capital in the formation of human capital. *American Journal of Sociology, 94*, S95–S120.

de Hass, H. (2010). Migration and development: A theoretical perspective. *International Migration Review, 44*(1), 227–264.

Faist, T. (2008). Migrants as transnational development agents: An enquiry into the newest round of the migration-development nexus. *Population, Space and Place, 14*, 21–42.

Fischer, P.A., Martin, R., & Straubhaar, T. (1997). Interdependencies between development and migration. In T. Hammer, G. Brochman, K. Tomas & T. Faist (Eds.), *International migration, immobility and development: Multidisciplinary perspectives.* Oxford, UK: Berg Press.

GCIM. (2005). *Migration in an interconnected world: New directions for action*. Geneva: Global Commission on International Migration.

Green, A. E., Power, M. R., & Jang, D. M. (2008). Trans-Tasman migration: New Zealanders' explanations for their move. *New Zealand Geographer, 64*, 34–45.

Hanson, G. H. (2010). International migration and the developing world. In D. Rodrik & M. Rosenzweig (Eds.), *Handbook of development economics* (pp. 4363–4414). The Netherlands: North-Holland.

ILO. (2007). *International labour migration and development: The ILO perspective*. Geneva: International Migration Programme, International Labour Office.

IOM. (2005). *World migration 2005: Costs and benefits of international migration*. Geneva: International Organization for Migration.

IOM. (2010). *World migration report 2010: The future of migration: building capacities for change*. Geneva: International Organization for Migration.

Jonkers, K. (2008). *A comparative study of return migration policies targeting the highly skilled in four major sending countries*. Florence: European University Institute.

Kapur, D. (2004). Remittances: the new development mantra. *Discussion Paper Series,* No. 29. Washington, DC: The World Bank.

Kapur, D. (2010). *Diaspora, development, and democracy: The domestic impact of international migration from India*. New Delhi: Oxford University Press.

Khadria, B. (1999). *Migration of knowledge workers: Second generation effects of India's brain drain*. New Delhi: Sage Publications.

Khadria, B. (2004). Migration of highly skilled Indians: Case studies of IT and health professionals. *STI Working Paper 2004/6*. Paris: Organization for Economic Cooperation and Development.

King, R. (1986). Return migration and regional economic development: An overview. In R. King (Ed.), *Return migration and regional economic problems*. London: Croom Helm.

Klagge, B., Klein-Hitpass, K., Fihel, A., Kindler, M., Matejko, E. & Okolski, M. (2007). High-skilled return migration and knowledge-based economic development in regional perspective: Conceptual considerations and the example of Poland. *CMR Working Papers* No. 19/77. Warsaw, Poland: Centre of Migration Research, Warsaw University.

Lazaridis, G. (2000). Filipino and Albanian women migrant workers in Greece: Multiple layers of oppression. In F. Anthias & G. Lazaridis (Eds.), *Gender and migration in Southern Europe: Women on the move* (pp. 49–80). Oxford and New York: Berg Press.

McKeown, A. (2004). Global migration, 1846–1940. *Journal of World History, 15*(2), 155–189.

Mishra, N. (2007). The push & pull of globalization: How the global economy makes migrant workers vulnerable to exploitation. *Human Rights Brief, 14*(3), 2–4.

Portes, A. (1997). Immigration theory for a new century: Some problems and opportunities. *International Migration Review, 31*(4), 799–852.

RBI. (2010). Remittances from Overseas Indians: Modes of transfer, transaction cost and time taken. *Monthly Bulletin* (April), Reserve Bank of India.

Richards, K. (2004). The trafficking of migrant workers: What are the links between labour trafficking and corruption? *International Migration, 42*(5), 147–168.

Richmond, A. H. (1984). Explaining return migration. In D. Kubat (Ed.), *The politics of return: International return migration in Europe*. New York: Centre for Migration Studies.

Russell, S.S., Jacobsen, K., & Stanley, W.D. (1990). International migration and development in sub-Saharan Africa. *World Bank Discussion Papers* 101. Washington DC: The World Bank.

Solimano, A. (2010). *International migration in the age of crisis and globalization: Historical and recent experiences*. New York: Cambridge University Press.

Stark, O., & Bloom, D. E. (1985). The new economics of labor migration. *American Economic Review, 75*, 173–178.

Todaro, M. P. (1969). A model of labor migration and urban unemployment in less developed countries. *The American Economic Review, 59*, 138–148.

UNDESA. (2011). *Trends in international migrant stock: Migrants by age and sex*. New York: United Nations Department of Economic and Social Affairs.

UNSD. (1998). *Recommendations on statistics of international migration, Revision 1*. New York: United Nations Statistics Division.

Wickramasekara, P. (2008). Globalisation, international labour migration and the rights of migrant workers. *Third World Quarterly* (Special Issue: Globalisation and Migration: New issues, New Politics?), *29*(7), 1247–1264.

World Bank. (2003). *Global development finance*. Washington, DC: The World Bank.

World Bank. (2013). *Migration and development brief 20*. Washington, DC: The World Bank.

Yeoh, B., & Chang, T. C. (2001). Globalising Singapore: Debating transnational flows in the city. *Urban Studies, 38*, 1025–1044.

Yusuf, S., & Wu, W. (2002). Pathways to a world city: Shanghai rising in an era of globalization. *Urban Studies, 39*, 1213–1240.

Chapter 12
Reverse Migrant Entrepreneurs in India: Motivations, Trajectories and Realities

Radha Roy Biswas

Abstract In recent years, India has seen thousands of highly skilled workers heading back to its shores from the USA, the UK and other countries. By one estimate, more than 60,000 Indian professionals returned to India in 2009–2010 alone, the majority of them IT professionals. This trend is expected to continue as many more professionals, pulled by economic opportunities and family ties in India and pushed by recessionary conditions and immigration issues in advanced western nations, continue to return over the next few years. While the majority return to jobs, a smaller group go back to start businesses. As these 'reverse migrant entrepreneurs' come back home, they bring a unique combination of transnational knowledge and assets, deploying these in entrepreneurial ventures in the home country, generating jobs and other economic activity, and in this way, they play a key role in the dynamics of reverse migration. As skilled reverse migration to India continues to grow, the motivations, trajectories and experiences of these entrepreneurs need to be understood. This chapter explores these aspects through interviews with 18 skilled migrant professionals turned entrepreneurs in Kolkata and Bengaluru, who returned to India from the USA and the UK, and who, prior to moving back, had studied full time and/or worked full time for at least 1 year in the USA or the UK and had been developing or running the business in India for at least a year.

1 Introduction

India has been at the receiving end of reverse migration, as thousands of skilled professionals, primarily from the IT sector, have headed back to its shores from the USA, the UK and other developed economies. According to one estimate, more

R. R. Biswas (✉)
International Workforce Development, Kolkata, India
e-mail: rrbiswas@yahoo.comrrbiswas.biswas8@gmail.com

than 60,000 Indian professionals returned to India in 2009–2010 from the USA alone, the majority of them IT professionals (Ahmed 2010). An earlier estimate found that 40,000 expatriate Indians went back to India in 2007 (World Economic Forum 2010). Looking ahead, estimates put the number of reverse migrants to India in the hundreds of thousands by 2015 (Chanel 2012).

Since the 1990s, a number of factors have reversed decades of a one-way flow of skills and talent from India to the West. The IT revolution of the 1990s and the early 2000s in the USA and the EU offered India a growth trajectory that could not have been predicted earlier. With the Indian high-tech sector developing as a result of offshore outsourcing, the digitisation of business processes and the globalisation of skilled labour markets and production, many Indian emigrants of the 1980s and 1990s started reversing tracks as they returned home to jobs in India or to start new companies (Chacko 2007; Saxenian 2006). In the late 1990s, an early wave of reverse migration began to take root as returning IT professionals started settling in the tech cities of Bengaluru and Hyderabad.

While IT professionals continue to lead the wave, there are indications that other professionals are joining them. Doctors are now an important component of reverse migration as increasing numbers return from the UK (RajaniKanth et al. 2007). Along with doctors, professionals from other fields such as scientific research, financial services and marketing are also returning. India's Defence Research and Development Organization reportedly has hundreds of non-resident Indian (NRI) scientists keen to become part of India's defence projects (International Labour Organization 2011).

All this is happening for a variety of reasons: some are being pulled by opportunities in India's growing economy and by family ties, some are being pushed by recessionary factors, immigration issues and eroding opportunities in the USA and the UK, while some come because of a mixture of both. This broader group of professionals is resettling beyond the high-tech hubs in other metropolitan areas such as Kolkata and Chennai. While the vast majority of these reverse migrant professionals are returning to jobs, a smaller subset are coming back to start businesses.

Chacko (2007), Kapur (2002) and Saxenian (2005, 2006) among others have noted that as reverse migrant professionals and entrepreneurs come back home, they transfer advanced technical skills, managerial knowhow, knowledge of more developed markets and connections with financiers and clients in addition to financial assets. They combine these skills and assets with a familiarity and knowledge of local conditions, systems and cultures in a way that their foreign counterparts cannot. It is the reverse migrant entrepreneurs' deployment of this unique combination of transnational knowledge and assets through entrepreneurial ventures in the home country and their potential to create jobs and contribute to the development of the homeland that makes them such important actors in reverse migration and this merits further exploration.

2 Study Methods, Sampling, and Operational Definitions

This study is an investigation of the motivations, entrepreneurial trajectories and experiences of a group of reverse migrant entrepreneurs in India.

For this investigation, in-person and telephone interviews were conducted with 18 skilled 'reverse migrant entrepreneurs' also referred to as 'returnees' and 'interviewees' in this chapter. With only eighteen interviews, the findings cannot be considered to be statistically significant. However, the rich vein of information gleaned from these interviews should provide a suitable complement to larger investigations into high-skilled reverse migration to India.

The individuals targeted were those who had studied and/or worked in the USA, the UK or any Western EU destination country for at least 1 year prior to returning to India to run a business, and who had been developing or running the business for at least 1 year at the time of the interview.

Eleven interviewees were located in Kolkata (Calcutta) and seven were in Bengaluru (including one co-located in Chennai). Overwhelmingly, their last foreign destination of stay was the USA (14) while four had come from the UK. The medical returnees were the only ones to have been based previously in the UK. Seven of the interviewees were in high-tech industries, i.e. IT and Biotechnology. Four were in architecture, engineering and related industries. Four were in medicine, including one who represented a consortium of returning doctors, who had founded a hospital in Kolkata together, and one had come back to head a small hospital that had been started with a family member. Three were in education and training, including one in IT-enabled education and training services (see Table 1).

Returnees ranged from those who were coming back to India after 20 years abroad having acquired foreign citizenship to those who went on assignments with temporary work visas travelling back and forth multiple times with a minimum stay of 6 months each time, to students who came back immediately after completing their studies, which were mostly advanced degree programmes. The majority (13) had been back in India for more than 5 years.

In India, business enterprises are classified according to the size of investment (Government of India 2013). Information from interviews on investments was not sufficient to categorise firms by size. Outside the individual medical practices (2), two businesses were under development, six businesses were 1–5 years old, and eight were over 5 years old.

Nine interviewees, formerly based in the USA or the UK, were sourced through the personal contacts of the author. The remaining interviews came from referrals of the primary interviewees. An additional ten individuals were contacted for interview but either failed to respond or did not meet the criteria.

The interview was divided into three main parts.

Part I: A basic background section on the returnee, details about the current business, and whether the returnee had run a business before.

Table 1 Interviewee snapshot: total 18

Location in India	Kolkata: 11 Bengaluru: 7
Last foreign destination	USA: 14
	UK: 4
Industry	IT and biotechnology: 7
	Medicine: 4
	Architecture, engineering and construction: 4
	Education and IT-enabled education services: 3
Length of stay (years)	Max: 23 Min: 2
Gender	Male: 15
	Female: 3
Age range	40+: 16
	Under 40: 2
Education	Advanced professional degree, Master's or PhD: 15
	Bachelors degree only: 3
Had started and run a business before	No: 15 Yes: 3
Time back in India	Under 5 years: 5
	Over 5 years: 13

Part II: Addressed the motivations and pathways for returning to India, starting a business and the enabling factors in those decisions.

Part III: Tracked the experiences and challenges of running a business in India, how time abroad had an influence on the returnees' decisions, and whether they felt that the return was permanent. For the selection of interviewees, a distinction was made between an entrepreneur and a 'self-employed' individual. The interviewees selected were those who showed evidence of having set up a business or who were in the process of setting up and engaging in activities to establish a business other than an individual consultancy. Independent individual practitioners were only included in the medical sector.

All interviews were conducted in-person or over the telephone in two cities—Kolkata and Bengaluru. Confining the interviews to these two contrasting cities—one the preeminent high-tech hub in India and a magnet for high-tech returnees, and the other, a major metropolis, enabled some analysis of the returnees' location decisions within India.

The following section highlights and analyses the main findings from the interviews in the context of the broader dynamics of reverse migration and entrepreneurship in India.

3 Findings

Although the data are still scant, some reports of expatriate Indians returning to India to start businesses are now starting to appear. Academic studies looking at the role of reverse migrant entrepreneurs in IT and biotechnology, and the rise of

technological entrepreneurship enabled by reverse migration are also growing (Lynn et al. 2012; Saxenian 2006).

A 2011 survey (Wadhwa et al. 2011) in the USA polled 153 Indian immigrants who had spent a minimum of 1 year studying or working in the USA and who had started companies in India that were at least 1 year old. Economic opportunities, access to local markets and family ties, were the principal reasons for returning to India. Over half of those polled reported starting companies in the IT sector, 5 % in consulting and 4 % in education. About 31 % were located in Bengaluru.

Financial news sources in India echo this information. Total Indian and foreign venture capital investments for the first nine months of 2012 reached almost $600 million and covered 157 deals, and the most popular industry targets were IT and IT-enabled services, Healthcare and Life Sciences and Financial Services firms (Venture Intelligence 2012).

While we do not have data for other sectors, some reverse migrants have been establishing businesses in other growth areas such as hospitality, retail and education (International Labour Organization 2011). In the medical sector, a number of returning doctors have set up private hospitals (Kumarnath 2012).

3.1 Motivations for Retuning to India

Two recent reports, addressing the motivations that cause migrants to return to India, indicate several factors—both professional and personal—that influence return decisions. Career and business opportunities in the new Indian economy, together with personal reasons that include family ties and ideological reasons such as giving back to the motherland, are among the key motivators for wanting to return (Finegold et al. 2011; Wadhwa et al. 2011).

The interviews conducted for this study bear out the importance of career and business opportunities and ideological reasons such as giving back to the homeland. However, the role of family in the return decision is different from what is commonly perceived.

Career and business opportunities in India were the most important return factors for 15 of the 18 interviewees. For example, six Bengaluru-based and two Kolkata-based entrepreneurs came back to take advantage of new opportunities in India's growing IT and biotechnology sectors. Three were motivated by the education boom in India. For all the interviewees, after successfully pursuing a corporate and entrepreneurial life in the USA, their next challenge was to become successful entrepreneurs in India.

On the other hand, one IT executive and one structural engineer had come back to India after experiencing career setbacks during the 2008 US recession and had turned to entrepreneurship. The IT executive came back to a job and then started his own IT business, while the engineer came back with the idea of starting up a business, confident that he could capitalise on the Indian real estate and construction boom, and his own international experience, to succeed.

Of the four doctors interviewed, two were motivated by adverse career developments in their UK careers. These doctors found advancement pathways closed as new EU health care workforce directives, and new immigration laws took effect in the UK. The former gave precedence to the hiring of other EU nationals in the public health system while the latter only gave these professionals a temporary permit to work in the UK. Faced with this mid-career crisis, they decided to come back. The other two returned for personal and ideological reasons, but were also confident that their international training would give them entry into India's growing private health care sector.

Therefore, while some were pulled back primarily by business opportunities in India, some decided to return mainly after being pushed out by job losses or adverse career conditions abroad. However, for all the interviewees, economic opportunities in India were a strong reason to return. All banked on India's growing economy to make their decision work.

Personal and ideological reasons were equally important. One architect, who had left India to study in the USA, returned after getting his US citizenship, in time for his children to start school in India, as he wanted to raise his family here. Another architect came back because he did not want to settle permanently outside India. In the interview, he revealed that he always knew he was going to return some day, so he never applied for permanent residency. His reason was neither family based nor business based; it was simply that he wanted to live in India, even though he had thoroughly enjoyed his career and life in the USA.

For five of the high-tech entrepreneurs in Bengaluru, returning to India was a deeply ideological decision, confirming what has been found in recent surveys of Indian students (Finegold et al. 2011) and workers (Wadhwa et al. 2011) in the USA. One senior scientist, an early returnee credited with starting one of India's first biotech research companies, said:

> I was a tenured professor at a leading US university on a fast track for promotion, when the urge to return to India hit. It was a completely personal choice … unabashed nationalism. The stint in the USA was always meant as a way to get qualified, gain experience and then come back to contribute.

This interviewee came back as a faculty member at a prestigious science institute in Bengaluru, from where he proceeded to build the business that was incubated at the institute itself, the first of its kind.

A successful former Silicon Valley entrepreneur turned venture capitalist, who advises funds and start-ups, stated similar motivations. After having successfully created a venture capital fund and seeded several start-ups here, his goal is to build the entrepreneurial ecosystem for the next generation of Indian start-ups.

Business opportunities mixed with ideology influenced two young biotech entrepreneurs. One, in his late twenties rejected attractive corporate offers, having graduated in engineering from a top American PhD programme, and he actively looked for ways to come back to India because he wanted to make an impact in public health. Lacking opportunities commensurate with his skills and ambitions, he decided to launch his own start-up. Another young biotech entrepreneur, with a

start-up focused on developing mobile phone-based diagnostics platforms for chronic diseases, was on a fast track with a global leader in medical devices, but decided not to pursue a career in a large MNE. Rather, he wanted to take on new challenges in India, where he could make a maximum impact. Both these young entrepreneurs saw themselves as part of a growing group of peers who are looking to pursue entrepreneurial routes rather than 'safe' corporate careers, and they see this as a key trend for their generation. The ambitions of both were fostered by the impetus for entrepreneurship provided by the business schools they attended abroad (Bhattacharyya 2012) and by programmes that had captured their imagination, such as the global health initiative of the Gates Foundation.

Family ties are commonly perceived as a strong motivator for the decision to return to India. However, family played a more nuanced role for these entrepreneur interviewees. The family was still an essential factor for those for whom family was not the main reason for returning, but the role of the family was that of enabler and facilitator rather than as the driving force behind the decision to return.

Only three interviewees cited family as the primary reason for return. A doctor went back to meet family responsibilities while at the peak of an illustrious career in the UK. An IT executive came back to assist his wife's career—a professor who was not able to find suitable opportunities abroad. An architect from the USA, an only son, returned to take care of his ageing parents and also because he wanted to raise his own children in India. It is worth noting that among the interviewees with children at the time of return, the age of the children was an important factor in the return decision. At the time of their decision, most felt they could return as their children were very young and would be able to adapt to India, and more specifically to its highly competitive and regimented education system.

But even for those for whom family was not a prime motivator for returning, family played an important role in their return and in their location decision within India. These returnees made the decision to return knowing they could bank on their family ties at the Indian end to facilitate a number of aspects of their return and resettlement process. The family and family home provided an initial soft landing spot, cushioning the physical and emotional effects of a major transition. By staying with family, the returnees could lower their initial costs while they went about establishing the business. Coming back to familiar terrain also gave them an opportunity to leverage old academic, professional and personal networks for the business. At least eight interviewees revealed that they based their location decision in India on these factors.

At the same time and regardless of the primary motivation for returning, the benefits of coming back for all interviewees were strongly linked to the renewed proximity with family and the chance to manage family responsibilities in a way that would have been impossible abroad. Accordingly, the family was a prime motivator for a few, an enabler for many, and a bonus for almost all.

3.2 Motivations for Starting a Business in India

The responses of the interviewees showed different trajectories to entrepreneurship. Some came back to jobs in India and then moved to the entrepreneurial route; some returned after being displaced at jobs abroad and started a business after that; while a few came back expressly to start business—a process they had begun abroad. Their motivations for starting a business in India ranged from ideological to pragmatic.

For the entrepreneurs in IT and biotechnology, it was a question of building on previous successes and bringing their international experiences to India. They also felt they could expand globally from this starting point. For example, one said:

> It is now possible to start a global business here with cost advantages and the right talent pool. Today, almost no IT business is launched out of the USA without an Indian footprint. So, this venture is part of a global strategy, and I was in a position to execute this.

These entrepreneurs expressed a desire to bring their global expertise and experience to contribute to India's success, thus combining career and business motives with ideology. Indeed, this small group appeared to be driven by a unique combination of confidence, ambition, the idea of giving back to their motherland and contributing to the new Indian economy, confident that their skills and experience would allow them to do so.

On the other hand, for some other interviewees (excluding the doctors), including two IT executives, the motivations for starting a business were far more pragmatic and personal. Their decision to be entrepreneurs rested on what they considered to be the most viable career option. 'The salary structures offered in my industry were too low given my skills and experience, so going into business for myself was the only viable financial decision after having decided to come back'. 'Never having worked in the Indian industry and knowing about the hierarchical management structures here, business was the only option for me'.

These responses made it possible to categorise the interviewees into two broad groups:

Group 1: Those guided by pull factors, who came back to take advantage of opportunities presented by India's growth. In the case of high-tech returnee entrepreneurs, many were already part of a global ecosystem of high-tech expertise and capital. They were looking to leverage their international expertise, experience, networks and assets to build their businesses in India and optimise the advantages that India had to offer in terms of cost and talent. The scale of the start-ups in Group 1 was more likely to be larger than in Group 2 as they were already well networked with financiers or else had assets from previous businesses.

Group 2: Those who returned due to push factors and started businesses as a result of negative career changes abroad, who we might call 'corporate refugees-turned-entrepreneurs'. Having suffered setbacks in the corporate world, they were now looking to business as the next career option. This group includes doctors who had seen their careers stall in the UK, and other professionals who had suffered job

losses in the USA. For them, self-employment with a larger business operation down the line was the best career proposition. An IT executive found the Indian corporate culture hard to adjust to and opted for the entrepreneurial route. Two other interviewees, already based in India at the time they started their businesses, turned to entrepreneurship when they felt that their existing careers were stalling. The first steps of this group were typically small ones and usually self-financed as they tried to minimise financial risks and costs.

Despite their different trajectories, the two groups had one very important factor in common: in both, professionals with high international credentials and experience turned to entrepreneurship, and their expectations and approaches to business were different from those of the traditional business class in India—an aspect we address later.

3.3 Professionals as Entrepreneurs

Entrepreneurship in India has traditionally been dominated by two groups: the large unorganised sector of grassroot-level micro and small entrepreneurs; and multigenerational, family-owned businesses from traditional business communities, such as the Marwaris of Rajasthan, the Bania/Jains of Gujarat, the Parsis of Mumbai and the Chettiars of southern India (Mahadevan 2012), each with its own cultural and business norms.

In other communities outside of the landowning families, jobs in engineering, medicine, accounting, government and academia have been the preferred career choices and the mainstay of the middle class. 'Going into business' was considered to be a last resort, and preference was given to professional careers in the private sector or government and academia (Fontanella-Khan 2011). Individuals from these middle-class job-oriented families who left India to study abroad also pursued academic and corporate careers, with few turning to entrepreneurship; the growth of Silicon Valley tech entrepreneurs of Indian origin (Saxenian et al. 2002) in the 1990s being an exception. Returning to India was almost unheard of except in certain professions such as medicine and family businesses, where some students from relatively affluent families came back to join family firms or start new practices and manage assets at the same time. For the rest, outward emigration from India to pursue higher studies or work abroad was typically a one-way decision (Khadria 2006).

With the opening up of India's economy, higher aspirations and higher living costs, these norms and attitudes have been changing. Greater international travel and exposure for professionals are also shaping attitudes towards entrepreneurship. More middle-class professionals are starting businesses, many of them with some education or experience abroad (Fontanella-Khan 2011). The growth of business media sites such as 'yourstory.com' and 'Siliconindia', which celebrate entrepreneurial successes among professionals in India and abroad, have also played a

role in encouraging professionals to take up entrepreneurship. The entry of highly skilled reverse migrant professionals on to the Indian business scene, particularly the growth of engineer-entrepreneurs with roots in the USA, can be viewed as part of this change, with these reverse migrants breaking two sociocultural norms; firstly by deciding to return to India, and secondly by starting businesses.

The interviews conducted for this study support this view. All but one of the returnees came from non-business backgrounds. Most of the interviewees never expected to start a business when they first left India to study abroad. With the exception of the doctors and the IT professionals who successfully ran businesses abroad, many faced discouragement and resistance from parents or spouses, when they disclosed their entrepreneurial plans, and it took them some time to get acceptance for their decision. Two took up jobs on a temporary basis to pacify anxious ageing parents, and others spoke about the challenge of getting dependents to recalibrate their lifestyles and expectations while the business was being established. So, while the decision to move to India was welcomed by the family, the decision to turn to entrepreneurship was not always well received, reflecting traditional attitudes towards business. As one interviewee said, 'My family accepted my business plans only after I succeeded'.

Thus, for many of these returnee entrepreneurs, there was a double learning curve: first, to learn how to run a business, which almost all attributed to their international exposure and time abroad; and second, how to run a business in India. Their experiences are discussed later in this chapter.

3.4 Locating Within India

The choice of location within India was often the convergence of a business decision and a personal one. One interviewee in Bengaluru said, 'As an entrepreneur, I recognised the huge opportunity in the corporate education sector of a growing metro like Bengaluru. I was also attracted to Bengaluru as I have a large family here. But, I did not base my business solely for either. It was both'.

All the doctors headed to Kolkata, where they were originally from, on the assumption that there would be ample demand for their services in a large metropolis, and that the presence of family and friends would allow them to build an independent practice relatively quickly. The structural engineer's choice of Kolkata for his business, notwithstanding its reputation as a challenging business environment, was also driven by both the proximity of family and his connections to industrial clients. An IT executive turned education entrepreneur also based his business in Kolkata because of his familiarity with the local terrain and his connections with local policymakers and property developers.

For six high-tech interviewees in Bengaluru, however, the choice of location within India was guided by business needs first and foremost, driven by the availability of the right workforce and the right ecosystem to build a sophisticated business. The biotech entrepreneurs chose Bengaluru despite having families in

other Indian high-tech hubs, because Bengaluru had the best links to venture capitalists and partners for their start-ups and the best talent pool. The situation was the same for three Bengaluru-based IT entrepreneurs. On the other hand, two IT entrepreneurs, both originally from Kolkata, based their businesses in Kolkata. Although the city could not boast the scale and sophistication of Bengaluru's IT industry, they could still capitalise on its reasonable-sized IT sector, an adequate local talent pool for IT services and lower costs.

The distinction for the IT interviewees in deciding to locate between Kolkata and Bengaluru is worth noting. Bengaluru is now well established as India's premier IT and biotech start-up hub and is emerging as a world-class tech city (Chacko 2007), with local firms moving fast up the value chain from low-end services towards R&D and proprietary products. Kolkata is one of India's largest metropolitan areas, but its IT industry is smaller and less developed than that of Bengaluru in terms of the value and sophistication of the products and services produced. The interviews indicate that the decisions to locate in Bengaluru taken by the high-tech entrepreneurs developing higher-value IT offerings and biotech products were based on the entrepreneurial ecosystem and infrastructure there, while the Kolkata IT entrepreneurs were less dependent on a sophisticated funding environment and workforce and could afford to locate closer to home and family. One Kolkata IT entrepreneur confirmed this when he said that in order to move his company towards higher value-added services and products he would have to consider opening up an office in Bengaluru. Therefore, the location decisions of the returnee IT entrepreneurs within India were linked to the nature of the businesses that were being started, as well as the relative positions that these two cities occupy in the growth of India's technology sector.

3.5 Factors Enabling Entrepreneurship in India

Most of the factors enabling and facilitating these entrepreneurial efforts were within the private sphere. The interviewees showed little expectation or reliance on public support and infrastructure for their plans, even though they all agreed that poor infrastructure and excessive red tape were frustrating. Excessive bureaucracy and paperwork at banks was another source of annoyance. However, these were all well-known weaknesses of the Indian business scenario, which the returnees had factored into their plans. As far as infrastructure and red tape were concerned, there was a certain resignation that business had to continue despite the poor state of affairs. For example, some interviewees factored in the lost productivity of their staff resulting from unreasonable commuting times because of traffic congestion.

Concerning public policies and schemes, two IT entrepreneurs stated that the tax-free status of software services firms had helped them during the early phase. One credited a state high-tech incubator with providing subsidised office space and helping with start-up logistics. Outside of IT, there was little interaction for returnees regarding public services or public policy issues. Almost all the

interviewees agreed on just one area where public policy had played an important role; they all noted that Indian government visa programs such as the 'overseas citizen of India (OCI)' and the 'person of Indian origin (PIO)'[1] had facilitated their return decision, their entrepreneurship plans and the resettlement of their families.

The following emerged as key enabling factors for entrepreneurship in India:

- Personal and professional networks in India and abroad
- An increasingly robust ecosystem for a global business based out of India
- International credentials and experience
- Personal finance to provide cash flow for up to 2–3 years.

With respect to financing, it is worth noting that with the exception of the two young biotech entrepreneurs, most interviewees relied on personal finance to tide them over the first 2 years of business, and they were partially or fully financing their businesses from savings and assets accumulated abroad. Access to finance is often mentioned among the incentives that a homeland government can provide to entice diaspora investment or accelerate reverse migration. Yet, for these returnees, public finance was not a motivator or enabler. While most started with some self-finance, the IT entrepreneurs followed up with private financing from angel investors and venture capitalists who were returnees themselves. Only three interviewees, including the doctor representing the UK group, sourced funds for expansion under Indian public banking schemes, once their companies had been established.

International credentials, which have always been highly valued in India, were important in opening doors—whether at banks or with clients. The benefits of international credentials were most tangible and immediate for the biotech entrepreneurs who felt that their credentials were very helpful in easing interactions with venture capitalists, government offices and in recruiting workers for their firms. For the medical returnees, their UK degrees were instrumental in establishing affiliations with well-regarded corporate hospitals, where fees are substantially higher than in public government hospitals. Even in the construction industry in India, where entry barriers are low and minimal qualifications needed for projects, international credentials and experience came in very handy with banks and clients. 'People tend to trust a professional with a credible background when handing out money', one interviewee said.

---

[1] The person of Indian origin (PIO) card introduced in 2002 and the overseas citizenship of India (OCI) card introduced in 2006 are Government of India programmes. The PIO card grants visa-free travel to India for a period of 15 years to foreign passport holders of Indian origin who have settled abroad up to the fourth generation, with a few exempted countries. The OCI card gives visa-free, multiple-entry and multi-purpose travel for life and other benefits. The eligibility criteria are slightly more restrictive, being aimed at foreign passport holders of Indian origin (except Pakistan and Bangladesh) up to the third rather than the fourth generation (MPC Blog 2012).

However, the interviewees considered their foreign experience to be more invaluable than their credentials in instilling their desire to be entrepreneurs and giving them the confidence to fulfil this desire. The interviewees said that two of the most critical skills required for business—the ability to take risks and ownership for decisions, had been honed abroad. As immigrants, they had learnt to adapt to different circumstances and cultures, both personally and professionally. Achieving academic and professional success abroad had given them confidence in their own decisions. Lean, Western managerial structures at work had taught them both multitasking and self-reliance at work. For the IT entrepreneurs who found themselves in Silicon Valley during the 1990s and 2000s, when so many Indian professionals were starting out and finding success in business, this presence proved a huge motivator to do the same, and they also leveraged the opportunities that India's growing economy had to offer. Thus, for this group, international exposure and time abroad were critical in their decision to be entrepreneurs, while India's growing economy provided the platform to test out this desire, albeit out of necessity in the case of some. In fact, many doubted whether they would have been able to carry their entrepreneurial plans through without their time and exposure abroad. This is consistent with a recent Gallup Poll finding, which showed that 60 % of Indians have the personality traits crucial for entrepreneurial success, but which also found that business execution and risk-taking were not common traits among the majority (Yu and Tandon 2011).

3.6 The Importance of Networks as Enablers

The importance of professional and personal transnational networks of migrants in influencing the development of technological entrepreneurship in India has been noted (Saxenian et al. 2002; Saxenian 2006). Lynn et al. (2012) have examined Indian technology entrepreneurship, which has been most obvious in the IT sector, and its links to foreign multinational corporations and the offshoring of IT services. It has also been strongly facilitated by the long experience of reverse migrants in the USA and the EU. Reverse migrants have reinforced and depended on their networks to facilitate different aspects of their entrepreneurship plan from cross-border venture capital funds to inter-organisation linkages for R&D (Basant 2004) to personal connections for business development. Most discussions tend to focus on the strength and value of these transnational networks in reverse migration. However, the interviews show how local networks at the Indian end were just as valuable for these entrepreneurs.

The Bengaluru-based IT and Biotech interviewees testified to the importance of their international networks in sourcing finance from venture capitalists and other investors to supplement their personal investments in the business. Three of these formed their company abroad before establishing Indian entities to elicit investments from investors overseas. Similarly, the consortium of the interviewee who

represented the UK doctors' group was also formalised in the UK, and the initial funds were sourced through UK networks.

Networks also played an important part in sourcing clients. At least two IT interviewees relied on former employers and clients abroad to generate business in India. An architect launched his service business by convincing his employer in the USA to outsource operations to him. Another education and training entrepreneur established her business almost entirely on the strength of her American networks. US investors funded her first project in Bengaluru, and her former American employer introduced her to her first client in India.

For the other interviewees, the Indian end of their network was more influential in sourcing business clients and funding. Connections to local networks in India were re-established before their return to India and enabled through social media sites, such as LinkedIn and Facebook, and online groups, which the returnees used to re-establish contact with former colleagues and peers. Local networks were particularly important for the structural engineer, the architect turned manufacturer and the IT executive in education. For the structural engineer, they were invaluable for navigating the complex and often treacherous territory of the construction sector in India to secure licences and permits, deal with government officials and source materials and labour. Similarly, contacts with local policymakers and educators were also important for the IT executive who was starting a school. For the architect turned furniture manufacturer, sourcing factory space and hiring skilled workers required the expertise of a local. Securing a bank loan for machinery was a challenge as a first-time entrepreneur, until a college acquaintance introduced him to his local banker. Local connections were also necessary for high-tech entrepreneurs in Bengaluru, who used these contacts to source office space, navigate business regulations and hire general staff.

3.7 Growing High-Tech Ecosystem

The role of early returnees, especially entrepreneur-turned-investors, in the development trajectories of the high-tech sectors of emerging economies has been addressed in discussions of reverse migration (Anandaram 2006; Saxenian 2006; Team YS 2012). Their role goes beyond the financial needs of the industry to their role as enablers—where these elite returnees not only create a base of financial assets and technical knowhow but also help set the stage on which other returnee entrepreneurs can flourish.

This notion is echoed by high-tech interviewees in Bengaluru, who viewed themselves as part of a burgeoning high-tech entrepreneurial ecosystem in India. More than one interviewee spoke of connecting with early venture capitalist returnees or the previous generation of returnee entrepreneurs. They acknowledged the contributions of early returnees, especially those who had created some of the first successful Indian IT companies. As one interviewee noted, in addition to creating a network of entrepreneurial role models and mentors, the financial

successes of some companies, such as Infosys and TCS, also created a stable of asset-rich engineers and technologists who wanted to invest further in technology development in India. As a result, a class of Indian investors from technical backgrounds, armed with 'technical minded' or 'smart' money, had taken root, giving further impetus to the current crop of returnee professionals turning to entrepreneurship. The role of the IT and business media in this ecosystem was also mentioned; by championing success stories among expatriate Indians as well as returnees and creating a new class of hero in India, the IT media had encouraged these professionals to take the plunge into business. The growth of networking sites and forums for exchanges was another encouraging development that offered greater mentorship and advising opportunities. Returnees were also involved in networking.

The ecosystem was particularly important for the Bengaluru-based high-tech entrepreneurs, including the two young biotech entrepreneurs, who saw themselves creating an ecosystem as they pursued their plans. Both described how the absence of clear guidelines on product approval and clinical trials helped them to figure out the gaps and needs in the industry, and they even helped to build the system by working with hospitals and government agencies, which were more receptive to the suggestions of these highly qualified returnees than they might otherwise have been.

However, an ecosystem was not a concern for most interviewees based in Kolkata, who saw themselves as individual, private operators working within the constraints of the Indian 'system'. The interest in networking with other returnees was even lower. One impression from this difference is that the subset of high-tech returnee entrepreneurs in Bengaluru tended to see themselves as a vanguard group, whose reverse migration and entrepreneurship decision was strongly influenced by their involvement in these particular globally competitive industries—IT and biotech—at a very important time in their growth and development, and accordingly their networking and dependence on the ecosystem was higher. For the others, the reasons for returning were far more individualistic and the ecosystem played a smaller role.

3.8 Experience and Challenges of Building a Business in India

One of the main hopes of reverse migrant entrepreneurship and a reason for the consequent interest among policymakers in India and elsewhere is that it will create jobs and income and assist in the overall development of the country. The businesses in this study were mostly start-ups or small enterprises with fewer than 250 employees. Table 2 below shows approximate employment generation through these entrepreneurial efforts.

Table 2 Employment generation by study group entrepreneurs

Sector-wise firms in interview group	Approximate aggregated employment
IT (4)	300–350
Biotech (3)	100
Architecture, engineering and construction (3)[a]	100
Education (3) including IT-enabled education services	100
Medical (4)[b]	900

[a] Not including the family-owned construction firm with 800 employees
[b] Represents the hospital started by the consortium of doctors from the UK (600 employees), the family-owned hospital led by a returnee (300 employees) and two individual practices with about two additional employees each

Most interviewees mentioned job creation in India as the most rewarding aspect of their entrepreneurship decision. Being able to create jobs was a way to fulfil the practical and ideological objectives of coming to India and becoming an entrepreneur and the best way to give something back. As one interviewee put it, 'More than anything else, it is the fact that nearly 50 families depend on me for their livelihoods. It is both a responsibility and a privilege'. The venture capitalist, who writes and coaches extensively on the need for professional entrepreneurship in India, went as far as to say that he considered the entrepreneurship plans of returnees as one of the best ways of giving something back to the country.

Most interviewees said that they were trying to introduce, or else intended to introduce, a culture shift in their organisations. They were experimenting with new communication protocols and more flexible HR policies. Most of the high-tech interviewees and at least two of the others had flexible work-time policies in place. Some were trying to create flatter and more open organisational structures. The architect turned manufacturer described how he literally created an 'open door' policy—actually keeping his office door open at all times and encouraging even semi-skilled staff to speak to him directly, rather than the usual way of working with frontline staff in India. Not surprisingly, some work culture shifts such as flexi-time were welcomed, while others, such as performance-linked pay systems, had encountered some resistance.

At least five interviewees stated that they were paying their workers above market rates. The IT entrepreneurs mentioned that they were highly competitive in their salary offerings, aware that the IT industry in India had high attrition rates and that as small firms, they were lower in the preference order of many potential workers, who preferred to go for bigger and more prestigious firms, such as the top-tier Indian IT firms. The architects also spoke of paying their workers slightly above market rates, because it is always difficult for small firms to retain their workers. Most of these firms had introduced health plans for all employees.

Many articles in the Indian media are currently devoted to the experiences of returnees in India. Poor public infrastructure, confusing governance structures (Kumar 2011), a sluggish bureaucracy and outdated management structures are

among the most cited impediments to business in India (Hume 2012; Sebastian et al. 2006).

Among the challenges faced by the interviewees, a lack of clarity concerning regulatory requirements, especially vagueness in company formation regulations, was an area of concern, mirroring general perceptions and reports in this area. It was felt that the government had not done enough to streamline information or processes. Instead, a cottage industry of 'compliance consultants' had emerged to help businesses navigate this territory. Even though they added to the cost of business, most interviewees said they used them to avoid wasting their own professional time.

The problem of corruption—another long-standing issue in India—was another challenge. However, the returnees rationalised it as a necessary cost of doing business within this sector in India, without which projects would not even get off the ground, even though they were repelled by the notion of bribes and black market operations. When they were unable to deal with the issue personally, it was handled by a local partner or a consultant.

The study did not uncover any significant gender-based differences in the returnees' experiences. Of the four women interviewed, the two doctors and the education entrepreneur did not report facing any gender-based issues in particular, possibly because all three belonged to high-skilled professions with a significant representation of women. For the fourth woman, who returned to join the family construction firm, her main role upon return was to steer the company through an international partnership. Gender was an issue insofar as construction is a heavily male-dominated field where semi-skilled male workers traditionally resist taking orders from female superiors; therefore, any prevalent biases or differences could not necessarily be interpreted as pertaining to the returnee experience, but might be a general aspect of the industry.

However, for most interviewees, while dealing with this issue was of some concern, it was the area of 'soft' professional skills and attitudes that surfaced as a more challenging problem.

3.9 The Challenge of Soft Skills and Work Culture

Many returnees indicated that while they felt they were able to transfer their technical skills and expertise to India, transferring their soft skills and professional culture was not so simple. Although these returnees were able to leverage their international technical experience to build their businesses in India, their foreign experiences were also a hindrance in their local dealings because their own professional perspectives and attitudes had changed during their time abroad. Nearly all the interviewees found themselves somewhat hampered by the differences in professional attitudes between themselves and local staff, partners and even clients, and by the lack of appropriate communication skills and work culture among local staff. These differences often become a source of stress and frustration in

their local interactions. However, they did not consider these challenges big enough to merit any reconsideration of their reverse migration decision. Rather, the interviewees were trying to readjust their expectations.

Indeed, for almost all the returnees, the key word for resettling, establishing and running a business in India was 'recalibration'. In nearly every aspect of business, the returnees found that their modus operandi had to be adjusted to the 'Indian pace, the Indian style of working'. Most were aware that doing business in India would involve adjustments when they made their decision and they had prepared themselves to go with the flow.

Nonetheless, differences in work culture and communications skills constituted the biggest challenge for a majority of interviewees. They perceived a lack of clarity and deliberate ambiguity in communication among staff when it came to accepting tasks and responsibilities. In many cases, staff members were unable to communicate workload problems, ask questions upfront about assignments, and were unwilling to speak up on deadlines, even when they knew they would not be met. Some interviewees saw this as a vestigial feudal mentality—the inability to speak up to, or question, authority. This was true even in IT, which is a relatively new industry, and where new norms of open communication are expected to prevail. Such reticence nearly cost one interviewee his client in the USA, when his team flouted a well-established communication protocol because of a regional holiday, without bothering to inform either the client or the returnee himself of the change. Yet, the same team expected bonuses or increments every year, regardless of the company's performance. To the interviewee, this was an indication of his workers' lack of ownership of their work.

The lack of communication skills coupled with a seeming lack of accountability and ownership was of concern to most interviewees. Interviewees also found that a lackadaisical approach to communication was pervasive. Calls and emails simply went unanswered. This was true for interactions with clients as well as partners. Written business communication via email, even among engineers, was poor. The returnee who joined the family construction firm noted that many junior staff in firms similar to her own were not well versed in English or any form of written communication. The problem was addressed by appointing one or two staff to receive and disseminate all emails, but this resulted in lost productivity.

Risk-taking and exploration were other points of concern. This was particularly important to the high-tech entrepreneurs who found that the 'multitasking, curiosity-driven, risk-taking ownership mentality required in young high-tech start-ups' was missing in most workers they were recruiting, who preferred more streamlined jobs in established high-tech companies like Google or Microsoft or leading Indian IT services firms like Tata Consultancy Services, Infosys or Wipro. Another high-tech interviewee described this as an 'IT services versus IT product development mentality', where there was little interest in exploration and risk-taking, with most locals preferring straightforward technical work, making it difficult for a small company to move out of services to higher-value product development work. Another biotech interviewee saw a lack of the appropriate skill set as a challenge, as he was looking for individuals who could 'write code, think

design, run the numbers, pitch to investors and do housekeeping as well'. Not finding enough suitable candidates, he was considering hiring from abroad through his network in Boston and was receiving enough responses to feel it might be a feasible strategy.

Work culture and communication differences also posed problems in the medical sector. Two doctors described their frustrations in training frontline staff, where simple administrative protocols were flouted due to an 'ingrained lack of professionalism'. Also, the foreign-trained doctors, long used to a culture of peer review and open critique of their work in the interests of better service, found that the practice of reviewing medical decisions, especially among senior doctors, is almost non-existent in India and that critiques are often perceived as personal attacks. There was also some soft corruption in the medical system that was of great concern to at least three doctors interviewed. A system of 'reciprocal referrals' and cuts from consulting fees is common among the Indian medical fraternity. Refusing to give and receive referrals and cuts almost cost one doctor her practice and has significantly affected the other doctor who came back to establish a small hospital with a family member.

From where then did the returnees, born and raised in India, get their communication and other work skills? It is worth noting that nearly all returnees felt that their own communications skills, sense of independence and accountability and ownership at work had been honed during their time abroad, starting with graduate school, when they learnt to overcome their ingrained Indian sense of deference by questioning their professors in the classroom. This was carried to the workplace and back to the business in India.

3.10 Changing Plans to Meet Reality and Looking to the Future

At least six interviewees had to adjust plans or change business direction after they had started. For example, in the case of the architect who set up a business based on a business process outsourcing (BPO) model directly linked to his last US employer, the business grew quickly until 2008, with 100 % of the revenue coming from the USA. However, after the US recession of 2008, they turned aggressively to the domestic Indian market. Now, the firm's revenues are 100 % India-based. Another architect, who returned in 2000, came back to find architectural consulting fees were too low and found chasing developers for payments too risky, so he turned to doing installations and fit-outs for modular furniture makers, eventually setting up his own manufacturing unit in 2004. Like the architect, the structural engineer found that the consulting fee structure in his industry was far too low to allow him to maintain the living standards he aspired to, and so he was forced to consider construction, which is far more profitable but which has a far less professional environment. One biotech entrepreneur found that

the initial product that he was designing for the market, a mobile phone-linked diagnostic device for a specific disease, was not going to work, so he decided to move to chronic large-scale diseases like diabetes, and acknowledged that it was possible to change course faster in India than in the USA, where regulations would have set him back by at least 1 year.

Two interviewees—one in IT and the other in education, started with local partners who were either friends or former colleagues. In both cases, they had provided the financial equity while the local partner was supposed to provide sweat equity. The partnerships failed because of differences over financial control. Both had to source new partners under new terms.

Overall, most returnees seemed reasonably optimistic about their prospects despite the hurdles and course corrections. Only two doctors regretted their decision to return because neither the income nor the professional environment was what they hoped for upon return. On average, most interviewees gave themselves 2–3 years to break even and fully resettle. Significantly, possible failure in the business was not as seen as an impetus to reverse the decision to come to India.

Perhaps, it is a mark of the entrepreneurial spirit that led most to feel more or less assured that their plans would work. The prevalent attitude was that if they did not, they would modify their plans or figure out another solution—there was too much financial, physical and emotional investment to reverse the decision to return. Only three interviewees, all of whom had left corporate careers for entrepreneurship, maintained the possibility of returning abroad, but only as a distant, last resort.

4 Conclusion

This investigation into the motivations, trajectories and experiences of returnee entrepreneurs reveal more nuanced stories beneath the larger studies and the media coverage. In some cases, this study bears out some of the prevalent perceptions of reverse migration and entrepreneurship. Pull factors such as career and business opportunities in India's growing economy, and ideological motivations such as giving back to the homeland were a primary motivator for returning. Job creation, a key aspect of reverse migration, was important for these entrepreneurs as a way of meeting their ideological goal of giving back to the homeland, and as an important impact of their return decision. However, the role of the family turned out to be different from what is commonly perceived. In many cases, the family was not the prime motivator for returning. Rather, its role was that of an enabler and facilitator, easing the return and resettlement process for the returnees and their families in a number of ways. From the entrepreneurial motivations and trajectories, it appeared that were two sub-groups of entrepreneurs. Some of the high-tech reverse migrant entrepreneurs appeared to see themselves as part of a vanguard movement building the new India from a global perspective, whereas the

non-high-tech interviewees were operating mostly as individual actors, capitalising on their connections to build their personal futures.

Public policy and supports from the public sphere played a lesser role than expected. When it came to supportive policies, the discussion was mainly limited to the visa programs that the Indian Government had introduced. The entrepreneurs interviewed were enabled and supported primarily by private interests, resources and networks. Moreover, commonly mentioned problems in reverse migration—poor infrastructure and working conditions—surfaced as less of a concern than differences in work culture and professional attitudes between returnees and locals. Importantly, while these returnee entrepreneurs felt that they were able to transfer their foreign-acquired technical expertise and credentials to establish their businesses, transferring the soft skills, managerial skills and professional culture was not so easy and was often a source of frustration. Despite the challenges, nearly all were reasonably optimistic about their plans. These returnee entrepreneurs are part of a changing entrepreneurial profile in India. Because of the high level of personal and professional investment they bring to their decision of returning and starting a business in India, they are likely to see this decision as permanent. High-skilled reverse migration in India is relatively new and ongoing, and it is perhaps too early to determine the course it will take and the full implications for India and the destination countries abroad. The following questions merit further investigation:

- Are returnee entrepreneurs more likely to see their decision as permanent? A comparison study among returnee entrepreneurs and job holders, taking consideration, among other factors, of the time spent abroad and in India, can help us understand who is more likely not just to return, but to stay there, with implications for both India and the destination countries.
- How do the experiences of reverse migrants in establishing and running a business vary by sector? Can this tell us whether reverse migration entrepreneurship is more likely to occur and grow in some sectors than in others? Comparative case studies across some key sectors will give us a better understanding as to whether reverse migrant entrepreneurship is likely to be restricted mostly to the tech sector, or whether it is likely to spread more widely across the economy.

References

Ahmed, Z. (2010). US 'reverse brain drain' to India now in full swing. BBC News Washington. www.bbc.co.uk/news/world-south-asia-10614936ks. Accessed 6 September 2012.

Anandaram, S. (2006). Indo-Israel workshop on technology, innovation and finance: An early stage technology venture capitalist's view of the opportunity landscape in India. Organized by IIM Bengaluru with TIFAC and DST. ftp://ftp.sni.technion.ac.il/events/INDIA-ISRAEL/Second%20Workshop%2002_2006/InnovationWave-%20Jan2006.pdf. Accessed 22 October 2012.

Basant, R. (2004). U.S.-India technology cooperation and capability building: The role of inter-firm alliances in knowledge-based industries. Published by Honolulu: East-West Center. East-West Center Occasional Papers. Economics Series No. 2.

Bhattacharyya, R. (2012). With MBA from US, Indians return to do business at home. The Economic Times Bureau. http://articles.economictimes.indiatimes.com/2012-07-27/news/32889755_1_indian-students-indians-return-global-business-schools. Accessed 25 September 2012.

Chacko, E. (2007). From Brain drain to brain gain: Reverse migration to Bengaluru and Hyderabad, India's globalizing high tech cities. *GeoJournal, 68*(2–3), 131–140.

Chanel, G. (2012). Human capital on the move. Enrst & Young IT Magazine. http://tmagazine.ey.com/insights/human-capital-on-the-move/. Accessed 25 October 2012.

Finegold, D., Kumar, B.V., Winkler, A.-L., & Argod, V. (2011). Will they return? Indian students in the United States. *Economic and Political Weekly*. *xlvi*(21).

Fontanella-Khan, J. (2011). India's new guard of entrepreneurs. The Financial Times Online. http://www.ft.com/cms/s/0/a8eaa908-abeb-11e0-945a-00144feabdc0.html#axzz2GY0xw9cx. Accessed 13 November 2012.

Government of India Ministry of Micro, Small and Medium Enterprises. (2013). Definitions of Micro, Small and Medium Enterprises. http://www.dcmsme.gov.in/ssiindia/definition_msme.htm. Accessed 18 January 2013.

Hume, T. (2012).The secrets of doing business in India. Route to the top. CNN online edition. http://edition.cnn.com/2012/02/03/business/doing-business-india/index.html. Accessed January 2013.

International Labour Organization. (2011). Migrants return to India. World of Work Magazine No. 73. http://www.ilo.org/global/publications/magazines-and-journals/world-of-work-magazine/articles/WCMS_170535/lang–en/index.htm. Accessed 8 December 2012; http://www.migrationinformation.org/Feature/display.cfm?ID=804. Accessed 8 December 2012.

Kapur, D. (2002). The causes and consequences of India's IT boom. *India Review, 1*(2), 91–110.

Khadria, B. (2006). India: Skilled migration to developed countries, labour migration to the Gulf. Jawaharlal Nehru University, New Delhi, and Asia Research Institute and the Department of Economics, National University of Singapore. http://meme.phpwebhosting.com/∼migracion/modules/ve7/2.pdf. Accessed 10 December 2012.

Kumar, S. (2011). Challenges of doing business in India. *The Hindu Business Line*. http://www.thehindubusinessline.com/opinion/article2681474.ece. Accessed 18 December 2012.

Kumarnath, K.V. (2012). NRI doctors homebound. *The Hindu Business Line.* http://www.thehindubusinessline.com/industry-and-economy/economy/article2776940.ece. Accessed 10 December 2012.

Lynn, L., Meil, P., & Salzman, H. (2012). Reshaping global technology development: Innovation and entrepreneurship in China and India. *Journal of Asia Business Studies, 6*(2), 143–159.

Mahadevan, R. (2012). Everyone is a Vaishya. Outlook Magazine Special Issue: B-School Special 2012. http://www.outlookindia.com/article.aspx?282331. Accessed 12 December 2012.

Migration Policy Centre. (2012). India's engagement with its diaspora in comparative perspective with China. European University Institute. MPC Blog Debate Migration. http://debatemigration.wordpress.com/2012/11/12/india%C2%B4s-engagement-with-its-diaspora-in-comparative-perspective-with-china/. Accessed 12 November 2012.

RajaniKanth, K., Bose, P., Sanjeev R., & Vidya. S. (2007). South Indian NRI docs head home. Business Standard. http://www.rediff.com/money/2007/mar/30doctors.htm. Accessed 3 December 2012.

Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development, 40*(2), 35–61.

Saxenian, A. (2006). International mobility of engineers and the rise of entrepreneurship in the periphery. UN World Institute for Development Economics Research. Research Paper No. 2006/142.

Saxenian, A., Motoma, Y., & Quan, X. (2002). *Local and global networks of immigrant professionals in Silicon Valley*. San Francisco, CA: Public Policy Institute of California.

Sebastian R., Parmeswaran, A., & Yahya F. (2006). Doing business in India. Australian National University and National University of Singapore. *New Zealand Journal of Asian Studies 8*(1), 17–40.

Venture Intelligence. (2012). VCs make 52 investments worth $200-M in Q3'12. Press Release. http://www.prlog.org/12004604-vcs-make-52-investments-worth-200-in-q312.html. Accessed 11 December 2012.

Wadhwa, V., Jain, S., Saxenian, A., Gerffi, G., & Wang, H. (2011). *The Grass is indeed greener in India and China for returnee entrepreneurs: America's new immigrant entrepreneurs–Part VI*. Missouri: The Ewing Marion Kauffman Foundation.

World Economic Forum in collaboration with The Boston Consulting Group. (2010). Stimulating economies through fostering talent mobility. https://members.weforum.org/pdf/ip/ps/TalentMobility.pdf. Accessed 10 November 2012.

Yu, D., & Tandon, Y. (2011). India's big problem: Nurturing entrepreneurs. *Gallup Business Journal*. http://businessjournal.gallup.com/content/156143/india-big-problem-nurturing-entrepreneurs.aspx#1. Accessed 2 December 2012.

Chapter 13
Gender Migration, Return and Development: Emerging Trends and Issues with Special Reference to India

Jayanti Kumari and Rashmi Sharma

Abstract Gender plays a crucial role in understanding the causes and consequences of international migration. In this chapter, we look at migration from a gendered perspective. In contrast to the assumptions that most migrants are men and women are their dependents, statistics and several new studies on women have increasingly recognised women as being independent and as a major part of globalised movement. While men migrate into a variety of economic sectors, women migrant workers are mainly concentrated in the services sector. This chapter utilises the dataset from a survey conducted in five cities in India, which records the experiences, activities and suggestions of highly skilled return migrants. The first section of the chapter focuses on the factors that cause women to migrate internationally and the differences between men and women in terms of migratory behaviour. Does the economic status of migrant women affect their social status, decision-making and opportunities? An even more worrying issue is the fact that most of these skilled migrants leave to find better-paid jobs abroad but end up in occupations below their skills level. It is in this context that the next section examines the challenges and opportunities and their impact on the role of women. The current debate about the linkage between migration and development has led to the realisation that women migrants are emerging as a new target group to initiate development processes in their home countries, and they can become active agents of change. Accordingly, the final section presents the vital contribution and experiences provided by skilled women returning to India, mainly from developed countries. The chapter concludes with a brief discussion of the nexus between the return migration of skilled women and development, and it raises additional questions for discussion.

J. Kumari · R. Sharma (✉)
Zakir Husain Center for Educational Studies, School of Social Sciences,
Jawaharlal Nehru University, New Delhi, India
e-mail: rashm02@gmail.com

J. Kumari
e-mail: jayanti.jnu20@gmail.com

1 Introduction: The International Mobility of Women; Trends and Issues

Female migration is an important component of international migration, but it has not been a prominent issue on the migration research and policy agenda for some time. The statistics of the last few decades clearly show that the percentage of female migrants is now close to half of the total migrant stock worldwide (see Table 1). The total number of international migrants has increased over the last 10 years from an estimated 150 million in 2000 to 214 million persons today, and women migrants account for 49 % of this figure (IOM 2011).[1] Between 1990 and 2010, the numbers declined in Asia (from 45.4 to 44.6 %), North America (51.1–50.1 %) and Europe (52.7–52.3 %), but rose in Africa (46.2–46.8 %), Oceania (49.1–51.2 %) and Latin America and the Caribbean (49.7–50.1 %).[2] The percentage of women out of the total migrant population has been on the increase and it is reasonably balanced across the globe. However, these statistics on recorded migrant populations do not reveal the complete picture of movement, particularly within countries and regions. A recent dataset documenting the gender structure of brain drain shows that highly skilled women have a higher propensity to emigrate and are overrepresented among international migrants (Docquier et al. 2007). Docquier et al. (2012) show that women respond differently to push factors than men, and they are more responsive to emigration than skilled men. We do know that in most developing regions, more women now migrate independently, that is, not just as dependants or family members, and more of them are making a difference in the area of development (Zlotnik 2003; Sorensen 2004; Morrison 2007).

Globally, international migration has been perceived as a male phenomenon as men accounted for the major share of world international migration until the late 1970s, migrating during the large labour movements in Europe and the USA of the 1960s and 1970s, with women and children following for family reunification in secondary waves during the 1980s and 1990s. However, global economic restructuring from the 1990s on combined with liberalisation policies and macroeconomic reforms resulted in a new term entering the debate: the feminisation of labour, which depicted women at the centre of these processes as they constituted a new labour force, especially in the export-oriented sectors around the world (Dannecker and Sieveking 2009). By the 1990s, women were migrating in far higher numbers, both as family members and independently, voluntarily or involuntarily. Accordingly, they have always taken part in a range of globalised movements, for example, as skilled or unskilled workers, students, within the

---

[1] International Migration stock: 2008 revision, http://esa.un.org/migration/p2k0data.asp.

[2] United Nations, Department of Economic and Social Affairs, Population Division (2009). Trends in International Migrant Stock: The 2008 Revision (United Nations database, POP/DB/MIG/Stock/Rev. 2008).

Table 1 Trends in international migration stock, (1990–2010)

Year	Estimated number of international migrants at mid-year	Estimated number of female migrants at mid-year	Female migrants as a percentage of all international migrants (%)
1990	155,518,065	76,386,335	49.1
1995	165,968,778	81,761,249	49.3
2000	178,498,563	88,256,349	49.4
2005	195,245,404	96,074,285	49.2
2010	213,943,812	104,794,962	49.0

Source United Nations, Department of Economic and Social Affairs, Population Division (2009)

family reunification category, for marriage or as asylum seekers and refugees (Kofman and Raghuram 2005). Despite its significance and the growing proportion it represents, the issue of female migration has not been sufficiently examined in migration research. The migration of women deserves attention because recognition of the role women play in global movements is bound to lead to significant changes in international migration studies. Women on the move display different migratory behaviours than men; they face different opportunities, and they have to deal with different risks and challenges, such as gender inequalities in the countries of origin and destination, violations of their human rights, exploitation, trafficking, gender discrimination and specific health problems (Kofman 2000; Heering and Wissen 2004; Cerruti and Gaudio 2010). Their crucial contribution to economic development and poverty reduction in their countries of origin and countries of destination should not be omitted either.

While viewing women migrants as dependents or associational migrants, we can often ignore their economic significance. The reasons for migration can generally be traced to various social, economic, political, cultural and environmental determinants. Various micro-level studies show that women also migrate individually for economic reasons. Conell (1984) stated that female migration is primarily a response to real and perceived spatial inequalities in socioeconomic opportunities, which are themselves the result of uneven sectoral and regional development. It has been noticed that single women are motivated to work overseas primarily to support their families. But the key to their actual emigration decisions is their autonomy and decision-making power within the household, particularly with regard to financial matters (Oishi 2002). In the Philippines, it is mostly the wives who manage household finances. Sri Lankan women also undertake a major role in household finances, albeit to a lesser degree than their Filipino counterparts. In both countries, women make both short-term and long-term financial plans for their children and other family members (Oishi 2002).

All the major studies on migration agree that economic disparities between developing and developed countries continue to be the key determinant of cross-border movements for poor countries (UNDP 2005). The increase in female migration can be explained in several ways, and chief among these is the argument of the trans-globalisation of economies, which has created a demand for labour in

low-paying jobs in the services sector of developed economies (Sassen 2003). In many developed countries, a combination of demographic change, the growing participation of women in the workforce and reduced social services for children and the care of the aged has resulted in rich countries depending on the care offered by people from poor countries, especially women (Ehrenreich and Hochschild 2003). As employment opportunities such as domestic work, nursing and teaching have opened up in the service sectors in Europe, North America and parts of Asia, these have become female migrant niches for women from poorer regions in Africa, Latin America, Southeast, Central and Eastern Europe and Asia (Al-Ali 2004). Education can also affect the migration potential of women just as it does with men. But unlike men and even though their education may impel them to move, foreign companies have frequently preferred to hire them because they are cheap and docile rather than educated (Oishi 2002). The Philippines places a premium on the training and education of its emigrants, particularly nurses, domestic workers and seamen as part of its proactive labour exporting policy (IOM 2011). Similarly, in the large emigration state of Kerala in India, where emigration has been mainly male-dominated (one in 10 is woman), the women who migrate tend to be better educated than the men (UNESCAP 2003).

As gender attributes are usually assigned by cultures, the migration choices and constraints for women can vary vastly, depending on their sociocultural origins. One could argue that in the case of the Philippines, Sri Lanka and Thailand, the high emigration of women has been possible, among other things, because of the greater flexibility in gender roles in those societies. One survey found that many Filipino and Sri Lankan women tend to take their own decisions to migrate— contrary to the household strategy theories—because they already enjoy considerable autonomy and decision-making power within the family and also regarding household finances (Oishi 2002). Many female migrants come from developing countries that are already somewhat integrated into the global economy through export-oriented industrialisation (e.g. Philippines, Sri Lanka). Similarly, as there is already a long tradition of domestic migration in such countries, this increases the likelihood of female emigration (Oishi 2002). For example, many of the Philippine women who migrated to Hong Kong and China came from such internally mobile areas.

In addition to the rise in the migration of high-skilled females for employment, migrant women have also ventured into entrepreneurship and self-employment in the host country. Many feel that the jobs in the destination countries are not good enough or see them as 'no point' jobs and self-employment helps them to gain independence from exploitative practices and the threat of deportation. It gives them working flexibility and a better chance to combine work and family responsibilities. Accordingly, immigrant women are attracted to self-employment because of a lack of alternatives, blocked mobility and because they find it impossible to find a job that fits their skills. However, they may encounter problems such as complicated procedures, the absence of information about potential sources of help, a lack of fluency in local language and everyday racism (Lazardis 2003).

It can be said that the influence of gender on the complete migration cycle (IMR 2009) needs to be assessed and understood in order to reach an understanding of the complexities of female migration. Female migrants face a number of different issues during the complete migration cycle. Even though it is not possible to strictly compartmentalise these, since the issues and problems are inter-related across phases, observing the different phases does help to pinpoint the issues. We can broadly categorise three separate phases: the first lies in the source country, the second is the transition phase, while the third is in the destination country. Gender relations, roles and hierarchies influence the migration process and produce different outcomes for women in all three phases.

2 Female Migration from India

As India is a predominantly patriarchal society, female migration from the country has been traditionally undermined and constrained. However, in line with global trends, there has been an increase in the number of Indian women migrating, both as dependent family members and as independent workers. Indian women have migrated to the developed countries of the west, the Gulf countries, Australia and other Asian countries. They have been studied by migration academicians as the wives of Indian male migrants who are left behind and who are struggling to ensure their families' daily survival, and as female migrants who have migrated for less-skilled jobs in the care industry, as nurses and domestic workers (Khadria 2009). But there is also an increasing trend of high-skilled female migrants migrating from India as skilled labour and as students for higher education. It is evident from the various case studies that the migration of women is now taking place more and more for employment purposes. There are 22,786 Indian nurses in the OECD countries (OECD 2007; SOPEMI 2007). Indian nurses have also been migrating to the USA and the percentage of Indian nurse candidates for the USA licensure examination has increased since 2001. India was ranked first in the UK in 2005–2006 with 3.6 thousand nurses and ranked second in the USA with 3.8 thousand nurses. There are also significant numbers of Indian nurses in Ireland and Australia. However, women migrants from India are predominantly low skilled or semi-skilled and a majority of them go to the Gulf. Every year, large clusters of young Indian women go to Malaysia, Singapore and the UAE to work as domestic workers, caregivers and nurses. They go in the hope of earning more to supplement their family incomes, send siblings to school, pay a dowry or increase their status in the matrimonial market.

The migration of women from India has always been dependent and independent, voluntary and involuntary. In 2010, the United Nations Population Division estimated that 48.7 % of all international migrants from India were women (see Table 2). The opening up of employment opportunities in domestic work, nursing and teaching within the services sector in Europe, North America and parts of Asia has facilitated the migration of women from the poorer regions of India. Statistics

Table 2 India migration profile: (1990–2010)

Indian migration profile	1990	1995	2000	2005	2010
Estimated number of international migrants at mid-year	7,493,204	7,022,165	6,411,272	5,886,870	5,436,012
Estimated number of female migrants at mid-year	3,578,808	3,378,740	3,107,712	2,860,663	2,648,186
Estimated number of male migrants at mid-year	3,914,396	3,643,425	3,303,560	3,303,207	2,787,826
International migrants as a percentage of the population	0.9	0.7	0.6	0.5	0.4
Female migrants as percentage of all international migrants	47.8	48.1	48.5	48.6	48.7

Source United Nations, Department of Economic and Social Affairs, Population Division (2009)

on women migrating for work reasons have indicated a sharp increase, as evidenced in figures from the major migrant producing state of Kerala, where female migration increased from 9.3 % in 1999 to 17 % in 2004. In 2008, India was the top receiver of remittances at USA $52 billion. The earnings of 40–50,000 Indian nurses in the Gulf, 90 % of whom are from Kerala, have contributed to pushing the state's per capita income from negative to 41 % above the national average. However, many Kerala women who emigrate to the UAE do not go through the emigration clearance that is mandatory in order to cross Indian borders to work abroad as domestic workers. This method of border crossing is usually used by migrants who do not have any employment contracts and who travel with the help of illegal agents (Zachariah and Rajan 2008). In overall terms, there has been a significant rise in number of women migrating from India for economic and career-related reasons.

Among the high-profile successful Indian women entrepreneurs who migrated to the USA—the top receiving country for high-skilled migrants—the names of Cisco Vice-President Jayashree Ullal, Yahoo content editor Srinija Srinivasan, Digital Think's chairwoman Vinita Gupta, Smart Modular Company founder Lata Krishnan, Right Works CEO Vani Kola, former Hewlett Packard GM and current CEO of Tioga Systems Radha Basu and numerous others are now very familiar in Silicon Valley (Banerjee 2000). Indian women have carved a niche for themselves in the IT sector in the USA. They have been working at high-profile posts and have achieved autonomy and independence. However, for every successful Asian Indian woman in the IT sector in the USA, there are hundreds of other female software engineers who come as dependent wives of male computer professionals. No doubt, a few of these women are lucky enough to get a job in the USA, but their lives differ from those of the women millionairesses and billionairesses in this sector. Nevertheless, the evolving nature of female migration from India, from low-skilled domestic workers and housewives to highly skilled professionals, students and entrepreneurs, needs to be underlined (Sharma 2011).

3   Return Migration-Development Linkage: Conceptualising Women Return Migrants as Development Agents

Every year, a large number of skilled women migrants, excluding those who seek permanent settlement in the host country, return home. Advances in technology and lower communication and transportation costs have created an ever-growing globalised world with easier access to job-related and other information. Economic stimuli for skilled women to return may involve push factors in the country in which the migrants are living, such as economic downturn or unemployment, end of contract, recession and the desire to invest savings. On the other hand, pull factors include an economic boom in the country of origin, more job opportunities and better wages at home. Whether the return migrants are pulled by the attraction of better opportunities in their home countries or pushed by adverse economic, political or environmental conditions in the destination countries, the important question is whether they are linked to development. 'New growth theory' considers 'knowledge workers' as the modern source of economic growth and development (Straubhaar, cited in Iredale et al. 2002). For this reason, countries are now competing for highly skilled immigrants. Skilled migrants do not just bring skills and knowledge, but more importantly, they bring positive externalities in terms of increased technological and economic entrepreneurship networks in and between the sending and the receiving countries (Saxenian 2002). This section analyses whether female returnees engage in development activities differently than men.

There are many studies which establish the fact that remittances can be an important instrument for poverty reduction and growth in many developing countries (Lucas 2004; Adams 2005). Like male returnees, female return migrants have entered the scene of the international and national policy and research debates on the role of 'new' development actors. For example, the final Report of the Global Commission on International Migration (2005) states that not only do female migrants send back remittances in higher amounts and on a more regular basis but they also use the remittances more efficiently for local development processes than their male counterparts. This statement is strengthened by images dominating the gender and development discourse, namely that women are more responsible towards their families and communities.

But we still know too little about the actual linkages between gender, migration and development and the policies that make these linkages work for development. Some argue that the integration of a gender perspective into development policies and programmes can contribute to their efficacy and sustainability (Ramirez et al. 2004). Like male returnees, female migrants return home with financial, social and human capital and they try to impact their home country in a variety of ways. Financial capital involves the use of savings and accumulated capital for development projects; human capital involves the use of qualified skills and experiences

that are relevant to the labour market while social capital[3] is transnational networks and linkages. Return migrants may also contribute by sharing their knowledge and skills, directly if the social and economic environment permits (Thomas-Hope 1999) or in some cases from abroad, for example, by building transnational networks for the transfer of knowledge and technology (Hunger 2004). But it has been argued that the use of savings, skills and networks by women returnees back home depends on power structures within families as well as social structures. For instance, most female Bangladeshi migrants do not have the power to influence the use of the remittances, which still flow through male hands and thus form part of the reproduction of gender relations in Bangladesh (Danneker 2005, 2009). Migration can help raise women and men from the lower classes to the socioeconomic ranks of the lower middle class (ILO 2004; De and Ratha 2005, as cited in Omelaniuk n.d). Many migrant women seize the opportunity to buy land or real estate with their earnings (e.g. Indian and Filipina migrants). Compared to men, women tend to spend a much larger share of their earnings on the home, children's education, etc. The ILO says that this trend is also visible elsewhere, even though women often do not have the same job opportunities abroad and tend to earn less than men (Omelaniuk 2005). There is a scarcity of studies on the role that women return migrants play in development (Martin 2004; Sorensen 2005; Jagganath 2010).

The changes in gender relations and notions of equality between men and women have become an increasingly important development issue for women migrants during migration and after return. Some studies have looked at returnees as innovators, who are the 'bearers of newly acquired skills and innovative and entrepreneurial attitudes' which can benefit the receiving country as an innovative force (King 1986). This deals with the use of skills, qualifications and experiences that are relevant to the labour market, and thus, it refers to the knowledge or human capital of return migrants. Specialisation raises the productivity of inputs and increases output, which raises profits further. A rise in profits leads to a rise in purchasing or demand, and this leads to an increase in competition. The potential benefits of emigration and remigration are seen as possibly occurring at three different levels: the micro-level for individual migrants, families and communities; the meso-level for intermediate effects on particular industries/areas; and macro-level effects for economies and societies as a whole (Iredale et al. 2002). In the wake of the international meltdown, and given the relative stability of the Indian market, some engineers of Indian origin, who were working for carmakers in the USA, have returned to India. They bring with them a wealth of knowledge and experience and with their support, employment in the auto sector is expected to double from the current INR 13 million to INR 25

---

[3] Social capital here refers to social relations, group memberships and to the extent to which they can be mobilised to gain access to other resources (such as financial means, jobs, knowledge; see Bourdieu 1986). Social capital is dependent on the extension of an individual's social network, the strength of ties and relationships (e.g. weak vs. strong; Granovetter 1973) and on the resources that the respective persons and groups have at their disposal.

million by 2016.[4] Indian, Taiwanese and Chinese returnees from Silicon Valley in the USA have been an important force in the growth of the software industry in India and Taiwan, following liberalisation (Ghosh 2000). Apart from knowledge and skills, other potential benefits of the return migration of highly skilled people include the use of remittances to improve the balance of payment (BOP), reducing foreign debt and funding imports; improving human capital at a national level; the contributions of migration networks to the enhancement of international trade and the introduction of an innovative attitude to economic development through exposure to more industrialised societies. This represents the most difficult area to analyse, as separating the impact of return migrants on the economy and society from all other aspects (such as the information revolution, technology and research) is not an easy task.

4 A Case Study of the Role of Highly Skilled Women in the Development of India

4.1 The Case Study: Rationale for Selection and Methodology

Focusing on return migration of men and women to India, this section presents the results of a field study that was conducted in five Indian cities—Delhi, Kolkata, Hyderabad, Bangalore and Mumbai in the year 2011–2012. Although the field work was conducted to understand the overall experiences and contribution of both male and female highly skilled migrants who have returned and who are residing in India, only relevant data about return migrants are used for the current chapter as our goal is to focus on the gender perspective. The idea is to discuss the differences in the experiences of highly skilled male and female returnees in destination countries and the country of origin in general, and their role in India's development activities, the skills gained abroad, and in particular, the difficulties faced by migrants both before and after returning.

The study analyses the data collected in the five aforementioned Indian cities, which are situated in the five most economically and industrially developed states of India. The selection of these five cities for the study is due to the perception that these cities are in the process of developing as global centres; they have been the popular choices of skilled women return migrants as a place to work and reside after return. A survey conducted by the National Association of Software and Service Companies (NASSCOM 1995) covering the headquarters of the top 200 software companies in India revealed that '68 companies were located in Bombay [now Mumbai], 56 in Bangalore [now Bengaluru] and 30 in New Delhi. The remaining one-quarter of companies were distributed among Hyderabad, Madras

---

[4] The Hindu, 27 January, 2010.

[now Chennai], Calcutta [Kolkata] and Pune' (cited in Khadria 2004). Institutes such as the IIM, BEL, IISc, NIMHS, ISB and IITs, and the presence of various MNCs and similar entities in these places make them key locations for socio-economic development.

Random and snowball sampling was used in this survey. As a first step, formal contacts were made by approaching some professionals by email and telephone. At the second stage, interviews were held with those willing to respond. While in-depth interviews were used for the academic and research institutions, the random survey plus an in-depth interview were used for the multinational companies and other software companies. In addition to this, an online survey was also conducted with the help of Survey Monkey. Primary information was collected through a comprehensive questionnaire.

The chapter looks at six important aspects of highly skilled migrants: personal information, current employment situation, information related to out-migration/on-site assignment, return migration and its contribution to the home country, position in society and transnational ties. The questionnaire was used to interview about 1,000 respondents, mostly in the academic field, the financial and management sector, information and communication technology, pharmaceutical/biotechnological, medical and other sectors. Besides having written accounts of the responses noted down by the interviewers, several interviews were also tape-recorded for an in-depth analysis later on.

4.2 Profile of Survey Respondents

For the purpose of the study, we analysed a total sample of 527 and the field survey consisted of 458 males and 69 females. The large proportion of males can be explained by the fact that the percentage of highly skilled males migrating to developed regions of the world is much higher than that for females. Secondly, the composition of data favours technical and managerial sectors of employment (55 % of the total sample, see Fig. 1), which are considered to be male-friendly. Furthermore, it was more difficult to find female returnees than males. Out of 69 women, 55 are married, 11 are unmarried and three are divorced. The age profile of the women sample shows that almost 77 % of respondents (i.e. 53 out of 69), are between the ages of 25 and 45, and there were 15 respondents in the 45–65 age group. This means that most of the women returnees in the sample are young and belong to the working age group, and the mean age is 33. If we observe the educational level of the respondents, we see that of the 69 women, 40 hold PhDs, 24 have a master's degree while five hold a first degree. The dataset clearly depicts the USA as the most favoured destination country for Indian women to obtain a higher educational degree, followed by the UK and Germany, with around 36.11 % (13 out of 69) of women completing their doctoral and post-doctoral degree in the USA. Other foreign countries include Canada, France, Australia and Japan. Thirty-nine women were educated within India, and more than two-thirds of
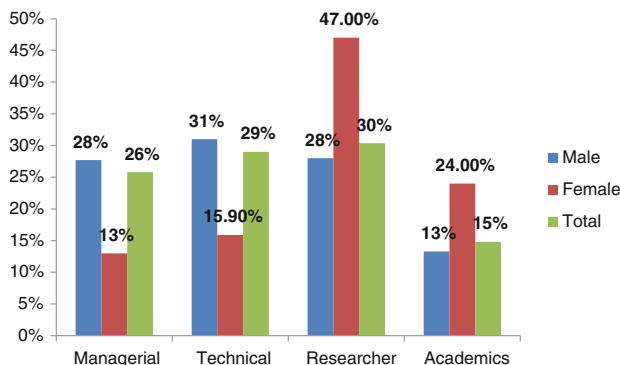
Fig. 1 Gender distribution in different employment sectors

them received their degrees in states such as Delhi, West Bengal and Karnataka. Thirteen respondents did their post-graduate courses in India, and five did them abroad. However, unlike these primary and post-graduate degrees, only one respondent of the four research degree holders had done her PhD in India, while the remaining three had done theirs abroad. The notable point here is that all the respondents who did their post-graduate or PhD degrees abroad had also received foreign fellowships.

Another interesting observation is that around 87 % of respondents were born in an urban area, with only 13 % coming from rural areas. Only 11 % of the female and 33 % of the male respondents said that Hindi was their medium of schooling up to 12th class, while around 62 % of males and 66 % of females said that their schooling had been in English, with the rest saying that they had completed their education in their mother tongue. The breakdown of social classification shows 53 women belonging to the general category, while 14 women did not reveal information on this aspect. There were only two in the reserved category. It can be inferred that the social profile of the sample encompasses young and married women, brought up and educated in English-medium schools in urban areas with access to good educational institutions.

Concerning the distribution of migrant professionals in current employment, it is evident from Fig. 1 that a higher percentage of males than females are working in technical and managerial areas of employment. On the other hand, the percentage of women employed in research and academia is higher than the percentage for male returnees. Here, managerial and technical sectors include management and finance, whereas research includes both biotechnology and pharmaceuticals. It can be inferred that research and academia are favoured areas of employment for women, with the situation balanced in the management and financial sectors. Most of the respondents reported very positively about working conditions. Like the men, a majority of women return migrants said that they are satisfied with their present employment and working environment, and they think that their employers and colleagues are also satisfied with their work.
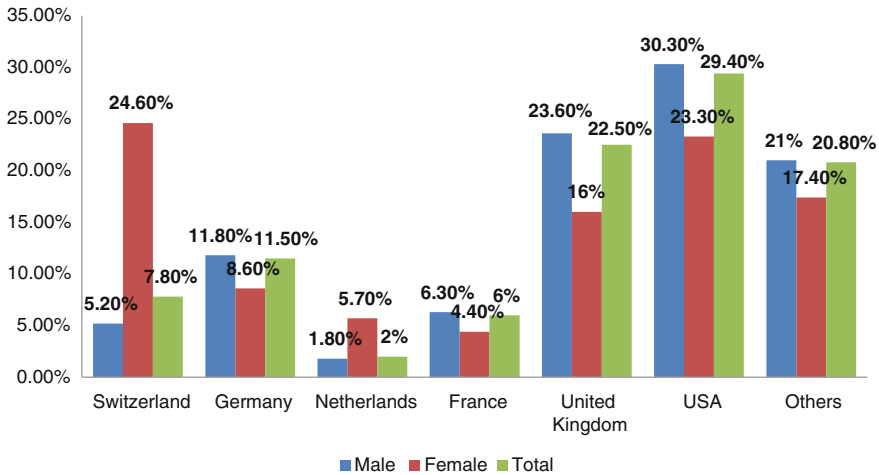
Fig. 2 Choice of destination countries during first visit

Figure 2 shows the details of destination countries visited by returnees in their first visit. For the analysis, only the first visit is taken into consideration because most respondents said that their first foreign visit was the most relevant one. Unlike men, Switzerland is the first choice for female returnees, followed by the USA and the United Kingdom, which are chosen because of ample job opportunities and good educational institutions. These results reveal an interesting difference with men. While the USA is the most favoured destination among men who are moving abroad, the women prefer Switzerland. We could easily understand the link between the choice of destination countries and engagement during the stay abroad; the USA and UK are the best choices for male for both higher studies and work assignments, whereas the women in the sample favour the USA and Switzerland. Other countries in the table include Canada, Australia, Spain and Japan. Information related to out-migration reveals that around 47 % of female and 54 % of male return migrants had gone overseas for a very short duration, that is, less than two years during their first visit (see Fig. 3). Fifty-three percentage of women returnees and 46 % of the male ones reported that they stayed abroad for more than two years. It can be easily deduced from Figs. 3, 4 and 5 that there is a strong correlation between visa type, engagement during the stay abroad and the length of stay overseas. For instance, those women migrants who had gone abroad with an employment visa on an assignment or project entrusted to them by their employers stayed for a shorter duration. Only 8 % of women and 4 % of men respondents with a permanent residence permit have stayed overseas for a longer, say 15–25 years. After project assignments, higher education is the second highest engagement abroad for women respondents. Another interesting fact is that only 4 % of women respondents had gone overseas on a family reunification visa,
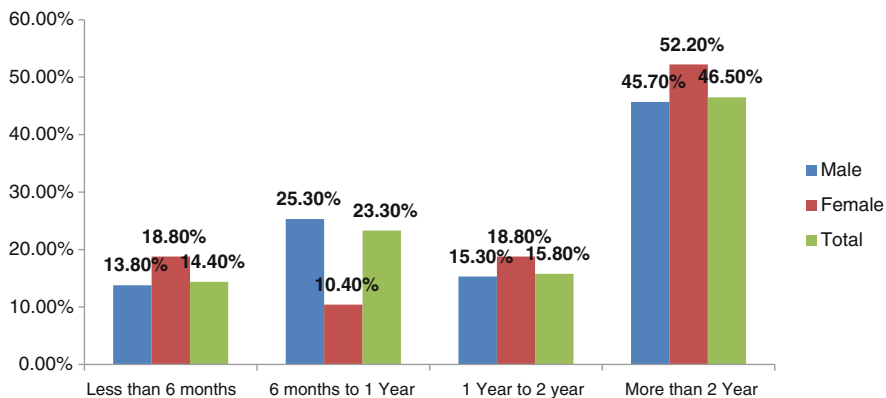
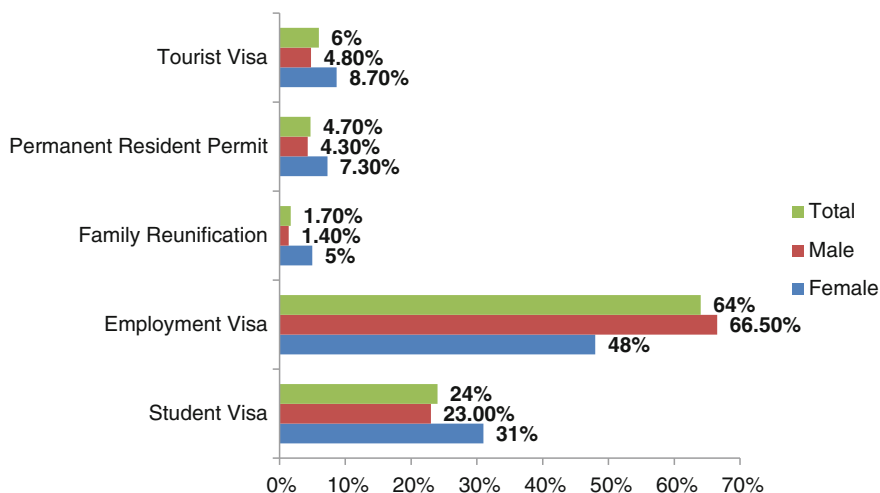**Fig. 3** Duration of stay abroad of return migrants during first visit

Fig. 4 Type of visa during the first foreign visit (visit 1)

reflecting the very low representation of dependent women (Fig. 3). The average period of residence abroad for the entire sample of women returnees is four years.

4.3 Experiences Abroad

In the present era of globalisation, transnational networks and relations enhance social and economic mobility and they aim to share and use information and contacts; this largely depend on the experiences of migrants in the destination countries. The study reveals that 78 % (356 out of 458) of male migrants in
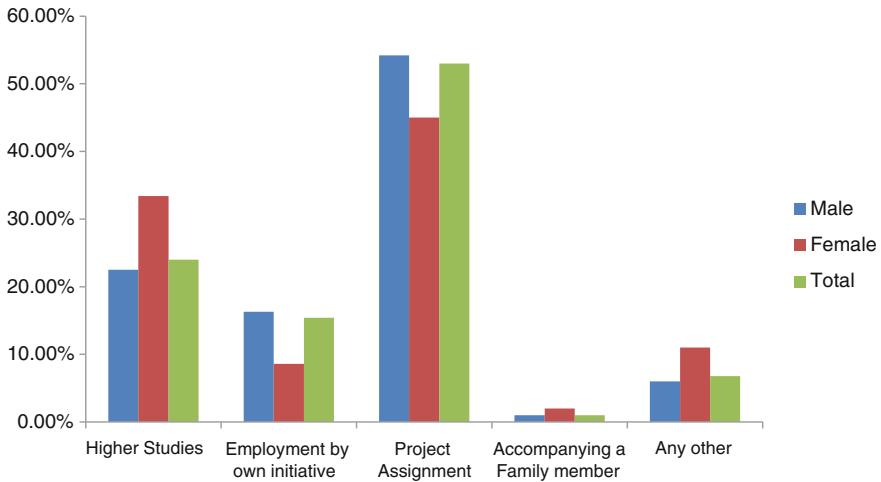
Fig. 5 Engagement during stay abroad during the first visit

destination countries said that their experience of tolerance towards foreigners was good and only a few reported it as bad, while 84 % of women responded that they did not face any problems in this regard. Women appeared more comfortable than men in the destination countries. Women returnees gave a mixed response about their experiences with communication and language-related issues. Over a third (31 %: 21 out of 69) of women rated their experience as neutral or bad, while the rest said it was good. After comparing the overall experiences about acceptance of different cultural and religious practices, we can conclude that the experiences of men and women are quite similar. There is no large variation in the data, except for the fact that only 3 % of females rated their experience of tolerance towards foreigners as very bad while 13 % of women respondents rated their experience of communication and language-related issues as very bad. When asked to give a detailed reason, they denied any racial discrimination but mentioned their difficulties in communicating with locals. Despite the claims that female migrants send back higher remittances and are more responsible towards families (GCIM 2005; Ramirez et al. 2004), this analysis portrays a different picture. When the return migrants were asked about whether they sent remittances to India when they were abroad, only 27 % of women said yes while 73 % said they did not send any remittances back home. If we compare this to the male respondents, we see that around 40 % (i.e. 179 out of 458) sent remittances to their family members (Fig. 6). The purpose of such transfers includes items such as covering daily expenses, buying a house and land and covering the education costs of a family member. On average, about 38 % of return migrants sent remittances when they were abroad. This is due to the fact that unlike males, skilled female migrants have less family responsibilities and are less engaged in buying properties in their home country.

Fig. 6 Remittances sent back home
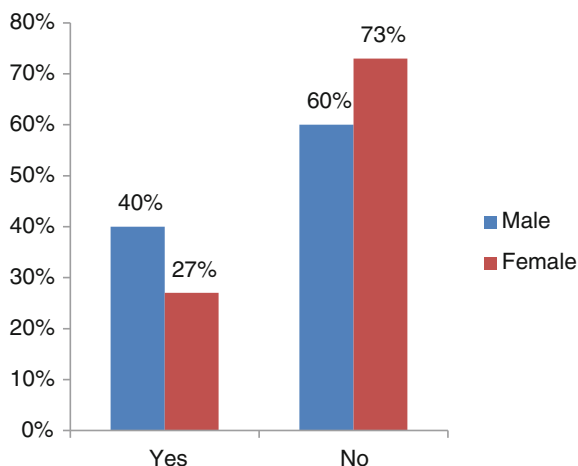
Our survey also included questions related to factors regarding the motivation to return and contribute after return. Figure 7 clearly shows that 40 % of females and 48 % of male professionals returned on their own initiative, and 41 % of male and 52 % of female returnees came back to India for employment reasons. Only four women respondents said that they had returned to join their family in India. This would seem to indicate that women are mostly influenced by reasons other than family.

Regarding what influenced the decision to select the specific city (Delhi NCR, Kolkata, Mumbai, Hyderabad and Bengaluru), 32 out of 69 (46.4 %) of the women and 211 out of 458 (46 %) of the men stated that they selected the city because it is their hometown and because of family reasons, whereas 36 (52 %) of women and 224 (48 %) of male respondents stated employment reasons (i.e. decided by the employer). It can be concluded that more women state employment reasons over personal and family-related factors when selecting the city of residence. But we can also see that men and women do not differ much when choosing a city, and now, more women are independent and feel safe staying alone in a particular city (Fig. 9). At the same time, the results show equal preferences for both genders for the personal and family-related factors that influence the choice of a specific city. The distribution of return migrants in a specific city shows that the number and percentage of female return migrants is larger in Kolkata, Bengaluru and Mumbai (Fig. 8). Looking at the profile of women and the specific city of their residence, we find that most women researchers and academicians choose Kolkata, Bengaluru and New Delhi to live, whereas women professionals in management and technical fields are mainly concentrated in cities like New Delhi, Hyderabad, Bengaluru and Mumbai. With regard to law and order and safety conditions, women professionals rated Mumbai and Bengaluru as the most comfortable and safest cities with New Delhi seen as the most unsafe. It was noticed that in Kolkata, unlike male returnees, a majority of women returnees were Bengali and they said they rated it as a
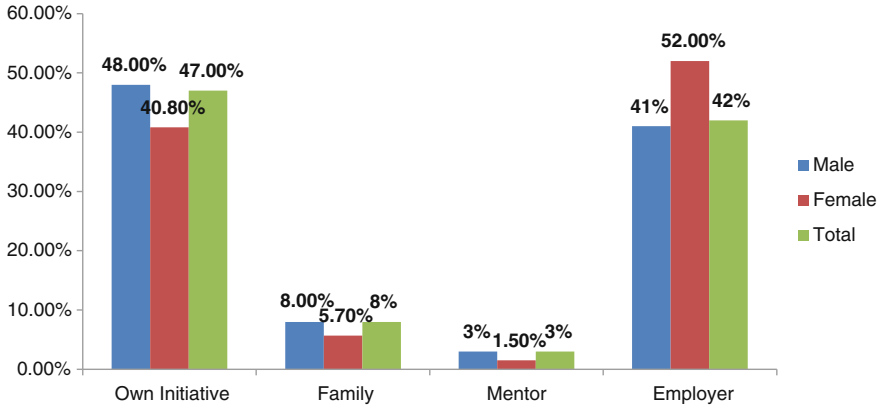
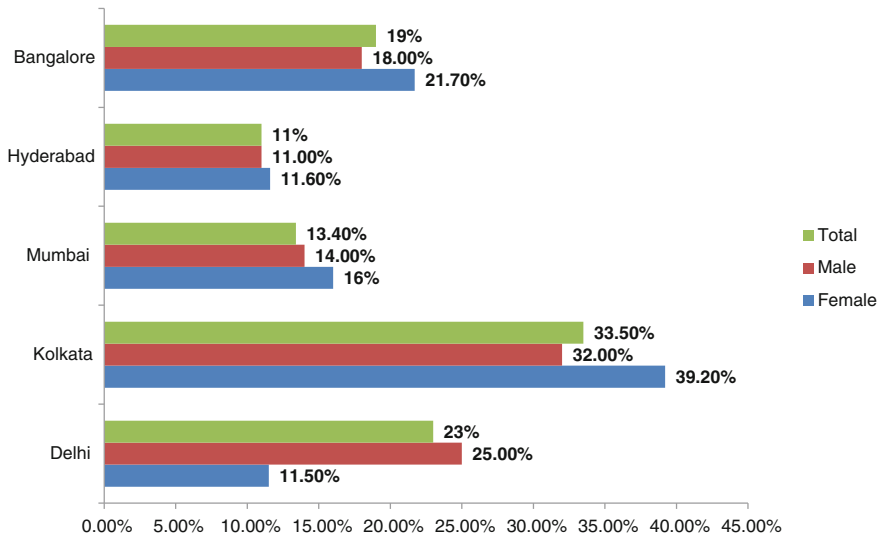**Fig. 7** Factors that motivated a return to India

Fig. 8 Gender distribution in five cities of India

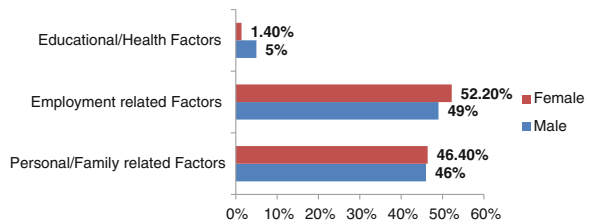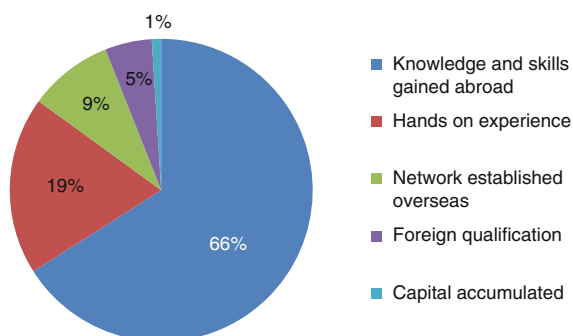**Fig. 9** Reason for selecting a specific city

Table 3 Difficulties faced after coming back to India

Difficulties faced upon return to india	Male (%)	Female (%)	Total (%)
Did not face any particular difficulty	81.40	53.70	78
Faced difficulty related to bureaucracy	4.60	13	6
Faced difficulty in terms of work culture	6.40	20.30	8
Faced difficulties with infrastructural facilities	7.60	13	8

Fig. 10 Gains from migration experience for female returnees (percentage)

Knowledge and skills gained abroad
Hands on experience
Network established overseas
Foreign qualification
Capital accumulated

top cosmopolitan city for women returnees despite the poor infrastructure and living conditions. Family, employment and children's education are the major motivational factors behind the return of women professionals to these cities. A few female respondents said they feel these cities are more developed and safer for women.

As far as the difficulties upon returning to India are concerned, 81 % of male and 53 % of female returnees responded that they did not face any problems when they returned. Table 3 clearly indicates that women professionals faced more difficulties than men. Among those women returnees who faced difficulties, 20 % experienced difficulties due to differences in the working environment while 13 % struggled with the poor infrastructural facilities and built-in bureaucratic problems and administrative inefficiency in the workplace.

Both the male and female respondents said that the knowledge and skills they had gained abroad had been the most important contribution to their current job in India. A significant number of female respondents mentioned hands-on experience as the second most important gain (Fig. 10).

When the respondents were asked about their 'active involvement in the development processes of India', more than half responded positively. Sixty-eight percentage of the men (312 out of 458) and 77 % of the women (53 out of 69) revealed that they have actively taken part in the development process of India. As Fig. 10 clearly demonstrates, a significant number of women reported their involvement in providing personal academic training to students and in establishing private laboratories to help students in research and development. A few women returnees mentioned the shortage of good educational institutions, and they

Table 4 Examples of the application of skills and experience gained overseas (in percentages)

Examples	Male (%)	Female (%)	Total (%)
Research and development	40	62.5	42.5
Teaching and training	21	10	20
Development of work culture and environment	16	10	15.5
Providing a better service to the organisation	11	6	10.5
Consultancy services	1	0	1
Sharing/transferring knowledge or experience	11	11.5	10.5

felt that such institutions are an absolute necessary for the development of the country and society. Some women (in Bengaluru) reported that they are running private schools and teaching evening classes for poor students. Furthermore, some women respondents said that they were contributing to the societal cause through various organisations and NGOs involved in environmental issues, the education of poor children and other social services. The male returnees, on the other hand, said they were making a contribution through charities and by getting involved in various developmental committees of the central and state governments. Table 4 provides examples of how the skills and experience gained overseas are applied after returning to India. We can see that both men and women have the highest level of application within the areas of research and development, and the results do not show any significant differences between their responses.

When asked how much their current annual income was in real terms when compared to the income they earned abroad, most respondents said that there was not much change in their salary. Only 30 % of the female respondents and 20 % of the male respondents said that their earnings were higher than before. Twenty women said that they had seen a decline in their salaries. A few attributed this decline to the unavailability of jobs in their area of choice and the low cost of living in India, while the majority remained silent on this issue.

The findings on the position of return migrants in society after their return are also noticeable. When comparing the return migrants' current income in India with their earlier income abroad, 52 % women returnees feel that there is no effect on their level of investment after return, while 46 % (i.e. 32 out of 69) feel that their overseas stay has affected their level of investment in a positive way and it had gone up after return. This response is similar to males, as 42 % (196 out of 458) reported that their level of investment is the same as it was before departure, whereas 56 % admit that it has increased. Major investments made in past five years include housing-related expenditure, durable consumption goods such as electronic appliances and furniture., and providing support to family members. Only five women migrants spoke about their investment in some community services while none of the women and 23 of the male migrants said that they have invested in the stock market in India. Another striking fact is that more than half of the women sampled believe that their position in society and the workplace has been enhanced since their return, and they also said that their standard of living had increased. The rest feel that their status and living conditions are the same as

before and that foreign exposure had nothing to do with their position in society. However, more than two-thirds of the men and women admit that foreign experience has contributed to their personal development.

5   Conclusion

Globalisation, demographic shifts and a shortage of skills and labour in many countries are accelerating migration rates, and return migration is now a prominent feature in the socioeconomic and political landscape of many countries. This study discusses the linkage between return migration and development with regard to women, and it offers us a good view of the experiences of return migrants, the problems they face and the contributions they make. The results presented in this chapter are not sufficient to confirm a strong linkage between the return migration of highly skilled women and economic development. However, an analysis providing essential evidence on the role and contexts of the return migration of women is important, and it can contribute to development in greater detail and in a more systematic way. The case study of highly skilled return migrants highlights the significant role played by India in the international mobility (emigration, immigration and return migration) of high-skilled labour and professionals from different fields such as Information and communication technology, academia, research, management and finance and medicine. On the positive side, the study emphasises several modes through which migrants can play an important role in the development of the countries of origin through remittances, investment, skill development and other forms of 'learning', as well through transnational communities and networks.

Unlike earlier migration trends where women migrated for family reunification, this study highlights the fact that large numbers of women are now moving independently as students and professionals. The findings show that young women professionals mainly want to go abroad to gain professional experience, which they think will be highly valued in India when they come back. In addition, they are motivated by higher earnings, fringe benefits and a higher quality of life in the destination countries. However, unlike young women professionals engaged in managerial and technical employment, the majority of prospective researchers want to go abroad for longer periods, and some want to settle abroad permanently, because they perceive that their career prospects are not that bright in India. Some of the academics and researchers are prepared to settle abroad permanently if given a chance. Unlike men, more women want to settle in their own country despite the lower salaries and the poorer standard of living. A unique aspect of Indian women professionals from cities like Hyderabad, Bengaluru and Kolkata is that none of them expressed a desire to settle abroad permanently, unlike the skilled women from New Delhi and Mumbai. This can be explained by the fact that cities like Bengaluru, Hyderabad and Kolkata are growing cities in IT, management and research terms, and women find ample opportunities for growth

and have scope to progress in their careers. *It has been seen that a few of the women returnee professionals had a very different picture in their mind before they returned and they returned with many expectations and plans to execute in their own country.* However, they faced many challenges related to bureaucracy and administrative inefficiency after they returned. For instance, a few respondents from IISc in Bangalore, especially those in the Astrophysics, Chemical labs, nanotechnology section, etc., reported that they are struggling with small laboratories, a lack of research equipment and they do not have proper information on the sale of research instruments and chemicals. The returnees said that India is very dependent on foreign countries for even the most basic laboratory equipment. A few respondents from institutes such as IIM, ISB (Hyderabad), NIMHS stated that they faced problems when teaching. Even though they wanted to introduce new courses after their return, they were obliged to follow the conventional syllabus since they have no say in administration, management and curriculum-making matters. Some senior female academics said that new Indian researchers are not ambitious enough and that they are not serious about research as foreign students. In contrast to the academics and researchers, women professionals in management and ICT are quite confident about returning. We can conclude that the migration of ICT professionals is circular migration because the majority of IT professionals move overseas for specific projects assigned to them by their employers, and accordingly, they return after completing these assignments and are keen to move again and gain some new skills and experiences.

Although other studies on return migration to India have dealt with the migration of health workers (doctors and nurses) and IT professionals, this chapter highlights the in- and out-migration of significant number of researchers and academics, apart from managerial and technical professionals. The study shows that the demand for Indian women academics and teachers and for female technical workers has increased several folds in the recent past. This increase in demand can be explained by the popularity of the English language and the internationalisation of higher education in India. Besides, the significant increase in migrants from research and academia has resulted from the rise in the participation of women in the services sector in general.

The study reflects the awareness, perception and anxiety of both foreign-educated and/or foreign-trained Indian women professionals who want to serve in the home country, but who simultaneously face many challenges in the workplace or in their family or society. They seem to be very committed, but the fact that they are constrained from working in India raises many questions and contradictions, about highly skilled emigration as brain drain on the one hand, and about qualified returnees from abroad not being considered as brain gain in order to provide them with good facilities on the other. One really needs to understand and resolve these contradictions and the dilemmas that they engender. It is good for the country if young female and male professionals from all fields move abroad and learn new skills and knowledge and then impart their new innovative ideas and experience in India after they return.

Not enough empirical research has been carried out to allow a systematic analysis of the remittances of female migrants and their development 'impact'. The globalisation of the Indian economy has brought about a shift in the migration patterns of women. Women from all socioeconomic backgrounds migrate, and this gives rise to varied trends and patterns, which also continue to evolve and change over time because of changing opportunities. It is only recently that women's autonomy and subjectivity in the migration process has been considered, with the increased awareness of 'independent' female migration. However, the complexity of women's migration trajectories and their lives abroad and after their return has not occupied much space on the agenda of mainstream migration research (Dannecker and Sieveking 2009). Nevertheless, most studies of return migration carried out so far do not make a distinction between the contributions of male and female migrants. Nonetheless, women migrants, who international and national development organisations and policymakers have tended to place for decades on the losing side of the globalisation processes, seem to be emerging more and more as important development actors and transnational entrepreneurs who are conscientious with regard to the development of their families and communities. The increase in the number of women migrating temporarily and then returning with new skills, experiences and savings and using these in the home country has amplified the debate on return migration, gender and development.

It is often argued that for a large-scale international female migration to take place, there is a need for strong conducive factors such as willingness and the motivations of individual women at an agent level (Oishi 2002). The reasons for emigration vary from one person to the next. A deeper understanding of the complex and interrelated dynamics between gender, return migration and development depends on whether the gendered nature of migrants' agencies as well as their context-specific understandings of development will be taken into consideration. This means, first of all, that the definition of development as economic growth has to be critically scrutinised. A gender analysis of migration looks beyond simple differences in migration behaviour between men and women—such as the likelihood and type of migration—and it examines the inequalities underlying those differences. It looks at how these are shaped by the social and cultural contexts of the individual and examines the influence that membership of social groups and economic and political conditions can have on migration decisions (Omelaniuk n.d.). Conclusively, we can say that the aspects highlighted in this study indicate that female returnees are more willing to participate in developmental activities after their return than their male counterparts, and they actually do participate more, even though such participation is somewhat constrained in accordance with popular assumptions. Accordingly, they need to be brought to the forefront of discussions and policymaking regarding developmental plans that include highly skilled returnees.

References

Adams, R., & Page, J. (2005). *Do international migration and remittances reduce poverty in developing countries*? World Bank. Revised April 21.

Al-Ali, N. (2004). *The relationship between migration within and from the Middle East and North Africa and Pro-Poor Policies*. A report by the Institute of Arab and Islamic studies. Exeter: University of Exeter for the Department for International Development.

Banerjee, K. (2000). *In the business of help*. Silicon India, September. www.siliconindia.com

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport: Greenwood Press.

Conell, J. (1984). Status on subjugal women migration and development in the South Pacific. *International Migration Review, 18*(4), 966.

Cerruti, M., & Gaudio, M. (2010). Gender differences between Mexican migration to the United States and Paraguayan migration to Argentina. *The ANNALS of the American Academy of Political and Social Science, 630*, 93–113.

Danneker, P. (2005). Transnational migration and the transformation of gender relations: The case of Bangladeshi labour migrants. *Current Sociology*, 53(4), 655–674.

Danneker, P. (2009). Migrant visions of development: A gendered approach. *Population, Space and Place*, 15(2), 119–132.

Dannecker, P., & Sieveking, N. (2009). *Gender, migration and development: An analysis of the current discussion on female migrants as development agents*. Bielefeld: COMCAD, University of Bielefeld Faculty of Sociology, Centre on Migration, Citizenship and Development (COMCAD).

De, P., & Ratha, D. (2005). *Remittance income and household welfare: Evidence from Sri Lanka integrated household survey*. Mimeo: World Bank.

Docquier, F., Marfouk, A., Salomone, S., & Sekkat, K. (2012). Are skilled women more migratory than skilled men? *World Development, Elsevier, 40*(2), 251–265.

Docquier, F., Lowell., B. L., & Marfouk, A. (2007). *A gendered assessment of the brain drain*. IZA Discussion paper, n. 3235.

Ehrenreich, B., & Hochschild, A. R. (2003). *Global woman: Nannies, maids and sex workers in the new economy*. New York: Henry Holt and Company.

Ghosh, B. (2000). *Return migration: Journey of hope or despair?*. Geneva: International Organization for Migration.

Global Commission on International Migration (GCIM). (2005). www.gcim.org/en/

Gender and Labour Migration in Asia, IOM. (2009). © 2009 International Organization for Migration (IOM).

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*, 1360–1380.

Heering, L. E., & Wissen, V. L. (2004). The role of family networks and migration culture in the continuation of Moroccan emigration: A gender perspective. *Journal of Ethnic and Migration Studies, 30*(2), 323–337.

Hunger, U. (2004). Indian IT entrepreneurs in the US and in India: An illustration of the ''Brain Gain Hypothesis''. *Journal of Comparative Policy Analysis*, 6(2), 99–109.

ILO. (2004). *Gender and migration in Arab states: The case of domestic workers*. Beirut: ILO Regional Office for Arab States.

IMR (India Migration Report). (2009). *Past, present and the future outlook*. General Editor Binod Khadria, Published by IMDS. Delhi: Jawaharlal Nehru University.

IOM (2011) *Facts and figures on international migration*. http://esa.un.org/migration/p2k0data.asp

Iredale, R., Guo, F., & Rozario, S. (2002). *Return migration and business migration and social transformation*. New York: Ford Foundation.

Iredale, R. Guo, F., & Rozario, S. (2003). *Return migration in the Asia Pacific*. Cheltenham: Edward Elgar Publishing.

Jagganath, G. (2010). The return migration of Indian women in Durban, Kwazulu Natal. *Journal of Social Sciences, 25*(1-2-3), 59–69.

Khadria, B. (2004). *Migration of highly skilled Indians: Case studies of IT and the health professionals*. OECD Science, Technology and Industry Working Papers.

Khadria, B. (2009). *India migration report 2009: Past, present and the future outlook*. edited, Published by IMDS, JNU.

King, R. (1986). *Return migration and regional economic development: An overview in return migration and regional economic problems*. Beckenham: Croom Helm.

Kofman, E. (2000). The invisibility of skilled female migrants and gender relations in studies of skilled migration in Europe. *International Journal of Population Geography, 6*, 45–59.

Kofman, E., & Raghuram, P. (2005). Gender and skilled migrants: Into and beyond the workplace. *Special issue of Geoforum, 36*(2), 149–154.

Lazardis, G. (2003). *From maids to entrepreneurs: Immigrant Women in Greece*. In J. Freedman (Ed.), Gender and insecurity—migrant women in Europe. Aldershot: Ashgate.

Lucas, R. E. Jr. (2004). Life earnings and rural–urban migration. *Journal of Political Economy, 112*, no. 1, pt. 2, University of Chicago.

Ramirez, C., Dominguez, G. M., & Morais, M. J. (2004). *Developing a framework to understand the relationships between migration, gender, remittances and development*. United Nations International Research and Training Institute for the Advancement of Women.

OECD. (2007). *International migration outlook*. SOPEMI 2007 Edition. Paris: OECD. Retrieved December 14, 2009, from www.oecd.org/dataoecd/32/20/38823907.pdf

Oishi, N. (2002). *Gender and migration: An integrative approach*. Working paper 49, The Centre for Comparative Immigration Studies. San Diego: University of California.

Omelaniuk, I. (2005). *Gender, Poverty Reduction and Migration*. Paper presented in the international women leaders' conference on migration and gender issues within the millennium development goals. Haifa (Israel), September 25–28, 2005. Retrieved December 5, 2009, from http://siteresources.worldbank.org/EXTABOUTUS/Resources/Gender.pdf

Omelaniuk, I. (n.d.). *Gender, poverty reduction and migration*. World Bank. http://siteresources.worldbank.org/EXTABOUTUS/Resources/Gender.pdf

Martin, S. (2004). *Women and migration. Prepared for the UN division for the Advancement of Women (DAW) consultative meeting on migration and mobility and how this movement affects women*. 2–4 Dec 2004, Sweden.

Morrison, A. R., Schiff, M., & Sjöblom, M. (2007). *The international migration of women*. Basingstoke: Palgrave McMillan.

Sassen, S. (2003). *Globalization and its discontent. Essays on the new mobility of people and money*. New York: The New York Press.

Saxenian, A. (2002). *Transnational communities and the evolution of global production networks: The cases of Taiwan, China and India Industry and Innovation*. Industry and Innovation (Special Issue on Global Production Networks).

Sharma, R. (2011). Gender and international migration: Profile of female migrants from india, the issues involved, and the problems faced. *Social Scientist, 39*(3–4), 37–63.

Sorensen, N. N. (2004). *Migrant remittances as a development tool: The case of morocco*. Working paper No. 2 (June). Geneva: Migration Policy Research, IOM.

Sorensen, N. N. (2005). Migrant remittances, development and gender. Dansk Institute for International Studierstrandgade. www.diis.dk

Sopemi. (2007). *Immigrant health workers in OECD countries in the broader context of highly skilled migration*. International Migration Outlook, OECD 2007. http://www.oecd.org/migration/internationalmigrationpoliciesanddata/41515701.pdf

Thomas-Hope, E. (1999). Return migration to Jamaica and its development potential. *International Migration, 37*(1), 183–207.

UNESCAP. (2003). *Dynamics of international migration from India: its economic and social implications*. Ad Hoc Expert group Meeting on Migration and Development, 27–29 August, Bangkok.

UNDP. (2005). *2005 Human development report*, New York.

United Nations, Department of Economic and Social Affairs, Population Division. (2009). *Trends in international migrant stock: The 2008 revision* (United Nations database, POP/DB/MIG/Stock/Rev. 2008).

Zachariah, K. C., & Rajan, S. I. (2008). *Migration and development: The Kerala experience*. New Delhi: Daanish Books.

Zlotnik, H. (2003). *The global dimensions of female migration*. Washington, DC: Migration Information Source, MPI.