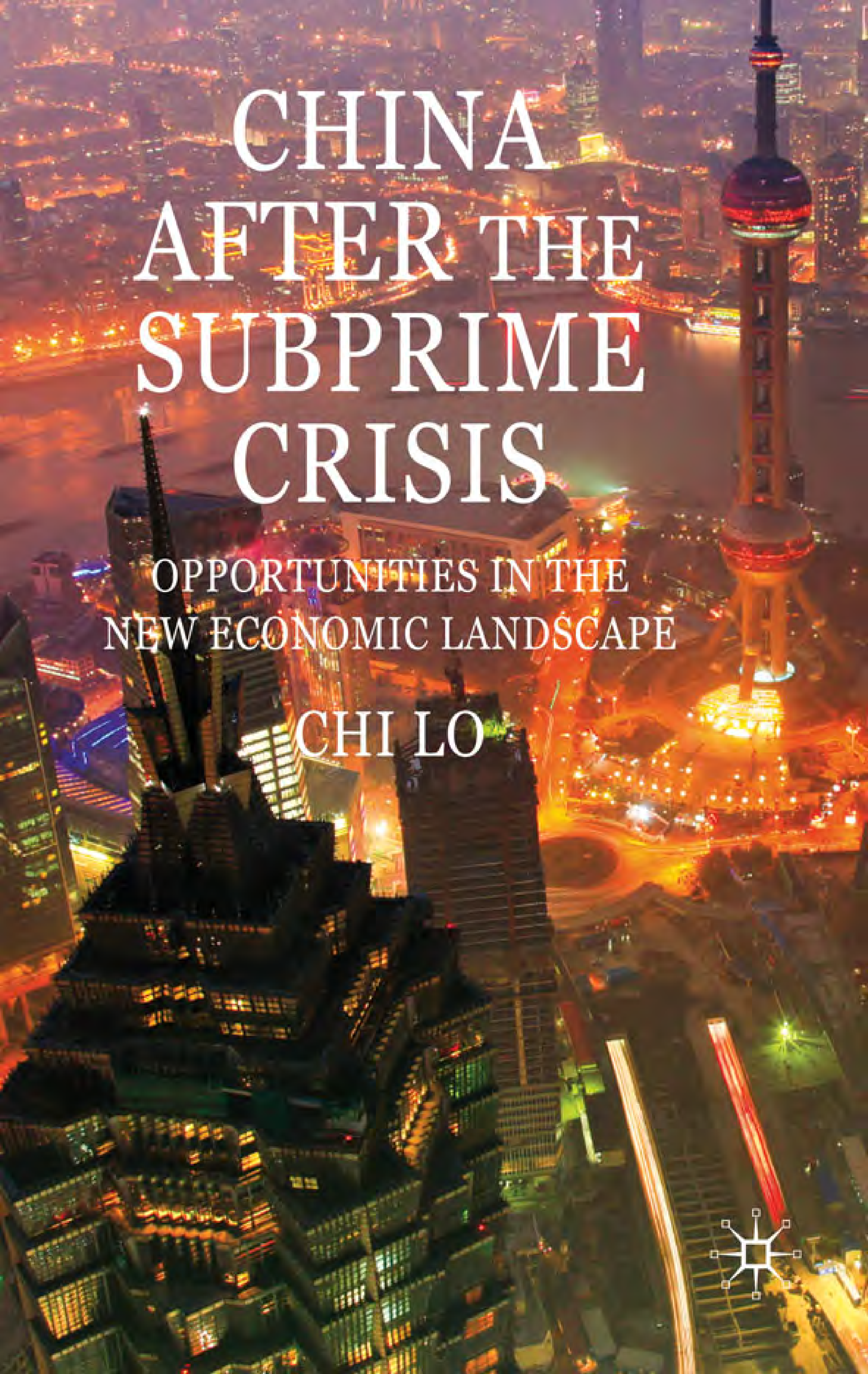

CHINA AFTER THE SUBPRIME CRISIS

OPPORTUNITIES IN THE NEW ECONOMIC LANDSCAPE

CHI LO

China After the Subprime Crisis

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Chi Lo
Chief Economist and Strategist for a Major Investment Management Company based in Hong Kong, China

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Daring to ask
Eager to learn
Brave to explore
Born to lead
Yielding to none

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Preface

The world economy has been stuck in a 'stable disequilibrium' state for over a decade, with excessive consumption in the developed world (led by the US) being balanced by excessive saving in Asia (led by China) until the subprime crisis erupted in late 2007. This 'credit quake' or 'financial tsunami', as some people term the financial debacle, has finally forced a fundamental rethink among the world authorities about the need for rebalancing the global economy back to a 'stable equilibrium' state. This rebalancing process, however, will not be simple or easy; it involves significant, painful structural changes in the economies on both sides of the Atlantic. The process will create instability in the short term. Internal and external political tensions will rise, sacrifices and tough decisions will have to be made, and economic behaviour and institutional and regulatory frameworks will have to be changed within this transition period from a disequilibrium to an equilibrium state.

While we are uncertain about how the economic and political dynamics of the rebalancing process will unfold, it is clear that both the US (representative of the debtors) and China (representative of the savers) are going through major policy reassessment and debates about their past behaviour. Larry Summers, the US White House economic director, argued strongly in late 2009 (Financial Times, July 2009) that the US must turn itself from a consumption-based economy into an export-led model, and rely on real engineering rather than financial engineering. Timothy Geithner, the US Treasury Secretary, and other top US officials have made similar statements about rebalancing US growth within the world system.

This rebalancing act may be a tall order for the Americans, who are so used to profligacy that some of them might have no bad feelings about running Ponzi games. But the logic of this 'new' thinking in the US is not just economic; it is also strategic from the US perspective. The credit quake has forced the US to realise that there is an increasing tension between its superpower status and its net foreign indebtedness. US global influence will be compromised if it continues to rely on foreign investors to bail out its financial sector, as in the subprime crisis, and/or to finance its fiscal profligacy, as Asia and China have been doing for over a decade. The massive US external deficit cannot be financed forever by foreign countries, so to some extent America's rebalancing is also born of necessity.

The short-term challenge of this long-term vision for US growth is to cut the US current account deficit, and keep it down on a sustained basis. Holding the US current account deficit to low levels will likely entail real depreciation of the US dollar, especially against the frugal Asian and Chinese currencies, whose economies have run big current account surpluses with the US. However, the US economic recovery in the post-subprime era requires effective and aggressive fiscal and monetary stimuli. This, in turn, calls for massive amounts of US sovereign debt to be smoothly absorbed by domestic and foreign investors. It is therefore essential to avoid any significant real US dollar depreciation, which will inflict losses in holding US debts. Obviously, this short-term need for US dollar stability conflicts with the long-term need for real US dollar depreciation, which is part of the unstable dynamics of the transition period.

Hopefully, the long-term structural rebalancing forces will come into play once the US economy regains its footing. Redirecting resources away from finance and consumption towards exports and investment will require relative price shifts. This means that the US dollar will have to depreciate against its trading partners. This is a wake-up call for the world system. If the US no longer runs a large and persistent current account deficit, surplus countries, such as China in the developing world and Germany and Japan in the developed world, will not be able to run large and persistent current account surpluses. This means disintegration of the export-led growth model for these surplus countries. They will have to rebalance by expanding domestic demand on a lasting basis.

The good news is that some initial progress has been made in this global rebalancing process. The US current account deficit has come down from over 6 per cent of GDP before the credit quake to 2 per cent. Meanwhile, China's current account surplus has come down to less than 9 per cent, from over 12 per cent of GDP in the years leading up to the subprime crisis. The bad news is that there is no guarantee this rebalancing trend will continue. The US strategy on this issue is not consistent with strategies elsewhere. When China can no longer behave like China, while the US intends to behave much more like China, accidents and tensions are bound to happen in the future.

On the Chinese side, its success in reviving the economy quickly after the subprime crisis may not really reflect fundamental success in sustaining long-term growth. It is true that China was the first major country to recover from the subprime debacle; it was also the only country in the world that had effected reflationary policies to fight the financial crisis. But China's stimulus package may, in fact, be a victim of its own success. The RMB4 trillion (US$586 billion) stimulus package announced, and quickly implemented, by Beijing in November 2008 was focused on government and infrastructure projects. Beijing had also directed the country's commercial banks to lend generously to augment the fiscal stimulus. The effectiveness of these measures in boosting GDP growth reflects the fact that investment (over 40 per cent is still state-driven) and the banking system (which is still majority-owned by the government) are still controlled by the government, so that it can still exert significant power over the growth trajectory. However, increasing investment as a result of the stimulus package only threatens to aggravate the already severe domestic overcapacity problem, and does little to help the global rebalancing process. The massive cash injection into the economy threatens to create asset bubbles due to the economy's moral hazard tendency (whereby a lot of the bank funds have been used in asset market speculation rather than real investment activity).

China was not directly hit by the subprime crisis. It was hit by the second-order effects of the crisis via a collapse in exports as external demand dried up. China's exports grew by 26 per cent year-on-year in 2007, but collapsed to a contraction of over 20 per cent in early 2009 when the subprime crisis was at its peak. The drop in exports is estimated to have cut China's GDP growth by 3 percentage points. If the spillover effect on the domestic sector is included, the export collapse may have cut growth by 5 percentage points!

Beijing reacted swiftly, announcing a RMB4 trillion stimulus package for 2009 and 2010 to contain the impact of the external crisis and prevent it from snowballing inside China. The rescue dosage was very strong, accounting for 14 per cent of China's 2008 GDP. Beijing, in fact, has plenty of leeway for fiscal expansion, because its fiscal books have improved since the turn of the millennium. In 2007 and 2008, the government ran a fiscal surplus of around 1 per cent of GDP. Its low debt burden (at only 20 per cent of GDP) would allow the government to borrow in the capital markets without any problems. However, these financial muscles may not necessarily be a blessing. The key component of the stimulus package is infrastructure spending, which is part of fixed-asset investment (FAI). FAI has been the most important growth driving force in recent years, and has been growing much faster than nominal GDP since 2000. In the short term, robust FAI growth can generate a lot of demand and employment, and hence boost top-line GDP growth effectively. But in the longer run it will increase supply and add to China's overcapacity problem.

Before the subprime crisis, much of this excess capacity was absorbed by robust export growth. Following the credit quake, external demand will remain weak for a long period of time. Hence, China's overcapacity problem will surface. This, in fact, reflects an inherent deflation risk in the Chinese economy, because its robust GDP growth has been driven by a massive supply expansion model built to cater for excess external demand since the mid-1990s. There is overcapacity in many Chinese industries, ranging from raw materials such as steel and coal to manufactured and consumption goods such as cars, white goods and beer. Beijing's massive stimulus programme can only delay the blowout of the excess capacity problem, but not eliminate it. Since it is impossible to boost domestic consumption in the short term, the government was left with no choice but to replace the collapsing export demand by fiscal spending on investment to avoid massive unemployment and potential social and political instability.

Cynics say that Beijing does not know what it is doing in driving the economy with brute force. I do not agree. The government is well aware of the overcapacity problem in the economy. That is why its RMB4 trillion stimulus package was focused on infrastructure spending, not on new manufacturing capacity such as new factories. But there are still problems with an investment-led expansion policy, because loose supervision of implementation of the investment projects, regulatory oversight and corruption still result in wastage in infrastructure construction. Government-led investment should also be conducive to boosting private investment and the development of small and medium-sized enterprises. But many local governments are squeezing these businesses hard to compensate for falling tax revenues. This is unfavourable to the development of a vibrant private sector. In late 2009, the government resorted again to export-boosting measures, such as export tax rebates and preferential loans to exporters, to stabilise the export sector. All these are obstacles to the rebalancing act that China needs to carry out in the post-subprime years.

Government directives to increase bank lending were the other, significant, part of the stimulus programme. But that led to another problem. The lending directives were so successful that bank loans jumped by RMB7.3 trillion in the first half of 2009, significantly above the official target for the full year. Monetary growth, such as broad money (M2), also grew at a record pace relative to GDP in 2009. This resulted in excess liquidity in the banking system. China was right to adopt an accommodative monetary policy to combat the external subprime shock. But the Chinese banking system was not broken; specifically, its money multiplier was not impaired like those in the developed world. Hence, there was no reason for China to pursue monetary expansion as aggressively as the developed world. The excess liquidity threatened to create asset bubbles in the stock and property markets and reignite runaway inflation.

In other words, while China has been successful in its crisis management to revive top-line growth, its achievement in effecting structural adjustment has been mixed at best. Any hopes of China taking over from the US as the lead growth engine in the world are unrealistic. For its own sake and for the sake of the world economy, China needs to strike a fine balance between crisis management and structural reforms. If it fails to tackle its structural problems, notably its dependency on exports to generate growth momentum, high investment rates will only lead to wide income gaps and more excess capacity. Growth will not, in the end, be sustainable. Meanwhile, the US needs to do the opposite in terms of its economic restructuring; namely, to reduce its dependency on excessive consumption and financial wizardry, and become a saver again. The subprime crisis has provided a good opportunity for both China and the US to make long-needed structural changes and institutional reforms. But the road to success will not be smooth.

Chi Lo

About the Author

Chi Lo is a chief economist and strategist for a major investment management company based in Hong Kong. He was enlisted as a member of the International Who's Who Professionals in 2000 and 2006. He has extensive international research experience in economics, financial markets, and public policy and standards development, covering North American and Asian economies. In his other major appointments, he worked as head of Overseas Investment at Ping An of China Asset Management (HK) Ltd., as Research Director (Greater China) at HSBC and as Chief Economist (Northeast Asia) at Standard Chartered Bank in Hong Kong, and served as Economic Advisor at the federal deposit insurance agency under the Canadian Government Department of Finance in Ottawa, Canada. He has also worked at blue chip investment banks and regulatory bodies in North America, the UK and Asia.

Chi Lo publishes widely in international periodicals and newspapers and appears as guest speaker at international news agencies and regional business seminars. He has taught applied economics and banking and finance courses and spoken at classes of EMBAs, MBAs and Finance Diplomas of various universities in Asia and North America, and at international seminars.

Introduction

Consider this: Mr A. walks into a bank and asks for a mortgage loan to buy a home in a nice middle–high-income residential area. The loan officer asks Mr A. for proof of income to back the loan. But Mr A. mumbles and fails to provide any solid proof. The loan officer then asks Mr A. to confirm his repayment ability by merely stating that he makes $200,000 a month. Mr A. enters that figure on the mortgage application form and signs it. The loan officer then stamps the form and approves the loan. Mr A. happily walks away with a mortgage.

Consider this other scenario: Mr B. is a foreign property investor (speculator), who is visiting this country and looking for a residential property to buy. But the regulations do not allow any foreigners who have lived in this country for less than a year to buy a home. And, when those qualifying foreigners buy, they must produce an employment contract. So Mr B. should not be able to buy a house, right? Wrong. His property agent will do the trick. After buying a property, Mr B. goes to the land registry office to register the title of the property he has bought. When asked by the registry office to produce an employment contract showing that he has lived and worked in this country for over a year, he produces one arranged by his property agent, who has simply found some company prepared to issue an employment contract for Mr B.

A Chinese subprime crisis?

These are not just stories; they are genuine incidents from China's lending and property markets in the aftermath of the subprime crisis, despite the existence of relevant lending procedures, guidelines and property regulations to control risks and prevent speculation. This is why many analysts have argued that China has a huge real estate bubble; some even argue that the real estate bubble is an inherent and recurring phenomenon in China. With banks lending on a whim and the regulatory system turning a blind eye, others argue that China will face its own subprime crisis in the not too distant future. But for most of the local Chinese, and the China bulls, these concerns seem unwarranted, because China's financial system is still closed to outside attack, its capital account (and currency) is not convertible, its banking system is mostly government-owned (which amounts to an implicit government guarantee to prevent any collapse in public confidence in the banks) and, last but not least, because of its underdeveloped financial system there are none of the financial derivatives that lay at the heart of the US subprime crisis.

Granted, these are the short-term factors that, together with strong economic growth, should help prevent China from falling into a financial crisis. But these 'shields' will disappear, possibly more quickly than many people would imagine, because China is rapidly liberalising its financial sector, particularly as regards insurance. Fancy financial derivatives are making their way into the Chinese financial product universe. Crucially, China has become an increasingly important part of the global economy, so it cannot behave as if it were still in isolation.

China's integration into the world economy began with international trade, but is increasingly extending into the global finance arena. Take the subprime crisis, for example. To correct the global imbalances that are at the root of this financial debacle, creditor countries have to boost consumption, while debtor countries need to cut their spending. Indeed, the biggest surplus countries, China, Japan and Germany, have embarked on significant domestic stimulus programmes. Yet the stimulus measures of the biggest debtor country, the US, remain disproportionately larger on a world scale. Most investors and other governments are still expecting the already heavily indebted US consumer to do more to drag the world out of recession. Hence, the frugal Asian economies have kept their currencies pegged against the US dollar in order to retain their export competitiveness.

However, this is not a workable solution. Asian countries import the super-loose US monetary policy via the dollar pegs and, at the same time, engage in local fiscal expansion to pull their economies out of the subprime-induced economic mess. In a half-market economy such as China, this import of monetary policy creates massive bank lending under government directives to the corporate sector (which invests in suboptimal manufacturing projects) and also pumps money into the stock and property markets (which creates an asset bubble). In other words, the renminbi (RMB) peg, which arguably has been retained to preserve China's export competitiveness, creates a tendency towards bubbles and busts. While this may be preferable, from the authorities' perspective, to prolonged deflation, the outcome is not optimal, especially in terms of helping the world to put right its economic imbalances.

Lessons to learn

Overall, the creditor countries are partly to be blamed for fostering the subprime crisis, or the global 'credit quake' as some may like to call it. Take China as a representative example. Its massive current account surplus enabled it to build up huge foreign reserves, which were then recycled back to the deficit counties in the form of cheap finance that fuelled the Anglophone debt binge. Without the Anglophone readiness to borrow and spend, China and the other creditor countries would not have been able to grow so robustly in the decade leading up to the credit quake. However, by treating the Anglophone debtor economies as a dumping ground for their cheap exports, frugal China and Asia have invited a protectionist backlash from the debtor countries, because their citizens and descendants will inherit a huge debt burden as a result of today's fiscal emergency measures.

In recent years, China's influence on the global markets has extended to the financial area. The old saying 'when the US sneezes, the rest of the world catches a cold' is going out of fashion. Now, when the Chinese stock market becomes ill, the rest of the world also gets infected, despite the tiny size of the Chinese stock market on the global stage. For example, the US stock markets in aggregate account for 41 per cent of the market capitalisation of the FTSE All World index, while China only makes up 1.5 per cent. However, on many occasions since 2007, when the Shanghai Composite index has plunged, stock markets in the rest of the world have also fallen abruptly.

China's financial influence on the global markets has risen sharply since the subprime crisis, because it is the only big economy in which government policies have been effective in engineering an economic recovery. Meanwhile, its contribution to world output has also been rising in recent years, so that its markets have become more important to investors. This is certainly a big change, because for many years the performance of Chinese and western equities was not correlated, due to the relative isolation of the Chinese markets. Between 2002 and 2007, the Shanghai Composite moved in the same direction as the S&P 500 in 37 out of 84 months – a correlation of 45 per cent. However, since 2008, the Shanghai Composite – S&P 500 correlation has increased to 16 out of 20 months – a correlation of 80 per cent. The correlation is even greater between China and other Asian markets, with the Shanghai Composite moving in the same direction as the FTSE Asia Pacific index in 17 out of 20 months – an 85 per cent correlation. It is not just equities that have been influenced by China's stock market. As Chinese equities have become a barometer for risk appetite, they have increasingly helped move currency and commodity markets also.

This is not to say that China is about to take over from the US as the benchmark market, or to suggest that China will soon become a superpower. But the fact remains that China's growing economic presence and influence on the global stage means that China is becoming an increasingly crucial part of the world. In the subprime crisis, it was part of the problem; in the post-crisis adjustment process, it is part of the solution. In other words, the lessons of the credit quake have also provided China with experience that will be valuable in managing its opportunities and risks in the coming years.

Meanwhile, the developed world also has a lot to learn from both its self-inflicted subprime crisis and Asia's crisis experience. This is not a normal crisis, so we may not see a normal recovery process. Those who think otherwise are in denial, in my view. The optimists admit that the negative shock to the world economy has been enormous. But they argue that the policy response to counteract this shock has also been significant. For example, US President Obama approved the largest peacetime fiscal stimulus in US history. The industrial world authorities also synchronised their expansionary policies in an unprecedented way to revive economic growth, with central banks cutting interest rates to zero or near-zero levels and implementing a quantitative easing policy that monetised large parts of the fiscal expansion. All these actions were taken against a backdrop evoking deeply troubling parallels with the Great Depression of the 1930s and Japan's more recent debt deflation trap. Companies, the optimists argue, overreacted to the subprime crunch by slashing sales and inventory more than they needed to restore cash flow. The passing of the subprime crisis would ensure a strong output rebound due to restocking, retooling and rehiring. So the world should be back to normal, right? Wrong, as I argue in Chapter 1.

In the grand scheme of things, the ending of the subprime problem marks the beginning of the post-bubble adjustment task of de-leveraging.

This process is extremely deflationary, especially on the back of a large output gap opened up by the credit quake. The developed world may see periodic goods price and asset price deflation, perpetuated by de-leveraging in the private and financial sectors. Consumption will be especially feeble under these circumstances. This has far-reaching implications for Asia. A protracted decline in western consumption will put an end to the emerging markets' export-led development model, crimping profit growth in Asia's export-led economies and sectors. In other words, export-led growth is dead. Asia has not learned from the 1997–8 Asian crisis experience, so adjustments in both economic and corporate earnings growth terms will be tough this time.

The post-subprime economic adjustment in the developed world will last for a few years, as debt unwinds across all rich countries. During the adjustment process, global growth will see a structural downward shift, unless developing world consumption rises sharply. But this would require a change in the developing world's saving habit, which is unlikely in the short term. So governments throughout the world will have to play an active role to prevent their economies from faltering. Infrastructure spending is the key tool for fiscal activism; thus an infrastructure boom is expected to unfold in the post-bubble years, favouring commodity and construction-related sectors in the economy.

Not a black swan

More crucially, many western analysts have argued that the subprime crisis was a '*black swan*' event. This is wrong, in my view. This erroneous view, which amounts to a denial of human error, will have important implications for the direction of macro and micro policy in fixing the global system. The term *black swan* comes from the ancient western concept that all swans were white. In that context, a black swan was a metaphor for something that could not exist (Taleb, 2007). Ever since black swans were discovered in Australia in the seventeenth century, the term *black swan* has been used to refer to a high-impact, unpredictable and rare outcome beyond the realm of normal expectations. In other words, black swan events are typically random and unexpected. For example, the previously successful hedge fund Long Term Capital Management (LTCM) was driven into the ground as a result of the ripple effect caused by the Russian government's debt default. The Russian government's default represents a black swan event because none of LTCM's computer models could have predicted this event and its subsequent effects.

However, as far as the subprime crisis is concerned, it is not a black swan event, even though the magnitude of the resultant credit crunch and confidence crisis was unexpected. This is because all the events and factors leading up to the credit crunch were known. Even in the US, economists had warned of the credit/asset boom storing up trouble for the future, but their voices had fallen on deaf ears (see Borio and White, 2003; White, 2006). The point is clear when we draw parallels between the Asian crisis and the subprime debacle. The crises have similarities in their causes and symptoms – namely, a prolonged period of low interest rates leading to moral hazard, imprudent lending, regulatory oversight, excessive investment, and asset bubbles. The advent of financial derivatives made the subprime crisis more complicated.

Let us take a good look at the pre-crisis macroeconomic backdrop in the two instances. The US current account deficit ballooned to above the crisis threshold of 5 per cent of GDP before the subprime crisis broke, just as happened in Asia before the 1997–8 financial crisis (Figure I.1). Notably, Thailand, where the Asian crisis started, had a current account deficit of over 8 per cent of GDP prior to the crisis; the US had a current account deficit of 6 per cent in the year before the subprime crisis!

The Americans had been on a debt-financed spending spree for over a decade, pushing the loan-to-deposit ratio in the banking system to over 100 per cent. Everything from personal consumption to financial

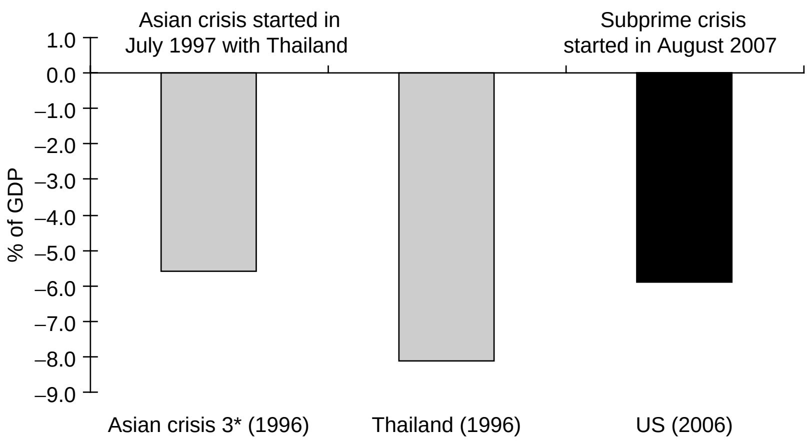

Figure I.1 Current account balances before crisis

*Average of Koran, Indonesia, Thailand.

Source: CEIC.

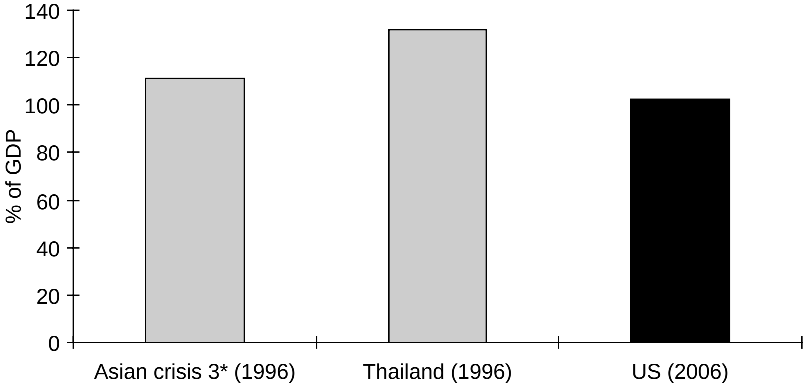

Figure I.2 Loan-to-deposit ratios before crisis

* Average of Korea, Indonesia, Thailand.

Source: CEIC.

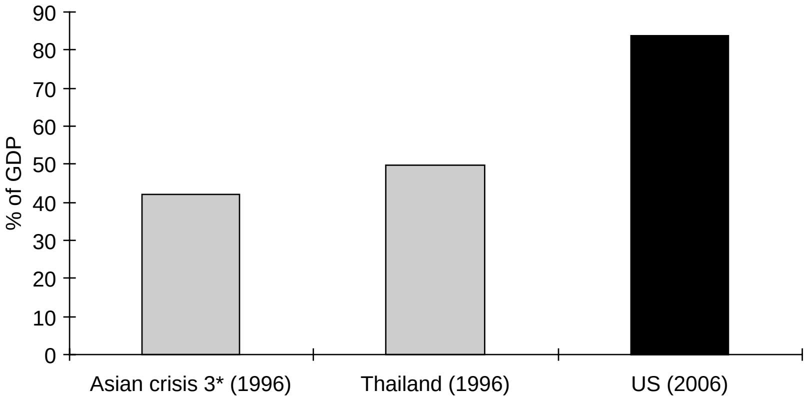

Figure I.3 Foreign debt before crisis

* Average of Korean, Indonesia, Thailand.

Source: CEIC.

investment had been funded by debts. The blowout in the US loan-to-deposit ratio vividly resembles the situation in Asia prior to the regional crisis (Figure I.2). Asia financed its excessive spending by foreign borrowing, and so did the Americans (Figure I.3). Foreign debts in both America and the three Asia crisis countries that needed IMF bailout (Korea, Thailand and Indonesia) all soared before their respective crises.

Gross US foreign debt was even bigger than in the Asian crisis countries, as seen in Figure I.3. However, nearly all America's foreign liabilities were denominated in USD, due mainly to the USD's reserve currency and international trade status. Moreover, the US government enjoyed strong international confidence in its debt servicing and repayment ability. Hence, the US had not suffered a sudden seizing up of capital inflow during the credit crunch, and there was no USD crisis. This is quite different from the Asian situation, when massive capital outflow caused a regional currency crisis alongside the financial crisis.

The deepening of the US subprime crisis after September 2008, despite the Fed's repeated massive liquidity injection, showed that the markets had failed to clear on their own and the global financial system had stalled. Massive bailout programmes therefore followed. These bailouts were deemed necessary for only one reason: to stabilise the financial sector in a crisis of contagion. They were intended to protect the integrity of the whole financial system, or so the logic goes. However, bailouts do not necessarily guarantee a true recovery in the financial markets (much less an economic recovery) because they obstruct genuine cleaning up of the system and keep excess capacity alive (see Chapter 2 for more).

So the subprime crisis was a crisis of human error, not a black swan event. Some economists even argued that the US government's actions and interventions, rather than any inherent failure or instability of the private sector, caused, prolonged and dramatically worsened the crisis (Taylor, 2009). To put right their mistakes in the coming years, regulators will not be so ready to let banks securitise lending and shift it off their balance sheets to create new lending capacity. The developed world's banking sector will become slimmer, less risky and less profitable. Money markets will also be smaller and more expensive, so that banks will have to rely more on the traditional funding source of deposits. A plain vanilla banking model of simple lending and borrowing will return; fancy derivatives will be gone.

There is much to be learnt from the subprime crisis, ranging from regulatory to macroeconomic policy aspects, by both the western world, notably the US, and the east, especially China. There are also risks and opportunities arising for the global economy and for China, which is in the midst of opening up its financial, especially insurance, sector on the back of an economy with inherent excess capacity and moral hazard problems. But there has been insufficient work so far to bring the east and the west together in the subprime analytical framework. The following chapters seek to analyse these crucial, and often controversial, issues and fill the gap caused by this insufficiency.

Chapter 1 argues that the subprime crisis was not a normal crisis. Hence, one should not expect a normal economic recovery after the crisis. The credit quake was the result of a combination of wicked micro financial roots and devastating macro forces that completely destroyed not only wealth but also confidence in the financial system. The only thing that comes close to the post-subprime environment is a balance sheet recession. The trouble with a balance sheet recession is that, like deflation, governments still do not know how to deal with it. Arguably, this problem is self-inflicted by the authorities' myopic bailout policies.

Chapter 2 follows on from the closing argument in Chapter 1 that the difficulty in the post-subprime adjustment process was self-inflicted by the bailout policies. The developed world's banking system needs to be cleaned up to revive long-term growth potentials. However, bailouts breed moral hazard and obstruct the needed microeconomic consolidation in the system by keeping excess capacity alive. So far, the global authorities have ignored this structural distortion on the grounds of the need for stabilising the global crisis. Countries such as China should learn from this, especially since China has an inherent excess capacity problem with serious moral hazard in the system. Far from rebalancing, it is unfortunate that the current policy directions point to continuing imbalance in the post-subprime world!

Chapter 3 argues that economic and financial bubbles are inevitable, because they result from irrational human behaviour. So inundating the system with more regulations will not prevent them from happening again. The world needs better, not more, regulations. Regulatory control should focus on facilitating financial innovation to gain consumers' trust without deterring its development. Since China still embraces tight control as a way to manage its economic development, these post-crisis regulatory issues have many far-reaching implications for its future reform path. While the West has a lot to ponder regarding re-regulation of its banking system and treatment of financial innovation in the post-subprime years, Asian countries may get the wrong signal from these post-crisis re-regulation measures, especially when they see that China's restrictive model seems to have worked better. The subprime debacle also shows that China's push for consumerism and financial liberalisation could backfire if the process is not managed properly.

Chapter 4 looks at Asia's role in the subprime debacle and argues that Asia accounted for half the forces causing the subprime crisis by providing massive savings to enable the spendthrift Americans to live beyond their means. In other words, Asia was a guilty bystander in the subprime debacle. The chapter examines why China was not much affected by the crisis, but Hong Kong was badly hit despite its robust fundamentals. The analysis also highlights the risk of 'capital protectionism' in the post-subprime era, which could potentially destroy every ingredient of globalisation in one stroke and limit market forces and scope, leading to lower economic growth for the whole world. The chapter ends by tracing the possible adjustment trajectories for the global and Asian economies.

By examining the economic, intellectual and political development factors, Chapter 5 analyses the view that the subprime crisis might have created an unprecedented opportunity for China to become the next world superpower. There is no doubt that China has become a major regional player, driving Asian economic growth and integration and creating wealth for many Asian nations. But suspicion among both the eastern and the western nations has created checks and balances to constrain China's superpower aspirations. More subtly, China still lacks the quality of a thought leader required to become a world superpower. While none of this denies China's remarkable achievements in recent years, and China will be a huge force to be reckoned with, it is not yet quite in a position to replace the US as the next global superpower.

Chapter 6 argues that, while the subprime crisis might have provided China with a benign opportunity to restructure its growth mix towards domestic consumption and to push forward some policy breakthroughs, the Middle Kingdom must resist the temptation to abuse this opportunity as a means for establishing a bailout policy framework to handle future crises. It is better for Beijing to heed the lessons now and get a good start in its efforts to deregulate the financial sector and develop a consumer credit market than to jump into financial engineering and excessive consumerism and end up with another big financial mess to mop up in the future. The chapter also argues that the structural adjustment process in the west might raise the risk of slower growth for China in the future.

The global credit quake may have presented China with an opportunity to expand its economic interest overseas. Chapter 7 explores the forces behind the Chinese overseas investment push, and argues that more aggressive capital account liberalisation is needed to allow capital outflow to help address China's economic imbalance problems and asset bubble risk. It also argues that the subprime crisis may offer a win–win opportunity for both China and the US to rebalance their external accounts, while at the same time helping China to acquire the technology and capital goods needed for further economic development. The US may have to rethink its export policy towards China if it wants to capture China's rising demand for high-tech products and capital goods. In recent years, the US has been losing out to Europe and other Asian countries in terms of capitalising on China's high-tech demand.

Chapter 8 argues that China's economic restructuring effort had started even before the global credit quake. The subprime debacle merely puts these structural shifts in the spotlight and highlights the urgency of Beijing's rebalancing effort. Contrary to common perception, there are initial signs that Beijing's 'expenditure-switching' development strategy might be yielding results. Its plans to improve the social safety net may mark the beginning of an end to China's excessive savings and a steady rise in consumption in the coming years. Indeed, the Chinese economy is now on the verge of a consumption boom, as its per capita has reached US$6,000 a year in the major cities, with other parts of the country playing catch-up. The analysis also argues that, despite the latest financial liberalisation effort, there is still significant inefficiency in China's initial public offering (IPO) process. If not corrected, this distorted IPO process will only create a strong incentive for entrepreneurs to rush to list and then exit, with broader negative consequences for the economy, in particular the financial sector.

Chapter 9 analyses the risks behind China's economic expansion and structural change opportunities in the post-subprime crisis years. Of all the potential risks, a bust in China's asset bubbles leading to an economic crash-landing is the least likely. An imminent risk is a continued (or even worsening) disequilibrium between aggregate saving and investment on a global scale in the post-subprime world. An unconventional wisdom argument here is that China's under-consumption problem is mainly a result of the government's development policy, rather than an insufficient social welfare system. Chinese consumption will not grow as fast as many would like to see. Finally, the chapter raises the concern that China may be returning to interventionism, potentially reversing the liberalisation effort of the past thirty years.

Chapter 10 explores the possibility of more crises in the years immediately following the subprime crisis, as many have feared. These include another global debt crisis triggered by the US and UK, a Chinese debt blow-up, and a US dollar crisis. An examination of the macro debt dynamics suggests some unconventional wisdom for the conclusions for these concerns. This chapter also assesses the possibility of China shifting out of US dollar assets into other currencies and assets for its foreign reserves. The conclusion here is controversial: that China cannot and will not shift out of the US dollar and US dollar assets, either in its own interest or in the interest of the world. The purpose is to stimulate more debates and research on this area for policy and investment themes in future years. Finally, the chapter concludes with an analysis of the future of the gold price trend in relation to monetary policy in the post-subprime world. Again, the analysis and arguments are unconventional, such as that rising gold prices can (and will) coexist with deflation, in order to stimulate thinking outside the box.

Chapter 11 concludes the book by summing up my views on the post-subprime world from the global, Asian and Chinese perspectives. The conclusions may be controversial, but they serve to encourage more research on these global, regional and Chinese events. In particular, I conclude that the post-subprime world will be constrained by a double whammy of deficient demand and supply of credit (while many others think things will be back to normal with robust growth fuelling inflation); Asia cannot become a global growth leader without deep-rooted structural changes (while others argue that Asia has already developed an autonomous growth leadership under China's lead); and China is risking reform/policy complacency that will bode ill for Asia's outlook. Finally, I cannot envision an internationalised Chinese currency for another decade, if not longer, despite Beijing's keen desire to push for it. China will simply not be ready for it for quite some time.

1
The Subprime Crisis Is Not a Normal Crisis

In my view the subprime crisis is not a normal crisis, and so its recovery trajectory is going to be different from anything we have seen before. We are in uncharted territory, so history may not be an appropriate guide for how things will unfold in the post-subprime world. This is perhaps a common theme that both the developed and developing worlds should focus on. For China, understanding the nature of this global 'credit quake' is especially crucial, as it is in the process of liberalising the financial (notably insurance) sector. For the western world, there is no consensus over whether or not this crisis is just another normal financial crisis. There is also a tendency to look backward to find clues to what is going to happen in the post-crisis world. This could be wrong.

When we compare the subprime crisis with the Asian financial crisis in 1997–8, there are many similarities in their causes and symptoms (see Introduction). But in terms of the post-crisis recovery process, while Asian growth experienced a V-shaped rebound a year after the Asian crisis, thanks to Asia's young and vibrant economic structure and a quick return of confidence, don't bet on the same thing happening in Europe and the US. This is not only because Europe and the US do not have the economic dynamism that Asia has, but also because the subprime crisis is not a normal economic crisis. Never in history had we seen such a wholesale collapse in economic confidence as in the subprime crisis, except during the Great Depression. But the subprime crisis is unique in the sense that public wealth and confidence were destroyed by both wicked financial roots that bred greed at the micro level and erroneous economic policy that caused devastating damage at the macro level. It was this deadly combination of corrupted micro and macro forces that finally sank the US financial system and precipitated an unprecedented crisis. In the post-subprime era, the only situation that comes close to it is a Japanese-style balance sheet recession. The problem with a balance sheet recession is that governments and central banks have little experience in dealing with it, arguably because it was myopic government policies that caused it in the first place. We shall deal with this issue in Chapter 2. Here we will explore the 'abnormal' nature of the subprime crisis and its consequences.

How did the West get it so wrong?

In a nutshell, what happened to the US financial institutions prior to the subprime crisis was that on the left side of the balance sheet nothing was right; so on the right side of the balance sheet nothing was left (Table 1.1). The subprime debacle, which deteriorated into a global credit quake, was the fault of whiz-kid financiers who created financial instruments that even they did not properly understand. Along came the greedy bankers who pursued profit and personal reward without regard to risk, or even common sense. To complete the toxic potion for brewing the crisis, add in dozy supervisors who failed to properly regulate and restrain those bankers, and benevolent but arguably negligent central bankers who allowed an explosion in liquidity and asset prices which supported the whole rotten edifice. Excellent analytical work has been published on the subprime crisis (Read, 2009; Shiller, 2008; Zandi, 2008) for those who are interested in detailed investigation of the crisis. I intend to give a quick recap of the issue here, from a fresh angle, as a lead-in to our discussion in this book.

Basically, three key factors contributed to the subprime debacle, which was triggered by the expectation of defaults on subprime mortgages

Table 1.1 Subprime crisis in a nutshell

Generalised US financial institutions' balance sheet (2007)	
Assets	**Liabilities**
Nothing **is** **right**	**Nothing** **is** **left**

Source: Author.

in the US:

- Financial innovation that had resulted in massive securitisation of illiquid, and often low-quality, assets;
- the low interest rate policy pursued by the Greenspan Fed between 2001 and early 2005;
- the low financial literacy of US households.

The root of the crisis, in my view, stems from the acceleration and deepening of financial innovation between 1997 and 2007. Through securitisation, the financial innovation process makes it easy to 'liquefy' a portfolio of illiquid credits (typically bank loans or mortgages) so that they can be packaged into investment products and resold to investors. Any bank with distressed loans has used this financial engineering technique to securitise bad assets. The original intention of doing this is good. First, by re-liquefying an illiquid asset, the bank can free up capital, expand its balance sheet and achieve important efficiency gains. As for investors, they have more investment product choices and can take longer-term positions to enhance returns. Second, securitisation helps diversify risks by spreading the insolvency risk of the underlying asset across a wider group of investors. This, in turn, helps reduce the risk exposure of any individual investor.

However, securitisation was abused. The process backfired and weakened the incentives of financial intermediaries to monitor the behaviour of the original borrowers. Low interest rates and low apparent risk, as perceived in the financial innovation years, had created strong incentives for financial institutions to become highly geared. Much of this gearing was swept off-balance-sheet by unscrupulous bankers to avoid on-balance-sheet capital charges. Once a risky credit could be liquidated more easily via securitisation, banks had less incentive to carry out due diligence on their borrowers.

In the subprime context, all this opened the 'credit door' to poor-quality borrowers. To make matters worse, the innovative securitised products were highly complex. This complexity did not appear to matter when markets were normal and defaults were low. But it became lethal once the market conditions turned bad, as it became impossible to understand and price these instruments rationally. Worse still, the complex web of cross-holding of these assets trapped the leveraged institutions. The value of their assets sank and funding dried up. As the losses spread, the highly integrated financial system created enormous uncertainty about the counter-party risk. Public confidence collapsed, pulling the rug from under the financial institutions and the economy.

Some have argued that US monetary policy was too loose during the period of financial innovation (see Taylor, 2009). Low interest rates combined with low perceived risk encouraged the financial institutions to borrow excessively, with a lot of the borrowed funds being used to buy those complex securitised products issued by fellow banks. The Greenspan Fed cut interest rates aggressively, to a 50-year low of 1 per cent, to save the US economy from collapsing after the 9/11 terrorist attack and the bursting of the high-tech bubble in 2001. The Fed's bail-out measure also injected an enormous amount of liquidity into the global monetary system. It kept rates low for the next 4 years; real interest rates even became negative at times when adjusted for inflation. The Fed did this for a reason – to prevent the US from falling into a Japanese-style debt–deflation spiral.

While the Fed's move was possibly necessary to avoid a systemic collapse at that time, it also produced an unintended result – it helped brew the housing bubble that lay at the heart of the subprime crisis. Low returns on traditional investments pushed investors and lenders to take bigger risks to get higher returns. Credit grew rapidly, as financial intermediaries extended loans to borrowers with weak financial strength in search of higher profits. Investors with varying degrees of knowledge also reallocated their portfolios to more lucrative but riskier assets for the same purpose. The low borrowing rates for both short- and long-term maturity attracted lots of borrowers, including those with poor credit standing. At the same time, housing prices soared, encouraging more lending but with less incentive for credit checks.

The third ingredient of the crisis was a blend of bad information, financial ignorance and myopia on the part of investors and consumers. (We will discuss the information and inventive problems of the crisis in more detail in the next section.) Naïve investors/consumers, many of whom thought they were knowledgeable, fell for the prospect of getting a mortgage at previously unseen low rates and then projecting those rates for the next thirty years! Modern behavioural economics also shows that there are distinct limits to people's ability to understand and deal with complex financial instruments. Inundated by 'small print', they often ignore the details and even fail to read or understand the implications of the contracts they sign.

Hence, many families were lured by the possibility of acquiring assets that had always been beyond their means. This naïve thinking and the inability to comprehend complex instruments were then exploited by banks and other lending institutions hungry to attract and retain clients. This is, in fact, similar to previous misdoings when financial intermediaries advised their clients to invest in financial assets ill-suited to their risk tolerance levels. Meanwhile, contrary to what one would expect, low financial literacy is not limited to economically backward countries; it also occurs in the US, despite its advanced economic status. Only two out of three Americans know the law of compound interest; less than half know how to measure the impact of inflation on the cost of indebtedness. Financial knowledge is especially low among those who have taken out subprime mortgages. The banks and other lending institutions disregarded risk and simply exploited this illiteracy to expand their loan books.

The micro foundation of the subprime debacle

This brings us to the micro aspect of the subprime crisis, which is one important reason why this is not a normal crisis. A normal economic crisis is caused by excess demand igniting inflation, which then pushes the monetary authorities to tighten up sharply, leading to soaring interest rates and eventually an economic hard landing. The subprime crisis is a result of an unprecedented combination of micro and macro forces. Hence, we should not expect the post-crisis environment to follow a normal pattern of economic recovery. We will look at the micro aspect in this section and the macro aspect in the next section.

There are two aspects of the micro foundation of the credit quake: incentive distortion and information problems. When these two are combined with illiterate investors and consumers, a financial accident is bound to happen. Distorted incentives are indeed intrinsic to the financial intermediation process and financial innovation, such as securitisation. Securitisation is attractive to banks because selling off the loans and their attached risks enables the banks to leverage more loans off their capital. In essence, securitisation increases the power and scope of financial intermediation with a given amount of capital. Unfortunately, incentive problems also arise from this behaviour.

Financial engineering allows a loan originator to sell off the loan easily and at par value, which has lessened the lender's incentive to carry out due diligence on the credit risk of the borrower. Research by Moody's Investors Services, an international credit rating agency, shows that US subprime loans originated in 2006 and 2007 had a much higher default rate than in the previous years, due to this incentive problem. In the context of the subprime crisis, this incentive problem was worsened by the fact that many of the risks that securitisation was supposed to diversify, that is to spread more widely outside the system, actually remained in the banking system. In some cases, even when the risks were spread out, they eventually found their way back to the banks. This is because the debt securities issued by one bank were not really sold to a wide range of investors of different backgrounds outside the banking system. Instead, they were bought by the proprietary trading desks of other banks. This created a network of cross-holding of the underlying loans. That did not matter much when the risks were idiosyncratic and, hence, did not cause contagion in the system. But when systemic shocks happened, such as the Fed rate hikes between 2005 and 2007 that pricked the real estate bubble, a domino effect quickly destroyed the returns of all interconnected securities and caused market panic.

This cross-holding of securities with highly correlated returns was not limited to the banking system. It spread to non-bank financial institutions, which engaged in exactly the same sort of maturity-mismatch activity, that is, financing long-term investments by short-term borrowing. These included the so-called special purpose vehicles (SPV), which were often set up by the banks themselves to buy securitised loans through issuing short-term debts. In many cases, these SPVs had either direct or back-up credit lines from banks. Hence, when funding difficulties arose in these institutions, the default risk of the securitised loans in effect came back to the bank's balance sheet.

Why did banks set up these off-balance-sheet entities? Blame it on the banks' motivation to maximise profit by exploiting regulatory arbitrage. An off-balance-sheet vehicle was not required to hold capital in the same manner as a bank would if the bank were to hold the loans outright on its balance sheet. So creating such an entity to 'expand loans' appeared to be a neat way to boost profits without having to raise more capital. In Europe, only Spain has devoted effort to curbing this incentive problem. The Banco d'Espana, the Spanish banking regulatory body, has insisted that Spanish banks must treat banks' SPVs as on-balance-sheet vehicles, so that they have to set aside capital provisions in the same way as the banks. That is why Spanish banks did not see the mushrooming of these financial conduits in the years before the global credit quake.

The remuneration schemes within the financial institutions created another level of incentive problem. These schemes often offered traders potentially unlimited upside rewards but capped the downside losses. So, effectively, they encouraged the traders to take on excessive risk to maximise expected returns. In this regard, financial innovation had made matters worse by enabling clever traders to build portfolios with considerable leverage with little payment upfront, so that returns could be amplified when the underlying asset value changed. As a result, traders had a natural tendency to focus on highly risky instruments to generate higher expected returns.

Information problems were also central to the subprime crisis, as most of the toxic asset-backed securities were far too complicated for even sophisticated investors to understand, not to mention monitoring their performance and riskiness. For example, just a plain vanilla residential mortgage backed security (RMBS) already contains tens of thousands of underlying mortgages. Unless these mortgages are homogeneous (which they are not), it will be extremely difficult for any individual investor to monitor the changes in the underlying risk exposure of the RMBS. Further, the underlying pool of mortgages is constantly changing as matured mortgages are being replaced by new ones. To make things more complicated, some US RMBS also have embedded clauses to protect/compensate the lenders from the non-recourse nature of the US mortgage loans in case of a default (see Gorton, 2008). These protection clauses only make evaluation of the RMBS more difficult.

Collateralised debt obligations (CDOs) are yet more complicated. They allow banks to sell the mortgage payments rights and related credit risk to investors anywhere in the world. In essence, CDOs repackage a bundle of risky assets into different categories of assets. Some of these categories offer bond-like returns suitable for investors with low risk tolerance, such as pension funds, while other more risky categories are sold to investors with higher risk tolerance seeking higher returns. Typically, a CDO comprises a large number and variety of RMBS, and often mixes together prime and subprime mortgages from different originators. This may seem to be good risk diversification practice. But, even more than with plain vanilla RMBS, it is impossible to monitor the underlying risks of a CDO.

All this complexity and opacity of the underlying assets are non-issues during normal times when defaults are low. But when defaults begin to rise, as in the subprime crisis, it becomes very important what a CDO contains. When defaults on some the US subprime mortgages originated in 2006 and 2007 turned out to be higher than expected, investors began to lose confidence and started to expect much higher losses on these securities than they had previously thought. Once confidence was lost, the informational complexity of these CDOs made them very difficult, if not impossible, to price rationally.

The cross-holding of these CDOs in the banking system only made the information problem worse. In theory, banks exist to transfer funds from savers to investors/borrowers. In reality, they engage in a lot more investment activity themselves by lending to and borrowing from other banks, buying CDOs and financial instruments/derivates written by other financial institutions, and so on. This web of securities cross-holding between banks has significantly raised systemic risk by increasing the exposure of financial institutions to each other. The upshot is that, in normal times, no one cares about counter-party risk. But, when confidence in the financial system is lost, one needs to know about not only one's direct exposure to a particular institution, but also exposure to all possible related counter-parties.

The point is that the information requirements for managing risk increased sharply at the same time as investors were waking up to the reality that prospective returns of the financial derivatives, like RMBS and CDOs, were a lot worse than they had expected. So, when the subprime crisis deepened after the collapse of Lehman Brothers, investors panicked, confidence collapsed and everyone rushed for the exits. As nobody wanted those risky assets, the markets for them became dysfunctional, leading to a drying up of wholesale funding, even to financial institutions that were thought to be safe. Any attempt to sell off assets to get funding ran into an adverse selection problem under these circumstances: if someone was selling an asset, perhaps that was an indication that he/she might be in trouble. And even if the central bank stepped up to support an institution, that might be seen as a negative sign for the institution, as in the case of Northern Rock in the UK.

The macro damages

What makes the subprime-induced economic downturn so different from a normal economic cycle is that the crisis had deep-rooted micro foundations that damaged the 'heart' of the economic system (that is, the banks). This means that there were forces at work other than just excess demand prompting a macro policy crackdown on inflation and resulting in an economic crisis. It also means that macroeconomic policy alone cannot help right all the wrongs and set the economy back on its feet. As a result, we may not see a normal post-crisis recovery process.

Deflationary forces in the post-bubble global economy are huge, as debt unwinds across the developed world. There will be periodic goods price and asset price deflation, perpetuated by de-leveraging in the

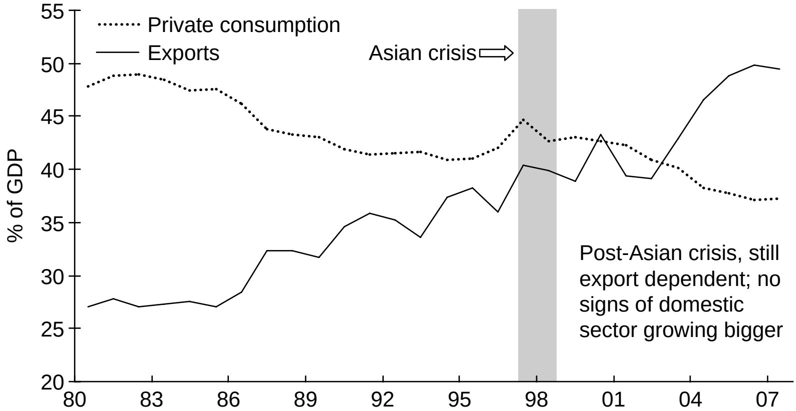

Figure 1.1 Asia has not learned its lessons
Source: CEIC.

private and financial sectors. Consumption in the developed world will remain feeble for years. This means that the export engine that the emerging markets have relied on for generating growth will be damaged in the years to come; corporate profits in these markets will also be crimped. The export-led growth model for the developing world will be impaired in the post-subprime world. However, Asia has not restructured its economy since the 1997–8 Asian crisis by moving away from export reliance to developing strong domestic demand (Figure 1.1). Without a large and vibrant domestic consumption sector, the adjustments in both economic and corporate earnings growth terms will be tough due to the loss of robust global consumption.

In particular, the post-subprime economic adjustment in the developed world will last for some years, as debt unwinds across all advanced, but heavily indebted, countries. In the medium-term, global growth will see a structural downward shift, unless developing world consumption rises sharply. But this would require a change in the developing world's saving habit, which is unlikely to happen swiftly. Governments throughout the world will have to play an active role in preventing their economies from faltering. Since fiscal activism is mainly directed into public investment programmes, an infrastructure boom is unfolding in the medium term. This will help boost demand for commodities and energy.

The subprime crisis is not just a liquidity crisis. It is a solvency crisis with microeconomic roots. As of the end of 2009, almost two years after the global credit quake erupted, the de-leveraging process in the US and Europe had just started. There is still a long way to go before the process can be completed. This is because the losses of the financial institutions have been socialised and put onto government balance sheets, so that the genuine financial cleansing process has yet to begin. The existence and persistence of financial 'dead wood' in the system will limit the ability of banks to lend, households to spend and companies to invest. Despite policy support, the US financial system is still severely damaged. Most of the shadow banking system,[1] which grew out of the securitisation of assets and the integration of banking with capital market development (see Adrian and Shin, 2009), has disappeared. Traditional banks are saddled with trillions of dollars in expected losses on loans and securities while still being undercapitalised.

The reduction of global imbalances implies that countries, notably the US, running large current account deficits will have to cut consumption sharply and rebuild savings. These debt-ridden consumers face a negative wealth shock from falling home prices and stock markets and shrinking income and job growth (Figure 1.2) all at the same time, which will make their retrenchment more painful and slow. The job and income contraction in this crisis is much more severe than in the IT bubble crisis in 2000–1 (Figure 1.2). On the other hand, countries running large current account surpluses, notably China, will have to

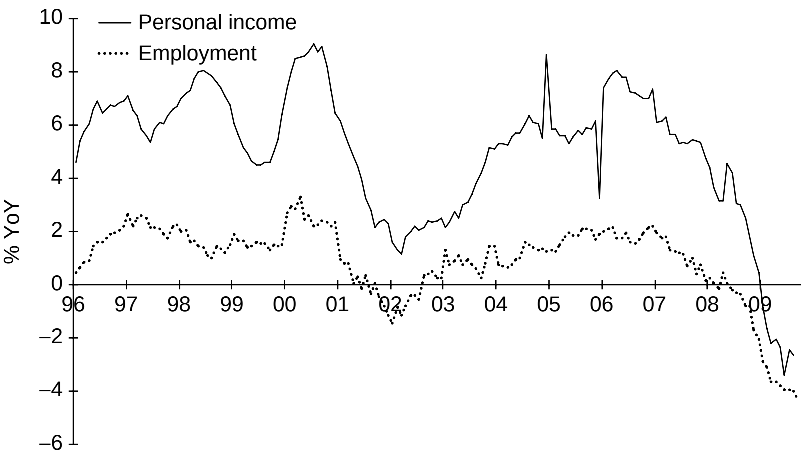

Figure 1.2 US job and income growth
Source: CEIC.

increase consumption and run down savings. But, if domestic demand in the surplus countries does not grow fast enough, the whole world's economic growth will suffer.

It's a balance sheet recession

Optimists like to point out that history provides a lot of evidence that the deeper the recession, the stronger the recovery (for example, see Bond, 2009). Even the Great Depression conformed to this 'rule', with real US GDP growing by 10.8 per cent in 1934 and 8.9 per cent in 1935. So this time it will be the same. Time will tell if the optimists are right. But economic analysis shows that this time history will likely be wrong; we are in uncharted territory. The global economy will remain weak for years after the credit quake. This is because the US economy, still the largest in the world, will struggle with slow growth complicated by balance sheet issues. There will be stabilisation in consumption and investment, but there will not be robust growth for quite some time. The twin headwinds of private sector de-leveraging and impaired financial institutions with unusually high risk aversion are the biggest problems of all in the post-subprime world. This is a typical balance sheet recession scenario, like the one Japan has been going through since the 1990s (Koo, 2003).

In a nutshell, the challenge of a balance sheet recession is this. In the face of a big drop in asset prices, the private sector cuts spending on goods and services to save enough money out of income flow to reduce balance sheet leverage, in other words debt. Unless external demand comes to the rescue, via a surge in the trade surplus, and massive fiscal stimulus is injected into the system, private income flows will tend to fall as households and firms cut spending to reduce their debt loads. Since one person's spending is another person's income, the result of this retrenchment process is a downward spiral in income contraction: spending cuts lead to falling income, which, in turn, aggravates debt reduction effort, which, in turn, leads to more spending cuts.

If the economic cleansing process were allowed to work itself out and then start afresh, relative price signals would be less distorted. Debts that could not be supported would be allowed to disappear through default; creditors would gain ownership of any remaining tangible productive assets. Prices for goods and production factors would adjust until growth returned to the trend path dictated by demand and supply of resources and entrepreneurs' profit maximisation incentive. All this would lead to a more productive set of economic behaviours in the post-crisis world.

However, the real world is not that ideal. So far, few nations have been prepared to take the bull by the horns and allow the cleansing process to run properly to clear the financial excess. Instead of allowing debt-deflation to run its course, the global authorities have been focusing on short-term measures, trying to reduce debt-service cost (by cutting interest rates to zero and pursuing quantitative easing), socialise losses (by bailing out financial institutions that are not viable) and support private sector income flows. There are two ways to achieve the latter:

- First, by improving the trade balance through cutting imports and boosting exports so that more domestic and foreign spending is received as income by domestic producers;
- Second, by increasing the fiscal deficit through cutting taxes and increasing government spending so that more income is received by the private sector from government spending than is taken away by taxation.

At a global level, under the post-subprime adjustment process, unless we discover life on another planet, the first strategy will not work. It is simply not possible for both the developed and developing worlds to export their way out of economic problems at the same time. Balance sheet recession has characteristics distinct from normal economic recession, so its recovery trajectory will also differ significantly from normal economic recovery. Recovery in sales of consumer durable goods and homes, along with inventory rebuilding, usually leads the charge in a

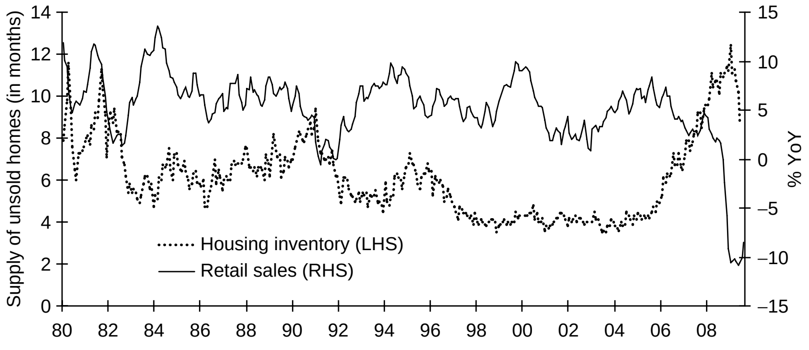

Figure 1.3 US housing inventory (surging) and retail sale (contracting)
Source: CEIC.

normal recovery. But it is unlikely this time around, as the household sector is seriously damaged, with deep contraction in consumption and housing sales likely to last for a long time in the post-bubble balance sheet rebuilding process. In the US, this adjustment is seen in deep contraction in retail sales and surging housing inventory (Figure 1.3). Those who are expecting a strong and swift economic recovery are likely to be wrong. Time will tell.

2
Post-Subprime World Still Unbalanced

The sharp rebound in the global financial markets in 2009 seemed to herald an end to the western banking crisis and the start of an economic recovery. Not really. This is because the developed world's banking system is not just suffering from a temporary breakdown of the inter-bank market and a transitory fall in asset values. It is seriously impaired, and the damage will hinder the post-crisis recovery process. Even a recovery in capital markets activity may not help the post-subprime recovery much, because the benefits of stabilising financial conditions are not being distributed evenly. That is why banking lending has remained depressed and the money multipliers in the developed world have remained broken, despite improvement in the financial environment.

Desperate times need desperate measures. So the global authorities have come up with unprecedented stimulus measures to prevent a global systemic implosion. However, bailouts breed moral hazard and obstruct the needed microeconomic consolidation in the system by keeping the excess capacity alive. So far, the global authorities have ignored this structural distortion on the grounds of the need to stabilise the global crisis. Countries such as China, in particular, should learn from this, since China has an inherent excess capacity problem with serious moral hazard in the system. There is also a risk of a 'back to central planning' mentality emerging in China in the post-subprime era. The synchronised and aggressive global bailout policies offered no more than a short-term fix for the problems. Far from rebalancing, it is unfortunate that the current policy directions point to a continuing unbalanced post-subprime world!

The banking crisis is not over

As the global economic rescue plans take hold, capital markets around the world have recovered, though not quite back to pre-subprime levels.

By October 2009, the MSCI World equities index gained more than 60 per cent from its record low in March 2009, and corporate bond and structured credit risk spreads narrowed by a similar impressive margin. The US, the epicentre of the subprime crisis, has shown similar sharp rebound in its capital markets, with the S&P 500 surging by over 50 per cent from its low in March 2009 and corporate bond spreads over risk-free Treasury bonds falling significantly (Figure 2.1). Normally, financial market movement leads economic activity, with varying time lags but by an average of 9 months to a year. So this sharp rebound in stock and bond prices should herald an end to the western banking crisis and the start of an economic recovery into the future.

However, just when everyone thought that it was safe to go back into the capital markets, Dubai threw the world markets into turmoil in late November 2009 by delaying repayment of much of the debt of Dubai World, the government's investment arm with US$59 billion in liabilities. Currencies wobbled, and stocks and bonds took a beating in the following days. The debt delay reminded the world markets that, while the symptoms of the subprime crisis might have been dealt with by massive policy expansion, the roots of the disease had not really been tackled. The core of the subprime problem was loading up too much debt onto people and companies that could not afford it. That has not changed, despite all the aggressive bailout policies. When we look at the way sovereign debt is exploding, at the losses being taken by the private equity industry, or at the way credit card debts are spiralling out of control, then it is clear that the basic problem of piling up too much

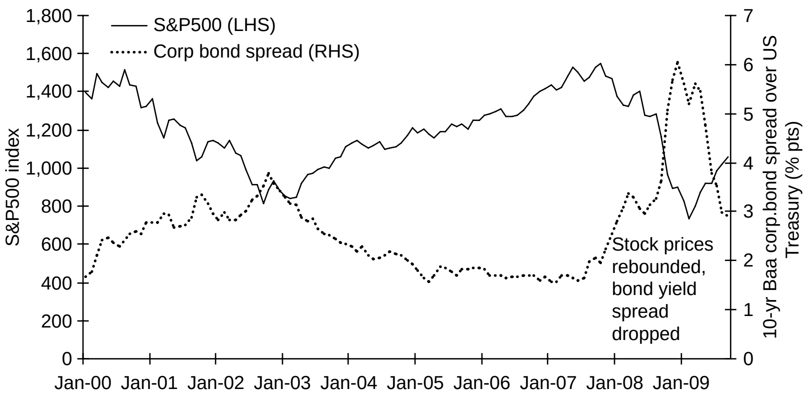

Figure 2.1 US capital markets rebounded

Source: CEIC.

leverage onto flimsy foundations has not been solved. Instead, it has only taken a different form.

The Dubai debacle reminds us that this is not a normal crisis (as I argue in Chapter 1), so past experience may not be a sufficient guide. In particular, it highlights that the banking crisis is not really over yet and the global economic recovery may not be solid for a few years. This is because the true size of the banks' losses, much of which are still hidden in their balance sheets, is probably enormous. The International Monetary Fund estimated that the total write-offs on financial claims in the subprime crisis would be US$4.05 trillion for the US, UK, Euro zone and Japan combined, with the US alone accounting for 66 per cent (or US$2.7 trillion) of these losses (IMF 2009). However, by February 2009, only about US$1.12 trillion had actually been written off by the crisis-hit countries, representing only 27 per cent of the total expected losses. With almost three-quarters of the losses still stuck in the western banking system, it is hard to say that the developed world's banking system has returned to stability.

The developed world's banking system is not just suffering from a temporary breakdown of the inter-bank market and a transitory fall in asset values that could be overcome by simply waiting for recovery. Rather, the system is seriously crippled. This damage will hinder the post-crisis recovery process for a long time. Given the expected losses, the western banking system is indeed at the brink of insolvency, with a permanent loss in equity capital. Meanwhile, the shadow banking system,[1] and hence the market for financial derivatives, has been shattered. The prices for structured securities, such as collateralised debt obligations (CDOs), have collapsed due to a loss in investors' confidence in these instruments.

The subprime crisis has left investors with the bitter realisation that the multi-fold chain of securitisation was no more than a huge institutional fraud. Those cash-back loans to *ninja* (no income, no job and no assets) customers that included hefty fees to brokers and were securitised and structured up to 60 times do not have any value when risk appetite disappears. The failure of the credit rating agencies to do a proper job in helping investors to guard against credit risk only made things worse. If the securitisation process created 70 per cent triple-A rated papers out of what on average were B-value loans, there must be some serious flaws in the rating process. This fault will not disappear even if the wider economy recovers.

So far, defaults on securitised credit card debt and commercial loans to companies that are driven to bankruptcy have not yet surfaced. But they are potential time bombs. All these will continue to deprive the banking system of equity capital and restrict its ability to extend credit. The Americans have relaxed their accounting rules, making them generous enough to allow banks to sweep many losses under the carpet in the short term. But banks cannot hide the truth forever and wait for miracles. The Japanese made that mistake in the 1990s by trying to muddle through, only to end up with almost two decades of economic stagnation.

Capital markets cannot save the day

But wait a minute. Wouldn't the recovery in capital markets activity, with stock prices rising and corporate bond yield spreads falling, help offset the deficiency left behind by the crippled banking sector? Unfortunately not, because the benefits of stabilising financial conditions and recovering wholesale market liquidity have not been distributed evenly. In the global financial liquidity network, capital markets act to align the interest of borrowers with those of risk-seeking savers. What makes this process unique is that it effectively side-steps the banking sector, which is subject to capital requirement constraints and the risk-averse discipline of bank shareholders and depositors. So it is not surprising that the improvement in international corporate sentiment followed the thaw in capital markets activity in the first half of 2009, even though monetary data still showed a continued contraction in bank credit across the developed world (Figure 2.2).

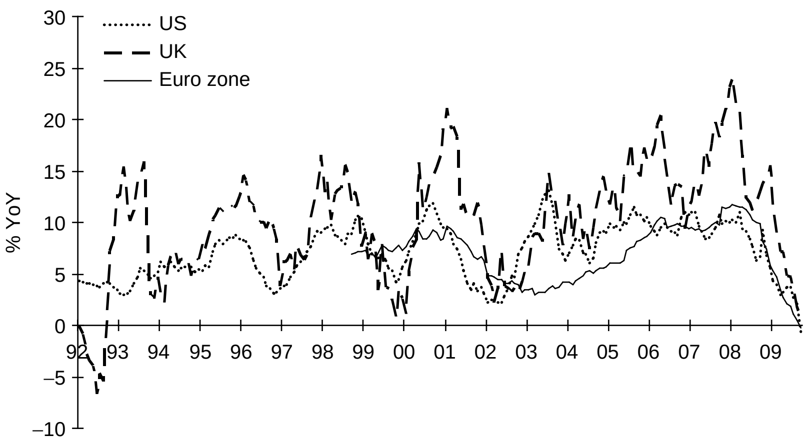

Figure 2.2 Global loan growth collapsed
Source: CEIC.

Data from Thomson Reuters, a financial data service provider, showed that global corporate debt issuance, excluding government agencies and financial institutions, jumped to US$903 billion in the first six months of 2009. That was over 150 per cent (or US$542 billion) more than the amount in the second half of 2008. Corporate debt issuance in the first half of 2009 was already 22 per cent more than the full-year 2008 total issuance. Yet bank lending remained severely depressed, as the effects of loan losses and changing regulatory and accounting practices prompted banks to focus on shedding balance-sheet risk. As a result, global syndicated loans fell by 17 per cent in the first six months of 2009 compared with the previous six months, and were only 44 per cent of the volume seen in the first half of 2008.

Broken bank credit channels and unprecedented monetary liquidity in the global financial system allowed corporate borrowers to bypass the banking system and raise funds directly from the capital markets. So it seems that the revival of capital markets activity, which is in effect a process of financial disintermediation, helped to deliver the so-called economic 'green shoots' – initial signs of economic recovery – in the first half of 2009. Optimists are quick to argue that a global economic recovery will unfold from here. Well, this is not quite true, in my view. The trouble is that the economic benefits of stabilising financial conditions, as summarised by the fall in the so called TED spread[2] back to normal levels (Figure 2.3) and recovering wholesale market liquidity, have been distributed unevenly. Only governments, large financial

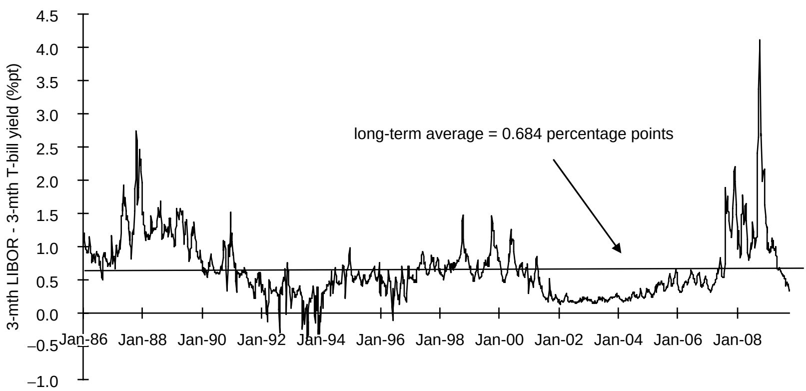

Figure 2.3 TED spread returning to normal

Source: CEIC.

institutions and investment-grade corporates have attracted the bulk of finance at cheaper cost from risk-averse investors. Other smaller and sub-investment-grade companies still have to pay a hefty risk premium to get financing.

For example, the margin of European high-yield corporate asset swap spreads over A-rated investment grade issuers was about 500 basis points[3] in mid-2009. This was down from over 800 basis points in January, but it was far from being a sign of normal financing conditions in the real economy. Such a large risk premium is in effect a tax on corporate profits, investment and employment. Meanwhile, illiquid securitisation markets have made borrowing harder for smaller borrowers and forced them to rely on the crippled banks, which effectively means credit rationing to the small borrowers. Securitisation issuance has remained depressed, falling by 50 per cent in the first half of 2009 from the same period in 2008, despite aggressive support from the Fed and the European Central Bank (ECB) through securities buying programmes.

In a normal economic cycle, a flood of capital market liquidity would fuel a recovery. But this is not a normal cycle. From the financial system's perspective, the major channels of finance in the real economy have remained blocked, with the US and European money multipliers[4] showing no signs of revival after collapsing in late 2008 (Figure 2.4). With the money multiplier malfunctioning, aggressive monetary expansion, even in the form of quantitative easing (QE), will not be transformed

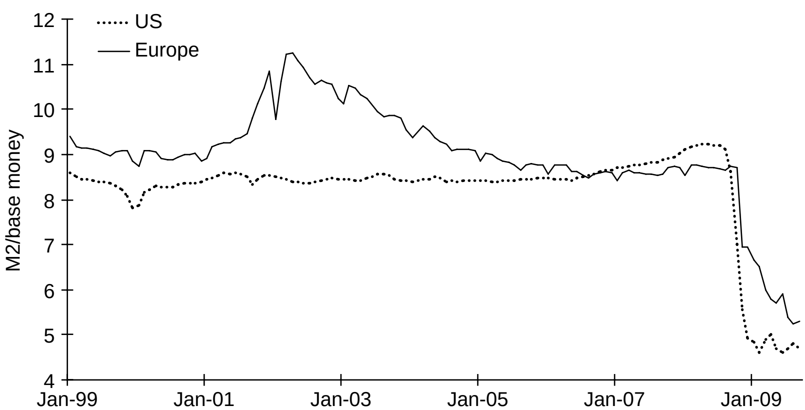

Figure 2.4 Monetary multipliers collapsed

Source: CEIC.

into bank lending, as conservative banks simply parked their excess reserves created by QE at the risk-free central bank accounts. Increased corporate issuance and rallying equities may prompt an improvement in expectations, increase the effect of an inventory rebuilding process, stabilise consumer wealth and slow job losses: these economic 'green shoots' were seen in the first half of 2009. But, without measures to restore normal credit creation, the pressure of leverage on corporate and consumer balance sheets will constrain income, profit and spending growth. If the Fed and the ECB or other major central banks tighten up policy too early, any economic 'green shoots' will not be able to survive, so that the post-subprime global economic recovery will be short-circuited.

The capital markets recovery in 2009 has only reduced the need for emergency policy support in the western financial system. It has not reduced the need to improve the economic effectiveness of liquidity, that is, to rebuild the money multiplier in the banking system. Rebuilding the liquidity arteries in the real economy is the prerequisite for ending the western banking crisis and sustaining an economic recovery in the post-crisis world. A feeble economic recovery coming through the floods of international central bank cash will eventually degenerate into a liquidity trap, just as in post-bubble Japan since the 1990s.

Lehman Brothers, a bailout excuse

The subprime crisis has brought the global authorities to act together on a policy common front, for the first time in history, to bail out their systems. When financial ministers and central bank governors of the G7 countries[5] met in Washington DC in October 2008, a month after the collapse of US investment bank Lehman Brothers, they decided to take decisive action and use all available tools to support systematically important financial institutions and prevent their failure. Desperate times need desperate measures. However, this pledge amounted to an open-ended government guarantee for the large financial institutions. This was plain moral hazard.[6] But the puzzling thing is that this decision was right! The risk of the whole financial system imploding, sinking the good, the bad and the ugly institutions all at once, was apparent. The collapse of the wholesale funding market after the demise of Lehman Brothers clearly indicated that a systemic collapse would result if nothing was done to salvage public confidence.

Thus, the lesson learnt from Lehman's failure seems to be that every large financial institution with potential systemic impact must be rescued. That lesson was reinforced by the emergence of economic 'green shoots' in the first half of 2009 as a result of the global authorities' unprecedented fiscal and monetary stimulus, which helped improve global confidence. Since then, the global system seems to be on the mend. Ironically, one could even argue that it was Lehman's failure that brought about all these drastic bailout measures. If it had not failed, it would not have triggered a global panic and there would have been no chance of getting the resources needed from the US Congress to resolve the crisis. So, despite the Lehman mayhem, things seemed to have turned out all right. Though Lehman Brothers' failure caused a financial disaster, it had the effect of forcing a public sector resolution of the crisis and taught us the lesson that such a failure must be avoided.

Such lessons, indeed, would sit quite well with authorities in economies such as China, who are ardent supporters of bailout policies as a way to preserve systemic stability. If policymakers (including those in China) do indeed draw conclusions of this kind, this is a big problem for financial and macro policy direction. This is because these seemingly logical and strong conclusions are easy excuses for breeding moral hazard. No government should ever promote the doctrine that systematically significant institutions are too big, or too interconnected, to fail in a crisis. Fundamentally, no profit-maximising business can operate properly without a credible threat of bankruptcy. It would degenerate into a state-owned enterprise, like those in the old China, which produced for the sake of production, disregarding returns.

Another problem with learning the wrong lessons from Lehman Brothers' failure is that they tend to breed economic policy complacency, with the belief that bubbles are unpredictable, indiscernible and inevitable. So, the logic goes, it is better for a central bank to clean up after a crisis than to take pre-emptive action. Former US Fed chairman Alan Greenspan is a strong believer in this doctrine. The more effective the post-crisis bailout policies, the more likely it is that central bankers will draw such a conclusion. There is indeed a fine line to walk between bailing out the system after the crisis, thus allowing moral hazard to grow and encouraging more financial excesses to build, and adopting pre-emptive actions, with the risk of misjudging the situation and wrecking systemic stability.

However, there are also strong reasons to believe that regulations alone cannot overcome the powerful incentives for excessive credit creation brought on by loose monetary policy (see White, 2009). To put it simply, if the market becomes too euphoric during a prolonged period of monetary expansion, the incentive for banks to expand their balance sheets will be very strong, moral hazard will emerge, and regulations will be bypassed as rulebooks are thrown out of the windows. In fact, this is exactly what has happened in every single previous financial crisis anywhere in the world. Thus, pre-emptive monetary tightening should replace pre-emptive easing as a policy doctrine.

While the massive scale of government guarantees may have ended the financial panic, the danger of prolonged economic stagnation remains. The feeble economic recovery in 2009 was fuelled by the authorities' aggressive bailout of the financial system and by extraordinary fiscal and monetary expansion, especially in the countries with the highest private sector debt, such as the US, the UK and Europe. However, in the post-bubble period, the spendthrift private sectors of these crisis-hit countries will be forced to save more and pay down debt for years to come. Indeed, the Americans have cut debt and increased savings significantly since the subprime crisis deepened in October 2008, with the personal saving rate swinging from negative to over 5 per cent of disposable income in early 2009 (Figure 2.5). This is one part of the rebalancing process. The other part requires opposite behaviour from the export-led economies, which need to spend and, hence, import more.

However, this is a very delicate rebalancing act, which involves two levels of expenditure switching, first from private to public spending, and second from debtor country to creditor country consumption. Unless and until both processes are well managed, any economic recovery in the post-subprime environment will be unsustainable

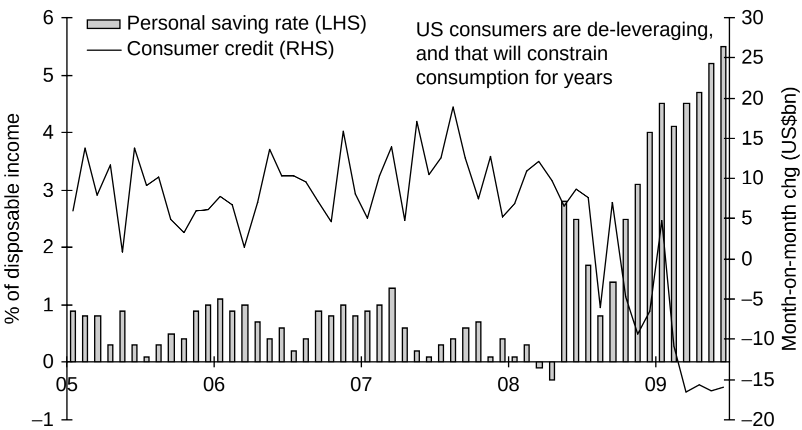

Figure 2.5 Americans de-leveraging aggressively
Source: CEIC.

(Blanchard, 2009). Hence, thinking that a drastic financial crisis such as Lehman Brothers' failure could prompt a policy conviction to bail out the economy swiftly so that it could return to normal is purely naïve. Macroeconomic policy is not able to solve the microeconomic problems that lie at the heart of the credit quake.

The wrong lessons from bailouts

This brings us to the problems with bailouts. In a nutshell, thanks to the aggressive rescue measures by the global authorities, the global banking system, especially in the crisis-hit countries such as the US, the UK and Europe, has become even more concentrated. This obviously reflects the 'too big to fail' doctrine, but it also forces investors and depositors to face a new era of more state activity in financial markets in the future. A more serious issue is the use of the printing press by central banks. Europe, the UK and the US Federal Reserve have massively expanded their balance sheets through bond purchase programmes in order to push down long-term interest rates to assist the de-leveraging and economic recovery process.

Aggressive monetary easing, including drastic measures such as zero interest rates and quantitative easing, have enabled banks to repair their balance sheets, ravaged by losses on toxic assets. As banks allow loans to consumers and businesses to expire, they borrow at close to zero interest rate and invest the proceeds in higher-yielding bonds, thus taking a profitable spread. The trouble with all this is that, from a macro perspective, there is too much money chasing not returns but 'parking places'. Hence, the massive liquidity injection by central banks into the economic system is unlikely to generate any sustainable growth momentum. This is also why the post-subprime economic recovery will likely be accompanied by a long period of high unemployment and slow consumption, because banks will remain constrained by their lending ability.

The key reason why the banking system's lending ability will remain crippled for a long time is because, fundamentally, there has not been any genuine clean-up of the whole system. In other words, dead wood remains in both the banking and corporate sectors. So excess capacity will continue to plague the economy for years to come. This is the biggest problem with bailout measures, which have obstructed the needed micro consolidation in the system, keeping companies operating – and employing voters – rather than facilitating the structural retrenchment that will sustain growth in the long term. There may be short-term advantages to an economy in keeping a bubble's unnecessary capacity alive, as seen in the emergence of the economic 'green shoots' in 2009. But the ensuing misallocation of capital will significantly impair long-term growth potential.

Experience shows that a bubble creates capacity that should not have existed in the first place. So, once the bubble bursts, this capacity is no longer needed. An intense period of contraction follows. For example, the IT bubble in 2001 gave rise to hundreds of publicly traded dot-com companies and created tens of thousands of jobs. Most of these firms either went bust or merged with other technology companies once the IT bubble burst. Similarly, the gold rush of the 1800s led to construction of outposts that later became ghost towns after the yellow metal bubble burst. This time around, the global economy has experienced during this first decade of the new millennium the biggest credit bubble in history, which benefited virtually every industry in every country. Arguably, all the growth stories in the 1990s and 2000s, such as China, India, emerging market infrastructure, residential construction, hedge funds, private equity and commodities, were capital-intensive investments that benefited from easy access to cheap credit.

The global credit bubble has created the world's biggest economic bubble. Now that the bubble has burst, there will be massive overcapacity in the global economy, as the financial and economic excesses created by the bubble unwind. There will also be a massive savings glut, as both the developed (debtor) and developing (saver) worlds save at the same time. This combination of over-supply of goods and saving is extremely deflationary in the post-subprime adjustment period, and may hold back world growth for years. The global authorities' aggressive bailout responses have not been unusual. Politicians are naturally fearful of post-bubble consolidation, as it inevitably means higher unemployment and voter distress. Countries such as China, where voting is not a part of the political process, fear social unrest threatening the government's grip on power. Hence, post-bubble policies tend to sustain an economy's unwanted capacity, with the hope that growth will rebound so that the economy can eventually grow out of the problems by absorbing those excesses.

Japan in the 1990s is a vivid example of how using a bailout strategy in the 1990s stymied the structural adjustment process in the post-bubble years. Excess capacity, especially in the financial sector, was preserved, as companies were deemed 'too big to fail'. Simple economic theory states that significant overcapacity will lead to falling goods prices. This is exactly what Japan has experienced in the past fifteen years – namely, a prolonged period of disinflation perpetuated by periods of outright deflation. Even today, Japan's deflation problem has not gone away. In the post-subprime rescue efforts, it was clear that the US had followed the Japanese route of aggressive reflation with drastic measures, including quantitative easing and zero interest rate. It also implemented various liquidity injection programmes, such as the Troubled Asset Relief Programme (TARP), Term Asset-back Securities Loan Facility (TASLF) and public–private investment programmes, to keep the system from imploding.

However, these efforts amount to long-term structural distortions. These days, bailouts are deemed necessary for one reason alone: to stabilise the financial sector in a crisis of contagion. They are intended to protect the integrity of the whole financial system, or so the logic goes. However, bailouts do not guarantee a true recovery in the financial markets (much less an economic recovery). Bailouts also do not necessarily reduce systemic uncertainty or investors' risk aversion. This is because bailouts change the nature of the underlying market/economic risks to the investor – with the proportion of 'endogenous' (or systemic) risk rising relative to 'exogenous' (or systematic) risk. From the asset market's perspective, this means that, even though asset prices may be very cheap on the basis of conventional valuation metrics, the higher 'endogenous' or systemic nature of risk makes the future direction of asset prices unpredictable. In short, not only is the total risk of investment rising in this financial climate, but the nature of the underlying risk has become more adverse than before.

As and when global confidence returns and risk aversion fades, the authorities should shift away from bailouts towards foreclosures of bad banks. Foreclosures will lay the foundation for the financial market and economic recovery. First, foreclosures re-liquefy the economy in a general equilibrium 'bottom-up' way, rather than as a 'top-down' macro policy stimulus. A bottom-up approach will be more effective as a post-subprime adjustment because the economic risks have tilted towards an endogenous (micro) nature. Second, foreclosures tighten capacity utilisation (again via a 'bottom-up' micro process rather than a 'top-down' macro stimulus). This will help rebuild rising price expectations to counteract the risk of price deflation in the post-crisis world.

These are the important microeconomic foundations for sustaining a macro economic recovery. Yet many policymakers in the world are ignoring this on the grounds of the need to stabilise the global crisis. The crisis will pass; the global economy will be stabilised eventually. The question is whether the global authorities will take the necessary pains – foreclosing the bad banks – to sustain the economic recovery, or whether they will just prefer to hide in their own local agendas and wait for the next, perhaps bigger, crisis to erupt so that they can bail out the banks again.

Relevance to China's economic policy

These implications are especially crucial for China, which is trying to liberalise the financial sector in an economy that already has an inherent excess capacity problem. Beijing is always keen on using bailouts to preserve systemic stability. In other words, there is an inherent moral hazard problem in the Chinese system. If this remains uncorrected, it will be the biggest obstacle to further economic liberalisation and to sustainable long-term growth, in my view. As an analogy, the risk of China's fiscal activism causing inflation and investment growth blowout is akin to goldfish eating. Anyone who keeps goldfish as pets knows that goldfish can die from over-eating when their digestive system becomes jammed and their intestines burst. I do not know why goldfish never learn. Perhaps it has something to do with being domesticated for too long (goldfish were first bred as pets in China over 1,000 years ago). Presumably, after having their diet controlled by humans for a thousand years, goldfish have lost their ability to determine how much food is enough. After all, whenever there is food coming your way in the fish pond, why not eat it while there is nothing else to do?

The point is that China's economy, especially as regards investment growth, probably has a 'goldfish eating tendency'. It keeps investing until it bursts into overheating (prompting drastic policy clampdown), or the banking system gets into big trouble, or the environment becomes unliveable. This is reflected by the continued rise in the share of investment in the economy, with the investment-to-GDP ratio rising from 25 per cent in 1978 to over 40 per cent in recent years. The subprime crisis has aggravated this trend by prompting Beijing to increase investment spending. In the RMB4 trillion (US$586 billion) stimulus plan that Beijing announced in November 2008, for example, 80 per cent of the funds were assigned to public investment, including infrastructure, post-earthquake reconstruction and public housing (Figure 2.6).

In the post-subprime environment, China's chronic excess manufacturing capacity problem may get worse, as a result of the explosive bank credit growth and capital spending that Beijing implemented in late 2008 and 2009 to fight the effects of the global credit quake. There is no doubt that the Chinese authorities' stimulative policies have produced their

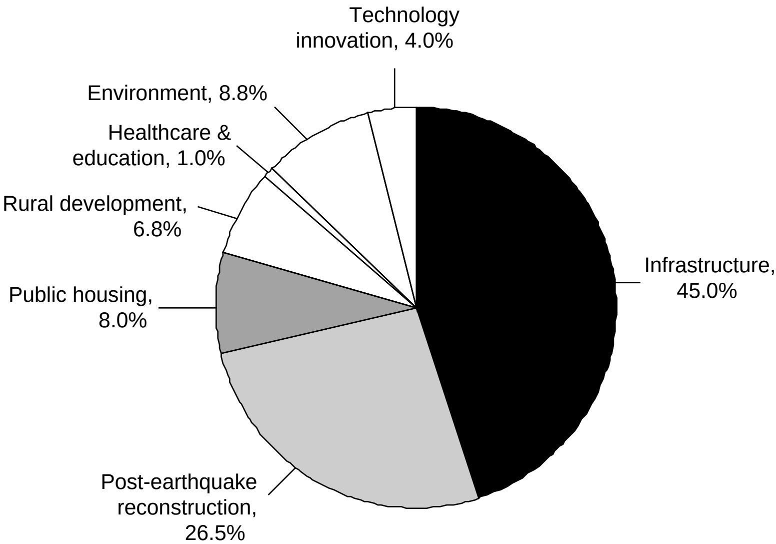

Figure 2.6 China's RMB4 trn (US$586 bn) stimulus plan
Sources: Author, government report in media.

desired effect of reviving economic growth, while all western advanced economies are still struggling to keep their heads above water. But these reflation policies have also prevented some otherwise obsolete capacity in the Chinese economy from being scrapped. By the same token, some marginal, economically nonviable projects have been made feasible with the help of extremely low capital cost and government spending.

The excess capacity problem will be aggravated by the uneven pace of de-leveraging in the developed world and spending growth in China. In particular, the west is de-leveraging fast while the Chinese saving habit is slow to change, so that Chinese consumption growth will remain slow. As a result, deficient demand is projected to intensify in the coming years. So the excess capacity problem will put more downward pressure on pricing power, generating a strong deflationary force holding back Chinese corporate profits for a long period of time. Meanwhile, the explosive growth in bank lending in 2009 could pave the way for a sharp rise in bad loans in the Chinese banking system in the coming years. Massive government-led infrastructure spending, policy-driven bank lending and administrative directives for reorganising ten major industries all bear some flavour of the old command economy. In theory, government intervention is needed when the economy is malfunctioning. But the Chinese system is not really malfunctioning; its banking system has not been damaged by the subprime shock, so the Chinese money multiplier has not been impaired. Thus there is a risk of increasing government intervention in the post-subprime years, with the possibility of a 'back to central planning' mentality emerging.

Post-subprime world still unbalanced

While China's response, using fiscal pump-priming to offset the negative subprime shock, seemed natural, it could come at a high price, as the stimulus programme basically ignored private consumption (see Figure 2.6 again). As long as Chinese growth remains investment-driven, it will do little to help correct the global saving–consumption imbalance. Further, Beijing urged the domestic banks to step up and fund the stimulus package; this they did, very effectively. In the first half of 2009, new bank credit grew by RMB7.4 trillion. That was three times the pace seen in the same period in 2008, and the strongest six-month lending surge on record. This outsized bank-directed investment stimulus reflected the response of the authorities to an unprecedented external demand shock, stemming from rare synchronous recessions in the developed world, which devastated the export-led growth engine in China and triggered the massive layoff of at least 20 million migrant workers in the export-intensive Guangdong province. Fearful of a potential outbreak of social instability spreading to the rest of the nation, Beijing moved decisively to arrest this deterioration by massive fiscal spending; hence the RMB4 trillion stimulus package.

However, this move may have produced some undesirable effects, which will not be discernible for some years. Surging investment demand accounted for a record 88 per cent of China's GDP growth in the first six months of 2009, doubling the average contribution of 43 per cent over the past decade. Meanwhile, the quality of Chinese bank credit most assuredly suffered, as more loans were pushed out to chase lower-quality projects. This could sow the seeds for a new wave of non-performing loans in the post-subprime years. So, on the back of the subprime shock, China has basically compounded the very problems that it was trying to resolve – preserving excess capacity by aiming a massive liquidity-driven stimulus at its most unbalanced sector.

From a global perspective, the credit quake is a reflection of unsustainable macro imbalances within and between nations, as well a reflection of serious flaws in policies, regulatory structures and risk management practices that allowed these imbalances to take the world to the brink.

The synchronised and aggressive bailout policies employed by the global authorities to save the global system offered no long-term solutions to solve the problems. 'Cash-for-clunkers' in the US and cash-for-roads in China, for example, are nothing more than quick-fix stimulus actions that risk compounding the existing imbalances by retaining excess capacity. The US cannot resist opting for another dose of excess consumption, despite the fact that its consumption share of real GDP remains at a record high of 71 per cent. Nor can China shift away from investment-led growth, even though its investment share in real GDP has surged to almost half of the economy.

Hence, far from rebalancing, the unbalanced world before the subprime crisis reappears after the crisis and compounds the existing imbalances! The world continues to employ local policies for solving global problems. It continues to operate under the assumption that the best global policies are the simple arithmetic sum of all national policies. This is obviously wrong, as different economies have heterogeneous and idiosyncratic problems. But the bailout policies produced massive liquidity that flooded the world's financial markets, pushing asset prices sky-high in the first half of 2009. Ever-frothy emerging markets equities shot up by 85 per cent by September 2009 from their lows just six months earlier in March, banking on some presumed powerful rebound in the underlying economy. But, before domestic demand growth takes over from exports as the key growth driver, this surge in stock prices was at odds with the broken export-led growth model that is likely to remain damaged for a prolonged period due to weak developed-world consumption in the post-bubble world. Far from rebalancing the global economy, current developments are, in fact, moving towards more imbalances in the post-crisis world.

3
Subprime Lessons: East Meets West

There are many lessons from the subprime crisis for both the East and the West. While the West has a lot to ponder regarding re-regulating its banking system and treatment of financial innovation in the post-subprime years, Asia may get the wrong signal from these post-crisis re-regulation measures, especially when it sees that China's restrictive model seems to have helped avoid the worst. Meanwhile, China is in the middle of liberalising its financial, notably insurance, sector and pushing for consumerism to power its economic growth in the future years. The subprime debacle shows that this process could be problematic if it is not managed properly. So there is a lot of food for thought for the Middle Kingdom.

On the macro perspective, financial and economic bubbles are inevitable because they are results of irrational human behaviour, or 'animal spirits' as John Maynard Keynes famously put it in 1936. This means that inundating the system with more regulations, which is what many politicians are pushing for, will not prevent financial breakdowns from happening again. The world needs better, not more, regulations. Better and adaptive regulations are also needed to ensure proper financial engineering to deliver economic benefits without harm. Arguably, financial complexity *per se* is not necessarily bad. It is the slippage of governance of its usage that has proven to be detrimental. So the global authorities must not make the policy mistake of strangling financial creativity in the post-subprime years. Regulatory control should focus on facilitating financial innovation to gain consumers' trust, but not deter creativity and development. Since China still embraces tight control as a way to manage its economic development and financial liberalisation process, these post-crisis regulatory issues have many far-reaching implications for its future reform path.

The bubble puzzle

The housing bubble that led to the subprime crisis was not the only large asset bubble in history. But why did other large bubbles, such as the US dot com bubble, not cause systemic failure in the global financial systems as the subprime crisis did? The bursting of the dot com bubble wiped out about US$10 trillion of equity. But the Keefe, Bruyette & Woods BKX index of the financial firms, a measure of financial system performance, fell by less than 6 per cent during the US equity market downturn between December 1999 and September 2002. This time, the subprime crisis wiped out about US$3 trillion of real estate value, but the BKX index fell by 75 per cent between its peak in January 2007 and mid-2009. The financial sector was devastated by this credit quake, whereas it had not been badly affected by the earlier dot com crisis. How was it possible for one crash, which wiped out US$10 trillion in assets, to leave the financial system unscathed, while another, which destroyed only US$3 trillion in assets, sank the whole system?

The reason lies in the ownership of assets. In the equity market crash early this decade, the assets were held by institutional and individual investors who either owned them outright or only held a small fraction on margin. So the losses were absorbed by the asset owners. In the subprime crisis, the losses were more widespread because housing assets were often bought with over 90 per cent on margin. So, when the housing bubble burst, falling housing prices meant that millions of homes became worth less than the loans on them. These huge losses were transmitted to the lending institutions, investment banks, investors on mortgage-backed securities, issuers of credit default swaps (CDS) and even the US Treasury.

Indeed, the events of the ten years preceding the subprime crisis in the US have a frightening similarity to the period leading up to the Great Depression.[1] Total mortgage debt outstanding jumped 215 per cent to US$29.44 billion in 1929 from US$9.35 billion in 1920. This pushed the residential mortgage debt-to-household wealth ratio to 27.2 per cent in 1929 from just 10 per cent in 1920. The Great Depression was attributed to excessive speculation in the American stock market, especially between the spring of 1927 and the autumn of 1929. Had the difficulties of the banking system been caused by losses on brokers' loans for margin trades in 1929, the results should have been felt by the banks at once after the stock market crash. But the banking system did not show serious strains until the autumn of 1930. Aggregate banking earnings continued to soar and reached a record of $729 million in 1929. However, banks' exposure to real estate was huge. As property prices fell more rapidly, foreclosures wiped out banks by the thousands. Had the mounting difficulties of the banks and the final collapse of the banking system in the 'Bank Holiday' in March 1933 been caused by the contraction of money supply, then the massive liquidity injection by the Federal Reserve in the eighteen months preceding the banking collapse should have averted the collapse of the system.

Economic historians are still studying the true causes of the Great Depression. But the claims that losses on the stock market speculation and monetary contraction caused the implosion of the banking system both seem inadequate. One thing seems clear: both the Great Depression and the subprime crisis had their origins in excessive consumer debt, especially mortgage debt, which was transmitted to the financial sector during a sharp economic decline. This phenomenon seems to offer some clue to addressing our original question of why one crash, such as the bursting of the IT bubble in 2000, causes minimal damage to the financial system so that the economy can recover quickly, while another crash, such as the Great Depression or the subprime crisis, crushes the financial sector.

The clue is that a financial crisis that originates in consumer debt, especially consumer debt concentrated at the grass roots level of the wealth and income spectra, can be transmitted quickly to the financial system and cause devastating damage to the whole economy, trapping it in the doldrums for a prolonged period of time. The subprime crisis has resulted in the second great consumer debt crash, the first being the Great Depression. This will constrain US consumption for many years to come. The implications of all this do not only provide valuable lessons for the western world, which seems to have forgotten the mistakes that the US made some eighty years ago before the Great Depression hit; they also provide China with a crucial warning about opening up its banking system and developing a consumer debt market and related financial services. It is clear from the Great Depression and subprime crisis events that when consumerism is pushed to the extreme, with excessive consumer debt build-up, the whole system goes bust eventually. The Chinese authorities should do more thorough research and carefully manage the process of unleashing Chinese consumer potential and developing the related financial services to support the rise of consumerism.

The painful lessons

To correct their mistakes, bank regulators in the subprime-crisis countries have decided to re-regulate and increase scrutiny of their banks.

As a result, western banks in the post-subprime years will likely become more heavily regulated than in the past two decades, so that their business will become more basic and generate less profit from fancy financial engineering. Granted, restrictions will hurt economic opportunities and profitability in the next economic upswing, but this will be a small price to pay for greater protection from another, perhaps bigger, banking crisis in the future.

However, the regulatory implications for Asia are different. From a policy perspective, the danger of the subprime crisis and the subsequent re-regulation of the global banks is that they may send the wrong signal to Asian regulators, that financial innovation is bad and government control is good, as the restrictive Chinese model seems to have shown. A case in point is the rapid collapse of US investment bank Bear Sterns and UK mortgage lender Northern Rock. The former was at the forefront of financial innovation in the securities markets; the latter was lauded for its innovative funding strategy.

The correct message from these failures should be that Asia should ensure that any move away from traditional banking practices towards more innovative techniques is accompanied by enhanced risk management. It will be extremely unfortunate if the wrong message is received and delays or even deters further financial liberalisation in the developing world. Asian regulators should take the subprime crisis lesson seriously to improve their regulatory systems. As Asian financial markets expand into new terrain, policymakers should put in place measures to deal with risks posed by financial innovation, but should not shy away from financial liberalisation or suppress financial innovation.

While the global authorities have taken unconventional micro and macro economic measures to fight the subprime crisis, the root problem has not been dealt with because they have abused, or misunderstood, the essence of Keynesianism. The principle of Keynesian stimulus is based on four propositions: that fiscal activism is needed to prevent a global depression; that a short-term fiscal boost will jump-start the economy; that some inefficient projects can combine with short-term cyclical and long-term structural agendas to produce a much-needed impact on saving the economy; and that a swift rise in public debt to fund fiscal activism need not be a concern. These general principles of Lord Keynes can be, and have been, easily abused by politicians to push for government spending that may not be for the long-term good of the macro economy. China is moving towards boosting consumption and financial liberalisation as new growth drivers. It also has an overspending tendency inherent in its economic policy. So there is a lot for the

Chinese policymakers to learn from this crisis and the western authorities' policy reactions to handling this financial crisis.

The developed world, led by the US, was wrong in the first place to encourage irresponsible social behaviour in the past two decades, which put the desire for current consumption ahead of the ability to pay for it. Financial engineering and deregulation had only encouraged borrowing and discouraged thrift to finance excess spending via a gigantic credit bubble, which eventually burst in the form of a credit quake! To tackle the impact of the crisis, the western authorities employed Keynesianism to the fullest extent by pushing up public debt to fund fiscal spending as if there were no tomorrow. The sad fact is that the US, the UK and other spendthrift and deficit countries, including Ireland, Greece, Italy and Spain, had over-borrowed for more than a decade. So a fall in consumption in the post-subprime world is not an anomaly to be fought but an adjustment to be accepted. But what the western authorities have done so far has been to sustain the spendthrift consumers' leverage and consumption. This process, in turn, has hindered the market-clearing adjustment.

The problem with this short-term fixing behaviour is clearly illustrated by Japan's experience in the 1990s. If the market were not allowed to clear, the effects of the financial crisis would just drag on. What the western authorities are doing this time around, in fact, mirrors the mistake of the Japanese authorities in the 1990s: while they may avoid debt-deflation in the short term, the post-crisis drag on the economy will last for a long time, resulting in weak economic growth and a persistent price deflation tendency. Empirical evidence from World Bank research argues that even drastic measures, such as massive liquidity support, blanket deposit guarantees, regulatory forbearance, bank recapitalisation and debtor bailouts (which are all measures that the western authorities have used to fight the subprime crisis) would not produce fast and sustainable economic recovery. By contrast, these measures tend to increase sharply the costs of banking crises (Klingbiel *et al.*, 2002).

Some counter-cyclical spending is vital on social grounds. However, stimulus measures such as temporary tax cuts for consumers and 'car scrappage' schemes, which the US employed in late 2009 and early 2010 to boost short-term consumption, were headed in the wrong direction and were a waste of time and resources. They reflected a hope that a temporary fiscal bridge would carry the US economy back to consumption-led growth – a clear misunderstanding of the spirit of Keynesianism. Meanwhile, relying on some sort of insurance schemes to limit banks' losses, which most of the crisis countries' authorities adopted in early 2009, cannot solve the underlying problem that clogged the credit flow.

This is because, although the insurance eliminates the banks' risk exposure to bad assets, it does not take the toxic assets off the banks' balance sheets. Hence, despite the insurance schemes, the banking system remains corrupted, with the bad assets continuing to drain resources from the system in the form of misallocation and mispricing of capital to inefficient 'dinosaur' borrowers (or zombie borrowers, as they are sometimes called), government debt and deficit build-up.

Since taking office in January 2009, US President Barack Obama has not only inherited the largest peacetime fiscal deficit in US history; he has even pushed it up further, to unprecedented levels. Hitherto, the US government alone has spent a huge amount of money on containing the subprime crisis – enough to fund two Vietnam Wars. About 90 per cent of this money has been spent on sustaining lending and consumption. President Obama and his advisors have ignored a subtle insight of modern Keynesianism: that the result of fiscal activism depends not only on current taxes and spending but also on their expected future trajectory. The US is not in a credible position to raise an already enormous budget deficit even temporarily, because the prospect for future deficit-cutting remains very poor. The US has no idea, in my view, of how to restore budget balance. This is because it is caught between a federal government that provides too few public investments and services and a public that is extremely resistant to any tax increases. So, in a sense, the US is starting off in the wrong direction, with larger rather than smaller deficits, in the post-subprime world. This is a relevant lesson for China, which is very much used to the idea of spending its way out of economic problems: while it may be possible for the sheer size of all these spending programmes to overcome the structural failures of the financial system and produce an economic recovery, such an economic recovery is unlikely to be sustainable. This is because the root problems in the system are not being dealt with, so that the bailout policies will only create more and bigger bubbles down the road, with the same final result of collapse at an even grander scale. So it is better for China to heed the lessons now, and get a good start in its efforts to deregulate the financial sector and develop a consumer credit market, than to jump into financial engineering and excessive consumerism and end up with another big financial mess to mop up in the future.

Better regulations, not over-regulation

As the western authorities are *en route* to re-regulate their banks, they must realise that regulation *per se* is potentially dangerous. In the post-subprime world, we do not necessarily need more regulations. Instead, the global system needs better and more appropriate regulations. This is food for thought for countries that are fond of control as a way to economic management. In particular, politicians grappling with financial crisis are determined that this kind of thing should never happen again, so they look to regulation to ensure that it will not. In all likelihood, however, that is a doomed venture. Boom and bust resulting from financial crisis will always happen, because economic agents are not always as rational as stylised economic models assume. So the authorities should not burden the financial system with excessive regulations that hinder development and efficiency.

In theory, correcting the incentive problem by making rewards conditional on long-term success (or, in other words, aligning the interest of the employees with that of the employer) can avoid the fatal risks run by bankers and traders in a financial bubble. In fact, this is not always the outcome. For example, at AIG, the US insurance giant that was brought down by huge bets on credit derivatives, the bonus system was based on a cautious mechanism that linked rewards to long-term performance. Traders' bonus payments were held back and reduced in subsequent years if there were any trading losses. However, by one account, the resulting losses to the traders still totalled US$675 million. Similarly, two investment banks noted for heavy employee ownership of stock – some 30 per cent in each case – were Bear Stearns and Lehman Brothers. When they went under, total losses by employees ran into billions of dollars. So where was the employee–employer interest alignment?

The trouble is that everyone loses their sanity in a financial bubble. The perception of risk changes, regardless of whether you are a government employee, an investor or a trader. For many years, it has been taken for granted by governments, regulators and economists in the western world that companies are better run if shareholders have a bigger say, because shareholders, it is assumed, have a rational interest in their investments. So, if given sufficient power, they would prevent banks from taking excessive risks. Again, facts have not always turned out that way. Take, for example, the Royal Bank of Scotland (RBS), one of the biggest banks in the world. The common understanding of its collapse is that it was all the fault of Sir Fred Goodwin, the chief executive. Had he been subject to proper control by the non-executive directors and large shareholders, the disaster would have been avoided. Really? The non-executive board consisted of directors who were mostly heavyweight senior bankers. They had for some years blocked Sir Fred's imprudent attempt to build an empire through acquisitions. But, at the tail-end of the boom, they weakened and sanctioned the disastrous purchase of ABN Amro, whose gigantic and unreasonable cost finally sank RBS.

These examples underscore the fact that economic agents do not act rationally at all times. Hence, there is a legitimate role for regulations to rein in human irrationality. Nonetheless, the government should not expect that putting more regulations in place will ensure that bubbles will never happen again. Meanwhile, the push for more financial regulations highlights the belief that markets are not efficient. In an efficient market, as the Efficient Market Hypothesis (EMH) says, market prices are rationally determined and fully reflect all relevant and available information. So no regulation should be needed, as markets allocate resources and risks efficiently via the 'invisible hand'. This is an extreme view, as we all know that this is not the case in the real world. At the other extreme, critics of the EMH argue that human behaviour is not rational, as it is driven by 'animal spirits' that generate market bubbles and busts. So regulation is essential for reining in misbehaviour. It has become clear that, in the post-subprime era, the EMH critics are gaining the upper hand in this debate.

Both camps hold strong convictions concerning their views. They may be extreme views, but each side has its elements of truth. Markets do function efficiently most of the time, collating a vast amount of relevant information on a product into a single number, or price, on the basis of which millions of decisions are made. This is indeed a feature of capitalism that is referred to as 'wisdom of crowds'[2] (Surowiecki, 2004). However, markets also malfunction from time to time, so the wisdom of crowds could turn out to be 'madness of herds'. And why do markets malfunction? Blame it on 'animal spirits', a human economic characteristic that John Maynard Keynes first identified in 1936 (Keynes, 1936/2007). Neuroscientific research has shown that rational behaviour is the result of a balance between various brain functions, including memory, logical deliberation and emotion. If that balance is upset by a shock, such as a life-threatening event, reasoning in the human brain will be overwhelmed by instinctive behaviour and result in irrational behaviour, such as herding or the fight-or-flight response.

Although humans do not face life-threatening shocks too often these days, other kinds of modern shocks, such as social rejection or a big financial loss, can still trigger human instinctive (or irrational) reactions. And, as social animals, *Homo sapiens* will react *en masse* if the perceived threat is big enough. This may result in riots, bank runs and market crashes. In a nutshell, markets are not always efficient, nor are they always irrational. They are, in fact, a collection of transactions that lie between these two extremes. In a way, markets are adaptive, because market participants refer back to the past for guidance for the next move. This gives rise to the so called Adaptive Market Hypothesis (AMH).

Fundamentally, the AMH emerged because of a serious flaw in the EMH. Despite the big strides that economists made in research, such as game theory, general equilibrium theory, portfolio optimism and derivatives pricing models, the EMH suffers from an obvious flaw, that it has been stretched to the extreme. This extreme development is, in turn, closely linked to modern economic training, which has addicted economists to the formality of calculus and physics. In economics graduate school, it is common to find research students who have little common sense about the real economy, but are rocket scientists churning out models that they think are able to explain the workings of human behaviour. This modelling environment, in which the EMH thrives, gives outsiders, including business and political leaders and regulators, a false sense of precision regarding the output of economic models.

By explaining economic behaviour as a process of adaptive reactions, the AMH offers an internally consistent framework in which the EMH and irrational behaviour can coexist. Behaviour that may seem irrational is, in the AMH framework, behaviour that has not yet had time to adapt to the modern context. And, precisely because of this lack of adaptation, the behaviour is guided by human instinct rather than logical reasoning.

My point in all this refers to my proposition that, in the post-subprime world, we may not need more regulations. We need better regulations instead. Markets do behave rationally in normal situations. But if economic agents are subject to shocks, such as a fear of Armageddon or an economic implosion that would cause massive financial losses, animal spirits will overwhelm rational reasoning. This irrational instinct applies to everyone, including regulators, politicians, investors and common citizens. Therefore, fixed rules that ignore changing economic and financial landscapes will inevitably have unintended effects. In other words, if the authorities were to enact new regulations in the aftermath of the credit quake, they might prove too severe when things are back to normal. On the other hand, regulations that were repealed after long periods of prosperity might lead to future excesses. The bottom line is that over-regulation is not the proper way to manage the post-crisis economic transition. Instead, we need better regulations that are designed to adapt to the changing environment and human behaviour.

What to do with financial innovation?

This brings us to the next crucial question: should regulators deter the development of complex financial products such as those that lay at the heart of the subprime crisis? This question is especially relevant to systems in Asia, and especially China, which are in the process of deregulating their financial sector and developing new financial/insurance products for the market. Many tend to think that the increasing complexity of financial products was the source of the global credit quake. Hence, they argue that the authorities should enact regulations to discourage financial complexity. In my view, this proposition is flawed because it confuses the advent and usage of complex financial products with the governance of the application and usage of these products. The advent and the usage of complicated financial products are not necessarily bad, but the slippage in the governance of their application and usage can be detrimental, as the subprime crisis has shown.

The political intention to deter financial innovation became obvious by mid-2009, almost two years after the subprime crisis broke. A US Treasury white paper in June 2009 said that a new consumer financial protection agency should be authorised to define standards for simple 'plain vanilla' products with straightforward pricing. It also proposed that all providers and intermediaries should be required to offer these simple products prominently alongside other lawful products that they choose to offer. In July 2009, a UK Treasury white paper, entitled 'Reforming Financial Markets', similarly advocated improving access to simple, transparent financial products as an easy-to-understand alternative for consumers who do not want, or do not have the capability to understand, complex and sophisticated products.

These motives are indeed valid, as unnecessary complexity is a problem for the regulators to worry about when the complexity is used to deceive and confuse buyers, or if people do not have good advice on how to use them properly. Indeed, complexity was used in that way in Europe and the US in the years leading up to the subprime crisis by some banks, which created special purpose vehicles to evade bank capital requirements, and by some originators of complex mortgage securities, to fool the rating agencies and ultimately the investors.

However, any effort to deal with financial complexity should balance its drawbacks and risks with the potential rewards that it brings. Complexity *per se* is not necessarily bad. Products that embrace complexity just have to be simple to use; any new products must have a simple and comprehensible interface with consumers so as to gain their trust and make them comfortable with buying these products and using them properly. The products themselves can be very complicated. Technological advancement has brought immense new complexity to the devices that we use in our daily life. For example, a century ago, homes were nothing more than roofs, walls and floors put together. But nowadays they contain a variety of complex electronic devices, such as auto lighting, doors and blinds, computerised locks, and communications and data processing devices. People do not need to understand the complexity of these devices, which have been engineered to be simple to operate.

The problem with financial products is that, although financial markets have largely shared in this growth in complexity, with electronic databases and trading systems, the new financially complex products have not gained consumers' trust. Thus, most people have avoided them, preferring to invest in financial products that are still at the plain vanilla stage. The stocks and bonds that most of us invest in nowadays have not changed much, fundamentally, over the last century. This is the same phenomenon as people being more willing to buy a new laptop computer, which is a complicated machine beyond a lay person's understanding, than to buy a new sophisticated financial product. This is because people are unsure about the financial products, and worried about their hazards or the integrity of those who sell them.

This lack of trust may have to do with the lack of 'testability' of financial complexity. Financial breakdowns occur infrequently, years or even decades apart. So it is hard to understand how some new financial device will behave. Further, people who use financial instruments often have little or no personal experience of crises. Hence, understanding and trust are hard to establish. This is completely different from the situation with tangible goods, such as televisions and computers, which are subject to numerous tests and studies for safety in use.

Thus, from a regulatory perspective, regulators need to ensure that trust in sophisticated products can be established. Suppressing financial innovation and complexity is not the way to go. Instead, they must endeavour to facilitate the widespread use of appropriate products, which may be complicated in nature but not in understanding and usage, to address investors' needs. Regulators must also be aware of the balance between safety and creativity in financial complexity. Simply introducing more regulations will not solve the inherent problems of financial complexity. Also, regulators must not simply act as law enforcers against the shenanigans of wicked financial product promoters. They must be open to making complex ideas work so as to release their potential to improve public welfare and economic efficiency. However, the subprime crisis has greatly damaged trust in the financial system, so that the task of the regulators, to repair the system and promote financial efficiency, has become more difficult.

As the crisis has shown, there has been over-reliance on housing as an investment in the US. It is an appealing investment because it is easy to understand and tangible; we see the home we own every day. But, because the Americans use housing as a saving vehicle, they have built homes that are larger than needed, hard to keep up and beyond their financial ability to afford. Hence, their housing investment comes with excessive leverage. Financial engineering exploited this systemic flaw and created a housing bubble, which eventually burst, causing the credit quake and sending shock waves across the world. The growth and bursting of the US housing bubble reflects imperfect financial institutions, but does not necessarily mean that the institutions and their products are overly complex.

As far as the creation of retail financial products is concerned, there has to be a complex financial infrastructure to support them so that professionals who try to create them can manage a full array of risks. The right way to approach this is surely not through more regulations, which will only strangle financial innovation and the benefits it will bring. Rather, regulators should focus on encouraging and facilitating innovation. Instead of hiring more staff to implement more regulations, they should hire qualified staff to understand the financial complexity of the innovative process and facilitate it by being open to changes and creative ideas. In the end, it all goes back to better regulation, but not more regulations.

4
Asia, a Guilty Bystander

By living below their means, frugal Asians piled up a huge amount of savings which flowed westwards to support the spendthrift Americans in living beyond their means. The global saving–investment imbalance remained in a stable disequilibrium state for almost fifteen years until the subprime crisis broke. So, although Asia did not have a financial crisis due to its relatively sound economic and financial fundamentals, it was a guilty bystander in the global credit quake. Still, it could not escape the economic impact of the subprime shock, because of its heavy reliance on exports to and capital inflow from the developed world.

Arguably, China was the representative Asian guilty bystander due to its dual role as the largest saver and the largest factory in the world. India was the best example of the damages that subprime-induced capital outflow could cause to an economy, especially as it had much worse economic fundamentals than many of its Asian neighbours. But there were a couple of innocent bystanders in the subprime crisis, namely Singapore and Hong Kong, whose strong economic and financial fundamentals failed to shield them from the subprime impact.

The point of all this is that the subprime shock is so big that no one is spared. While the economic impact of the crisis is obvious, the financial impact may not be readily visible. There is a risk of 'capital protectionism' in the post-subprime environment. This is the worst form of protectionism, as it can damage the productivity of all economies by destroying every ingredient of globalisation in one stroke and limiting market forces and scope, resulting in lower economic growth for the whole world.

A guilty bystander

Behind the economic and financial excesses that led to the subprime crisis, there is an Asian connection. First, shiploads of cheap goods from

Asia, notably China, helped keep US inflation down. This prompted the Americans, and the Federal Reserve, to think that they could spend lavishly without igniting inflation at the same time. Second, the combination of over $4 trillion foreign reserves of Asian central banks and billions of petrodollars from the Middle East provided the US with enormous liquidity to support the Americans' spendthrift behaviour. These funds were mostly poured into US Treasury and mortgage-backed securities, suppressing US bond yields, inflating the housing bubble and encouraging excessive US household borrowing to fund consumption.

Asia's high savings also created ample liquidity and cheap credit for enhancing western banks' and speculators' leveraging power to fuel the global asset bubbles. Through carry trades, these international players borrowed at low Asian, especially Japanese, interest rates and swapped the proceeds into high-yield currencies and markets. In a nutshell, frugal Asians, with the Chinese and Japanese accounting for over 40 per cent of the world's central bank reserves, have lived below their means, with savings flowing westwards to allow the spendthrift Americans to live beyond their means. While it lasted, this cross-Atlantic saving–spending mischief became a stable disequilibrium, enabling Asia to supercharge growth by lending to America so that it could buy Asian exports. So, although Asia did not cause the developed world credit quake directly, it was a guilty bystander. Now that the party has ended with the subprime crisis, Asia will suffer as well in the post-bubble adjustment period over coming years as the financial excess implodes.

Asia did not have a financial crisis, because its economic fundamentals and banking systems were in reasonably good shape. But it made up half the forces that caused the debacle. Europe and the US were the epicentre of the credit quake, which hit Asia hard through the export channel. On an aggregate basis, the region (except Korea and India) has run a large current account surplus (Figure 4.1), with strong capital inflow, since the end of the 1997–8 Asian crisis. As a result, Asia has accumulated a big surplus in its basic balance,[1] with surging foreign exchange reserves (Figures 4.2 and 4.3). The region's external debt situation was also very strong, with very low foreign debt burden, especially compared with the US (Figure 4.4), and high short-term foreign debt-cover ratios[2] at over 1 (except Korea; Figure 4.5). A general safety guideline is that a country should keep its short-term foreign debt-cover ratio at or above 1 to avoid frequent short-term financing and rollover risk. All this suggests that Asia had a very strong external position before the subprime crisis.

While European and American banks were under tremendous bankruptcy pressure when the subprime crisis erupted, the Asian banks were

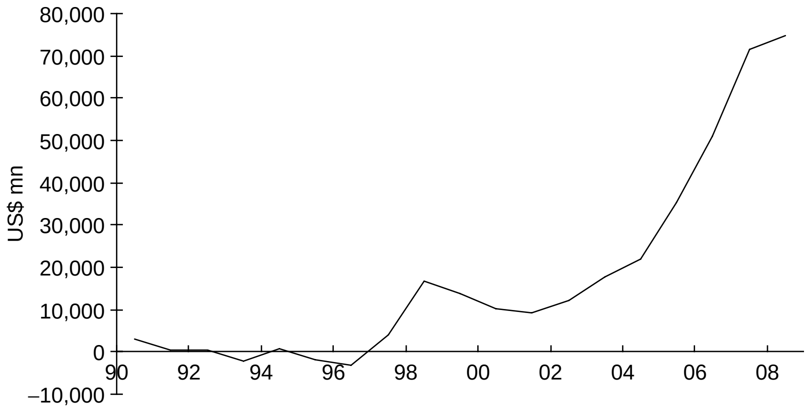

Figure 4.1 Asia's current account surplus
Source: CEIC.

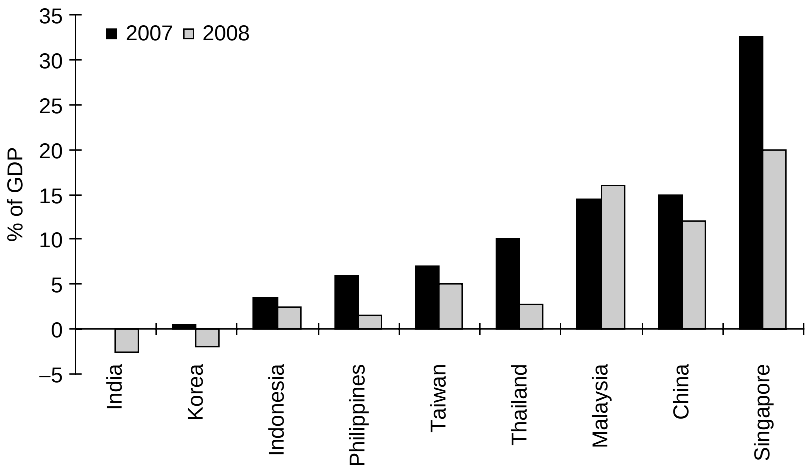

Figure 4.2 Asia's basic balance
Source: CEIC.

calm due to their sound fundamentals. Crucially, the region had very limited exposure to US mortgage-related assets. So their books were clean. Asian banks were also extremely liquid at the time the credit quake hit, because the wholesale funding market was not as developed in the region as it was in the western economies. This can be seen in the

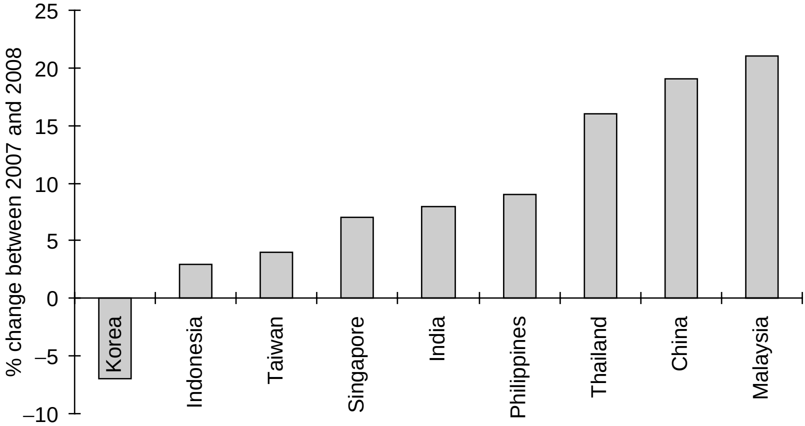

Figure 4.3 Foreign exchange reserves growth
Source: CEIC.

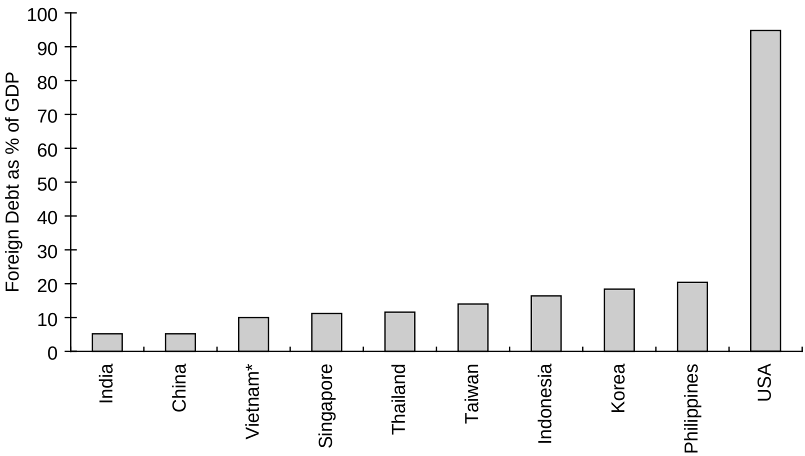

Figure 4.4 Gross foreign debt (2008)
*2007 data.
Source: CEIC.

Asian banks' low loan-to-deposit ratio (under 100 per cent) this time around, as compared with over 100 per cent before the 1997–8 Asian crisis and Europe and the US in this subprime crisis (Figure 4.6). As a result, no major financial institutions in the Asian system needed to be bailed out by public funds, though there were a couple of small bank

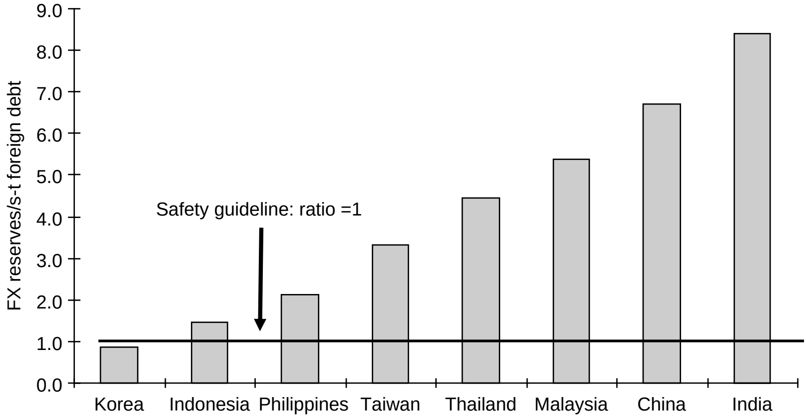

Figure 4.5 Short-term foreign debt cover ratio (2008)
Source: CEIC.

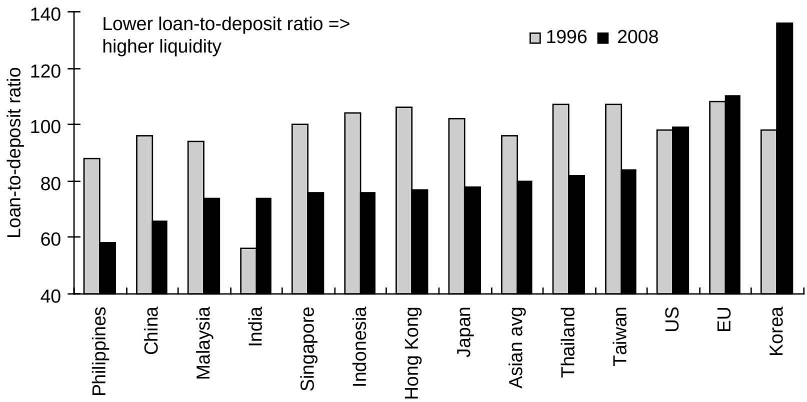

Figure 4.6 Asian banks awashed by liquidity
Source: CEIC.

runs, such as the Bank of East Asia in Hong Kong in September 2008, due to panic. Granted, China had provided public funds to its state-owned banks. But this was part of an ongoing bank restructuring process and was not related to the credit quake.

Price behaviour in the equity markets also suggested that there was no financial crisis in Asia. The beta[3] of US banking spiked by 100 per cent, from 0.9 before the subprime crisis to 1.8 by mid-2009. This significant hike in the bank stocks' beta made perfect sense, since, when the financial crisis hit the economy, bank stocks naturally would be more volatile than the rest of the market. In contrast, the beta of Asia's banking sector rose only marginally during the subprime crisis; it remained very close to 1, well below the levels seen in the Asian crisis. This well-behaved Asian bank stock beta suggested that the Asian banks' price volatility was the same as the markets' volatility, reflecting an absence of financial crisis in the region. Nevertheless, Asian economies still suffered badly from the subprime shock due to their heavy reliance on exports, especially to Europe and the US, as the economic growth engine. The collapse in exports after the credit quake erupted caused output to plummet throughout Asia. Further, foreign capital flows reversed course, resulting in contraction in money and credit growth in the region. This, in turn, hurt Asia's investment and capital spending. Those economies that relied heavily on foreign capital inflows to fuel growth (such as India and South Korea) were hit much harder than the rest of Asia by the subprime impact (see below for more discussion).

The immunity of the Chinese system

Arguably, China is the representative Asian guilty bystander, due to its dual role as the largest saver and the largest factory in the world. These roles lay at the heart of the subprime crisis by fostering the global saving–investment imbalance. However, the financial damage inflicted by the subprime crisis on the Chinese banking system was quite limited: less than 1 per cent of total assets in the system, according to the market estimation. Why was that possible? At first, the worsening of the US subprime crisis, as seen in the failure of the 158-year-old investment bank Lehman Brothers and the nationalisation of Fannie Mae and Freddie Mac and AIG (America's largest insurance company) within three weeks in September 2008, had indeed raised concerns about the stability of China's banking system. In particular, the worries were focused on the Chinese banks' exposure to Lehman Brothers' default and to the total subprime problem.

However, market information at the end of 2008 (the latest data available at the time of writing) showed that the Chinese banks had very limited exposure to the US subprime crisis. Weighted average exposure of the seven largest Chinese commercial banks (Industrial and Commercial Bank of China (ICBC), Bank of China (BoC), China Construction Bank (CCB), China Merchant Bank (CMB), Industrial Bank, Citic Bank and Bank of Communications (BCom)) to Lehman's

Table 4.1 Chinese banks' exposure to the US subprime crisis

	Lehman Brothers (US$ million)	US government agency debts (US$ million)	Total (US$ million)	Exposure to Lehman as per cent of total assets (per cent)	Total subprime exposure as per cent of total assets (per cent)
BOC	130	17,286	17,416	0.05	1.83
B.Comm	70	n/a	70	0.02	0.02
CCB	n/a	3,250	3,250	0.02	0.31
CITIC Bank	159	1,584	1,743	0.05	1.06
CMB	70	255	325	0.03	0.16
ICBC	152	2,716	2,868	0.01	0.21
Ind. Bank	34	0	34	0.02	0.02

Sources: DB, HSBC, UBS.

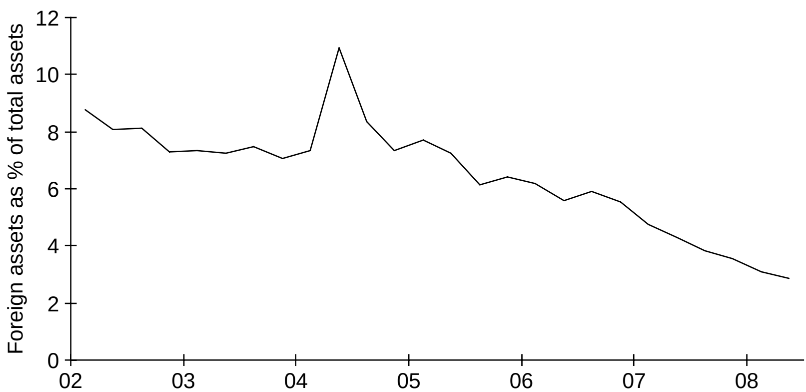

Figure 4.7 Chinese banks holding less foreign assets
Source: CEIC.

default amounted to only 0.02 per cent of their total assets. Even if we include the US government mortgage agency debts, the Chinese banks' exposure to the total subprime (Lehman + agency) assets amounted to only 0.5 per cent of their total assets (Table 4.1). From a macro perspective, Chinese banks have been reducing their foreign asset holdings in recent years (Figure 4.7), suggesting that they had been cutting foreign risk exposure. This was the biggest positive contributor to shielding the Chinese banking system from the impact of the subprime crisis.

China's banking system has been seen as the Achilles' heel of its economy due to the poor asset quality, lack of market discipline and opaque operation model. The banking industry is still heavily regulated; risk control systems are still defective and policy intervention still distorts the price of credit. Thus, much improvement is still needed. But this is not to deny that things have changed for the better in recent years. The government's recapitalisation efforts have worked, with its public listing and foreign ownership strategies improving the banking fundamentals, as seen in the steady decline in the banks' non-performing loans and increase in their capital–asset ratios (Figure 4.8).

Ironically, Chinese banks look more solid than their western counterparts on the back of the US subprime crisis. While the US banks have been lending aggressively and imprudently for over ten years, causing the banking system's loan-to-deposit ratio to explode, the Chinese banks have been scaling back lending activity (Figure 4.9). The fall in the Chinese loan-to-deposit ratio reflects both Beijing's credit control to rein in runaway growth in recent years and improvement in risk control among the Chinese banks. For example, in the mortgage loan business, the minimum down payment in China is 30 per cent and the average mortgage loan life is less than 20 years. These are much more stringent than the conditions in many developed markets. Rising

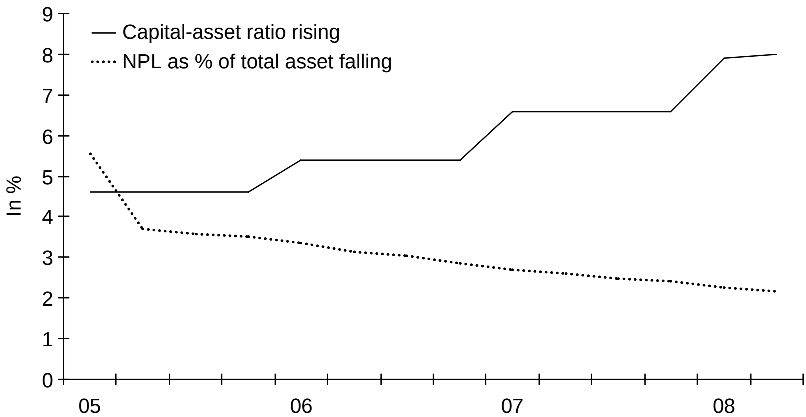

Figure 4.8 Improving Chinese bank asset quality
Source: CEIC.

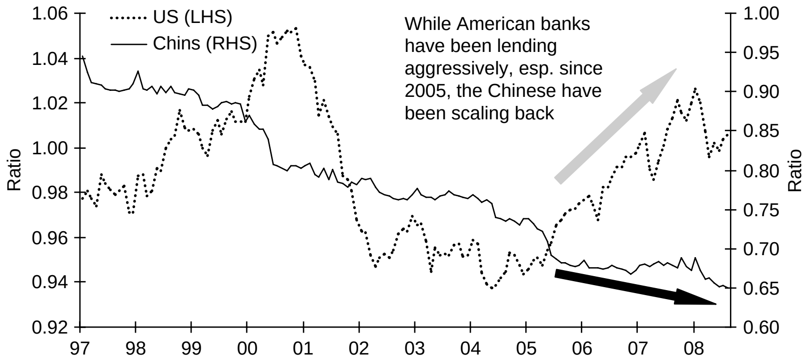

Figure 4.9 Loan-to-deposit ratios
Source: CEIC.

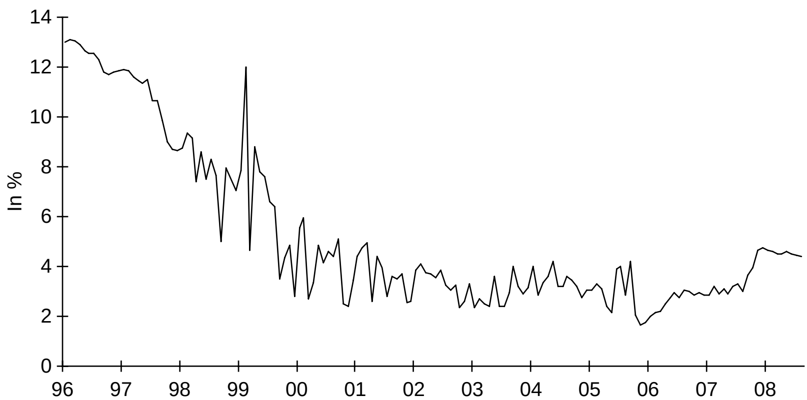

Figure 4.10 Three-month China interbank offered rate (CHIBOR)
Source: CEIC.

competition among banks, public listing and foreign ownership have also brought in some market discipline to the Chinese banking sector.

Since all the major commercial banks in China are either directly or majority-owned by the government, this amounts to an implicit government guarantee of the banks. Such a guarantee helps eliminate counterparty risk in the system. Hence, when the subprime crisis erupted, there was no confidence crisis and no disruption of credit flow in the Chinese banking system as there was in the developed world. The stability of the

Chinese system can be seen in the low and stable Chinese inter-bank rates throughout the subprime crisis (Figure 4.10). From a systemic risk perspective, the Chinese banks are by default safer than their western counterparts because of government ownership, heavy regulations and their lack of sophistication, which bar them from getting involved in highly leveraged investments and product development. China's closed capital account, which bars free flow of portfolio capital, and its heavily controlled banking system mean that its banks are insulated from the global financial turmoil.

The vulnerability of India

Meanwhile, the adverse impact of a reduction in foreign liquidity inflow on growth is best illustrated by India, as it is one of the Asian countries that have been most affected by the global credit crunch. In recent years, India's GDP has grown at rates much faster than its potential growth rate, due mainly to large capital inflows. Between 2006 and 2008, India's growth rate averaged 9.3 per cent, up from an average of slightly over 6 per cent in the preceding eight years (Figure 4.11). Boosting this accelerating growth trend was a sharp rise in capital inflows, much of which came in under the disguise of foreign direct investment (FDI). For example, between 2001 and 2003, India received an average of US$10 billion of capital inflows each year. But the amount of inflows

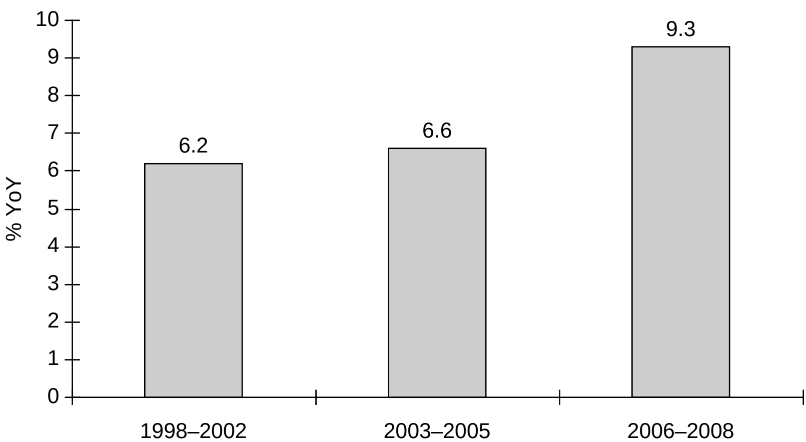

Figure 4.11 Rising Indian GDP growth...
Source: CEIC.

surged to US$107 billion in 2008. Out of this, about US$45 billion was foreign borrowing, US$30 billion was equity market-related inflows and only about 15 per cent billion was genuine FDI (Figure 4.12).

A large amount of capital inflow created a seemingly virtuous cycle of an appreciating exchange rate, lower interest rates and strong domestic demand growth, especially in the three years leading up to the US subprime crisis. Indeed, India had one of the strongest credit cycles within Asia, with credit growth rising much faster than nominal GDP growth by a big margin (Figure 4.13). For example, credit growth outpaced nominal GDP growth by 3.8 percentage points in 2006, but that gap grew to 8.6 percentage points in 2008. Unfortunately, capital inflows to India were not driven by the country's economic fundamentals. This was because India had been running a large current account deficit and fiscal deficit (Figures 14 and 15). Its foreign debt accounted for about 74 per cent of its total foreign reserves in 2008. Though this was not too excessive by Asian standards (Figure 4.16), it did add to the concerns about India's economic fundamentals when combined with its external and fiscal deficits.

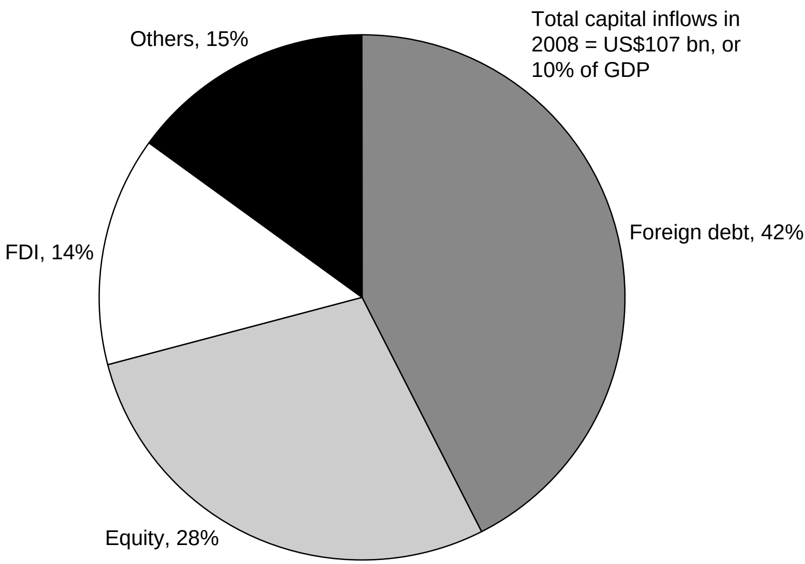

Figure 4.12 ...boosted by capital inflows
Source: CEIC.

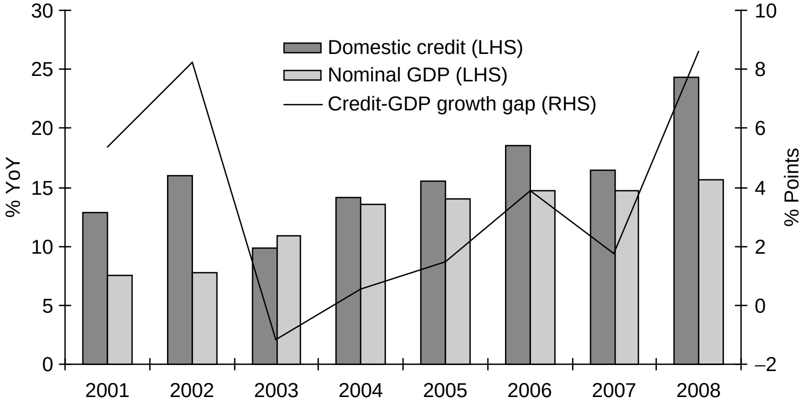

Figure 4.13 India's credit growth outpaced GDP growth
Source: CEIC.

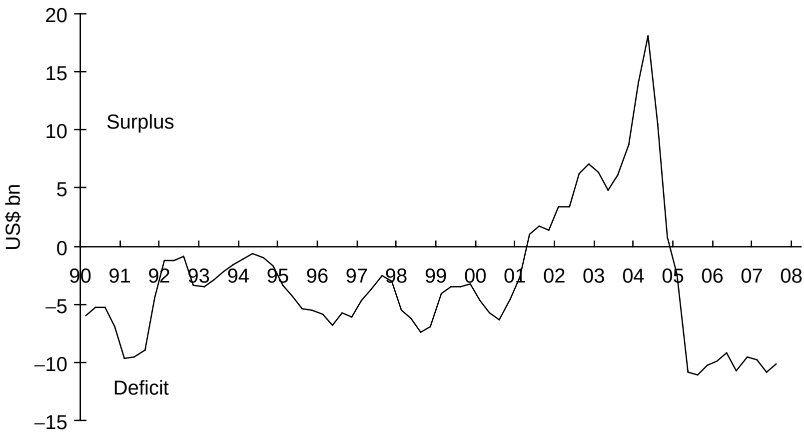

Figure 4.14 India current account balance
Source: CEIC.

As with many other emerging economies, the robust capital inflows to India were dependent on global risk appetite, which, in turn, was driven by the liquidity and growth environment in the developed world before the subprime crisis. Indeed, a large part of the non-debt capital inflows to India was estimated to have been funded by way of debt leveraging in the

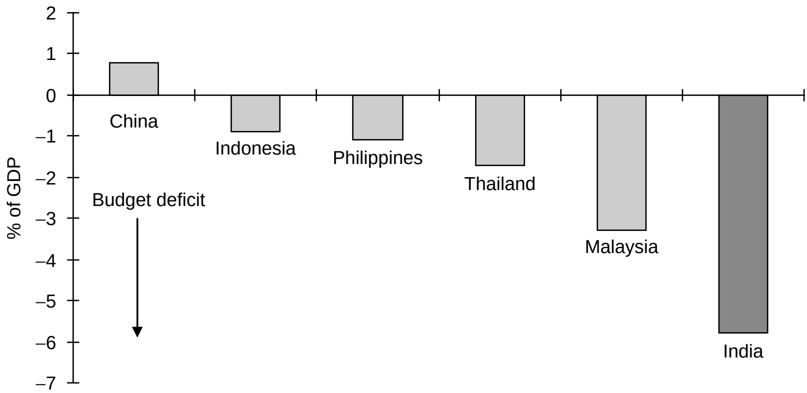

Figure 4.15 India had the worst fiscal balance (2008)
Source: CEIC.

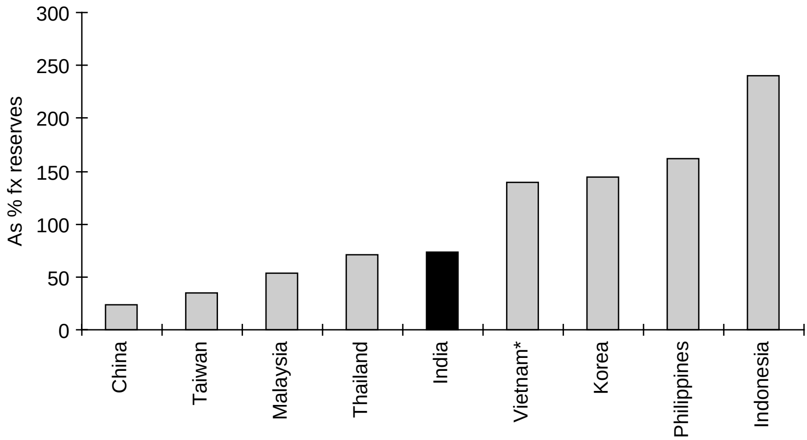

Figure 4.16 Asian foreign debt (% of FX reserves, 2008)
*2007 data.
Source: CEIC.

international market. Now that the credit bubble in the western world has burst, sharply cutting risk appetite and capital inflows to emerging markets, India is facing a huge negative growth shock in the coming years due to the dearth of capital inflows. Some analysts estimate that capital inflows to India will amount to less than a third of the US$107 billion seen in 2008 in the years between 2009 and 2012, if not longer.

Hong Kong, an innocent bystander

There are a couple of exceptional cases in Asia, which can be categorised as innocent bystanders in the subprime crisis. They are Singapore and Hong Kong. In fact, the situation in Singapore is quite similar to that in Hong Kong, so we use Hong Kong here as a representative example. Despite its strong economic and financial fundamentals and limited exposure to the subprime toxic assets, Hong Kong was not exempt from the financial debacle. Being a global trade and finance centre, Hong Kong was, in fact, more acutely exposed to the turbulence of the global financial crisis than most of its neighbours. Weakening global demand led to a sharp fall in Hong Kong's export growth, which is a crucial source of income for local businesses and households and, hence, a fuel for domestic investment and consumption. The correlation between export growth and domestic demand growth in Hong Kong is very high, at over 0.7 for some years. Concerns over counter-party risks resulted in liquidity strains in the banking system, with the three-month Hong Kong inter-bank offered rate (HIBOR) jumping by 160 basis points[4] in a week at one point, as banks were reluctant to lend to each other.

To cope with the stresses in liquidity conditions, the Hong Kong Monetary Authority (HKMA) injected HK$44.2 billion into the banking system to ease HIBOR pressures and boost liquidity. It also introduced a more flexible framework for providing liquidity to the banks, including enlarging the discount window mechanism to include US dollar assets as collateral for Hong Kong dollar liquidity, expanding the duration of discount window lending from overnight to three months, and raising the threshold for using Exchange Fund papers as collateral for discount window borrowing from 50 per cent to 100 per cent. Moreover, the HKMA cut its policy base rate to a record low of 2 per cent and introduced a blanket deposit guarantee, up from HK$100,000 per account, to boost depositors' confidence.

In response to investors' requests, the HKMA also committed itself to investigate the complaints alleging improper selling by banks of Lehman Brothers' 'minibonds', high-risk structured products that were misrepresented by some bankers as safe bond instruments. To help local small and medium-sized enterprises (SMEs) fight the credit crunch, the Hong Kong government also approved a new SME Loan Guarantee Scheme for firms to borrow up to US$128,000, with the government guaranteeing 70 per cent of the loan.

Despite the loss of confidence, the Hong Kong banking system was extremely liquid, as it had been de-leveraging since the Asian crisis in

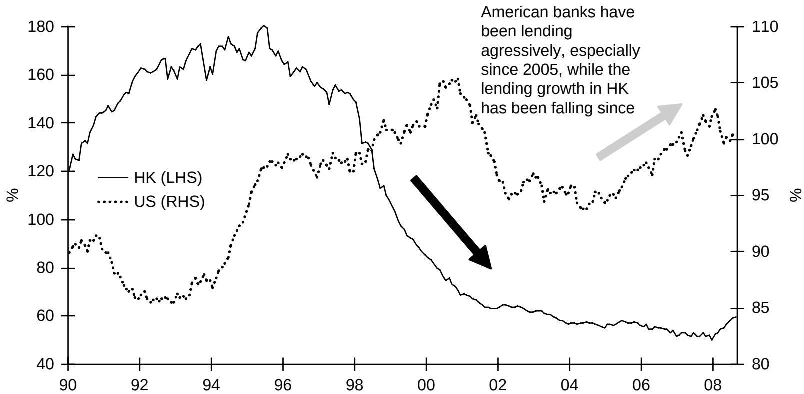

Figure 4.17 Hong Kong's loan-to-deposit ratios
Source: CEIC.

1997. This was in stark contrast to the US system. During the subprime crisis, the average loan-to-deposit ratio for Hong Kong banks was only 60 per cent, compared with 100 per cent in the US. This suggests that there was ample liquidity and a low debt burden in the Hong Kong system (Figure 4.17). Further, banks in Hong Kong had been maintaining very high capital ratios to secure themselves against any potential crises, with an average Tier 1 capital ratio of 10.6 per cent and an overall capital ratio of 14.2 per cent in 2008 (the Bank for International Settlements safety guideline is 8 per cent for the overall capital ratio). High capital ratios and low leverage suggest that Hong Kong's banking system was fundamentally strong.

Besides, Hong Kong had built a strong current account position through its competitive service export sector. The current account surplus remained high, at 12.6 per cent of GDP in 2008, and its foreign reserves were at a huge $158 billion, or 18.7 months of retained imports.[5] All this indicated that classic financial crisis symptoms (extensive foreign borrowings, insufficient foreign exchange reserves, current account deficit) were absent in Hong Kong (Figure 4.18).

However, the credit quake stemming from the US shattered public confidence and tightened funding conditions significantly, with the credit crunch spreading to the whole of Asia. Concerns over counter-party risks sent the three-month HIBOR soaring within days (Figure 4.19), despite the HKMA's aggressive liquidity injection into the local banking system. Concerns about Hong Kong banks' investments

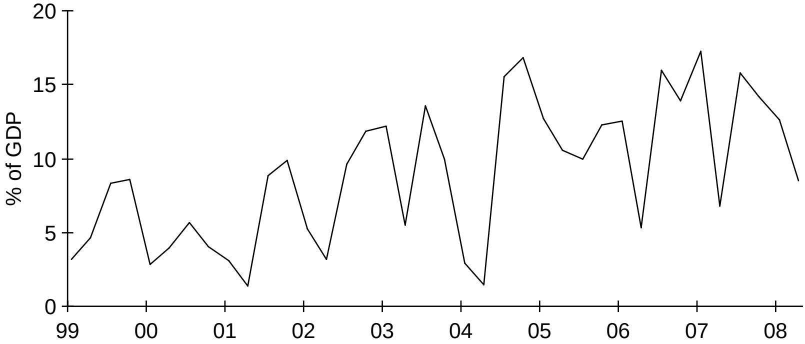

Figure 4.18 Hong Kong current account (% of GDP) in persistent surplus
Source: CEIC.

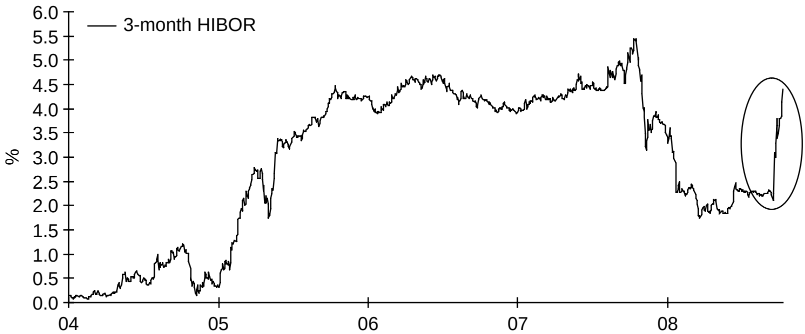

Figure 4.19 HK funding cost soared on the subprime shock
Source: CEIC.

in failed US financial institutions even triggered a brief run on the Bank of East Asia in late September 2008. Investors were also worried about the balance sheets of Dah Sing Bank and Hang Seng Bank, as these two banks had potential loss exposure to Washington Mutual's failure.

The point of all this is that the subprime shock is so big that it does not matter whether you have strong or weak fundamentals; no one is spared. At the same time, China's closed system, heavy regulatory control and underdeveloped financial system appear superior because they help minimise the subprime impact on the country's economy. It is against this backdrop that the global authorities, notably those from the developed world, are pushing for re-regulating the banks and restricting financial innovation. But inundating the financial system with regulations and restrictions will not prevent another bubble from arising, and will not help resolve the problems at the root of the subprime-type crisis (see Chapter 3).

The coming crunch in Asia

While the real economic impact of the crisis is obvious, with global trade contraction holding back global growth for many years, the financial impact in terms of capital flows is less visible, and arguably more dangerous. Reduced capital inflow to Asia is, in fact, a form of protectionism in disguise. In the developed world, so much taxpayers' money has been spent on bailing out banks that many of them, including the major global players, will be forced to focus back on their domestic market to give taxpayers their money's worth. In other words, banks that receive state aid are under a lot of political pressure to expand their domestic loan books. This means contraction of foreign lending, and hence of capital outflows towards emerging markets, including Asia.

Compliance by global banks with their political masters' command to focus on domestic lending is equivalent to protectionism against the globalisation and free flow of capital. This 'capital protectionism' distorts the allocation of investment on a global scale; it hurts trade financing and, consequently, trade in all kinds of goods and services. So it is arguably the worst form of protectionism. In contrast to trade protectionism, which impacts specific goods, capital protectionism destroys every ingredient of globalisation at one stroke. This, in turn, damages the productivity of all economies by limiting market forces and scope, resulting in lower economic growth for the whole world.

Recessions brought about by the bursting of a nationwide asset bubble are fundamentally different from normal recessions. The bursting of an asset bubble means destruction of private sector balance sheets, as the value of assets bought with borrowed funds implodes while the debt incurred to buy those assets remains at its original value. Many businesses and households may fall into negative net-worth situations. When these private sector agents start paying down debt or increasing savings to regain their financial health and credit ratings, the economy enters a so-called 'balance-sheet recession' (Chapter 1; and see Koo, 2003). In this situation, monetary easing by the central bank will fail to stimulate the economy or the asset market. Monetary policy loses its effectiveness because the private sector, with a huge debt overhang, is not interested in borrowing at any interest rate.

The post-subprime crisis adjustment has started in the large over-consuming economies in the developed world, led by the US. This first stage of adjustment has eliminated the debt-fuelled consumption binge that enabled their large trade deficits. The second stage of the adjustment involves Asia, whose export growth started contracting in November 2008. The global balance of payments must balance. So a reduction of consumption by one sector (the developed world) in the global balance must come with a corresponding adjustment in the other sector (Asia).

There are three ways the global system can adjust. One is for the underlying global imbalances to remain. Governments of the US and other trade-deficit countries can borrow massively to support aggressive fiscal spending to offset the contraction of household consumption. But, as debt-financed consumption by the likes of the US has been one of the root problems for this global credit quake, simply replacing one over-consuming American entity by another cannot be a long-term solution.

The second way is for the trade-surplus countries to sharply raise domestic consumption, most likely via massive fiscal spending, to match the decline in the developed world's household consumption. But this is an impractical way out, because the adjustment scale is way beyond the capacity of most countries to handle. For example, a fall in US consumption equivalent to 5 per cent of its GDP (which is a low estimate, given the scale of the economic damage inflicted by the subprime crisis) would require a rise in Chinese consumption equal to 17 per cent of China's GDP. This is equivalent to requiring Chinese consumption to grow by 40 per cent a year, a clear impossibility.

This leaves the final way out – a sharp fall in global output, with massive factory closures, bankruptcies and unemployment, to eliminate overcapacity. The painful burden of this adjustment will fall on the trade-surplus economies, notably Asia, because this is where the bulk of the overcapacity is found. As a notable example, most of China's robust economic growth in the past fifteen years has been driven by supply-side expansion, supported by strong export growth. And that robust export growth was sustained by excess consumption in the western world. As a result, Chinese exports became the key driver for domestic investment growth and absorbing the bulk of the manufacturing excess capacity (Figures 4.20 and 4.21). The resultant economic pain from the needed adjustment will be high and potentially destabilising.

However, before this adjustment can run its course, which will take years, there is a risk that individual Asian countries will try to avoid the

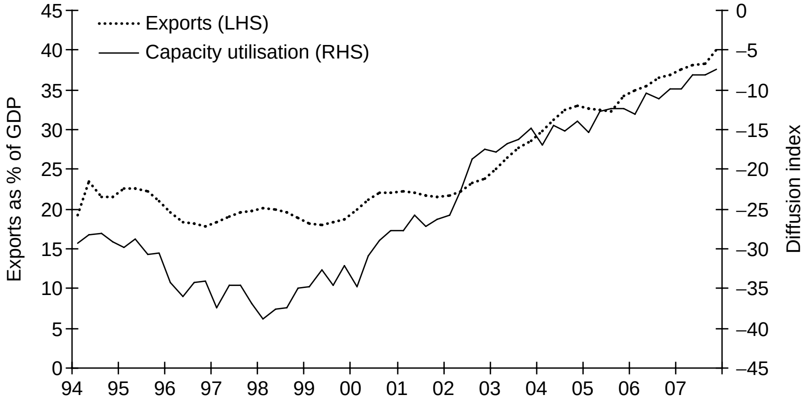

Figure 4.20 Exports absorbing China's capacity utilisation
Source: CEIC.

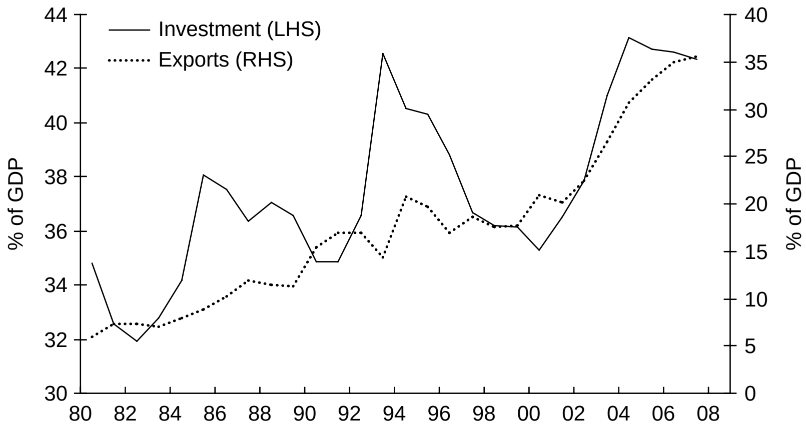

Figure 4.21 Exports driving Chinese investment
Source: CEIC.

demand contraction and its resulting economic pain by boosting their ability to export overcapacity through trade-related measures. This may include export subsidies, subsidised financing, competitive currency devaluation, import tariffs and the like. The incentive for the Asian authorities to do this is strong because there is insufficient domestic growth momentum (see Chapter 1).

This was in fact the US strategy when, in a similar situation to China today, it was forced to adjust to the 1929–31 crisis. The US had a serious overcapacity problem in 1929. For much of the 1920s, it was able to export its overcapacity by running huge trade surpluses with the rest of the world. However, when the 1929–31 global crisis hit and eliminated the trade-deficit countries' ability to import, the US faced an ugly adjustment of output contraction. But it tried to avoid the painful adjustment process by enacting trade tariffs, most notably the Smoot–Hawley bill of 1930. By doing so, it forced an output contraction on the rest of the world. But the trade-deficit countries fought back with retaliation measures against the US. Trade wars ensued, resulting in a collapse in international trade. This, in turn, forced the adjustment back to the US via sharp output contraction, or the Great Depression, as the process was subsequently called.

US over-consumption was one of the root causes of the global imbalance that led to the credit quake. In the post-bubble adjustment, consumption in the US and other spendthrift economies is contracting, and the process is pushing up their saving rates. But this is only half of the adjustment needed. The other half must come from the other side of the global imbalance – Asia's over-production. Asian consumption must rise sharply or a sharp drop of production must ensue. This time around, it is not likely that the Asian region could stage a V-shape economic growth rebound as it did after the 1997–8 Asian crisis. This is because the crisis this time is global, with synchronised demand contraction throughout the world, whereas last time the developed world was still growing strongly and absorbing Asian exports to help pull the region out of the Asian crisis. There will still be aftershocks from the credit quake in the coming years.

5
China Becomes a Superpower?

Many argue that the subprime crisis has presented an unplanned opportunity for China to elevate itself further and faster on the global stage, and soon to become a superpower. Indeed, when one looks at China's rapid growth and its increasing economic impact on the global economy and markets, in contrast to the badly damaged US economy with its financial system crippled by the subprime crisis, the image of a rising Chinese superpower seems logical. The debate over whether the US could maintain its world superpower status was, in fact, started some twenty years ago by a provocative Yale University professor. The subprime crisis has just revived that debate.

Undoubtedly, China's rapid economic growth and rising influence in the world markets have changed its image from a dark horse to a successor to the US as the next global superpower. But is China ready for this? Economic and intellectual development suggests that China's recent performance is far from unique, and it is not yet ripe to become the next superpower. Although the US may be badly beaten by the subprime crisis, it is down but not out. There are also regional checks and balances that will constrain China from spreading its influence, despite the fact that China has become the major regional economic growth driver and wealth creator for many Asian economies.

Finally, China's rapid economic success may, ironically, make it more difficult for the western economies to recover from the credit quake of 2007–8. This is already creating xenophobia among the western nations, giving rise to trade and capital protectionism and political tension, which will also create roadblocks in China's path to becoming a superpower. In a more subtle sense, China still lacks the attributes of a thought leader, which would be required to become a world superpower. This is not to deny China's remarkable achievements in recent years, and China will become a huge force to be reckoned with. However, it is not quite there yet.

Subprime crushes the US?

Amid the rubble of the global credit quake, the US position as singular superpower and global economic top dog looks increasingly under threat. There is an emerging consensus in the western world that China is the chief beneficiary of the subprime debacle and has emerged as a serious challenger to US hegemony. In the east, Asia is becoming China-centric, as it is banking on China's growth to provide spillover momentum for boosting regional growth in the future. Since economic might so often goes hand in hand with military strength, this expected shift in economic power in the post-subprime era (along with a weakening US dollar) has been heralded as a harbinger of US national decline (see Zakaria, 2008).

Back in 1989, Paul Kennedy of Yale University shook the world's thinking about the global balance of power by arguing that there was need for a debate about whether the US could preserve its superpower position, because, in Professor Kennedy's view, the obvious answer was 'no' (Kennedy, 1989). This gloomy assessment came right after the 1987 US stock market crash, when the world was worrying about the twin US budget and current account deficits. At that time, the US had also become an international debtor for the first time in history, and was increasingly dependent on European and Japanese capital inflows to sustain its excessive spending.

The downbeat sentiment in the US came close to hysterical when Japanese companies snapped up Rockefeller Centre in New York, Columbia Pictures in Hollywood and Pebble Beach golf course in California. In one sense, the Kennedy thesis was right. As China, India and other emerging markets catch up with the developed world, the US is bound to suffer relative economic decline in terms of a falling share of global GDP, even if it grows faster than most of the developed world's large economies and remains the world's biggest economy in absolute terms.

However, ten years after Kennedy's prediction of the fall of the US, the country still remained the world's superpower. After another ten years, and two years after the breaking of the subprime crisis, the question now seems to be whether the provocative Kennedy thesis was wrong or simply premature. The eruption of the subprime crisis has certainly revived the Kennedy debate on the world status of the US. Arguably, predicting the timing of the rise and fall of nations and economies is notoriously difficult. Charles Kindleberger, the late economic historian, was one of the many who believed that national vitality moved in a life cycle. Among the internal causes of decline he identified were increased consumption, decreased savings, resistance to taxation, inequality, corruption, mounting debt, and finance becoming more dominant in the economy than industry.

Yet, if this chimes with the subprime-hit US, note that many of these woes were also present in the US in 1929, when an earlier financial crisis coincided with the long transition from British to American economic hegemony. While Kindleberger believed that the US was slipping from the global stage, he had no idea which country was likely to emerge as the next primary world economic power. He viewed China merely as a dark horse regarding that role (Kindleberger, 1996). Today, if the presumed candidate to challenge or replace the US for world power supremacy is China, the ensuing question one must ask is whether China is ready.

Is China ready to take over?

When the fainthearted look at China's rapid economic ascent, they fret that it could soon become powerful enough to swallow the rest of the world. Some even envision a 'Chinese Armageddon' that would trigger another regional economic crisis. This presumed crisis would be more severe than the regional crisis that shocked Asia in 1997 and 1998, because, unlike speculators who come and go swiftly, China will have a lasting impact. Others are worried that China's rise to an economic superpower will create another bully throwing its weight around. The main concern of this group of observers is that the world is not prepared for China's swift ascent; there is no free lunch at the 'Chinese party', so that some others will be hurt. A careful look at the evidence shows that these are indeed naïve views. China is moving fast up the world economic league, but it is far from being able to dislodge the US and become the next superpower any time soon.

To be an economic superpower, a country does not only need a sizeable economy with rapid growth rate and foreign trade expansion. It also needs strong financial clout to be influential in the world economy. China's real economy and foreign trade may continue to expand at a fast pace, but its readiness to build a world-class financial system with the correct incentives is still lagging far behind. It is obvious that, despite financial liberalisation and increasing influence in recent years (sending shock waves through the world financial markets at times), China's financial clout on the global stage is still limited, chiefly by its heavily controlled and relatively underdeveloped banking system. Even on the issues of the size of its economy, growth rate and trade expansion, evidence does not support the swift rise of a Chinese superpower so soon.

Let us flash back ten years. The Asian crisis in 1997–8 had changed the relative economic importance of China versus Japan, ASEAN and the NIEs.[1] This change was the first trigger creating a perception that the Middle Kingdom had become an economic superpower, while the Japan–ASEAN–NIE group had declined. For example, the so-called Purchasing Power Parity, or PPP, measurement[2] of gross domestic product (GDP) ranked the size of the Chinese economy second only to that of the US, even at the time of the Asian crisis. And the World Trade Organization announced in 2002 that China's foreign trade ranked fourth in the world. China's rapid growth rate in the 1990s also overshadowed the growth rates of the rest of the world. Its GDP in US dollar terms soared threefold, and trade value jumped four times, between 1990 and 2000. Some analysts even project that China will become the world's largest economy in less than twenty-five years if these trends prevail.

However, the devil is always in the details. China's economic prominence is in fact not that different from its Asian neighbours' performance during their economic transition. In a global context, China's dollar-value GDP as a share of the world total rose by three percentage points from 2 per cent in 1972 to over 5 per cent in recent years. On the other hand, Japan's share of world GDP jumped by ten times, from 1 per cent to 10 per cent, during its peak thirty-year growth period between 1955 and 1985. The NIEs and some of the ASEAN economies, such as Indonesia, Malaysia, Thailand, the Philippines and Singapore, also saw a jump in their share of world GDP, from 1 per cent to 5 per cent, during their peak development period between 1965 and 1995. The picture of relative performance is not much different when we compare China's foreign trade growth. The Mainland saw a sixfold rise in its share of foreign trade in the world total, from 1 per cent to 6 per cent between 1979 and 2009. But Japan, the NIEs and some of the ASEAN economies also saw their share of world trade soar by a similar amount during their peak thirty-year growth periods.

Economic power is measured not only by output capacity and foreign trade growth, but also by the strength in the financial markets. Here, China still lags far behind, despite its influence on the world financial market movement in recent years. Some analysts have ranked China's stock market capitalisation the eighth in the world, just behind Italy. But this is only true if China's non-tradeable state shares are included. These shares account for over a third of stock market capitalisation. However, these non-tradeable state shares would probably fetch 10–20 per cent of the market value, according to equity analysts, if they were freely traded, due to the inherent risks in the underlying state-owned enterprises (SOEs).

Further, despite all the hype over China's stock market, it is still not playing any major role in capital allocation in the economy. Market research has found that China's stock markets supply only a little over 10 per cent of the capital needed by entrepreneurs. The marginal role of China's stock market casts doubt on its capability of improving capital allocation. In addition, there are structural flaws in the Chinese stock market. Since many listed SOEs are still unhealthy, there is a severe incentive problem embedded in the function of China's stock market. On one hand, Beijing wants to force corporate restructuring by bringing in market discipline through listing of the SOEs. On the other hand, stocks are often listed to raise capital from the public for sustaining the bad SOEs. Moreover, Chinese new share offerings, or initial public offerings (IPOs), are usually underpriced, to ensure that people who buy into them will make money but not losses.

These conflicting incentives still exist, despite economic reforms, and they have resulted in market failure in corporate restructuring. Indeed, some researchers found that shareholding firms in China saw an annual 8 per cent fall in their productivity between 1993 and 1996. That was worse than many of the better-managed SOEs' performance. In money terms, earnings per share of the shareholding firms fell by 55 per cent, from an average of RMB0.31 in 1994 to RMB0.14 in 2001 (Green, 2003). The likely reason for this disappointing outcome was fraud, which continues to plague the market today. The listing of the bad SOEs made corrupt officials and their acquaintances into shareholders. The listed firm thus became a vehicle for them to fatten their pockets by fund embezzlement and mismanagement. Massive asset stripping by the local officials often took the form of huge loans from the listed company to the parent company.

The point is that China's financial markets are inefficient and tiny when compared with those of many other economies. The total value of China's stock market, even including the non-tradeable state shares, is about 15 per cent and 5 per cent of those of Japan and the US, respectively. Foreign exchange transactions are negligible in China, due to an inconvertible currency and a closed capital account. In a nutshell, there is an absence of free international portfolio flows in the Chinese system. Meanwhile, both Japan and Singapore are dominant players in the global foreign exchange market. Without world-class financial clout, the road for China to become an economic superpower is still a long way away.

The myth of China's dynamic growth

However, some may still think that China could easily take over the global economy because of the persistence of its dynamic growth, especially trade expansion. Not so fast, in my view, because China's rapid output and world trade growth result from its catching up with the rest of the world when it emerged from isolation. China's top economic performance will fade as its economy matures. Crucially, the export-led growth model is no longer functioning since the subprime crisis, as world demand for exports will likely remain weak in the post-bubble adjustment process. The developed world is moving into a saving mode, with the American household saving rate having now risen to almost 5 per cent of disposable income, from –1 per cent in late 2008. This will aggravate Asia's saving glut and further weaken global consumption power. If China cannot reinvent its economy, changing from export- and investment-led (much of China's investment growth has been export-related) to domestic consumption-led, its growth momentum will slow in the coming years. However, a quick structural shift towards more consumption is not likely for China and other frugal Asian economies, due to their long-term saving behaviour and the inadequate social safety net, which weakens consumption confidence.

In any case, China's catch-up performance is common to any developing country when it starts trading its labour-intensive output with more developed capital-intensive economies. When a closed economy opens to trade with the rest of the world, it will specialise in the production of goods in which it has a comparative advantage. Since China is better endowed with labour than with capital, it should specialise in labour-intensive goods and trade them with other nations for capital-intensive goods to raise its economic welfare. On the other hand, the other nations will benefit from trading their high value-added goods with cheap labour-intensive Chinese imports. In the absence of distortions, this process should create 'gains from trade' for all trading partners.

Experience shows that a developing economy evolves in two stages. Robust trade growth characterises the first stage, while an enlarging domestic sector dominates the second stage. In the initial period, economic liberalisation opens the country to foreign trade, prompting specialisation according to its comparative advantage. Trade volume grows dramatically and the export-to-GDP ratio surges (this is exactly what has been happening in China since the mid-1990s). Then foreign trade growth gains further momentum. Taking advantage of local cheap labour, the economy allocates massive capital to the trade sector to boost exports. In the final stage, cheap labour is exhausted, so that the country's comparative advantage changes. Its exports will focus on high value-added products. It also becomes rich enough to shift spending towards non-traded goods and services. In other words, as the economy matures, a large domestic sector develops as the major growth driver. The ratio of exports to GDP falls.

China is just following this evolutionary process, which is hardly a recipe for making a superpower. Some thirty years ago, China's closed economy accounted for merely 2 per cent of world GDP, and its foreign trade was less than 1 per cent of the world total. Then paramount leader Deng Xiao Ping started the first round of economic liberalisation in 1978, reforming China's agrarian economy and opening it to foreign trade. China's share of world trade surged to 2 per cent of the world total by the mid-1980s. Continued reforms in the 1990s spurred further trade and output expansion, with their shares more than doubling to over 5 per cent of world total in recent years.

In broad terms, the Mainland has been following an economic development path laid out earlier by other Asian economies. Its current growth dynamics are no different from those of Japan or the NIEs at their peak growth periods. Demographic trends, furthermore, are not favourable for China to replace the US and become an economic superpower in the post-subprime world. China will grow old before it gets rich! Even if China's GDP were to reach US$4.5 trillion by 2050, some US$1 trillion more than the US, as some analysts forecast, the median age in the US would by then still be the lowest of any of the world's major economic powers, except India.

According to United Nations projections, by 2050 the working-age population of the US will have grown by 30 per cent, while China's will have fallen by 3 per cent. If China continues to rely on exports for generating growth momentum, the decline in the labour force will amount to a huge challenge for Chinese policymakers in the years ahead. Meanwhile, the US still has unmatched research and higher education establishments. While it is almost certain that we are moving into a multipolar world and a multi-currency reserve system, with constraints on US power, in the years ahead, the US will still remain the most flexible among the large economies. If there is concern that China may rise to overtake the US as the next superpower, this may not be a bad thing, as it should give US policymakers the impetus to tackle their fiscal and financial challenges and Americans the drive to fix their balance sheet (by saving more) in order to prevent their country from disappearing from the world stage.

Regional checks and balances

A more subtle point is that China does not have the thought leadership to underpin its ascent to an economic superpower in the medium term. From a political perspective, its rise will likely be greeted with alarm by its Asian neighbours. Asian history is replete with examples of competition for power and even military conflict among its big players. China and Japan have fought repeatedly over Korea; the former Soviet Union teamed up with India and Vietnam to check China; China also supported Pakistan to counterbalance India. In recent years, the rise in China's economic and political influence has pushed Japan and India closer together. So if China's influence rises further in the post-subprime years, as is likely, it will meet with regional resistance to check its power expansion.

There is also another crucial ingredient of clout that makes a country a superpower – vision. 'Pax Americana' was made possible not only by the overwhelming economic and military might of the US but also by its visionary ideas, including free trade, liberalism and multilateral institutions. Although China today may be the world's most dynamic economy, it does not seem to play an equally inspiring role as a thought leader. The big idea animating China is empowerment. China rightly feels proud that it is undertaking a new industrial revolution. But self-confidence is not an ideology that can inspire and command respect. Further, the Chinese export-driven growth model, which is also pretty much the Asian growth model, is only a derivative of free trade or globalisation. It is not an organic growth force, and thus is not an exportable system/model that could help elevate China to superpower status.

This thought leadership element is crucial, as it correlates directly with technological leadership, which, in turn, is a key element in becoming an economic superpower. Discussions about the death of America's technological leadership and the fast catch-up of Chinese technology are exaggerated, in my view. Even though some advanced Asian economies, such as Japan and South Korea, are closing the technological gap with the US, America still leads the world by a big margin. In 2008, for example, American inventors were awarded 92,000 US patents, twice the combined total given to South Korean and Japanese inventors. China and India are nowhere to be found in the scientific invention league table.

China, and Asia as a whole, is pouring money into higher education. But Chinese and Asian universities are unlikely to become the world's leading learning and research centres for a long time. None of the top ten universities is located in Asia, and only the University of Tokyo ranks among the world's top twenty. In the past thirty years, only nine Asians, seven of them Japanese, won a Nobel Prize in sciences; the other two were American Chinese. One may argue that things will change in the future, especially given the current pace of change in China. Yes, things will change, but not as fast as one would expect. The problem lies in the Chinese hierarchical culture, centralised bureaucracy, weak private universities and emphasis on rote learning and test-taking. In fact, these are also traits of the Asian education system. These characteristics will hobble China's efforts to compete with the finest research institutions in the US and even in Europe.

Even China's much-touted numerical advantage is less than it seems. China supposedly graduates 600,000 engineering majors each year. The US trails with only 70,000 engineering graduates a year. So, in terms of quantity, these numbers seem to suggest that China has the edge in generating brainpower. Not really, because quantity often misleads. Half of China's engineering graduates have associate degrees only. And the overall quality is poor! A McKinsey Global Institute study in 2006 found that human resource managers in multinational companies considered only 10 per cent of Chinese engineers as even 'employable', compared with 81 per cent of American engineers. The point is that weak brainpower does not create superpower.

Regional influence

In terms of regional influence, China undoubtedly commands a lot of clout. It is on course to overtake Japan as the world's second largest economy in 2010. As a regional heavyweight, it is driving Asia's economic integration and growth momentum, basically through trade. Indeed, China has run a persistent trade deficit with Asia (Figure 5.1), suggesting that the Middle Kingdom has been a constant source of demand for Asian exports. Further, due to its heavy demand for commodity and capital goods for industrialisation, exporters of these goods,

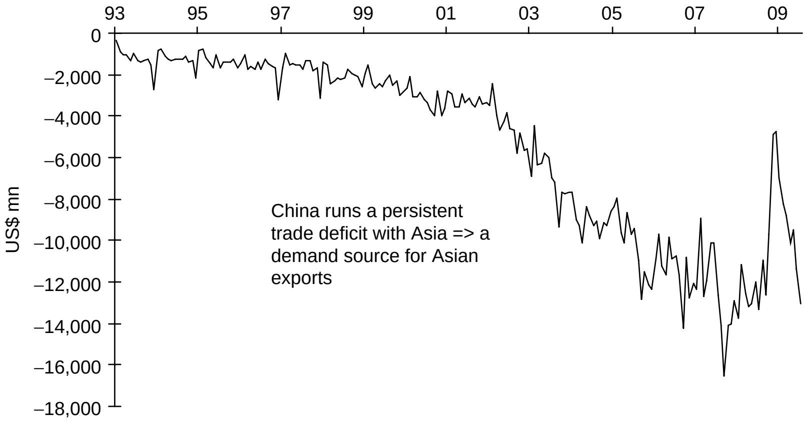

Figure 5.1 China's trade balance with Asia
Source: CEIC.

notably the EU (Germany, in particular), Australia, Japan and South Korea, have also gained significantly from Chinese demand growth. Most Chinese imports from these countries are for its own domestic use rather than for re-export, and so they are less vulnerable to global demand fluctuation.

China's economic progress is in fact rewriting the relationship between the western economies and the prices of key raw materials. When the western world hit an economic brick wall during the subprime crisis commodity prices did not collapse, thanks to China, which has become the biggest consumer of metals in the world, and the second largest consumer of oil, after the US. Thus, commodity prices held up pretty well throughout the subprime crisis, mostly because the Chinese economy did well. Crucially, China's key growth source during the crisis period had shifted from exports towards government-led domestic infrastructure spending, which is primarily a commodity-intensive form of economic growth. Such a demand pull from China is good news for commodity-producing economies, such as Canada, Australia, Norway and New Zealand, which weathered the credit quake better than other developed nations. It was thus no great surprise that the central banks of Australia and Norway were first to raise interest rates in late 2009, while the central banks of all other major developed nations had to continue to rely on monetary life support by keeping interest rates at very low levels.

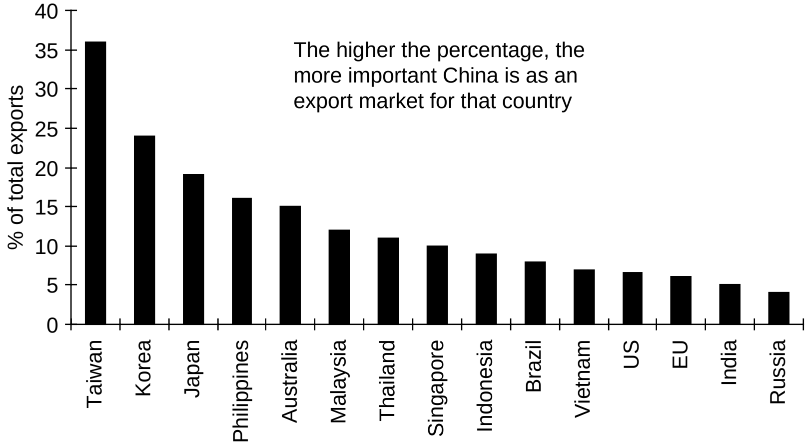

Figure 5.2 Exports to China as % of total exports
Source: CEIC.

In terms of China's demand impact on the individual regional economies, there are a couple of ways to look at it. The first, and the most straightforward, is to examine their export shares to China. By this measure, Taiwan, Korea and Japan have the greatest share of exports going to China (Figure 5.2), implying that buoyant Chinese demand will have the biggest positive impact on them (and vice versa for declining Chinese demand). The second, more dynamic, way is to look at the response of the regional economies' exports to changes in Chinese demand. To do that, we examine an economy's export elasticity to Chinese imports (i.e. the percentage change in a country's exports in response to a 1 per cent change in Chinese imports[3]). It can be represented by the following equation:

$$\dot{X}_t = \alpha + \beta(\dot{X}C_t) + e_t$$

where $\dot{X}_t$ = change in the country's total exports over time
$\dot{X}C_t$ = change in Chinese imports over time
so that β = export elasticity to Chinese imports

An elasticity (β) greater/smaller than 1 implies that the country's exports to China rise faster/more slowly than a rise in Chinese import demand. My estimation shows that Taiwan and India have the highest export elasticities to Chinese imports, while Korea and Singapore have a unitary elasticity (implying that a 1 per cent rise in Chinese import demand elicits only a 1 per cent rise in Korean and Singaporean exports). For most of the Asian economies, their export responsiveness to a change in Chinese import demand, while still positive, is not large (Figure 5.3).

More specifically, Malaysia and Thailand (and to a large extent Korea and Taiwan) are best positioned to benefit from China's domestic demand structure changing towards housing demand and consumption in the coming years. This shift in the Chinese main purchasing sources means greater demand for house-building materials (such as cement, plaster, rubber, steel and other base metals), and furniture, electronics and home appliances. To gauge the impact of this structural change in China's demand, I estimate the elasticity of Asia's housing-related exports to China's housing-related imports. The results are shown in Figure 5.4. Malaysia, Thailand, Korea and Taiwan will benefit most from China's changing demand structure because they have high elasticities. Although the Philippines' elasticity is very high (with a β of 2.75), it is not statistically robust (with an R-squared of only 0.13; see Figure 5.4). This means that the Philippines' housing-related export responsiveness to the change in China's housing-related imports is unstable and unreliable.

One point worthy of mention is that the trade benefits neighbouring countries receive from a fast-growing China often go unrecorded. For example, South Korea's economy was in a mess after the Asian crisis,

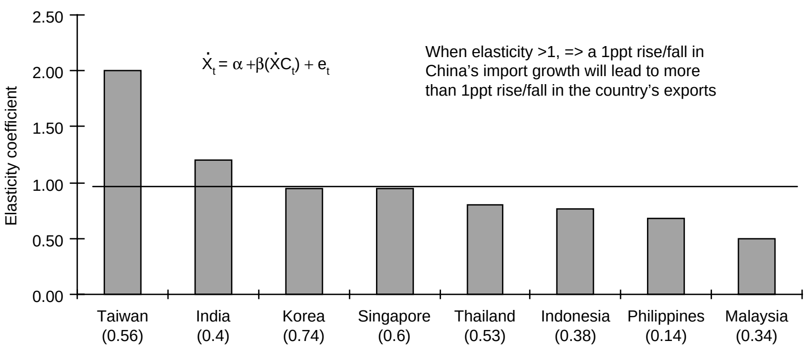

Figure 5.3 Elasticity of total exports to total Chinese imports (1999–2008)

Note: Figure in bracket = R-squared.

Sources: CEIC , author.

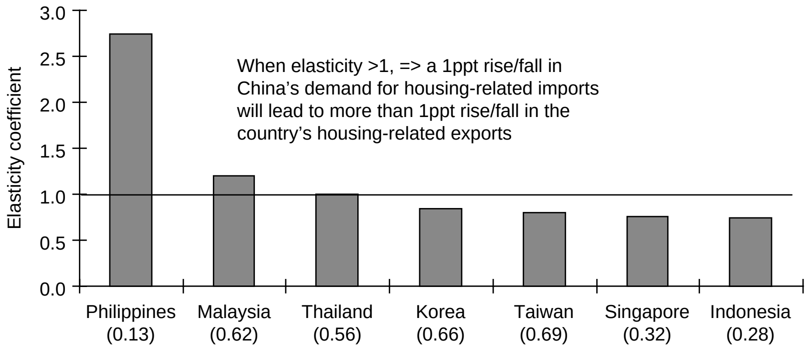

Figure 5.4 Elasticity of housing-related exports to China's housing-related imports (1999–2008)

Note: Figure in bracket = R-squared.

Sources: CEIC, author.

when its conglomerates crumbled under excessive debts. However, the South Korean economy recovered much faster than its Asian peers, thanks partly to its reform efforts, which cleaned up the banking system, and partly to China. The Mainland offered South Korea not only a vast market for exports, but also a pool of cheap labour that helped many South Korean firms thrive after crisis. South Korea's experience was not unique. China's benefits spread as far south as Australia. Indeed, Australian mining companies see China as their trump card, and the Australian government openly admits that robust Chinese economic growth has been a key factor for driving Australia's economic growth in recent years, and has helped to shield it from the subprime crisis impact, as Chinese demand underpins commodity prices and, hence, Australian exports and earnings.

Southeast Asian countries, ASEAN in particular, benefit from China's demand both directly, as their exports cater to the rising needs of the Chinese, and indirectly, due to the branching of the global supply chain since the late 1990s. Back in the 1980s, advanced economies such as Japan and the US shipped capital and intermediate goods directly to Asia for processing and re-exporting to end markets in the developed world. Since the opening up of the ASEAN and Chinese economies, the global supply chain has been lengthened, as companies take advantage of cheaper inputs in these areas. Capital and intermediate goods are now shipped from Japan and the US to advanced Asian economies such as Taiwan and South Korea for first-level processing. These semi-processed higher value-added goods are then sent to China and ASEAN for further processing or assembly before shipping to the final markets. This has led to a sharp rise in intra-regional trade within Asia. China, being at the tail end of this outsourcing process, naturally records huge gains from trade. But the ASEAN economies in the middle of the processing chain also benefit from the rise in intra-regional trade.

With its rising wealth, China has also been a source of demand for services such as tourism, education, insurance and finance. The tourist trade has had the most important impact on Asia in recent years, with the arrival of Chinese tourists to the five major Asian economies, South Korea, Hong Kong, Singapore, Thailand and Malaysia, jumping more than threefold in the past ten years. Crucially, their average expenditure has also risen significantly. In Hong Kong alone, an average Chinese tourist spends over HK$7,000 per trip. This is more than the average spent by tourists from the US and Southeast Asia.

Despite its rising economic influence, China's ascent to the global stage has inherent limits. China is unlikely even to dominate Asia in the sense of replacing the US as the region's peacekeeper and decisively influencing other countries' foreign policies. China has formidable neighbours in India, Russia and Japan who will resist any Chinese attempt to become a dominant regional player. Even southeast Asia, where China appears to have reaped the most geopolitical gains and delivered most of the economic benefits, has been unwilling to fall into China's orbit completely.

Impact on the West

For the developed nations, notably Europe and the US, an economically stronger China in the post-subprime world may not be encouraging news. Strong Chinese growth will certainly help major capital goods exporters in the western world, but China's strength will also prevent the old-fashioned commodity-price safety valve from kicking in to relieve the western world of its economic pains. Without a major fall in commodity prices (because Chinese, and other Asian, demand is holding them up), the US, the UK and other financially challenged nations will be struggling to stage a post-bubble recovery. To understand this, think about the correlation between domestic costs and global commodity prices. If the achievement of price stability depends on the trade-off between these two forces, an increase in one, say commodity prices, must be offset by a fall in the other, that is, domestic costs.

Thus, if China is the key force boosting global commodity prices, domestic costs in the western world will have to fall to ensure price stability. Since domestic costs mostly vary directly, moving up and down, with domestic demand, it follows that higher commodity prices will have to be associated with lower domestic demand growth under a price stability environment. This is equivalent to saying that higher commodity prices will erode domestic purchasing power and force demand growth lower. This will, in turn, erode domestic pricing power, pull down domestic costs and offset the inflationary impact of higher commodity prices. Viewed from this angle, China's economic strength is virtually imposing a tax on the developed world economies, which will make their post-subprime economic recovery more difficult. So there is a steep cliff for the crisis-hit western economies to climb before they can return to any sense of economic normality. Higher commodity prices just make that climb tougher. Offsetting high commodity prices will be lower wages, weaker pricing power, squeezed corporate profits and lower sales than before the subprime debacle. Hence, domestic price pressures are likely to remain subdued for some years in the post-subprime era.

Higher commodity prices will only erode purchasing power, making the west feel more like a deflationary than an inflationary world. Add to this the need to raise taxes and cut public spending (notably public sector wages) to pare fiscal deficits, and the need to increase private saving to repair the consumer balance sheet, and the whole of the western world is facing an ongoing period of austerity. In the post-subprime adjustment period, the western world is paying the price both for its earlier greed and excesses and for the success of economies elsewhere in the world, notably China. The post-crisis adjustment will take a long time to heal.

As for China, observers often confuse China's rapid economic progress and likely emergence as a superpower with present-day reality. In fact, China is still a developing nation and relatively poor. Economics aside, for all its military ambition, it is decades away from being a match for the US. According to the Stockholm International Peace Research Institute, China accounted for only 4 per cent of global military spending in 2005, a tad short of the UK and France, and an aircraft-carrier away from the US at 46 per cent. In economic terms, the Chinese economy has many more structural flaws than its stringent tone suggests. During the subprime crisis, its economy was kept growing mainly by public investment and government-directed bank lending, which could lead to asset bubbles and mounting bad loans in the post-subprime years. This is not to deny China's remarkable achievements in recent years. China will be a huge force to be reckoned with. But it is not quite there yet.

6
Opportunity for Learning

The subprime crisis provides a unique opportunity for China to learn from the developed world's experience of macroeconomic policy, financial liberalisation and regulatory control. From a macroeconomic and growth perspective, it should be very clear that China was not decoupled from the growth trend of the developed world during the crisis. Post-crisis, China is still not yet an independent economic power that can grow organically and at the same time propel global economic growth.

The feeble economic environment in the post-subprime world has given China a very good opportunity to restructure its growth mix towards domestic consumption. It also offers an opportunity for Beijing to push forward some policy breakthroughs, including establishing a proper set of profit incentives and budget constraints based on market forces to regulate corporate behaviour, liberalising energy prices, and rethinking China's financial framework and deregulation process. The latter is especially crucial now that China is developing a credit derivative market and starting to build a consumer credit system.

However, China must not see this opportunity as a means for establishing a bailout policy framework to handle future crises. It is better for Beijing to heed the lessons now and make a good start on its efforts to deregulate the financial sector and develop a consumer credit market than to jump into financial engineering and excessive consumerism and end up with another big financial mess to mop up in the future.

China needs the world

Chinese exports contracted sharply under the weight of the subprime crisis, with the damages spilling over to the domestic sector. Indeed, although the financial impact of the subprime crisis on China was limited, its ultimate impact on the economy was larger than expected. This is because conventional analysis has often overlooked the spillover impact of trade on domestic investment and job growth. This impact is big enough to affect over half of investment spending and urban employment in China, according to my estimate. The conventional wisdom is that China's push for market diversification in recent years will help reduce the impact of weaker demand from the developed markets. But the conventional wisdom is wrong, because it ignores the spillover effect of exports on China's domestic investment and job growth; and the subprime crisis has proven this point.

In addition to weakening external demand during the subprime crisis, the rise in the RMB exchange rate hurt China's export growth more than the data told us. Adjusted for RMB appreciation, China's export growth in fact slowed much more than the headline numbers indicated during the subprime crisis (Figure 6.1). For example, the headline export growth rate slowed to 17 per cent in 2008 from 26 per cent in 2007. But the RMB rose 6 per cent against the USD in 2008 from 2007. Hence, adjusted for the RMB appreciation, China's export growth was only 11 per cent (17 per cent – 6 per cent) in 2008. Damages from net exports certainly held back GDP growth, as net exports had risen to 8 per cent of GDP in 2008 from less than 2 per cent in 2000. The situation was similar in 2009.

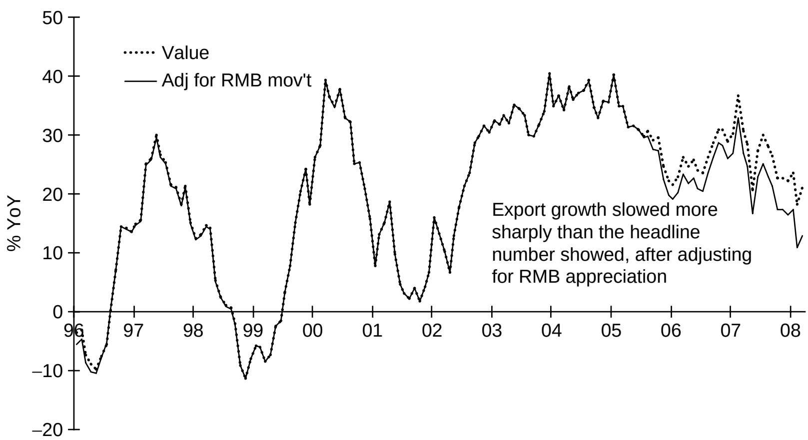

Figure 6.1 China's export growth
Source: CEIC.

Despite China's effort to diversify export destinations in recent years, the US, European and Japanese markets still account for half of China's total exports. Crucially, the impact of export diversification has been inflated because many Chinese exports to Asia are re-exported to the developed markets. Hong Kong is a good example, with over 80 per cent of Chinese exports to the territory being re-exported to third markets in the US, Europe and Japan (or G3, as they are sometimes termed). When adjusted for Chinese re-exports through Hong Kong to the G3, the share of Chinese exports to the developed markets rises by an estimated 11 per cent (Figure 6.2). Hence, the US, Europe and Japan still absorb 62 per cent of China's exports. The reason why China cannot shake off the influence of these developed markets is simple: they are the world's largest consumers, accounting for over 70 per cent of global private consumption, and China has become the world's supplier of consumer goods.

Meanwhile, China's export growth has played a crucial role in absorbing its manufacturing excess capacity. Looking at this issue from the other side of the same coin, robust export growth has powered massive capacity expansion in recent years (Figure 6.3). Investment by the export-oriented manufacturing sector has outpaced the total urban investment growth by a wide margin since 2004, with the former rising by an annual average of 35 per cent versus the latter's 26 per cent. The share of manufacturing investment has also jumped to 31 per cent of the total from only 12 per cent in 2002.

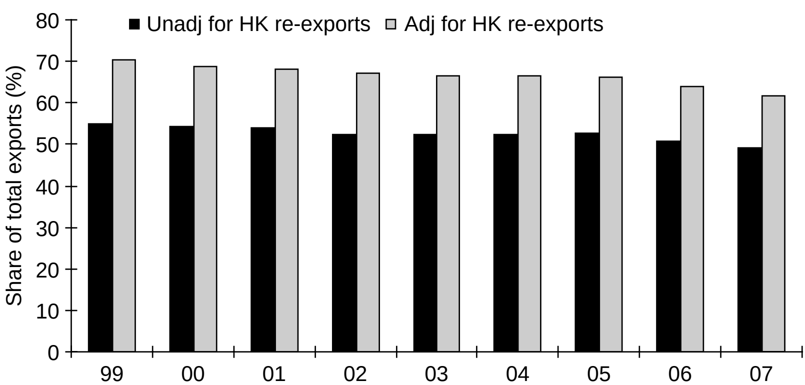

Figure 6.2 Chinese export share to the G3
Source: CEIC.

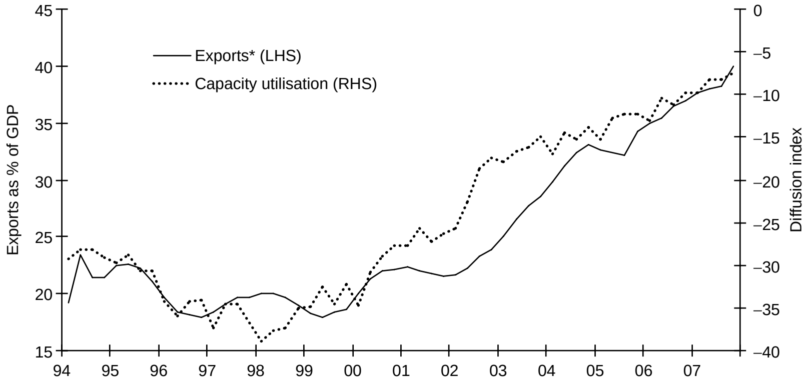

Figure 6.3 Exports absorbing capacity utilisation

*4-qtr moving average.

Source: CEIC.

There is also a second round effect of exports on domestic investment and job growth which conventional analysis often overlooks. Some analysts argue that, to assess the economic impact of exports, we should examine their value-added by stripping out the trade flow of processing exports. This is because the import components in the processing export trade do not contribute to economic growth, so they should be stripped out to calculate the net export revenue actually accrued to the domestic economy.

However, processing exports do affect domestic investment and job growth via investment in assembling plants, machinery and logistic services and hiring of local labour to assemble the imported inputs into end products before exporting them. An expansion in processing exports has also been an effective channel for technological upgrading, a key engine for productivity growth. Thus, cutting them out will lead to underestimation of the economic impact of exports on the domestic economy. Rapid expansion in manufacturing capacity has also created spillover demand for energy, freight and transportation, and trade-related services, boosting investment in power generation, coal mining, highways, railways, ports and real estate in industrial parks. These areas combined account for at least another 20 per cent of total urban investment. This means that the manufacturing sector (which is largely export-oriented) drives over half of total urban investment (Table 6.1).

On the job front, the manufacturing sector hires over 120 million workers, or about 40 per cent of total urban employment. However, among the rest of the 60 per cent of jobs in the tertiary sector, almost

Table 6.1 Urban fixed-asset investment breakdown (2008)

	per cent of total
Manufacturing	31
Real estate	24
Infrastructure	29
Power, water and gas supply	8
Transport and telecom	11
Urban infrastructure	10
Others	16

Note: Assuming 40 per cent of real estate and infrastructure investments are manufacturing driven => 21.2 per cent of these are related to manufacturing; adding this to manufacturing's 31 per cent share => a total of 52.2 per cent of urban investment is manufacturing-driven.

Source: CEIC.

two-thirds are casual, low-paid, temporary jobs. This means that the manufacturing sector's share of total formal jobs is quite significant. Obviously, formal jobs are more secure and deliver better income growth than low-paid informal jobs.

China's integration into the global economy implies that the links between global demand and Chinese domestic investment and job growth are much tighter than before. Despite export diversification, the US, Europe and Japan are still the key markets for Chinese exports. A significant slowdown in their growth as a result of the subprime crisis has thus had a bigger than expected impact on China's growth. This can be seen in the sharp slowdown in China's GDP growth to an average of 7.0 per cent year-on-year per quarter between the second half of 2008 and the first half of 2009, compared with the double-digit growth rates recorded before the subprime crisis. The export sector will continue to be hit hard for some years, especially the low value-added labour-intensive segment, such as toys, textile, white goods, textile and shoes, because the post-crisis economic adjustment in the western world will take a long time. Service providers (banks, transport, IT, logistics and property) and Chinese cities/provinces with large exposure to these economic victims will also see rising risk to their operating environment in the coming years.[1]

So contrary to conventional wisdom, China was not bucking the global trend of economic slowdown. How did those decoupling theorists

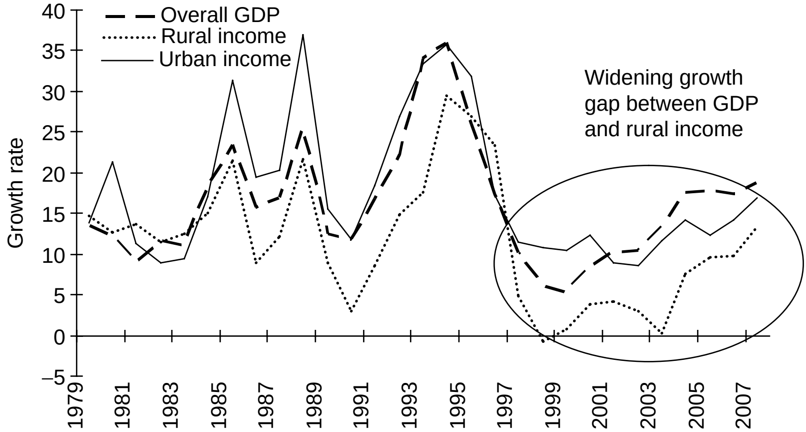

Figure 6.4 Lopsided growth
Source: CEIC.

get it so wrong? The fundamental problem lies in their obsession with China's headline growth, ignoring its growth structure. Since economic reform started, rural household income has, on average, grown at about 65 per cent the rate of overall GDP growth, but with the growth gap widening in recent years (Figure 6.4). Urban income has grown more or less in tandem with GDP growth, but the rural population still accounts for the majority (over 55 per cent) of the total population and, hence, the income pool.

The sluggish growth of the bulk of household income combined with rapid growth of GDP means that China has created a huge production capacity at the expense of consumption demand. All this excess output has to go somewhere. And, obviously, it has gone to the US and other developed markets to cater for their excess consumption. Crucially, the persistence of this household income and GDP growth gap suggests that China's growth was a derivative of US consumption. As US consumption collapsed during the subprime shock, China's growth slowdown became inevitable.

Fixing lopsided growth

China's lopsided growth problem stems from an imbalance development policy that Beijing formerly pursued, but is now trying to correct: namely, government-driven supply side expansion. This policy has persistently undermined China's consumption potential, pushing the country to rely on exports to rich countries to absorb the excess production capacity (Huang, 2008). Despite three decades of economic liberalisation, the government's 'visible hand'[2] in driving broad economic direction remains powerful. Beijing still heavily influences fixed-asset investment, which accounts for 45 per cent of GDP and contributes to over half of China's annual growth rate. The government still controls the banking sector, issuing administrative directives for bank lending. Much of the GDP growth since the mid-1990s has been the result of massive government-driven investment drives in infrastructure and urban construction.

An obvious lesson from the subprime crisis for China is that it must change its growth model by boosting domestic consumption. The flipside of the US consumer bubble is China's excess saving. Even though Chinese consumption has been growing in recent years, it is still significantly lagging behind the growth of other major sectors in the economy. Household consumption only accounts for 36 per cent of GDP, significantly less than the average 60 per cent share in other major economies. Further, China's consumption share of GDP has been declining for years (Figure 6.5), indicating that the supply-side expansion development model was eroding domestic consumption potential.

The falling share of consumption reflects excessive household saving, which has led to a massive rise in investment spending. The resultant

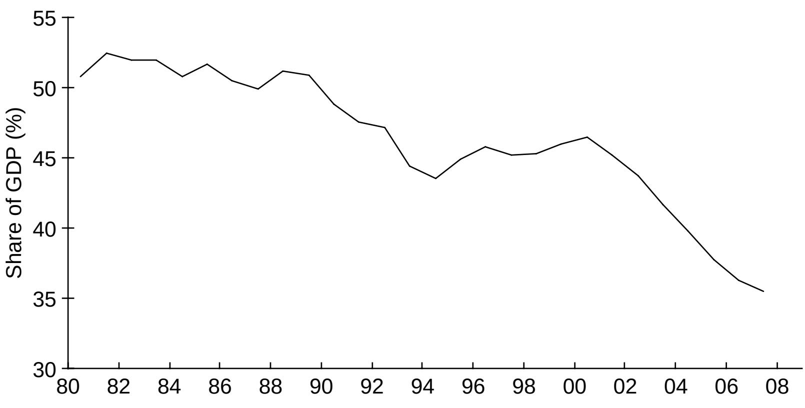

Figure 6.5 China's falling consumption
Source: CEIC.

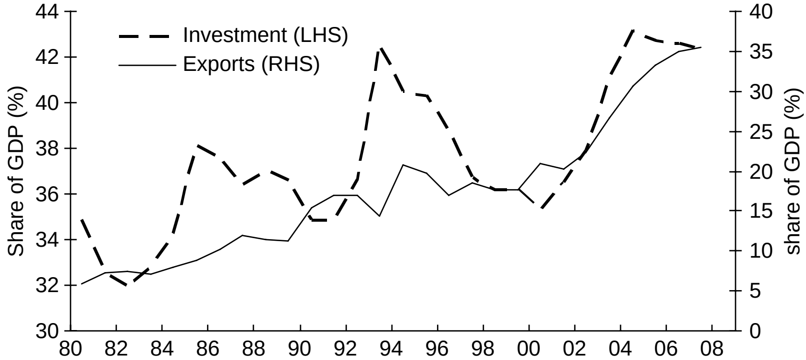

Figure 6.6 Exports driving investment
Source: CEIC.

rapid build-up of output capacity has, thus, become dependent on export markets (see Figure 6.3 above). The combination of rapid productivity growth and a cheap currency policy pursued by Beijing has given the export sector a significant boost, making it a significant driver for investment and economic growth in recent years (Figure 6.6).

The lack of a sufficient social safety net after economic reform did away with the free services provided by the government has been a major cause for China's high propensity to save. While the authorities have recognised this problem, and have taken various steps in recent years to establish more social security coverage and a pension system, the effects have been slow in coming. Sluggish household discretionary spending suggests that the steps taken so far have not been enough. Loopholes in the implementation process are also reducing the effectiveness of the measures.

The damage to export growth caused by the subprime crisis will likely be a multi-year phenomenon, because the post-crisis adjustment in the developed world will take a long time. This makes the change of China's growth model all the more urgent. The feeble economic environment in the post-subprime-crisis world has given the Chinese authorities a very good opportunity to boost social spending, both as a counter-cyclical policy and as a structural step towards a more balanced growth mix. A bigger domestic sector with higher consumption power is both a necessary and a sufficient condition for China to reduce its economic vulnerability and enhance long-term growth sustainability.

An opportunity for policy breakthrough…

China's strong growth in recent years has been driven by an unduly stimulative monetary environment, as seen in a prolonged period of declining real interest rate (Figure 6.7) and an undervalued RMB. The RMB's exchange rate should have risen on the back of strong capital inflows due to a large current account surplus and massive net FDI inflows. But this did not happen until 2005. Even since then, the amount of appreciation has not really reflected the underlying upward pressure on the RMB as implied by the balance of payments surplus. Beijing's 'stable currency' policy has prevented the RMB from appreciating to implied fair market levels. Thus, together with a synchronised global economic recovery after the IT bubble in the early 2000s, this environment greatly enhanced Chinese corporate profits, leading to constant pressure on companies to expand.

Beijing recognised the problem in 2004 and started addressing the risk of economic overheating. It adopted numerous restrictive industrial policies and relied mainly on administrative measures, such as lending quota controls, reserve requirement ratios hikes and investment curbs. But all these failed to deal with the fundamental causes of growth imbalance: excess capacity and under-consumption. Further, the emergence of the private sector in recent years has made corporate savings

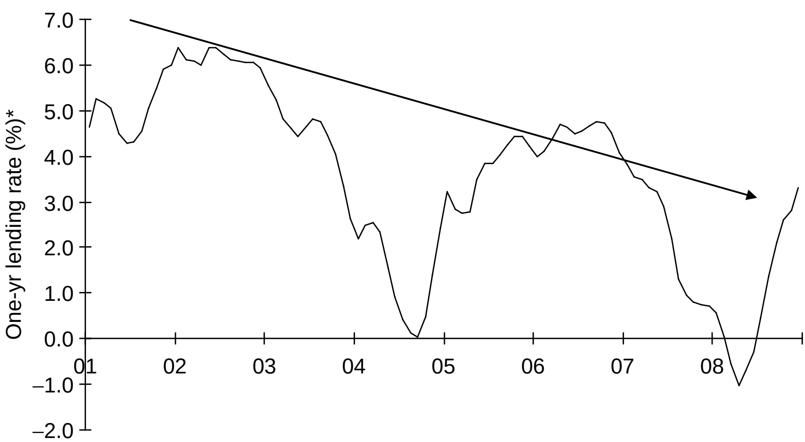

Figure 6.7 Prolonged decline in China's real interest rate*

One-year working capital lending rate, 3mma (3-month moving average).

Source: CEIC.

a main funding source for capacity expansion, reducing the effectiveness of Beijing's tightening measures. This, in turn, prompted Beijing to implement more administrative tightening to cool the growth of the targeted sectors in the economy. With hindsight, it can be argued that some of the macro measures imposed between 2004 and 2007 did little to ease economic volatility.

So, in the post-subprime world, Beijing must establish a proper set of profit incentives and budget constraints to regulate corporate behaviour and thus prevent future sharp economic swings. More crucially, such incentives and constraints will have to be based on market forces rather than on administrative directives as economic liberalisation deepens. These include the exchange rate, interest rates, bank lending, and factor prices such as energy and raw materials. Heavily subsidised electricity prices, for example, were a key driver behind China's massive capacity expansion in the energy-intensive base metals sector, which came under severe contraction pressure amid demand destruction by the subprime crisis.

The Chinese authorities have recently been moving towards liberalising energy prices and other crucial material sectors, but the pace has been slow and needs to speed up in order to achieve any concrete steps. The subprime crisis presents a benign opportunity for Beijing to push through some policy breakthroughs. In this regard, the fuel price reform programme that started in 2008 was an encouraging development. The key is to keep the direction and momentum going in the coming years.

On the regulatory side, the American subprime crisis has reflected both the importance of a functioning banking system and the dire consequences of regulatory failure. Among many other systems, China has also looked to the American financial system and capital markets as a role model for its financial sector reform. As a result, the systemic failure of the American system has sounded an alarm for Chinese regulators and, at the same time, provided valuable lessons for the Chinese regulators to rethink their financial framework and deregulation process. China's hitherto cautious stance towards financial reform has prevented its banks from getting caught in the global credit quake. But that also means that the Chinese system has remained untested at the time of a modern financial shock.

With China pushing through more financial reforms and developing more financial product markets in the coming years, the US subprime crisis should serve as an example from which the Chinese authorities can learn to avoid similar policy missteps and growth traps

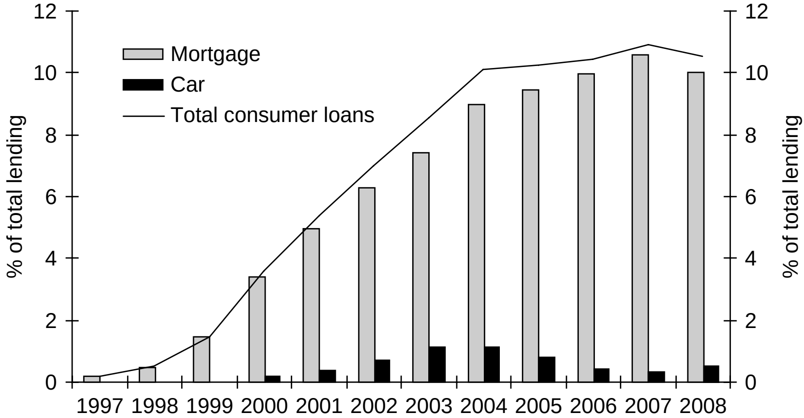

Figure 6.8 Consumer loans remain minimal in China
Source: CEIC.

in the future. This is especially crucial now that China is considering the development of a credit derivative market and starting to build a consumer credit system. At the moment, personal loans in the form of car, credit card and mortgage loans account for only about 11 per cent of total bank lending in China (Figure 6.8). Mortgage lending has been very conservative and inflexible. But a more developed financial system and increased access to credit for consumers are essential for building a consumption-based economy.

There are signs showing that Beijing has recognised that the US banking system failure was a failure of regulation but not a failure of market forces. So, despite the deep and prolonged subprime crisis, China still moved ahead with new financial liberalisation rules during the tough times. In 2009, it allowed margin trading in the local stock market, legalising and regulating part of the informal credit network (or underground financing; see Tsai, 2004[3] and Lo, 2007) among private enterprises as the first step towards reducing systemic risk and distortion to the credit market, and increasing access to bank credit for small and medium-sized firms. It also set up a second-board stock exchange, the Chinext in Shenzhen, as a venture exchange financing platform for high-tech start-up companies and SMEs. Then, in early 2010, the Chinese authorities introduced stock index futures and short-selling in the onshore A-share market, marking the first step towards allowing hedging instruments to develop. All this suggests that the global credit crisis has not deterred China from its resolution to proceed with financial reforms. Again, the key is to keep the direction and momentum going in the post-subprime environment. But this may not be easy.

The domestic banking development outlook may be benign. But the story is different from the perspective of the Chinese banks' connection with the rest of the world after the subprime crisis. In late 2008 and early 2009 foreign banks, including Bank of America of the US, UBS of Switzerland and the Royal Bank of Scotland of the UK, were all trying to cash out in China by selling their strategic stakes in the Chinese banks after the expiry of the 3-year lock-up period. They needed the cash back home to plug the black hole inflicted by the subprime crisis. The withdrawal of these strategic partners and foreign interests, if it continues, will bode ill for China's strategy of using foreign expertise to build a world-class banking system.

Between 2005 and 2008, foreign financial institutions pumped over US$25 billion into Chinese banks as part of the deal engineered by Chinese financial regulators. Foreign investors would gain access to China's banking market and in return transfer management technology to Chinese banks to enable them to become profitable commercial entities. However, the momentum for cooperation had begun to slow even before the subprime crisis, due to an expectation gap between the two parties and disappointment at what each party had delivered. A common case in point is risk control systems. Chinese bankers are often frustrated by foreign advisors who have rich international knowledge and technical skills but cannot adapt to the local market conditions and solve local problems. That has altered the Chinese bankers' expectations that foreign advisors would be able to offer effective solutions. On the other hand, foreigners have experienced a sharp cultural shock and felt betrayed by their limited influence over bank operations and their inability to gain ownership control. Foreign strategic investors have also been expecting a lifting of the 20 per cent cap on foreign stakes in Chinese banks, but that has not happened.

When China opened up its banking sector for strategic investment in 2005, it hoped that foreigners would help improve Chinese management standards, transfer technology and know-how, and co-build new fee-earning businesses such as credit cards and wealth management. Most crucially, China hoped that foreign banking partners would help improve risk governance in the Chinese banking system. But these hopes have largely come to nothing now that the foreigners have sold their stakes in the Chinese banks. Meanwhile, following the subprime crisis, the Chinese regulators are also debating how the western banking model and practices could benefit China. If both sides turn cool towards Sino-western cooperation, that will risk a slowdown in China's financial liberalisation in the future. In summary, the subprime crisis is both an opportunity for China to speed up its financial liberalisation strategy and a risk of slowing down that process.

... But not for bail-outs

This is the most important message for China, and other countries also, to heed: despite all the micro, macro and unconventional measures taken by the global authorities between 2007 and 2009 to tackle the subprime crisis, the root problem has yet to be dealt with effectively. That is because the western policymakers' approach has been to sustain household leverage and consumption at any price, when the only exit from the 'credit quake' involves a return to thrift by the overleveraged. Since this cannot be done without pain, there is still a fair amount of denial among the global authorities. As for China, which is moving along the financial deregulation path and intends to boost consumption as its growth driver in the future, there is a lot for the Chinese regulators and economic policymakers to learn from this crisis and the western authorities' policy reactions.

This global credit crisis was rooted in the irresponsible social behaviour of the US and most of the developed world over the past two decades, which put the desire for current consumption ahead of the ability to pay for it. Financial engineering and deregulation had encouraged borrowing and discouraged thrift to finance excess spending via a gigantic credit bubble. That, in turn, led to huge global economic imbalances and distortions. This root cause explains why it is so difficult to solve the crisis. Desperate to preserve the value of asset prices inflated by this huge liquidity bubble, policymakers in the western world have avoided the painful solution of allowing market clearing. Bailout programmes, liquidity injections and fiscal stimulus packages are all meant to sustain asset prices, when these asset prices really need to fall to market levels so that they can be cleared. Delaying this process only prolongs the crisis.

Japan's experience in the 1990s shows clearly that, if the market is not allowed to clear, the financial crisis will just drag on. Although debt-deflation may be avoided, the economic recession will last a long time and the recovery will be weaker. World Bank research shows that accommodating measures, such as massive liquidity support, blanket deposit guarantees, regulatory forbearance, repeated recapitalisation and debtor bailouts (which are all measures that the global authorities have used in this crisis), appear to cause a sharp increase in the costs of banking crises (Klingbiel *et al*, 2002). There was no evidence from the World Bank study that these accommodating policies achieve faster economic recovery.

There is nothing mysterious about the right policy to solve the subprime crisis, as shown by the Scandinavian banking crises in the early 1990s. The banks must be forced to disclose their toxic assets, and these must then be written down to market prices. This will hit shareholders and bondholders hard, but will protect depositors. The Swedish model stands out as a prime example of the success of tackling a financial crisis by adopting the 'good bank bad bank' model.

The Swedish government set up a 'bad bank' in 1992 to buy all the toxic assets from the banking system at market prices, forcing the Swedish banks to write down these assets and take the hit to their equity before any recapitalisation could begin. This should enable whatever is left of the smaller 'good bank' to be commercially viable again. This has not happened so far in the subprime crisis countries, including the US, the UK and Europe. The ultimate end game in the crisis countries should really be nationalisation of most of the banking system as the first step towards cleaning up the system, but, despite the overwhelming logic of this approach, there are powerful vested interests that want to prevent such an action of last resort. Viewed from this angle, the Chinese model, with most of its banking system still controlled by government, looks like something worthwhile for the western authorities to ponder on in the future. However, the extent of Chinese control over the banking system is a controversial issue, and lack of market discipline is the biggest distortion in the Chinese banking system.

Relying on an insurance scheme to limit the banks' losses, as most of the western authorities did in early 2009, does not solve the underlying problem that clogged the credit flow. What the insurance does is eliminate the banks' risk exposure to the toxic assets, but the toxic assets still remain on the bank books. Without taking the toxic assets off the banks' balance sheets, the whole system remains as corrupted as before. The bad assets will continue to suck resources out of the system in the form of zombie borrowers, misallocation and mis-pricing of capital, public sector debt and budget deficits. So this is not a model the Chinese should follow in their regulatory framework.

Hitherto, the US government alone has spent a huge amount of money on containing the subprime crisis – enough to fund two Vietnam Wars. About 90 per cent of this money has been spent on sustaining lending and consumption. But this bailout strategy has not attacked the root causes of the crisis – overleveraged assets financed by excessive credit creation. Here is the most relevant lesson for China, which is very much used to the idea of spending its way out of economic problems. It is possible that the sheer size of all these spending programmes may eventually overcome the structural failures of the financial system and produce an economic recovery. But, if such profligate policies do produce economic recovery, they will only do so by creating more and bigger bubbles, with the same final result of collapses, but at an even grander scale. So it is better for China to heed the lessons now and get a good start in deregulating the financial sector and developing a consumer credit market than to jump into financial engineering and excessive consumerism, ending up with another big financial mess to mop up in the future.

When opportunity becomes risk

On a positive note, the credit quake offers a benign opportunity for China, and the world, to rebalance its economic growth dynamics, with China needing to reorient its growth driver towards the domestic sector (notably the consumers) while the developed world needs to become more frugal and grow its export sector. The subprime crisis is probably a blessing in disguise in making this global rebalancing process necessary, because it has broken the western spendthrift / eastern frugal stable disequilibrium that lasted for two decades. For over twenty years, and especially in the decade leading up to the credit quake, rapidly rising debt had allowed Americans to live beyond their means and resulted in a sharp rise in the country's trade deficit (Elwell, 2008). On a global basis, this overly rapid growth in American consumption enabled the non-US global economy to grow faster than non-US global consumption; this was especially true for Asia, and in particular for China, the main beneficiary of the US consumption boom.

To see this, just look at the growth differential between Chinese consumption growth and GDP growth. While China's consumption was growing at a steady 9 per cent a year for the past decade, Chinese GDP growth substantially outpaced it, clocking in at an average of 12 per cent per annum. China was able to achieve this largely because it had poured resources and cheap financing into manufacturing, and in doing so produced many more goods than the local households and businesses were able to absorb. The balance was exported abroad, where much of it was absorbed by the spendthrift US consumers.

But the subprime crisis has changed everything. Whether America likes it or not, US debt levels will come down in the coming years. This means that America's debt-financed consumption will also slow sharply, so that the US trade deficit will shrink. For the rest of the world, a contraction in US consumption will bring with it a period of slower economic growth, as export demand will fall for the trade surplus countries. This matters especially for China. If the Chinese economy was the biggest beneficiary of excess US consumption growth, it is likely also to be the biggest victim of a rising US savings rate. So, eventually, the decline in the US trade deficit must result in a fall in China's ability to export the difference between the growth of its output and consumption (which has already been evident since 2009). When this phenomenon becomes entrenched as the post-subprime adjustment unfolds, China's economy will grow more slowly than its consumption, just as the opposite is happening in the US.

While China should seize the opportunity of this post-crisis adjustment to refocus its growth drivers towards the domestic sector, the structural adjustment process in the west also raises the risk of slower growth for China in the future. Even if Chinese consumption growth is able to continue to grow at 9 per cent a year, China's GDP growth will likely slow from the heady 12 per cent a year to something around 7 per cent over the medium term, depending on the speed of the US adjustment and the share absorbed by China's trade competitors. But a 7 per cent growth rate may be unacceptable to the Chinese authorities in the short term, as their mindset is still stuck with the 'magic' 8 per cent GDP growth rate. This will bring about another risk of intervention, with potential policy misstep and boom/bust volatility.

This risk will become more serious if Chinese consumption is not able to grow quickly enough to offset the external drag on GDP growth. And the risk of slower Chinese consumption growth is not negligible. First, in an environment of slower GDP (hence income) growth, it is only natural for Chinese consumption growth to slow down also. Just as rapidly rising income fed rapidly rising consumption on the way up, a slowdown in income growth should also cause consumption growth to fall. Secondly, and more crucially, the massive lending that Beijing pushed in the first half of 2009 to boost investment and GDP growth will almost certainly lead to a sharp rise in bad loans in the following years. To clean up these bad loans, which Beijing will have to do for a few years, will likely require some restrictive policies that will inevitably constrain consumption growth.

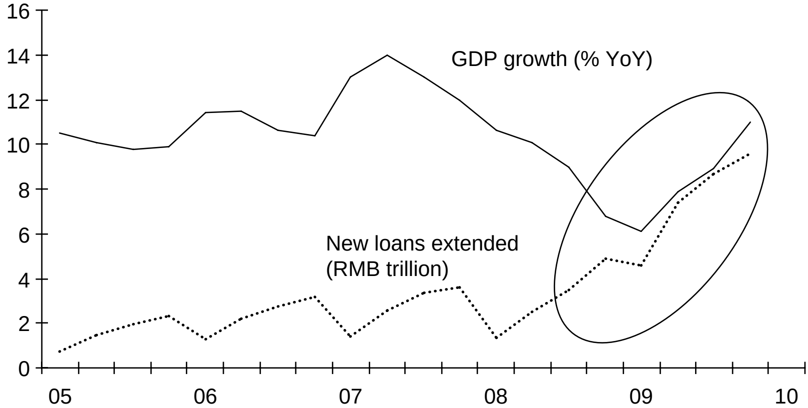

Figure 6.9 Massive loan growth boosts GDP growth (with a one-quarter lag)
Source: CEIC.

While the massive bank loan expansion in the first half of 2009 powered the Chinese economy strongly (Figure 6.9), the administrative nature of the loan expansion and misallocation of funds to bad projects cannot be a long-term solution for slowing Chinese economic growth. For the next five years or more, depending on the speed of the global rebalancing process, Chinese GDP growth will likely be slower than consumption growth. The massive but unsustainable investment in infrastructure and new production facilities that characterised Beijing's RMB4 trillion (US$586 billion) stimulus package to fight the subprime shock in 2009 and 2010 will not change this fact. If the stimulus package retards China's structural adjustment process, the risk of sustained economic imbalances creating negative shocks to the world will be even bigger.

7
Opportunity for Economic Expansion

Albert Einstein once said, 'In the middle of difficulty lies opportunity'. The subprime crisis is a difficulty for the western world, but this difficulty has provided China with an opportunity to expand its economic interest globally. The crisis will likely speed up China's overseas investment, since the cost of acquisition has been lowered in the process of wealth destruction. For China, increasing overseas investment does not only serve the purpose of seeking markets and resources; it also helps to lower the costs of production and, more crucially, to diffuse the risk of domestic asset bubbles. From a structural point of view, the ultimate solution for China to rebalance its economy is to reduce savings by encouraging domestic consumption. But this is not a process that can be completed within a short period of time. So an interim solution is to build a 'relief valve' for the domestic liquidity 'pressure cooker' by allowing capital to flow out of the country in search of better investment returns. In any case, given China's high level of domestic savings, it will need to liberalise its capital account more aggressively to promote overseas investment in the post-subprime era in order to address its domestic over-investment problem.

The subprime crisis may also offer a unique opportunity for both China and the US to rebalance their external accounts, while at the same time helping China to acquire the needed technology and capital goods for further economic development. American high-tech producers have failed to capitalise on China's rising demand. This can partly be blamed on the US export control policy towards China. In the post-subprime era, given the comparative advantage of the US, any credible plan for reviving the US manufacturing industry and creating US jobs will have to focus on the high-tech industry. If the Obama administration were to move towards policy liberalisation on high-tech sales to

China, it could open up a win–win opportunity for both China and the US in the post-subprime world, where fostering international trade would be a major way to boost global growth against an otherwise constrained economic backdrop.

The start of the great investment outflow

Even before the subprime crisis, China's rapid economic growth had raised its confidence in looking outside its national boundaries for investment opportunities. Rising competition and the drive to maximise profits have raised Chinese awareness of the potential of foreign markets. There is also a rising need to acquire raw materials from external sources to secure domestic growth needs. Hence, Chinese foreign investments have grown rapidly in recent years, though they are still small in absolute terms (less than 1.5 per cent of GDP; see Figure 7.1). China's overseas direct investment (ODI) has also created economic benefits for other developing economies. The subprime crisis will speed up China's investment outflow trend in the coming years by lowering the cost of acquisition by Chinese companies, as global asset prices have dropped.

China's ODI is concentrated mainly in the developing countries. Recent United Nations research shows that in 2007 China was one of the key countries providing capital for developing nations, especially in Africa (UNCTAD, 2007). China's outward investment thus has substantial implications for the economic development of the world economy in general and for developing countries in particular.[1] In the

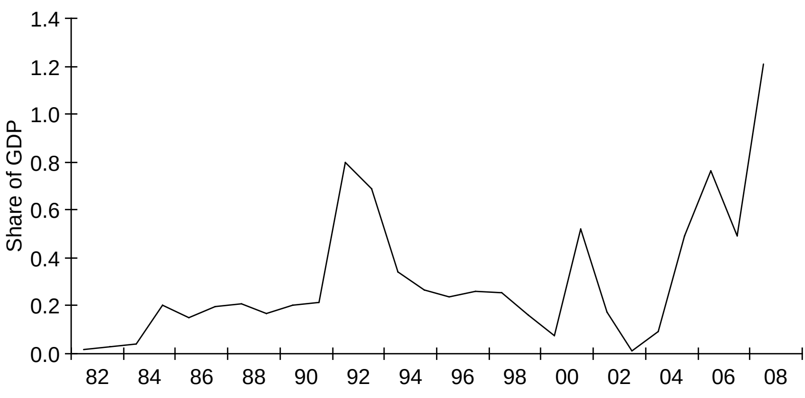

Figure 7.1 Chinese direct investment abroad
Source: CEIC.

1980s, China's ODI was quite small (see Figure 7.1) and it was primarily driven by political rather than economic considerations. Before 1985, only state-owned and local-government-owned enterprises were allowed to invest overseas. Private enterprises were allowed to apply for ODI projects after 1985, when the Chinese authorities started designing and developing procedures and policies for ODI. Under the investment liberalisation programme, there was a flux of ODI to Hong Kong in the 1990s. But most of the projects/investments went bad due to lack of investment know-how, ignorance about the rule of law in overseas markets, and corruption among Chinese officials and corporates.

The Asian crisis in 1997 prompted the Chinese authorities to change their ODI strategy. The regional crisis changed the global economic landscape by highlighting the strength of the overseas markets, which were growing strongly at that time and thus acted as an 'economic saviour' for the Asian economies by absorbing Asia's excess capacity via imports. Seeing the great opportunity in foreign demand growth, China issued a directive in 1999 to develop direct investment abroad that would promote Chinese exports via processing trade investment. This directive signified a crucial shift of China's ODI policy, from promoting overseas investment to directing ODI. In 2002, the Chinese authorities started the push for the 'going global' or 'stepping out' strategy as part of the economic reform process and to promote global industry champions in the wake of China's accession to the World Trade Organization. Then, in 2004, the Chinese authorities made another change to their ODI policy. In addition to just approving ODI applications, they further defined explicitly their roles in supervising the projects and providing services to facilitate the ODI. All this encouraged Chinese enterprises to 'go global' aggressively. The latest data, up to 2005, show that China had invested in 163 countries and engaged in an extensive range of economic activities, including information technology, finance, retail, fish processing and forestry. These overseas investments were concentrated in a few countries, including Australia, Hong Kong, Macau, Southeast Asia, Russia and the US.

Some of the larger deals done since 2002 include China Petro-Chemical's US$216 million purchase of six Indonesian oil fields, China National Offshore Oil Corp.'s (CNOOC) purchase of Indonesian oil assets from Spanish oil giant Repsol YPF SA for US$585 million, and CNOOC's other deals, such as the US$275 million purchase of a stake in an Indonesian liquefied natural gas project and a US$320 million deal to buy a stake in Australia's North West Shelf gas project. Even in finance, Chinese banks have been going abroad. The state-owned Bank of China (BoC) and Industrial and Commercial Bank of China (ICBC) have bought stakes in Indonesian banks to expand their Asian banking operations. Most major Chinese banks, such as BoC, ICBC, China Construction Bank (CCB) and the Bank of Communications (BCom), have established a presence in Hong Kong. The BoC has also boasted operations in New York.

All these deals have highlighted a rapidly growing trend in Chinese foreign investment activities. Official (balance of payments) data show that China's foreign direct investment (FDI) outflow reached US$53.5 billion in 2008, or 1.2 per cent of GDP, up from a scanty US$2.6 billion in 1998 (see Figure 7.1). But the official investment data tell only part of the story, because Chinese companies are more active overseas than the official data show. In many cases, the official data understate the true amount of Chinese overseas investment. For example, the official US$53.5 billion Chinese FDI outflow in 2008 was way less than the data reported by Hong Kong, which showed US$296.3 billion of FDI flows from the Mainland in the same year. However, Hong Kong's data on FDI inflows from the Mainland are also misleading. Hong Kong's numbers are tainted by possible round-tripping, whereby Mainland capital stops by Hong Kong and returns to China as FDI, to cheat Beijing out of preferential tax and other business treatment.

Nevertheless, even if it is difficult to quantify China's FDI outflows with accuracy, it is possible to qualify them with a fair amount of confidence. Companies such as CNOOC and China Petro-Chemical are typical channels of outward FDI, which, driven by both geopolitical and commercial concerns within China, seek to secure strategic foreign energy sources. On the geopolitical front, three of China's largest energy firms[2] have invested in more than 14 countries, including Indonesia and Myanmar in Southeast Asia, Iraq, Yemen, and Sudan in the Middle East, and Kazakhstan in Eastern Europe. At the commercial end, there are increasingly ambitious Chinese consumer and high-tech companies seeking foreign investment opportunities, including Beijing-based BOE Technology and Qiangdao-based Haier, among many others that have acquired assets in Asian and western countries. Further, while these giant Chinese firms' direct investments are recorded in the official database, many investments abroad are handled by the overseas arms of these and other Chinese companies, and are not recorded in the national data. The point is that, for every high-profile investment, there are many others that are not shown on the radar screen. Thus, the impact of these Chinese foreign investments on other economies is not readily visible.

China's overseas investment expansion in recent years, especially since the subprime crisis, has been seen as politically driven to secure raw materials and strategic resources to feed its industrialisation process. Indeed, China's direct investment in geographically and politically sensitive regions, such as Africa, for acquiring natural resources has raised international concern that its aggressive procurement policy may upset or alter global economic and political balances.[3] However, empirical evidence (Cheung and Qian, 2009) shows that seeking markets and resources is only one of the motives driving China's investment overseas. There are other crucial motives, including cost of production, agglomeration or herding behaviour, and pressure to seek higher investment returns for the huge US$2 trillion (and growing) foreign exchange reserves.

Costs of production have been rising in China's developed cities on the eastern seaboard. So it is natural for China to look overseas and invest in production bases where costs are lower. Further, China's overseas investment tends to follow in the footsteps of previous decisions, with empirical evidence showing that a host country that has a larger share of China's ODI tends to attract more Chinese capital. Overall, there is little evidence (in the Cheung and Qian 2009 study) that exports of natural resources from the African and oil-producing nations had attracted an increasing amount of investment from China. Further, China's direct investment in Africa and oil-producing countries does not appear to be focused on natural resources. Instead, Chinese firms have strong ODI interests in manufacturing, information technology products and services, and trading (Asia Pacific Foundation of Canada, 2005, 2006).

The structural push for overseas investment

Structurally, China's macro environment is conducive to building asset bubbles. So encouraging capital and investment outflow may be part of the solution to reducing the bubble risk. Why is China bubble-prone? First, China's economic growth can be characterised as a 'low-inflation boom'. On the one hand, rapid economic growth has generated rapid increases in income for both workers and capital owners since 1978, when economic liberalisation started. On the other hand, the country's huge pool of surplus workers, chronic excess manufacturing capacity and rapid productivity gains have long depressed goods and services prices. Thus, despite volatile headline CPI inflation, China's core inflation rate[4] has been depressed for more than a decade (Figure 7.2), despite

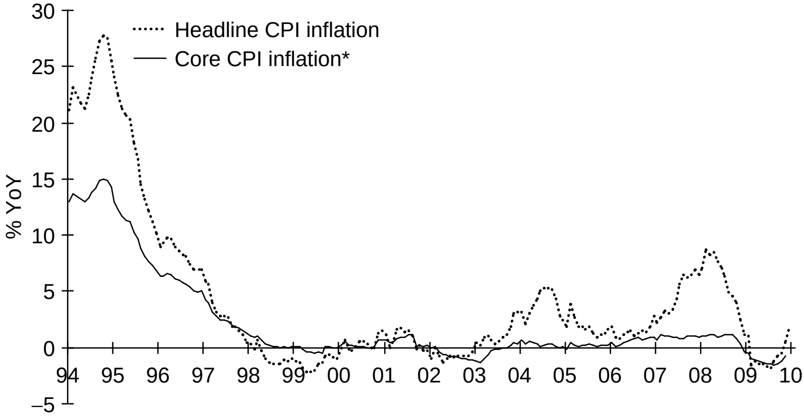

Figure 7.2 China's chronic disinflation

*Core CPI inflation = headline CPI inflation minus food and energy inflation.

Source: CEIC.

robust economic growth. This means that the enormous wealth creation brought about by rapid income growth will largely be reflected in asset prices. This process has been the key driver for China's asset market boom in recent years, and it will remain so for as long as the basic features of the low-inflation boom persist.

Second, China's vast pool of domestic savings has created fertile ground for asset price inflation and potential overshoot. At the end of 2009, China's household savings still accounted for over 200 per cent of the domestic stock market capitalisation. In comparison, the mountain of cash sitting on the sidelines of the American bourses, and widely regarded as firepower for pushing up the US stock market, was only 80 per cent of total stock market capitalisation. This means that the ample domestic liquidity stemming from the high saving structure will always be ready for boosting Chinese asset prices, depending on market sentiment. Adding to the huge domestic liquidity pool is foreign 'hot money', which typically chases higher returns in China when its improving growth outlook drives rising asset prices.

For example, speculative capital inflow[5] to China surged to a record high in the second quarter of 2009 (Figure 7.3). This coincided with a sharp rebound in the Chinese stock market and property transaction, as investors/speculators bet that Beijing's RMB4 trillion stimulus package, launched in late 2008, would be able to pull the Chinese economy out of the negative impact of the external subprime shock. Similarly,

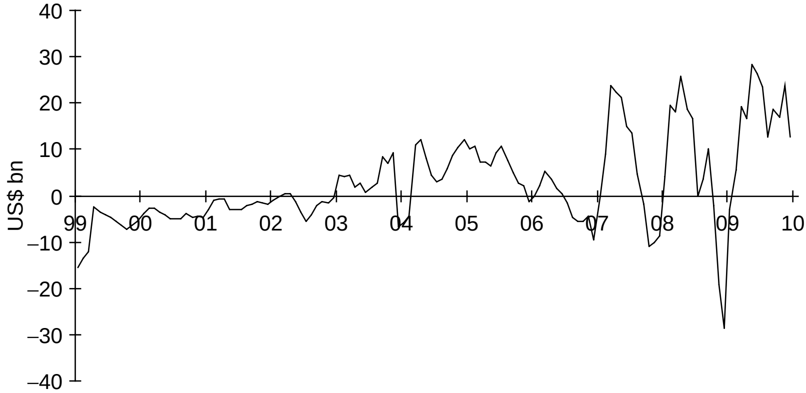

Figure 7.3 Hot money flows* to China

*3-month moving average.

Source: CEIC.

in early 2007 and 2008, hot money inflows to China surged as international fund managers bet on China's better growth prospects in the shadow of a volatile international economy, which eventually collapsed when the subprime problem exploded. Hence, excessive savings, rising asset prices and speculative global hot money flows are creating a self-feeding propensity that underlies the formation of asset bubbles in China.

In a nutshell, China's growing economy, with limited inflationary pressures, can put a rising floor under its asset prices, even though the domestic asset markets have shown high volatility. So far, the negative impact of China's volatile asset markets has been limited from a macro perspective, thanks to the 'firewall' that Beijing has maintained between the banking system and the asset markets. Specifically, Chinese banks are barred from speculating in the stock market. In the property market, there is a large (30 per cent or more) mandatory down payment ratio requirement for mortgage borrowers.[6] These strict measures have largely safeguarded the country's banking system from systemic risks stemming from excessive moves in asset prices.

China's bubble-prone macro environment reflects deeply rooted economic structural problems relating to its surplus labour force, spare capacity and excessive savings. The long-term solution to resolving these imbalances is to boost domestic consumption and cut savings. However, this will take years to accomplish. Thus, an interim solution is to allow capital outflow so as to reduce the domestic liquidity pressure on the economy and asset market. In terms of encouraging portfolio investment outflow, there are some signs that China is slowly relaxing capital control. For example, China expanded its list and investment quotas for foreigners to invest in the domestic A-share market[7] through the Qualified Foreign Institutional Investor (QFII) programme in 2007 and 2008, with an aim of boosting domestic stock market liquidity and rescuing the A-share market when it was in free fall. On the other hand, the Qualified Domestic Institutional Investor (QDII) programme, the reciprocal scheme that allows domestic investors to invest abroad, was put on hold between 2008 and November 2009 (Figure 7.4). However, since October 2009, Beijing has again been granting QDII licences, having realised that the risk to the domestic stock market is too much liquidity brewing an asset bubble, rather than free fall in the A-share market.

Since the outbreak of the credit quake in the western world, Beijing has also encouraged domestic firms to speed up the 'going global' business strategy, using its massive foreign reserves (over US$2 trillion by early 2010) to assist their expansion overseas. Allowing domestic investors to buy overseas equities serves the same purpose. The large valuation gap between domestic A-shares and Hong Kong-listed H-shares[8] means that Chinese domestic investors are forced to pay a hefty premium over foreign investors for the same stakes in a Chinese publicly traded firm (Figure 7.5). On average, A-shares in China are traded at a 30 per cent premium (87 per cent at the peak in early 2008) over their dual-listed H-share counterparts in Hong Kong. This is clearly suboptimal and

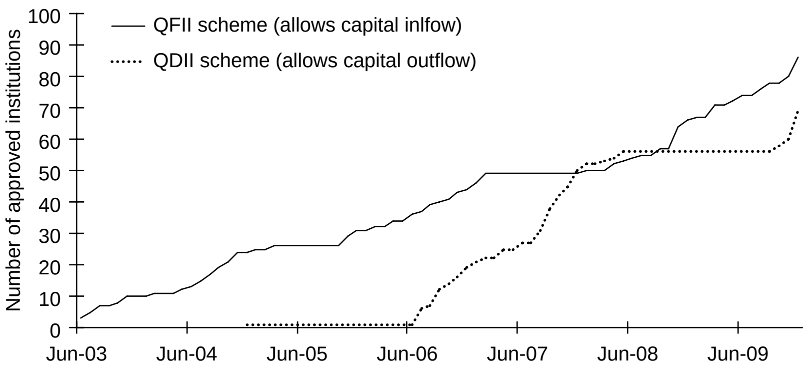

Figure 7.4 Only allowing capital inflow, not outflow
Source: CEIC.

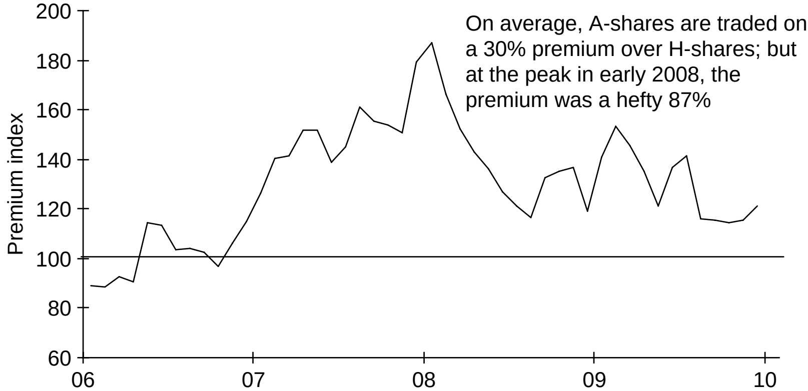

Figure 7.5 A-H share premium
Source: CEIC.

unsustainable in the long term. Since late 2009, the Chinese government has also been pondering whether to allow foreign firms to list on the mainland exchanges, including Exchange Traded Funds (ETFs) such as the HSI ETF, which includes stocks in the Hong Kong Hang Seng Index. Given the massive valuation gap between the Chinese and overseas markets, allowing onshore listing of foreign firms in China amounts to forcing Chinese domestic investors to subsidise those foreign firms if they are not allowed to buy foreign listed equities overseas. This will create pressure on the Chinese government to allow portfolio investment outflow as a longer-term solution to domestic asset price inflation.

The opportunity cost of investing overseas

Given China's high domestic savings, it will need to liberalise its capital account more aggressively to promote ODI in the post-subprime era in order to address its domestic over-investment problem, in my view. From a macroeconomic perspective, China can deploy its domestic savings: onshore physical assets, offshore physical assets and offshore financial assets. While the recent trend points to increasing offshore investment, the pace of ODI is still very slow, so that the stock of physical assets accounts for a very small share of domestic savings. The fact remains that China keeps tight capital controls over outbound capital flows, and over 70 per cent of China's total overseas assets are in the form of official foreign exchange reserves. Within the foreign reserves domain, about three-quarters are estimated to be in US dollar assets, with the bulk in US Treasury bonds. From this perspective, it makes sense to think of the opportunity cost of China's domestic fixed-asset investment, or formation of physical capital onshore, as the total returns on US Treasury bonds. In other words, China's investment decision between onshore and offshore vehicles boils down to the choice between building a toll road or railway in the country and buying US treasury bonds.

Since in the post-subprime environment massive deflationary forces and deleveraging effort will keep interest rates and US Treasury bond yields low for some years, the opportunity cost of onshore investment for China will be very low, or even negative if the potential renminbi appreciation against the US dollar is factored in. From this perspective, onshore investment, including infrastructure programmes with the effect of raising future income potential, is a better alternative for deploying China's massive savings. However, increasing domestic investment has raised concern about excessive investment causing diminishing returns and other adverse consequences for the country (for example, see *Asia Sentinel*, 2008; Grapper, 2009; Pettis, 2009).

The over-investment worry may not be as serious in China as many have assumed. Rapid investment growth will become a real concern if investment is not made in the infrastructure or related areas that lay the foundation for creating future income. In China's case, further investment in expanding the output capacity of the export industries will not help boost China's domestic demand to correct the current growth imbalance; it will only contribute to perpetuating China's current account surplus and result in more accumulation of foreign exchange reserves. While this type of investment, like infrastructure investment, acts as a counter-cyclical force to cushion economic downturns, it does not result in better allocation of national savings. Crucially, the return on this type of investment will likely be poor, as China's export-oriented manufacturing sector has been plagued by overcapacity. The low-return problem will likely be aggravated in the post-subprime years by persistent demand weakness in the developed world due to its post-bubble adjustment process, which features deleveraging, weak pricing power and constrained consumption.

However, if investments are made in quality infrastructure projects, they will generate externality and benefit the local economy over the long run in the form of improved productivity and profitability. For example, a new underground system will facilitate urbanisation and elevate the intrinsic value of a city, which in turn will increase real estate prices near the underground system, even though the system itself may not be profitable in the short term. Nevertheless, the persistence of high national savings in China means that the government will have to promote ODI more aggressively through capital account liberalisation as the next logical step to provide an effective means for deploying domestic savings. Beijing seems to be moving in this direction by encouraging ODI projects and increasing the quotas for QDII (see Figure 7.4 above).

Indeed, further liberalisation of capital to allow capital outflow should form part of China's structural rebalancing programme. Structural reform that helps boost domestic consumption takes time. Massive infrastructure investment programmes that can help boost consumption in the years to come are Beijing's preferred strategy for the medium term. But this strategy alone is, arguably, not the first–best solution to China's excessive saving problem, because diminishing returns will eventually set in as rapid development pushes the Chinese cities towards their capacity constraints. Capital account liberalisation that allows outbound investment to seek better returns should go a long way towards rebalancing China's economic structure.

A win–win foreign trade opportunity

In the post-subprime era, part of the global rebalancing exercise requires the US to reduce consumption and increase exports so as to shrink the

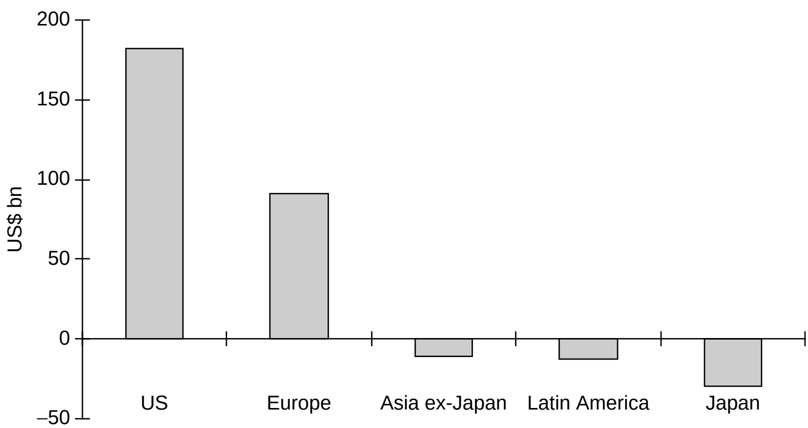

Figure 7.6 China's trade balance by region (2009)
Source: CEIC.

US current account deficit on a sustained basis. The US is the largest source of trade surplus for China (Figure 7.6). The only sensible way to solve America's bulging trade deficit with China is to sell more to the Chinese and buy less from them. While exchange rate adjustment (via Chinese renminbi revaluation) will help, from an export perspective it is essential to identify what China needs and what the US can offer. Economic evidence argues that an adjustment in US foreign trade policy, or trade restrictions to be more precise, would go a long way towards helping the Americans cut their trade deficit with China and rebalance their external balance sheets, while at the same time helping the Chinese acquire the needed technology and capital goods for further economic development.

Let us start by looking at what China needs. Chinese imports focus on two main categories: commodities and high-tech-oriented capital goods account for over 70 per cent of total Chinese imports (Figure 7.7). Indeed, these two import components have been gaining importance over the years as China's industrialisation progressed. This development is natural, and China's poor endowment of capital, technology and natural resources will likely cause this import trend to continue for many years. However, as a global leader in high-tech manufacturing, the US has failed to capitalise on China's phenomenal growth opportunities due to export restrictions. Sales of Advanced Technology products (ATP) have been under strict scrutiny by the US authorities due to national security concerns.

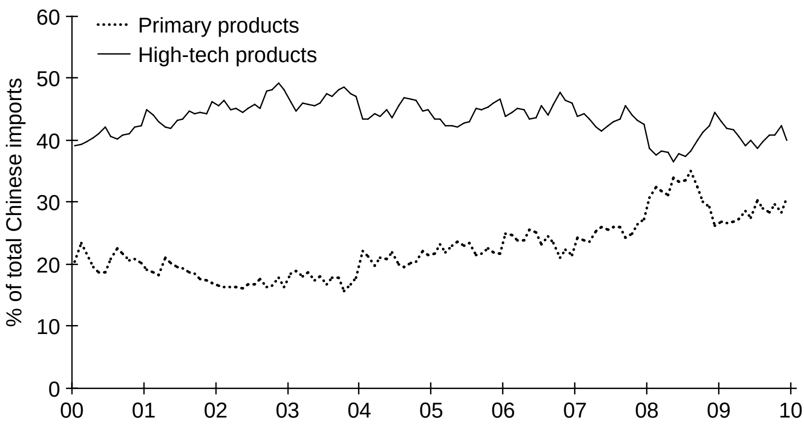

Figure 7.7 What does China import?
Source: CEIC.

Generally, ATP, as defined by the US government, includes ten industry groups, namely Biotechnology, Life Science, Opto-Electronics, Information & Communications, Electronics, Flexible Manufacturing, Advanced Materials, Aerospace, Weapons and Nuclear Technology. The US government requires US exporters to secure approval for exporting 'dual-use' (civilian and military) technologies, including aircraft engines, lasers, telecommunications, aircraft materials and other fields of interest, to China for fear that these goods could be used to enhance China's military power. Due to the lucrative Chinese market for these goods, lobbying effort by American high-tech exporters and conglomerates to relax these controls has been intensifying. In 2007, the US government finally set up a 'Validated End-User' programme (VEU) that permits US export firms to sell selected technologies and other items to trusted customers in China without the need for special export licences. The aim of the VEU programme is to enable American exporters to sell more easily to Chinese companies that have a good record of responsible use of sensitive US technology and capital goods for their intended civilian purpose. The fact is that the licensing system for exporting dual-use products remains very complicated. Crucially, the general US political attitude makes companies in both China and the US unwilling to risk any sort of backlash or even potential prosecution resulting from direct sales of these sensitive goods. So American exports of dual-use goods to China remain constrained.

However, US wariness of selling to China has generated profitable opportunities for other countries, including Europe and Asia. The potential loss of business opportunities from this US trade policy towards China has become increasingly evident, as American ATP producers are rapidly losing market share in China to their European and Asian competitors (Figures 7.8 and 7.9). The other side of the coin is that, despite rising Chinese demand for high-tech products, US exports of ATP products to China in recent years have basically remained flat as a share of total US ATP exports (Figure 7.10). This looks embarrassing for the US, given America's leading status in manufacturing and technological capabilities.

All this suggests that American high-tech producers have failed to capitalise on China's demand, which has been the only major source of demand growth in recent years. This can partly be blamed on the US export control policy towards China. In the post-subprime era, while the developed world is stuck with a prolonged adjustment process, China's economic growth is going to gain more importance on a global scale. American firms can ill afford to ignore this market much longer. Given US comparative advantage, any credible plan for

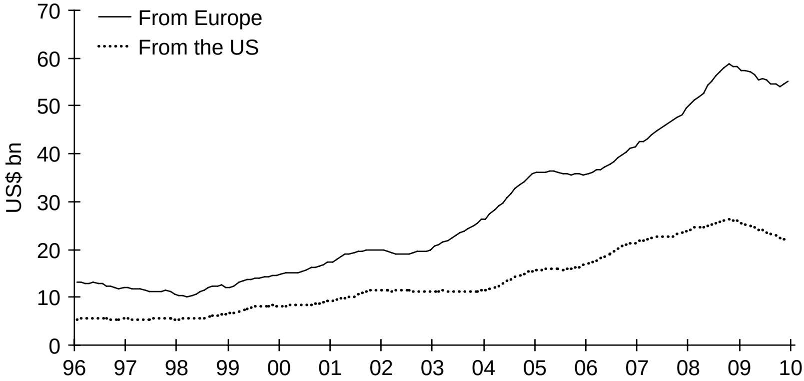

Figure 7.8 Chinese imports of ATP products*

*Data series are 12-month rolling sums; include Chinese imports of nuclear reactors and electrical machinery equipment.

Source: CEIC.

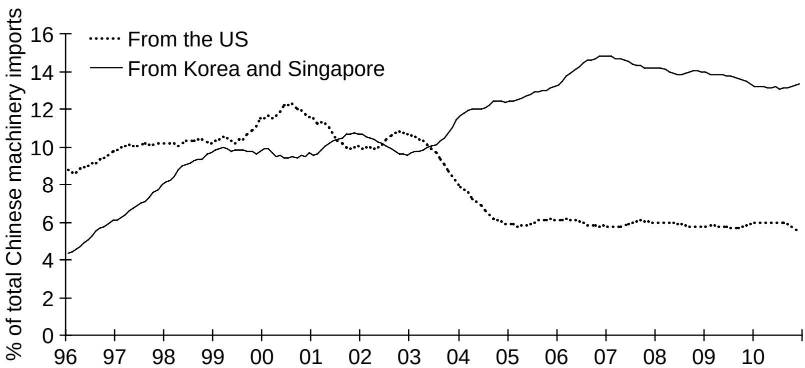

Figure 7.9 Chinese machinery imports

Note: Data series are 12-month rolling sums; include Chinese imports of machinery equipment and electrical products.

Source: CEIC.

reviving the domestic manufacturing industry and creating jobs will have to focus on the high-tech industry. In 2006, the Bush administration established a working group of senior officials in an attempt to work with China to sort out export control cooperation and facilitate Sino-US trade. But, hitherto, there has been no progress. If the Obama

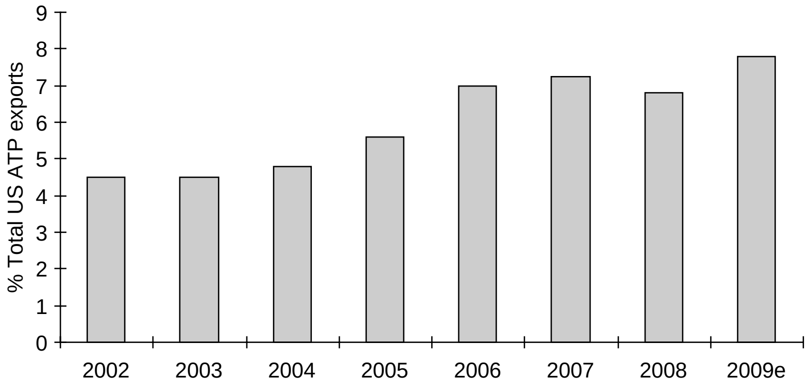

Figure 7.10 US ATP exports to China (2009)
Source: CEIC.

administration can follow up on the Bush initiatives and move towards policy liberalisation on high-tech sales to China, it may actually open up a win–win opportunity for both China and the US in the post-subprime world, where fostering international trade would be a major way to boost global growth against an otherwise constrained economic backdrop.

Indeed, the subprime crisis may well be a wake-up call for the US to rethink its policy attitude towards China, if it wishes to move on as a global leader. America's economic policy towards China under the Obama administration has so far been quite similar to earlier strategies under Bill Clinton and George W. Bush, that is, to force the will of the US upon China in bilateral meetings. This is not working, because the world is completely different today. During the Clinton years, US military power was at its height; the country was experiencing its strongest ever economic expansion; and US information technology was changing the world's economic landscape. Back then, China was still emerging from backwardness. So it was logical for America's policy towards China to be heavily bilateral. The US had the leverage to press China to open markets, deregulate banks and grant more foreign access to its corporate sector. The centre stage of the US China policy was the creation of the Joint Committee on Commerce and Trade and a similar forum for financial matters.

During the Bush administration, in 2006 US China policy chief and Treasury Secretary Hank Paulson established the Strategic Economic

Dialogue (SED) between the two countries. This forum consolidated trade and finance and included a broader array of topics and ministers than the two in the previous Clinton administration. But the SED remained strictly bilateral, based on the premise that America could still compel China to change its policies and economic behaviour. The SED has been renamed the Strategic and Economic Dialogue (SaED) by the Obama government, but is not materially different from its predecessor, because it is still purely bilateral. The SaED is chaired by both the Treasury Secretary and the Secretary of State. Yet the US administration still assumes it has the clout to force upon China the political and economic changes that the US wants.

The problem with continuing this bilateralism is that the US is now a pale shadow of what it was a decade ago. Its fiscal situation is out of control, its banking system crippled and discredited, its military stretched by two protracted wars. At the same time, China's economic ascent has raised eyebrows, with robust GDP growth lifting hundreds of millions out of poverty, an expanding role in global trade and growing diplomatic ties with Asia, Latin America and Africa. Most importantly, it has amassed US$2.4 trillion in foreign reserves and has become a critical creditor of the US.

Though China is unlikely to become a superpower any time soon (see Chapter 5), America's superpower leverage has diminished significantly. And China knows it. Hence, there is little use in Washington pushing Beijing to comply with US demands, such as revaluing the Chinese renminbi or signing a climate change treaty or embracing Internet freedom. New times need new policies. A plausible way to make China play by the international rules would be to weave a web of multilateral arrangements into which China could fit and by which China would be bound. The World Trade Organization is an example, in which China is obliged to play by the rules that a number of leading countries have subscribed to, and which has an orderly process of arbitration. While the US still has its leadership clout, it had better change tactics to marshalling multilateral support for other such arrangements.

In other words, Washington should increase efforts to work with other countries on enforcing changes that China should make in the global interest, such as a climate change treaty and the operation of the Internet. To put it bluntly, the US alone can no longer dictate the terms through bilateral negotiation. But, with skilful diplomacy that encourages other major countries, notably Europe, Japan and some large emerging markets, to buy into legally binding multilateral rules, it has a better chance of getting China on board. This will no doubt require the US to think outside the box and change its conventional economic policy attitude towards China (which also has its share of changes to make), but it is certainly worth a try if America wishes to capitalise on a potential win–win opportunity with China which has arisen as an incidental benefit of the subprime crisis.

8
Opportunity for Structural Changes

China's economic restructuring effort had started even before the global credit quake. The subprime debacle just puts these structural shifts in the spotlight and highlights the urgency of Beijing's rebalancing effort. The success of any structural shift in China's growth model will ensure China's long-term growth sustainability and provide a strong underpinning for Chinese asset values and investment returns. With a large, urbanising population[1] that is growing rich, financial liberalisation will help unleash huge consumption power in the years to come, giving rise to significant economic growth investment opportunities. Contrary to common perception, there are initial signs that Beijing's 'expenditure-switching' development strategy might be yielding results, with the growth in the export and investment segments slowing down while consumption growth is rising. Investment also seems to be shifting from the rich eastern seaboard to the less developed central and western regions.

Beijing's plans to improve the social safety net, notably in education and medical insurance, may mark the beginning of an end to China's excessive savings and a steady rise in consumption in the coming years. Indeed, the Chinese economy is now at the edge of a consumption boom, as its per capita income has reached US$6,000 a year in major urban cities. Beijing's continued effort to liberalise the domestic financial sector will present huge opportunities not only for boosting the country's growth but also for improving investment efficiency and development. Of particular importance is the opening of China's new venture capital stock exchange (the Chinext) in Shenzhen in late 2009, which is the culmination of ten years of planning. But, despite the latest financial liberalisation effort, there is still significant inefficiency in China's initial public offering (IPO) process. If not corrected, the IPO process will just create a strong incentive for business owners and venture capitalists to rush to list and then exit, with broader negative consequences for the economy, and the financial sector in particular.

Structural changes underway

The subprime crisis destroyed external demand, and with it China's export machine. As a result, net exports[2] began to make a negative contribution to China's GDP growth from 2008, after being a major growth contributor in previous years (Figure 8.1). However, this export destruction turned out to be a blessing in disguise, as it forced China to engage in structural changes to rebalance its growth by reducing its reliance on exports and enlarging its domestic consumption to generate growth momentum. Hence, GDP growth remained strong in 2009, despite the negative contribution from net exports (Figure 8.1).

In fact, even before the outbreak of the western world's credit quake, Beijing was trying to change the growth structure of the country, albeit at a very slow pace which is almost indiscernible unless one steps back and looks at the process in perspective. The subprime debacle just puts this structural shift in the spotlight and highlights the urgency of Beijing's rebalancing effort. In other words, China's structural growth quality was beginning to improve even before the crisis. While the changes are still at an initial stage, the success of any structural shift in China's growth model will provide a strong

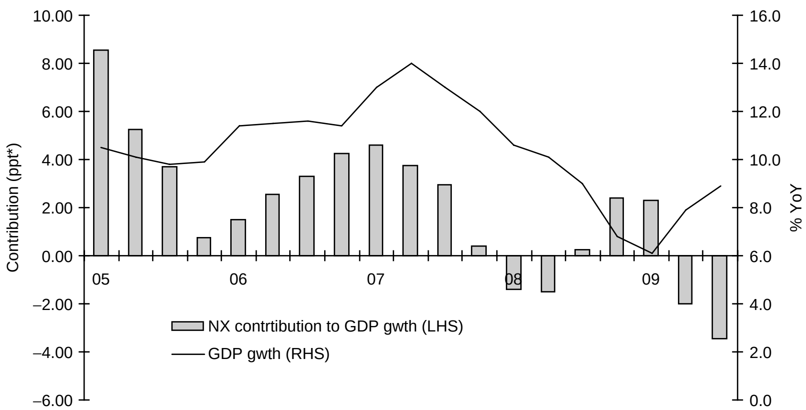

Figure 8.1 Net exports' contribution to China's GDP growth

*ppt (percentage points).

Sources: CEIC, PAAMC (HK).

underpinning for Chinese asset values and investment returns in the long term.

There are initial signs that Beijing's 'expenditure-switching', from export- and investment-driven to domestic-driven growth, is yielding some results. First of all, central government's massive RMB4 trillion stimulus package (to combat the impact of the subprime crisis), implemented at the end of 2008, successfully boosted private sector investment and consumption during the subprime crisis. Note that domestic consumption, as approximated by retail sales (Figure 8.2), has grown steadily despite the subprime shock. If this consumer momentum can be sustained, it will be a significant step towards correcting China's growth imbalance by shifting the growth driver from exports to consumption. With a large, urbanising population that is growing rich, financial liberalisation will help unleash huge consumption power in the years to come.

Since 2005, Beijing has been engineering a strategic policy shift from boosting growth quantity to improving growth quality. Administrative measures have been imposed to curb export growth and investment in base metals and other energy and resource-intensive high-pollution industries. At the same time, Beijing has also been making efforts to boost consumer spending via fiscal measures, improving the social welfare net and spending programmes in rural areas. On the industrial side, the Chinese government has also acted to avoid further build-up of excess capacity and improve the fragmented structure of some industries. The latter has been especially problematic in recent years as the

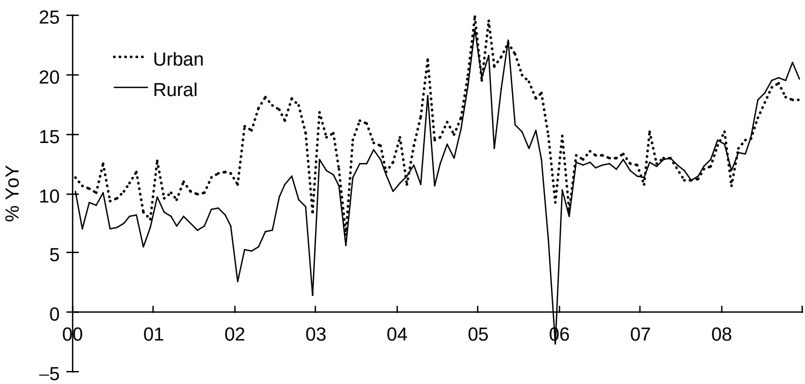

Figure 8.2 China real retail sales*

* Deflated by retail prices.

Sources: CEIC.

booming economy prompted many small, but uneconomical, players to enter the industrial sector. Many of these newcomers were, and still are, ill-equipped and inefficient, but they are in direct competition with the large firms for both market share and raw materials.

To the authorities, overcapacity and fragmentation are a bad combination for efficiency, and are clearly undesirable. The metals sector is a prime target in the Chinese government's campaign to weed out excesses, as the capacity build-up has been substantial since 2003 (Figure 8.3). The government has set stringent industrial policies to restrict capital spending in the non-ferrous and steel sectors, with a clear target of trimming inefficient facilities by at least a third by 2012. If sustained, this clean-up effort holds the key to enhancing the profitability and pricing power of top-tier Chinese metals producers, both in the domestic market and globally.

Beijing is also focusing on improving energy and resource efficiency of the economy, and improving the country's serious pollution problem. It is estimated that the Chinese economy's energy intensity (i.e. energy use per unit of output) is about five times that of advanced countries. The combination of dramatic expansion of energy and resource-intensive industries over the past few years and poor endowment with natural resources means that China is increasingly dependent on external supplies of key energy and materials. The massive boom in the commodity sector in 2008 led to severe margin squeeze within the Chinese manufacturing sector and significant bottleneck constraints in the economy. The country's escalating pollution problem has also become an increasingly visible and costly issue.

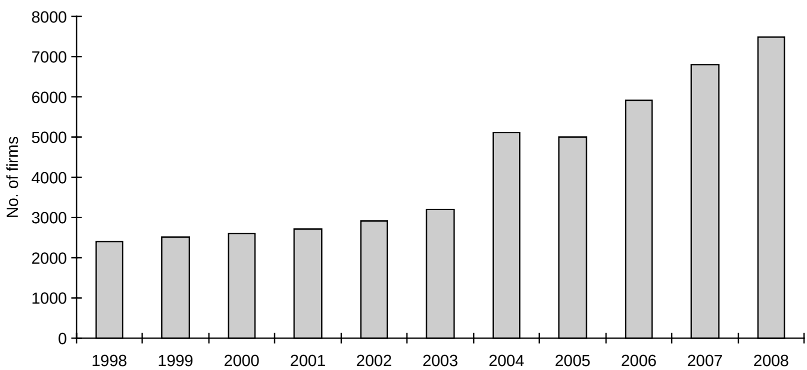

Figure 8.3 Number of enterprises in the non-ferrous metals sector
Source: CEIC.

To tackle these problems, Beijing is gradually liberalising domestic energy prices and using fiscal subsidies to support R&D spending on energy-efficient industries. In 2008, it set a three-year target of boosting sales of non-conventional engine vehicles, including hybrid and electric cars, to 5 per cent (or about half a million cars) of total auto sales from zero. In 2009, it started building five nuclear power plants for production of clean energy. Meanwhile, China's installed wind power facilities are already the fourth largest in the world, and it plans to increase total capacity from 12 GW in 2009 to 100 GW by 2020, which will represent an annual growth rate of over 20 per cent. The government has also been trying to reduce the economy's dependence on capital spending and exports, and increase the contribution of the consumer and service sector to GDP growth. The government-led capital spending programme implemented during the subprime crisis was concentrated on major bottleneck infrastructure rather than manufacturing capacity.

Some initial signs are showing that this expenditure-switching strategy might be starting to shift China's growth structure in the right direction (even without the subprime shock) – less growth in exports and investment but more in consumption (Figure 8.4). To boost consumption, the authorities have been implementing policies to facilitate urbanisation, improve the social safety net, labour mobility and labour rights protection, and to shift income distribution towards the rural poor, though these measures are still a long way from reaching their end goals.

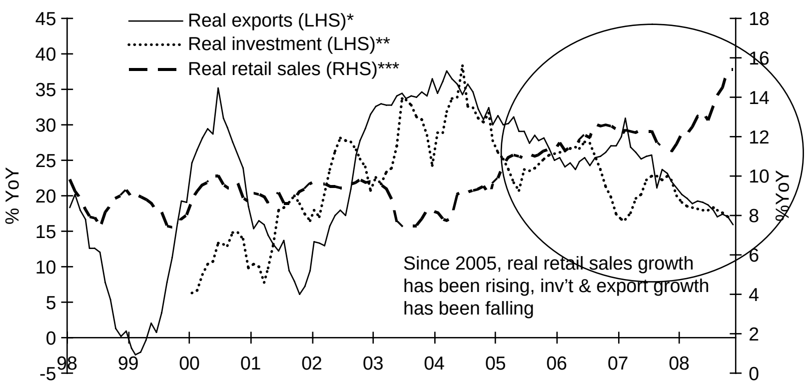

Figure 8.4 Initial signs of structural shift in China's growth

All series are 6mma, *deflated by HK re-export prices, **deflated by corporate good prices, ***deflated by CPI.

Sources: CEIC.

The government's efforts to downsize and discourage the exports of industries with excess capacity that cause significant environmental damage have also shown some initial results. For example, output growth of steel and cement (two known polluting industries with excess capacity) has plunged from over 20 per cent a year to below 10 per cent, while the export share of metals (another polluting

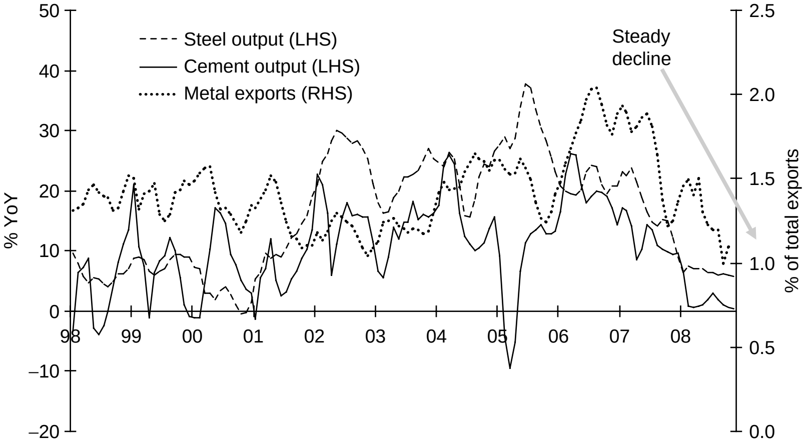

Figure 8.5 Growth rebalancing*

*All series in 3-mth moving averages.

Sources: CEIC.

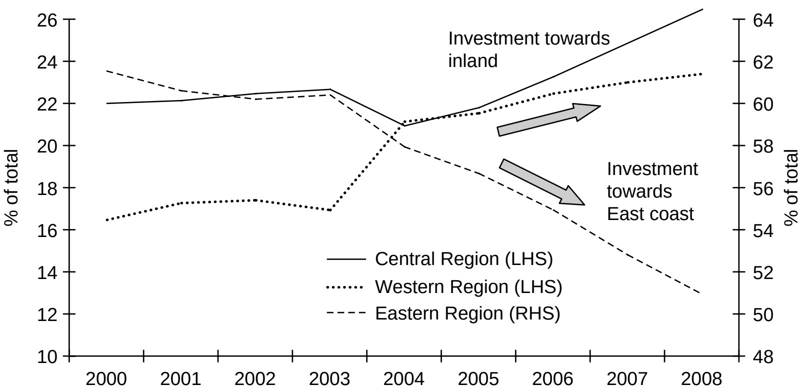

Figure 8.6 Investment re-shuffling towards inland

Source: CEIC.

industry with a serious overcapacity problem) has fallen by over half since 2006 (Figure 8.5). Finally, investment growth has been shifting from the rich eastern seaboard to the central and western regions (Figure 8.6), reflecting the initial success of the government's investment reshuffling strategy to boost the regional laggards. If this trend towards improving growth quality is sustained, it will ensure China's long-term growth sustainability and provide a strong structural underpinning for Chinese asset values.

Unleashing consumption power

The subprime crisis has provided a good opportunity for China to change its growth model. Chinese consumers could well emerge as the key growth engine when the export engine dies under the weight of the post-crisis multi-year economic adjustment. First, a key reason for Chinese consumers' high propensity to save has been the loss of the country's safety net. Previously, China's state-owned enterprises (SOEs) provided the country's socialist safety net, including free lodging, transport, medical services, and even food. But those free services disappeared with the collapse of the SOE sector in the late 1990s when Beijing's enterprise reform weeded out inefficient SOEs. Government social welfare spending has been rising in recent years, but remains insufficient to give the people a sense of security.

For example, Chinese government spending on health care was only 1.8 per cent of GDP in 2004 (UNDP 2007–8, the latest data available at the time of writing). This compares poorly with 8.1 per cent in Norway, 6.9 per cent in the US, 6.5 per cent in the Czech Republic, and 3 per cent in Mexico. Meanwhile, Chinese household expenditure on health care has increased sharply since the mid-1990s (Figure 8.7). This has, in turn, reduced discretionary buying power for other goods. Crucially, the lack of a sufficient social safety net has adversely affected consumer behaviour by raising precautionary demand for money and, hence, household savings.

In 2008, central leadership reached a consensus that social coverage expansion should head the policy agenda to address the consumption deficiency problem. A series of measures have been adopted, the most concrete being the health care reform plan that was started in early 2009. Beijing's plans to improve the social safety net, notably in education and medical insurance, may mark the beginning of an end to China's excessive savings and a steady rise in consumption in the coming years. Its spending on education and health care have already increased rapidly since 2006 (Figure 8.8). It now plans to spend 3 per

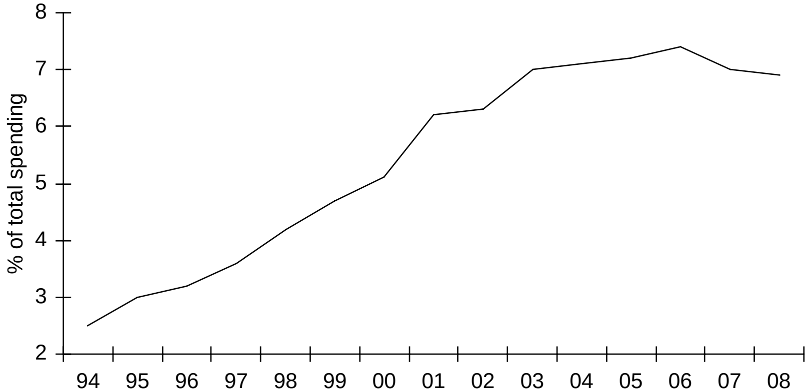

Figure 8.7 Household medical & medicine expenses
Source: CEIC.

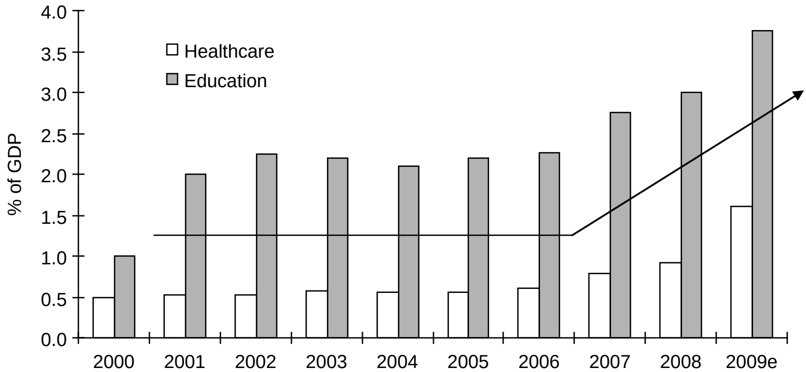

Figure 8.8 Rising government spending on social safety net
Source: CEIC.

cent of GDP, or RMB850 billion, to ensure that at least 90 per cent of the urban workforce will have basic health care coverage by 2011. Currently, fewer than half have health care insurance (Figure 8.9).

The medical insurance plan is seen as Beijing's most concrete step to address the root cause of China's relatively weak consumer sector, because the inadequate social security system has been eroding consumer confidence and, hence, spending power. Research by the International Monetary Fund (IMF) suggests that the impact of broader public health care coverage would be quite large, and, in the case of

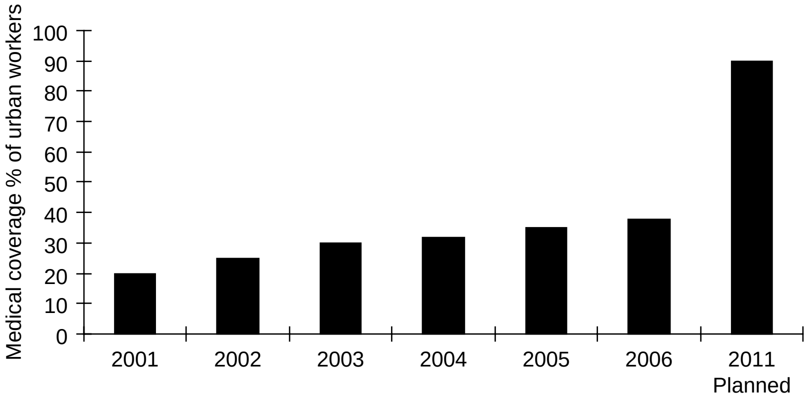

Figure 8.9 Beijing aims at increasing medical coverage sharply
Source: CEIC.

China, each additional yuan in government health spending would boost urban consumption by two yuan (Barnett and Brooks, 2010). Though it remains to be seen whether the authorities will be able to achieve their aggressive medical insurance target by 2011, there is little doubt that increasing the social safety net coverage will help unleash pent-up consumer demand.

To boost rural income, the government has been cutting agricultural taxes and fees, increasing fiscal transfers to the farmers, raising minimum procurement prices for agricultural goods, and starting to provide some basic medical and pension coverage for the rural population. Further, to fight the negative economic impact of the subprime crisis, in 2009 the government started to provide rural households with direct subsidies for buying white goods, such as home appliances and electronics. All this is intended to release pent-up demand in the countryside, where currently possession of consumer electronics, electrical appliances and consumer durable goods amounts to less than half that of urban households (Figure 8.10).

The Chinese economy is now at the edge of a consumption boom, as its per capita income in large cities (with large spending power), such as Shanghai and Beijing, has reached an average of US$6,000 a year, though on a national scale per capita income is still about US$3,500. Why is US$6,000 so important? Empirical evidence shows that all countries that have crossed the US$6,000 per capita income mark experienced a surge in consumer demand (with an average growth of 29 per cent within two years of hitting the US$6,000 mark), supported by a

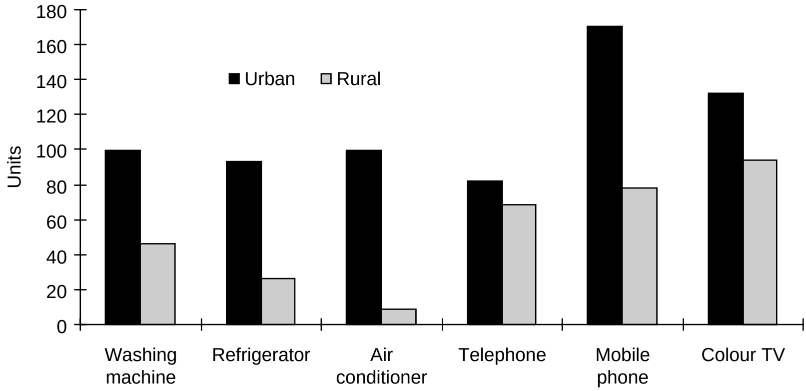

Figure 8.10 Consumer goods/100 households
Source: CEIC.

surge in consumer credit growth (by an average of 52 per cent within two years; see Table 8.1).

The logic for this is simple. People get rich by working hard. Then they get their first credit card, their first car, their air conditioner and so on. A critical mass of spending power seems to be created at that US$6,000 per capita income level. Banks can then lend to people who want to enjoy their new-found wealth through leisure, including eating better, dining out and buying nicer clothing. As people get rich, they also tend to buy insurance to protect their wealth and physical conditions. The propensity to consume seems to continue to rise from the US$6,000 to US$12,000 annual per capita income levels. Credit growth also tends to increase at the fastest rate in this income range.

China's large cities are just at the threshold of this rising propensity-to-consume stage. And rising Chinese spending is certainly sustainable for many years to come, as per capita income of the population outside the large cities grows towards US$6,000. Crucially, the level of leverage among Chinese consumers is still very low, with personal loans (including mortgage loans) accounting for only about 12 per cent of total bank lending. Over 85 per cent of China's household debt is in mortgages. This implies that leveraged consumption, such as credit cards, car loans and instalment credit, is extremely limited. In terms of spending on cars, health, insurance premiums and ownership of credit cards, China is way below most of the other major countries (Table 8.2). So, over the longer term, Chinese consumers will benefit from further financial liberalisation, with the government aiming to develop the

Table 8.1 Consumption takes off after per capita income reaches US$6,000

	Year when per capita income hit $6,000	**Consumption growth 2 years later (per cent)**	**Consumer credit growth 2 years later (per cent)**
US	1972	20	31
Japan	1977	22	74
UK	1978	38	52
Hong Kong	1980	39	46
Singapore	1982	15	37
Taiwan	1985	22	40
Korea	1989	45	82
Malaysia	1993	31	56
Average		**29**	**52**

Sources: CEIC, author.

Table 8.2 China far behind in consumption

	Per capita GDP (2008)*	**Cars per 100 persons**	**Health spending per capita (US$)**	**Credit cards per person**	**Insurance premium per capita (US$)**
US	45,931	47.8	6,700	2.35	4,086
UK	44,115	37.3	2,800	1.10	7,113
Japan	33,710	39.5	2,500	1.18	3,319
Hong Kong	32,000	9.18	1,300	1.50	3,373
Taiwan	30,345	24.1	1,450	1.00	2,628
Singapore	28,313	11.73	1,250	1.38	2,776
Korea	21,200	25.4	1,500	2.10	2,384
Brazil	10,643	3.9	800	0.80	202
Average		24.9	2,288	1.4	3,235
China (in large cities)	**6,000**	**2.2**	**120**	**0.20**	**70**
How far behind is China?		**91 per cent**	**95 per cent**	**86 per cent**	**98 per cent**

*In PPP (purchasing power parity) terms.

Sources: CEIC, author.

consumer finance market. To help better manage credit risk and build an infrastructure for consumer lending, the government has developed a nationwide personal credit monitoring system. With massive liquidity on their balance sheets, as seen in their low (70 per cent) average loan-to-deposit ratio, Chinese banks are in a much stronger position than ever before to increase lending to consumers.

This is not to say that there will be an explosive consumption boom in China in the near future, because these trends will take a long time to develop fully. China's domestic consumption has been deeply depressed by the skewed supply-side expansion growth model. But, with massive household savings, an under-leveraged consumer sector, improving social welfare and a critical consumption mass being formed, it is very likely that average Chinese consumption power will grow significantly in the coming years. A stronger consumer sector will reduce China's dependence on external demand as a source of growth and enhance the country's growth sustainability. This will be especially crucial in the coming years, because consumers in the developed world will be stuck in a structural downward adjustment trend.

Financial liberalisation

The subprime crisis has crippled the western world's financial system and narrowed the gap between China and the west in development of the financial sector. Re-regulation of the financial sector in western countries does indeed represent a setback in their financial liberalisation process. The global credit quake thus presents an opportunity for Chinese financial reform to play catch-up as an integral part of its economic restructuring effort. Indeed, Beijing's continued effort to liberalise the domestic financial sector will present huge opportunities not only for boosting the country's growth but also for improving investment efficiency and development. Of particular importance is the opening of China's new venture capital stock exchange (the Chinext) in Shenzhen (a city in southern China) in October 2009. It is the culmination of ten years of planning, and is designed to give small, high-tech start-ups a much-needed platform for raising capital.

According to the World Bank Investment Climate Survey for China, Chinese small and medium-sized enterprises (SMEs) only get 12 per cent of their working capital from bank loans. This is a much lower rate than in the other, much smaller, Asian countries, such as Malaysia (21 per cent) and the Philippines (24 per cent).[3] The IMF also notes that the smaller the firm, the more credit-constrained it appears to be in China (see Jahangir and Li, 2007). With bank credit hard to obtain, Chinese SMEs typically rely on retained earnings and informal financing. They are forced to keep large cash balances for working capital and contingency purposes. Thus, the credit constraints directly contribute to China's high corporate savings rate, which is itself a major factor in global imbalances. The opening of the Chinext is a means of helping resolve this problem by allowing smaller firms to list on the stock exchange (but things are not that simple; see next section).

There is certainly a lot of room for China's financial sector to expand. At the end of 2009, China's 1,653 listed companies were mainly traded on the Shanghai and Shenzhen main boards (the largest companies trade in Shanghai, which hosts 55 per cent of companies and accounts for 73 per cent of market capitalisation). Companies with initial public offerings (IPOs) of over RMB100 million are all directed to list on the Shanghai exchange only. Smaller blue chips trade on Shenzhen's main board, which hosts 28 per cent of the listed companies and accounts for 23 per cent of market capitalisation. At 63 percent of GDP, the total market capitalisation of China's Shanghai and Shenzhen senior exchanges is in the middle of its emerging market comparators. China's stock market is far smaller than India's and Malaysia's (Figure 8.11).

Since 1999, the Chinese authorities have been planning to create a venture exchange that would complement the exchanges in Shanghai and Shenzhen and provide a fund-raising platform for high-tech, modern agriculture or other innovative activities. On 30 October 2009, the

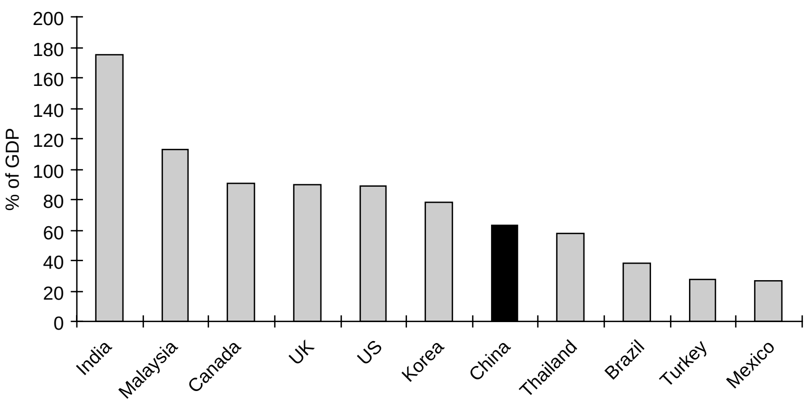

Figure 8.11 Stock market capitalisation
Source: CEIC.

Shenzhen Stock Exchange finally opened its new venture exchange, the 'Chinext', which is designed to give high-tech start-ups a platform from which to raise capital. The opening of Chinext reinforces Shenzhen's position as mainland China's second largest financial centre, and will likely add to the continued growth of its financial services sector.

Not all smooth sailing

Despite the latest financial liberalisation effort, the Chinext's first trading day highlighted the fact that there was still significant inefficiency in China's IPO process. This has reduced the credibility of public listing as a way of fund-raising. Further, old habits die hard. Despite over fifteen years of financial reform (see also Chapter 5), the decision on which companies could list on Chinext, especially in the first tranche, is still subject to the influence of central government, which is often politically driven at the expense of commercial interest. Most of the first batch of companies listed on Chinext appeared to be rather profitable mid-sized firms, not start-ups, as the government wanted to ensure the success of the exchange (which is also a face issue) and hence reinforce its credibility (at least on the surface) by allowing relatively solid companies to list first.

However, on the first trading day on the Chinext, share prices on average doubled from their IPO issue prices.[4] This showed clearly that the inefficiency of China's IPO process was alive and well, as the underwriters' profit from the IPOs appeared to be equal to the capital raised by the listing firms. The surging IPO prices phenomenon has also led to corruption among government officials and company executives. Fundamentally, such an IPO process creates the perception that listing a company is a licence to print money for the benefit of insiders rather than an efficient way to raise capital. The local newspapers are full of stories of multimillionaires created by going public. Many market players also noted that the majority of venture capitalists and company owners hoping to list on Chinext had no desire to build a successful company. All they want is to get a company listed, keep the value of their shares high for a period of time (a year or longer) and then cash out.

The average price–earnings (PE) ratio of the Chinext shares jumped from fifty-six times on listing (in October) to 120 times in December. During the same period, the twenty-eight shares on the Chinext exchange had risen in price by an average of ten per cent. But not all IPOs increased in price; some lost significant value. This suggests that it was the listing process itself, not the ongoing trading process, that caused the huge PE multiples. This was clearly unhealthy. Increasing the number of listed companies may help reduce the exuberance. There are currently between 2,000 and 3,000 qualified companies hoping to be listed on Chinext. The goal of the exchange is to have between 100 and 200 listed companies by its first anniversary, in October 2010. In three to five years, the target is to have 1,800 listed companies. However, there may be so much liquidity that it cannot be absorbed even with an increased supply of listed companies. Opening the capital account to allow capital outflow and improving financial regulations and investors' education are long-term measures needed to complement the increase in share supply to create a rational market.

Meanwhile, an increase in new issues is not risk-free. The first twenty-eight companies listed on Chinext were carefully examined. However, if Chinext is to expand quickly with new listings, there may be a lot less time to carry out due diligence on the new issues. Despite the fact that the China Securities Regulatory Commission (CSRC, China's securities watchdog) has committed itself to creating a department specifically to oversee Chinext, there may not be enough qualified analysts and auditors to ensure that all the new listings are well-run companies and that their statements are accurate. Indeed, this lack of qualified personnel is a general problem in China's financial and accounting areas. If the current market inefficiency that creates excessive rewards for listing companies is not corrected, the IPO process will just create a strong incentive for business owners and venture capitalists to rush to list and then 'take the money and run'. Further research will be needed to determine what effect this will have on the broader economy, but logically it cannot be good for the creation and development of good, solid, long-term companies or credible equity exchanges.

9
Risks behind the Opportunities

China's economic expansion and structural change opportunities in the post-subprime years are certainly not going to be smooth. One imminent risk is a continuing (or even worsening) disequilibrium between aggregate saving and investment on a global scale in the post-subprime world. Arguably, the problem at the root of China's persistent under-consumption problem is the Chinese government's development policy of making China the world's pre-eminent producer nation. This policy is in fact a social policy aimed at maintaining the stability of the country. All other factors, including a broken social safety net and an ageing population needing to save for retirement, are aggravating factors, in my view. As long as this 'social production' policy orientation remains unchanged, it will hold back consumption and render any rebalancing effort towards consumption-driven growth ineffective. If China cannot rebalance, the other (consumption) side of the world cannot rebalance.

Among all the risks that may materialise, a bust of China's asset bubbles, wreaking havoc in the economy and sending shock waves across the world, is the least likely outcome. However, the bubble-prone nature of the Chinese economy, notably its property sector, which is the pulse of China's boom–bust cycles, is a real risk that could periodically threaten the stability of China and the world economy. Fundamentally, the combination of China's massive domestic savings, stringent capital account controls and persistent global capital inflows has created a macro environment that is very conducive to asset price overshoots. Policy distortion and regulatory inefficiency only aggravate China's boom–bust tendency. This is a long-term destabilising factor for China.

Boosting Chinese consumption is very difficult, not only because of Beijing's production-orientated policy, but also because the government simply has not done enough to make that transition. Last but not least, it appears increasingly likely that China is returning to interventionism, thus potentially reversing the market liberalisation efforts of the past thirty-two years.

Why is it so difficult to rebalance?

'When there are risks, there are opportunities.' This famous Chinese proverb has a positive connotation, and, as I have argued in previous chapters, the subprime crisis has to a certain extent vindicated that connotation for China. However, the complicated macro and political forces behind the Chinese economic restructuring effort ensure that the future will not all be smooth sailing. So it pays to look at this proverb in reverse and to ask what risks underlie the opportunities for China's economic and structural changes. Fundamental to the Chinese (and the world's) imbalance problem is China's excess savings rate, which is a mirror of America's excess consumption.

Many explanations have been offered for the frugality of Chinese consumers. Social safety nets are still inadequate, so Chinese families have to save for a rainy day. The Chinese society is ageing quickly, due to the government's population control policy for the past three decades, so households have to save for retirement and supporting elderly dependants. To add an entertaining twist to the serious reasons for frugality, some even say that, since young Chinese men outnumber young Chinese women by a wide margin, households with sons have to save assets to compete in the marriage market.

However, the main explanation is, arguably, the government's development policy, aimed at making China the world's preeminent producer nation. It also wants China eventually to become a leader in the production of advanced technologies. To a large extent, it is this production orientation that strangles Chinese consumption, with other explanations aggravating the effect of this obsession with production. The US would like to retain its lead on production of advanced technology, but its economy is orientated towards consumption rather than production. So, as long as the Chinese production policy orientation remains unchanged, the risk to the Chinese, and the world, economy is a continued disequilibrium between aggregate saving and investment on a global scale in the post-subprime world.

It will be very difficult to get the Chinese to give up their obsession with production and shift to a consumption orientation within a few years. The Americans assume that the purpose of an economy is to provide opportunities to consume. So everything they do, from building infrastructure to investment in technology and capital goods, is geared towards increasing consumption. But the Chinese industrial policy is bluntly direct. They want foreign know-how and they want it firsthand. So China continues to make production in China, often in joint ventures with Chinese companies, a condition of many sales by US and other foreign firms.

Through production, the Chinese government can create more jobs. But excess production, because of insufficient domestic consumption, means that China will have to rely on exports to keep the job-creating machine going. Every year, tens of millions of poor rural Chinese pour into large cities to look for better-paying jobs. If they fail to find them, the country risks social instability. Public disorder is the single most important risk in the leadership's mind.[1] The governing elite would rather create more export jobs, even at the cost of subsiding foreign buyers, than risk job shortages by pursuing economic restructuring policies too fast or pushing up the RMB exchange rate to address the currency's undervaluation problem.[2]

To this extent, China's production/export policy is really a social policy, which is designed to maintain social order. The essence of this policy has been reflected in Beijing's repeated claim that the economy needs at least 8 per cent growth a year to create enough jobs for the huge labour force. That is why China has been unwilling to unpeg the RMB from the USD, despite its undervaluation and distortion of the real economy, and unwilling to speed up economic restructuring, as these moves will inflict economic pains, reduce job growth and risk social unrest. As a result of this need for constant job creation, China is unlikely to move as quickly as many would like to see in terms of rebalancing between domestic consumption and exports. If China cannot rebalance, the other (consumption) side of the world cannot rebalance. Hence, the risk in the post-subprime era is that the global imbalance may remain, or may even get worse (see also Chapter 2).

But China will not bust

Some people argue that a big risk in the post-subprime world would be a China bust (Chang, 2010; Javers, 2009; New York Times, 2010). Their main argument was that the enormous credit expansion[3] and government stimulus that Beijing had implemented between late 2008 and mid-2009 to fight the subprime impact had backfired and bred huge asset bubbles in the country, notably in the property sector. The asset bubbles would inevitably burst, crushing the economy with them. While China's economy, especially its property sector, is indeed bubble-prone, due to the government's boom–bust policy tendency, the political economic cycle (see Lo, 2006, pp. 11–18) and structural problems with the regulatory framework (see next section), the odds of a China bust will not be high, in my view, after the dust of the subprime crisis has settled.

The rapid pace of credit growth was indeed problematic, but Beijing noticed it early and started reversing its expansive policy in mid-2009, well ahead of other countries. By early 2010, when all the major central banks were still debating when and how to exit from the quantitative easing[4] they had implemented, China had already pushed up its money market interest rates and hiked the bank reserve requirement ratio by 1 percentage point. These moves hurt the world financial markets, which feared that China's policy reversal would affect Chinese growth and create a negative knock-on effect on global demand. All this suggests that the Chinese authorities were fully aware of the risk of asset bubbles and had acted early to prevent them from spreading. So a policy misstep causing a crash-landing in the Chinese economy in the post-subprime world is unlikely.

More importantly, even if China had developed asset bubbles during the subprime crisis period, they were not funded by credit creation. In fact, despite the rapid credit growth in late 2008 and the first half of 2009, China's loan-to-deposit ratio remained very low (at about 0.7), suggesting no excessive lending (a large part of which is believed to be a key funding source for asset market punting), given the deposit base

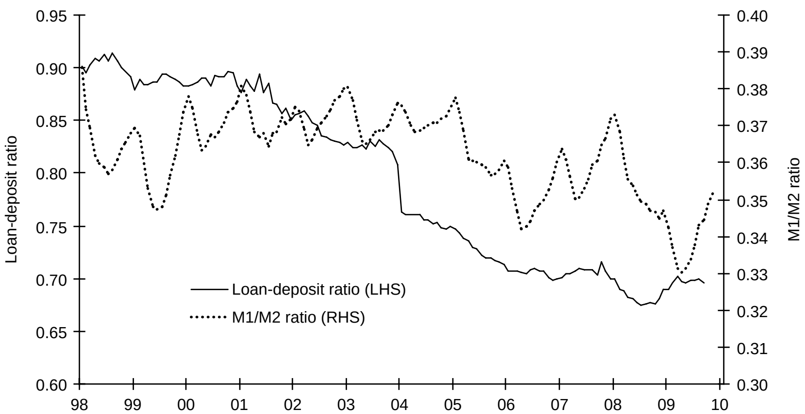

Figure 9.1 No credit bubble in China
Source: CEIC.

(Figure 9.1). Further, the ratio of narrow money (M1) to broad money (M2) growth had not shown any sustained upward trend, suggesting no evidence of money moving from fixed long-term deposits (which are part of M2) to readily spendable current account deposits (which are part of M1) for positioning for asset market speculation.[5]

All this means that China's asset bubbles have been driven by the huge liquidity stemming from domestic savings, with credit playing little part. This difference between a saving-driven asset bubble (in China's case) and a credit-driven asset bubble (in the case of the US) is very important. In an asset market boom–bust cycle, the banking system inevitably feels the pinch. If the bubble is funded by savings, when the bubble bursts, the damage to the asset market and, hence, the financial system is likely to be less severe than if the bubble had been credit-driven. This is because there is a lack of deleveraging pressure in a saving-driven bubble, so that the banking system is more stable due to the 'firewall' between the asset markets and bank lending.

Last but not least, China has little foreign debt. As a share of the country's foreign exchange reserve, China's total foreign debt is only 24 per cent,[6] the lowest among all major Asian economies (Figure 9.2). This means that the Chinese economy and financial system are not held hostage by foreign creditors in case of a loss of foreign confidence. It also means that, even if there is a bust in asset prices, it will not cause massive capital outflow and a domino effect on the financial system. Hence, the damage will not be as catastrophic as the crises in Dubai in 2009 or Argentina in 1999, which essentially degenerated into all-out

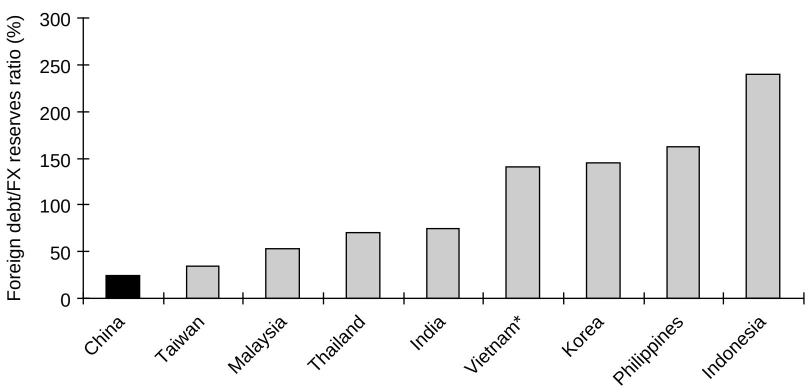

Figure 9.2 China has little foreign debt (2008)
Sources: CEIC, author.

debt crises with foreign creditors fleeing *en masse*. Nor will China be another Japan, which has suffered prolonged economic stagnation since its asset bubble burst in 1990. China still has over 500 million farmers living on very low income levels who want to move to the cities. The labour migration and the resulting labour productivity gains will support China's economic growth for another two decades or so.

China's bubble-prone economy is a real risk

Thus, even though the subprime crisis might have indirectly helped brew asset bubbles in China, the odds of a China bust are not high, in my view. But a bubble-prone Chinese economy presents a real risk, which, if not controlled properly, could create shockwaves for itself as well as for the global economy in a much-weakened macro environment in the post-subprime world. Fundamentally, the combination of China's massive domestic savings, stringent capital account controls and persistent global capital inflows has created a macro environment that is very conducive to asset price overshoots. This is a long-term destabilising factor in the Chinese economy.

The Chinese government also has a boom–bust policy tendency due to its obsession with controlling the economy by administrative measures. Whenever faced with economic problems, the bureaucrats' instinct has always been to use official decree, quotas or administrative controls to suppress them. This, in turn, has created many distortions. For example, interest rates have been kept chronically below

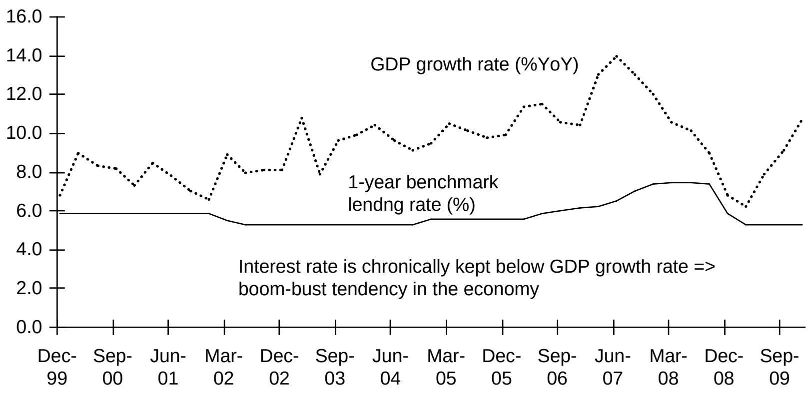

Figure 9.3 China's interest rate distortion

Source: CEIC.

GDP growth rate (Figure 9.3), giving the economy a natural tendency to always accelerate via borrowing and investment. Such a borrowing-cum-investment binge often pushes the economy towards overheating. As a result, Beijing often reacts with blunt administrative measures to clamp down on growth. This, in turn, generates disorder in the financial system. There have been many episodes of knee-jerk reactions by the authorities, resulting in temporary economic dislocation and sharp shakeouts in the local asset markets. The credit shutdown in 2003 and 2005 were two recent examples.

From a sector perspective, the Chinese property sector best illustrates the boom–bust tendency inherent in the economy. The property sector accounts for about 23 per cent of China's total fixed-asset investment and close to 20 per cent of total banking lending (including mortgages and loans to developers). More crucially, the property sector commands a central role in the economy, not only because it relates directly to the people's livelihood, control of which is top on Beijing's policy agenda,[7] but also because Chinese banks make most of their business loans based on collateral in companies' real estate assets. The value of these property assets is often pegged to the ongoing price of the nearby residential developments. So there is an indirect, often difficult to estimate, exposure of the banking system to real estate volatility via the corporate sector. If that collateral value were to suddenly collapse for whatever reason, China's banking system could potentially face a systemic meltdown that would make the western world's subprime crisis look like a walk in the park.

Regulatory deficiency has made China's property sector bubble-prone. And, due to its direct and indirect socio-economic relationship with the broad economy, the real estate sector often becomes the pulse of China's economic boom–bust cycles. There is a regulatory deficiency in the Chinese tax system regarding holding a property asset. China has taxes on real estate transactions only, but no recurring tax on holdings. This is in stark contrast with North America, for example, where a piece of property is taxed annually on its value. In the US, the average property tax is 0.95 per cent of the assessed value of the property, which for serious/genuine real estate investors represents a relatively modest cost of doing business. But for typical homeowners such taxes amount to about 3 per cent of their annual income, a non-trivial cash outlay, especially if they are not getting full use out of the property.

This and other aspects of the US tax regime, including the home mortgage interest deduction and passive loss rules, create an incentive for residential property owners either to live in the property themselves or to rent it out for generating rental income. In other words, such a tax system penalises house-owners for letting their property sit idle. The effect is to keep housing prices closely tied to real end-use demand for liveable space by driving owners to find such uses. Investor sentiment and other factors, including economic policy, could still push housing prices too high or too low and generate housing bubbles for a time, but the ultimate need to find actual occupants (together with corrective policy actions) eventually forces a correction.

In China, there is no such cost for holding property indefinitely. In fact, sitting on a piece of idle property could be a relatively attractive option in China due to the current, deficient, tax regime. Unless they already possess some offshore funds, average Chinese citizens have very limited investment choices onshore. They can 'gamble' on the local irrational stock market, buy low-yielding government bonds, or put their cash in even lower-yielding bank deposits. By contrast, real estate – occupied or not – offers them a visibly reassuring place to park their money, sheltered from inflation. All property owners have long been familiar with this advantage of owning a home. While the Americans bear a cost, Chinese house-owners (with little or no holding costs) are unconstrained by the need to make the property 'pay' in cash or in kind. For them, an empty condo is simply a store of value, much like gold, another asset that performs no practical functions besides retaining its worth.

This practice of holding onto empty property as a store of wealth is especially entrenched in the luxury property segment, as these flats/villas are not for living in; they are for the purpose of investment (speculation). Construction of all these 'useless' high-end units consumes huge amounts of labour and materials that could go into creating real useable wealth. With few other investment options in a closed financial system, the Chinese put a big chunk of their savings into real estate. Such behaviour is a strong driving force behind the surging housing prices, especially in large cities, that often create a nasty bubble.

The demand for luxury property is thus a source of speculative demand and is susceptible to boom–bust forces. A 'useless' asset such as gold or vacant flats can only serve as a store of value as long as people have collective confidence in its ability to perform that function and, thus, retain its value. The Chinese property market's boom–bust tendency transmits shockwaves to the rest of the economy due to its multiplier effect via the construction and banking channels, either when speculators' sentiment changes suddenly or when speculative forces push up prices so high that they invite draconian policy measures to clamp down on the surging price, or both.

Hence, China does not only need to rebalance its economy; it also needs to rebalance its housing market by changing the incentives so that the investment goes into much-needed low-income housing and not to high-end flats that are often left empty. But this is where the politics gets difficult. The obvious solution is an annual property tax, as in America. With an annual tax, it would make less sense to keep luxury flats empty. The juicy margins that property developers get from building and selling top-end flats would be squeezed, prompting them to build other types of properties.

Indeed, a property tax has been discussed for a long time in China as a silver bullet to alter some of the worst aspects of China's increasingly unequal wealth distribution. It could create a sustainable source of income for local governments, which often rely on the one-off revenues from selling land they have taken from farmers. And it could provide a way to finance reforms of the household registration (*hu kou*) system,[8] which denies health and education services to migrant workers in cities (see also Lo, 2007). However, such a tax has never been implemented. This is because some of the most powerful vested interests in China are the tight webs of property developers and local government officials, who both benefit from the current opaque set-up.

The consumption blues

Despite encouraging signs of fast consumption growth ahead (see Chapter 8), history has shown that the transition period will not be easy. Like the US and Japan during their export-reliant growth phases, China has not yet done enough to make that structural shift towards consumption become entrenched. These initial trends could still be reversed if Beijing loses structural reform momentum. This risk is especially prominent in the post-subprime adjustment years, because the global contraction stemming from the external shock could easily soften the Chinese authorities' resolve to sustain short-term economic pains for long-term gains. In other words, the post-crisis economic blues could make it difficult for China to move away from exports to consumption, despite genuine intentions to do so.

This can clearly be seen in the stubborn 'export-led' mindset entrenched in some government officials. For example, Chinese Commerce Minister Chen Deming announced at the annual National People's Congress on 9 March 2009 in Beijing that China would reduce export taxes to zero and give more financial support to exporters in order to gain market share of global trade in the subprime crisis environment. 'We should increase our share of the global market... We must transform ourselves from a big export nation to a strong export nation,' the *Financial Times* reported (*Financial Times*, March 2009).

If China had pushed the structural shift to greater domestic consumption hard enough, its export industries would have been scaled down before the global credit quake, more robust finance and service sectors catering to local consumers would have been developed, and capital and labour would have been reallocated throughout the economy. But, because of the insufficient effort made in the pre-crisis years, even though Beijing now wants to speed up the shift in the post-crisis years, it just cannot do so effectively. Despite billions of dollars of fiscal pump-priming, China's trade surplus still widened from an already-high US$17 billion monthly average in the first half of 2008 to US$33 billion in the second half of the year. In January 2009, the monthly trade surplus even soared to US$39 billion. The point is clear. China's pump-priming to boost domestic growth has not been working effectively. Otherwise, the trade surplus would have shrunk steadily during the subprime crisis, with rising imports on the back of falling exports.

The stimulus did not work as effectively as expected because the money had not gone where it was supposed to go – to the consumers and the service industries. China's service industry was almost nonexistent, and it was extremely hard to boost consumption when people's confidence was weak (a result of the combination of Beijing's production-orientated policy, the global crisis impact and an inadequate domestic social safety net). So Beijing's effort to boost domestic demand found its way mostly into investment (infrastructure projects) and the production sector, especially to the large state-owned enterprises. In fact, 70 per cent of the RMB4 trillion (US$586 billion) stimulus package that Beijing announced in November 2008 went into infrastructure investment and post-earthquake construction. Only 1 per cent was designated for medical spending and 7 per cent for providing affordable housing. Other elements of the fiscal stimulus programmes included promoting company restructuring and offering subsidised loans to support technical innovations within the non-ferrous metals sector; giving tax rebates for electronics and information technology product exports; and increasing tax rebates for textile producers.

Thus, the stimulating effects of these measures were mostly due to boosting output rather than directly boosting consumption. The result was to maintain employment and boost consumption, but this was done indirectly by boosting manufacturing capacity (and hence consumption by the workers hired in the factories). As a result, although exports were falling, Chinese output capacity was falling at a slower pace than Chinese consumption. Since a trade surplus is by definition the excess of a country's output over its consumption, China's trade surplus will not fall meaningfully if Beijing keeps boosting domestic demand by increasing investment and output capacity. This will only make it more difficult for China to shake off its reliance on external demand.

China will eventually make that shift from export-led to domestic-driven growth, but no one should expect it to be fast and easy. The shift will be slow because, first, a large share of the population[9] are still subsistence farmers with little cash income. Second, wary of the problems in Korea, Taiwan and the developed world, where over-leveraging created dire economic and financial problems, Beijing is expanding consumer credit at a very cautious pace. Finally, despite Beijing's recent efforts to improve the social safety net, including a new pension system, medical insurance and social security programmes, it will take years for all these systems to become well enough established to prompt households to reduce their saving rate, thus freeing up more income for consumption.

It will not be easy either. As much as Beijing would like to change its growth model, it cannot do so quickly except by tolerating a massive collapse in manufacturing output. China would not accept such a risk to stability. The world would also suffer from a China shock if its manufacturing sector were to collapse suddenly. So, in the post-subprime world, both China and the global economy are stuck between a rock and a hard place – while it is clear that China must make that expenditure switch in its growth model as soon as possible, it will not be possible to do so quickly. China's growth transition from one development model to another will be a long-drawn-out process. Political tension, often manifested in trade and capital protectionism (see Lo, 2009), between China and the crisis-hit western world will mount under these circumstances.

A return to interventionism?

Another risk in the post-subprime world is the possibility of China returning to increased government intervention in the economy, thus potentially reversing the market liberalisation efforts of the past thirty-two years. Unlike in the US and some other developed countries, where the prospects of partial nationalisation of the banking system and fiscal activism have raised investors' fears of bigger governments, state intervention in China is not a taboo. The growth-boosting campaign that started in November 2008 in China was swiftly implemented as soon as Beijing made this decision. The campaign consisted of huge public spending on public projects and state support for major industries. Beijing, in fact, singled out ten major industries for preferential treatment by the state to prevent their collapse. Rightly or wrongly, these were near-term fiscal measures needed to prevent the economy from imploding. However, there is a risk that they might reflect a tendency for the leadership and policymakers to return to big government, using the weakening economy as an alibi.

The risk of that tendency is seen in the steady rise in government spending as a share of GDP since the Asian crisis in 1997–8 (Figure 9.4). When economic reform started in 1978, government spending fell consistently until 1998. Continued economic liberalisation had dismantled the inefficient state sector and developed a burgeoning private sector, which, in turn, led to significant efficiency gains in the economy. All this formed a strong foundation for China's economic success in the past thirty years. However, the Chinese authorities started using counter-cyclical fiscal policy to sustain growth to fight the economic shock from the Asian crisis in 1998. Since then, government spending as a share of GDP has been rising steadily. This ratio is likely to continue to rise in the coming years, as Beijing will continue to use fiscal pump-priming to counteract the aftershocks of the global subprime crisis. There will be more mega-infrastructure projects,

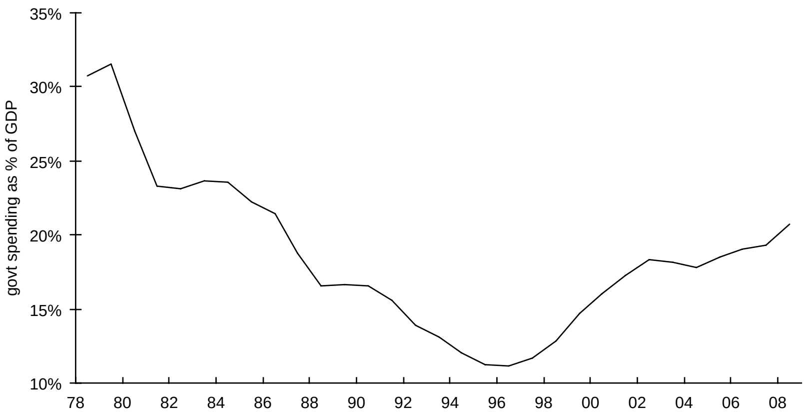

Figure 9.4 Big government is returning
Source: CEIC.

social welfare spending and fiscal support for various industries. All this means a bigger government down the road.

There is also anecdotal evidence for increasing state intervention in the economy, which does indeed give an impression of creeping renationalisation, with SOEs and firms with close connections with local government being given preferred access to resources. The fiscal stimulus package implemented in late 2008 and 2009 to fight the subprime impact exacerbated this trend. For example, in the steel industry, in March 2009 China's biggest steel-maker, Bao Steel, bought and restructured private steel-maker Jianlong in eastern Zhejiang province. This marked Bao Steel's third acquisition since 2007. In late 2009, the Shandong provincial government helped its loss-making Shandong Steel buy Rizhao Steel, a profitable private steel-maker.

In the civil aviation industry, within a few short years after the sector was privatised, all private airlines had exited the market, claiming that they had been squeezed out by the SOEs: Yinglian Airline was bought and 'restructured' by state-owned Sichuan Airlines, East Star Airline went bankrupt after it rebuffed a hostile acquisition proposal by Air China, and Aokai Airline was taken over by the Tianjin government. In contrast, the debt-laden state-owned carriers China Eastern Airlines and China Southern Airlines were both able to get capital injections of RMB7 and RMB3 billion, respectively, and billions in credit from major banks to keep afloat. In the property market, mainland media reported that 70 per cent of all SOEs had invested in the property sector in 2009. By November 2009, major SOE property developers had bought 280 million square metres of land – more than all the land sold in 2008. The top ten state-owned developers spent over RMB125 billon on land. Most private developers find it impossible to compete with the SOEs in terms of capital availability.

The primary sector and the transport industry are no exception. The Shanxi province's industrial plan aims at reducing the number of coal mines from 2,598 to 1,000 and coal enterprises from 2,200 to 100 by the end of 2010. While such a restructuring aims at reducing excess capacity in the coal-mining industry, it also means nationalisation of most of the coal mines in the province. Over 2,000 private coal mine companies had left the industry at the end of 2009. Most of them complained of being coerced by local governments to give up operations. A similar consolidation campaign is being implemented in neighbouring Inner Mongolia. Private investors have played a key role in the financing, construction and operation of highways in the Yangtze River Delta in the past ten years. In Shanghai, around 70 per cent of highways were built by private investment. But, since 2009, the Shanghai and Zhejiang governments have closed the sector to private investment. The private infrastructure firms that had previously entered the market have been bought out by SOEs.

It is also important to note that, although the total number of SOEs has fallen, the scope of their business has expanded into sectors which were previously dominated by private enterprise. Moreover, with the strengthening of SOEs' monopoly power in some sectors, private firms face insurmountable barriers to entry and competition. One of the key aspects of China's industrial policy in recent years has been the creation of 'national champions', or 'Chinese Fortune 500', that can compete with international firms on the global stage (see also Lo, 2007, pp. 183–188). In 2006, the State-owned Assets Supervision and Administration Commission (SASAC)[10] announced its intention to seek absolute control in eight strategically important sectors, including armaments, power generation and distribution, oil and petrochemicals, telecommunications, coal, aviation and shipping industries. Further, it would seek relatively strong control in the equipment manufacturing, auto, IT, construction, steel, and non-ferrous metal industries. By August 2008, 83 per cent of the assets of the central government's SOEs were concentrated in the strategic industries noted above. Almost all the production of crude oil, natural gas and ethylene, and all of the basic telecommunication services, are in the hands of state firms. Some even worry that monopolistic companies that have easy access to resources in the strategic industries could extend their control to other sectors through industrial chains.

It may be too early to conclude at this time whether a bigger government in the Chinese economy would necessarily be bad, especially at a time when all other governments, from the US, the UK and Europe to the Asian regional governments, are all increasing their roles in the economy to fight the global credit quake. Chinese government expenditures do not seem to be excessive as yet compared with other countries in terms of public sector debt to GDP ratio (Figure 9.5). In fact, China's public debt is even lower than the average of the emerging market governments. However, compared with China's previous reform trend, which was focused on economic liberalisation and reduced government intervention, the recent development is a noticeable change in policy intention that warrants monitoring.

In the short term, the impact of these changes may not be important. But, after the subprime crisis, whether China continues to loosen control on economic activity and move towards further policy liberalisation

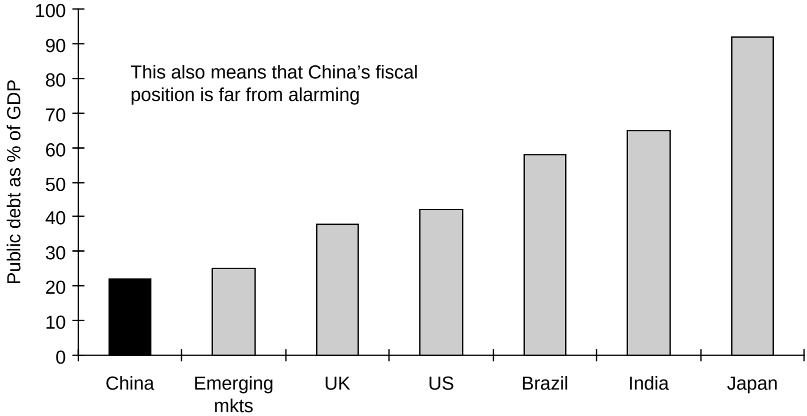

Figure 9.5 Relative size of the public sector*

*Data as of 2008.

Source: CEIC.

will have profound implications for the economy's long-term growth outlook and asset values. There is still a lot of rigidity in the Chinese economic system. For example, the capital account is still not convertible, the banking system is still largely government-controlled, the capital markets are still underdeveloped, and the service sector is still heavily regulated. The government still routinely uses administrative measures and other intervention tools, such as moral suasion and political pressure, to direct bank lending and industrial development. All these create distortions and unintended impacts on the social and economic fronts. Continued policy liberalisation, rather than more intervention, should be the way to sustain growth.

Increasing intervention in the economy will also put the government's credibility to the test. This will, in turn, create downside risk for policy actions and social responses. For example, achieving an 8 per cent GDP growth in the aftermath of the subprime crisis was an explicit target that Beijing stressed repeatedly in 2009 to counteract the external shock, and it appeared to be doing all it could to create jobs and boost consumption. With enormous financial resources at their disposal, the authorities' reflation campaign seemed to be highly successful, and the Chinese people had high hopes that the government would deliver its promises. But, at the time of writing, the subprime crisis is still not over. There is still the chance that it could worsen further, or create more financial aftershocks (such as the outbreak of sovereign debt crises in

Dubai in late 2009 and southern Europe in early 2010) before stabilising. This means that there would be a risk of major disappointment among the Chinese if the global economy were to fall into a prolonged recession that dwarfed Beijing's reflation effort to protect its economy. In this case, the risk of social tension and even unrest would mount, putting the authorities in an ever more challenging situation.

In a nutshell, China's fierce battle against the global subprime crisis will create a stronger consumer sector and a bigger government in the coming years. The former holds the promise of becoming the key growth driver for China, putting its economy onto a more sustainable and less volatile growth path. But this trend will take some years to fully develop. Any expectations that China will turn itself into a domestic-driven economy in just a couple of years, especially when the global adjustment to the subprime crisis will take a long time to complete, would be unrealistic. Meanwhile, increasing government intervention in the economy has the potential to evolve into a roadblock for long-term growth.

10
More Crises Brewing?

Many fear the possibility of another global debt crisis in the post-subprime years, triggered by the US and the UK, where public sector borrowings have risen most significantly to fight the subprime impact. Others fear that China may be next to fall into a debt crisis, setting off another round of seismic waves to wreak havoc in the global system in the coming years. Still others fear that the Chinese will soon abandon the US dollar as their reserve currency, prompting other sovereign and private investors to follow suit, and leading to a US dollar crisis that will crush the global economy.

Arguably, the US and UK public sectors are far from facing a debt crisis. Rather, the real risk lies in their household sector debts, which are becoming unsustainable burdens. The key to containing these debts so that they will not blow up and set off another global debt crisis is to keep interest rates low and stable for a long period of time. This is consistent with need in the post-subprime world, where structural adjustments will keep the world's output gap large, and hence inflation low, for some years. The worry about, and the risk of, a Chinese debt blow-up have been exaggerated, because the Chinese government has a very robust net fiscal balance, which should enable it to finance future spending and reform initiatives without any problems.

Last but not least, China cannot plausibly shift out of the US dollar in any short period of time, because doing so would cause drastic and dire consequences for its own economy and the world system. After all, there are no other credible currencies and asset classes that are deep enough to replace the US dollar as the world's reserve currency/asset even in the medium term. However, a side effect of China's gradual shift out of the US dollar into gold is to add to the upside risk of gold prices in the post-subprime years.

Another global debt crisis?

Following the massive government bailouts to prevent the impact of the subprime crisis from crushing the global economy, government fiscal deficits in the developed world have soared through the roof, with the US and the UK being the most worrisome major economies. The US public debt is expected to rise swiftly from about 70 per cent of GDP in 2009 to over 100 per cent by 2014, according to the International Monetary Fund (IMF). Rapid rising public indebtedness has led many to fear that the US will soon run into a debt crisis. In that case, US bond yields will soar and the US dollar will crash, sending shock waves to the global economy. There are similar concerns for the UK, where politicians are vying with each other on cutting spending to pare down the public debt. A debt crisis nightmare scenario cannot be ruled out. But, surprisingly, it is not very likely, provided that there is no premature monetary tightening. This is because the debt service burdens of both the US and the UK are, again surprisingly, low and bearable. The key to controlling financial stress and, hence, preserving economic stability in the post-subprime crisis era is to avoid premature and significant interest rate hikes.

With massive amounts of fiscal stimulus, financial bailouts and health care reform programmes, the US public sector debt is projected to rise by at least 40 per cent (to over 100 per cent of GDP from the current 70 per cent) between 2009 and 2014. This has raised fears that the US will soon hit a 'debt wall', when no one will want to buy the US Treasury debt. Similar concerns have arisen in the UK, where HM Treasury estimates that its public debt, after having risen from 30 per cent of GDP in 2000 to 65 per cent in 2009, will continue to rise towards 80 per cent by 2014. As in the US, UK politicians are rushing out plans to pare the fiscal deficit and public debt burden by cutting public spending and raising taxes.

As far as a debt crisis is concerned, it is the debt-service cost that counts, not only the level of indebtedness. If total interest payments exceed a certain threshold of a debtor's income, default becomes inevitable. Thus, the debt-service cost-to-income ratio is the critical indicator of a borrower's financial stress and default risk. On this count, both the US and UK public sectors are far from debt crisis levels, even though total public debt has risen swiftly since the subprime crisis.

Official data show that the US government's debt-service cost-to-income ratio has actually fallen steeply and steadily since the mid-1990s, and the current ratio is the lowest since the late 1970s (Figure 10.1). This

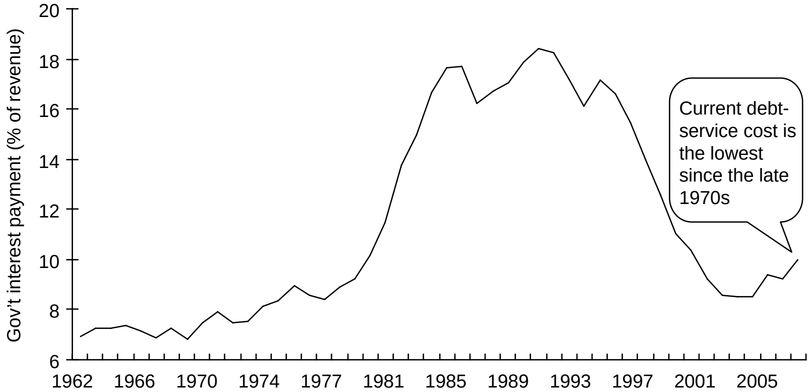

Figure 10.1 Falling US public sector debt-service cost-to-income ratio
Source: CEIC.

Figure 10.2 US interest rate on a secular decline
Source: CEIC.

is remarkable, as the fall in the debt-servicing ratio has come on the back of a rapid run-up in the public sector debt burden in recent years. The key reason for the fall in the US debt-service cost is the consistent decline in interest rates since the 1980s (Figure 10.2), even though the absolute level of public sector indebtedness was higher in the 1990s than in the 1970s and 1980s.

Falling interest rates alone cannot lead to a fall in the debt-service cost ratio. For example, US interest rates began to fall in the early 1980s, but the public sector debt-service cost ratio rose in most of the 1980s and peaked only in 1990 (see Figure 10.1 again). The reason for this rise in the public debt-service cost ratio during most of the 1980s was that the Reagan administration dramatically increased public sector borrowing to fund its aggressive tax cut programme and the resultant large fiscal deficit. The sharp rise in the net interest payment due to a higher debt load far exceeded the saving of interest cost from lower interest rates. However, since the early 1990s, the fiscal deficit pressure and escalating public debt burden have forced the US government to improve its public finances by raising taxes and cutting spending. This combined effort, coupled with the economic boom (which sharply increased government revenue) under the Clinton administration, dramatically cut the public sector debt-service cost ratio.

If we look at the UK, which is one of the countries hardest hit by the subprime crisis, its public debt-service cost ratio (at 6.3 per cent of government revenue) is even lower than the US (10 per cent of revenue). This means that the British government's financial stress is even lower than the American government's. As in the US, the UK public debt-service cost ratio has been on a secular decline (Figure 10.3). Even if the IMF's projection, that the UK's public debt will rise from the current 65 per cent of GDP towards 80 per cent of GDP by 2014, turns out to be right, these debt ratios are not unprecedented, and will not necessarily

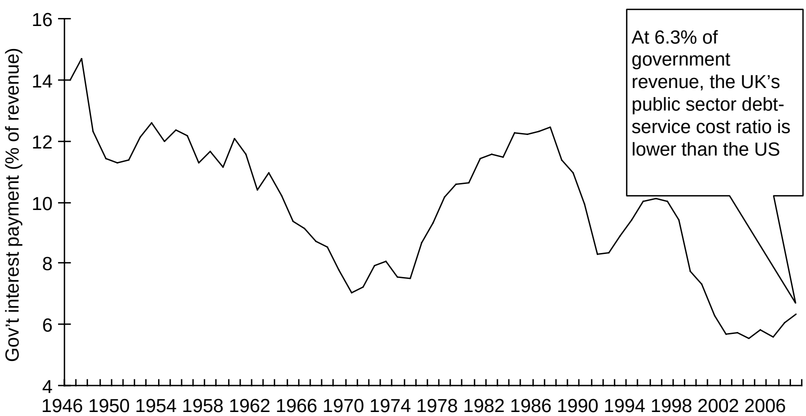

Figure 10.3 Falling UK public sector debt-service cost-to-income ratio
Source: CEIC.

lead to a debt crisis. In the early Victorian age, for example, the government's debt-to-GDP ratio was almost 200 per cent. It almost reached that level again in the early 1920s. In 1956, it was just a little under 150 per cent of GDP.

The point is that the public debt situations in both the US and the UK are far from dire. As long as interest rates stay low, their public sector financial stress is still manageable, so that a public debt crisis is not imminent. Rather, the danger is premature and significant monetary tightening. The impact of such a policy mistake was well illustrated in the US in 1936–7, when fiscal tightening and tax hikes helped push its economy back into a recession when the recovery from the Great Depression was far from complete. This cut government revenues sharply and sent its debt-service cost ratio soaring.

Decades of debt, no problem?

Theoretical economics does not define a 'high' or 'dangerous' level of debt. Without that knowledge, it is difficult to judge from the current debt levels whether the US and the UK have a level of debt that could lead to disastrous consequences. It is true that the huge increases in government debt reflect serious economic problems. But the subprime-induced credit quake has inflicted a huge negative shock on the global economy, which requires significant government spending to offset that shock. So, arguably, the world may be better off with high debt for a long period of time than suffer financial implosion within a short period of time. In fact, although economics is silent on the issue of what it means for debt to be too high, it does tell us that, in the face of a large temporary shock, the optimal response is for public debt to rise substantially to support government spending for a prolonged period of time. In other words, public debt should act as a buffer to help the government to respond to economic shocks.

The logic is simple. According to the above analysis, the US and UK governments have the ability to borrow long term and the option to roll over their borrowing. Rather than abruptly raising taxes and cutting government expenditure, they should adjust fiscal policy (i.e. cut their fiscal deficits) gradually over the long term. This is because fiscal adjustment cannot produce a surplus without further hurting economic growth in the short term. So debt must rise for a prolonged period. The required increase in debt to support government spending may appear unsustainable in the first place. But fiscal adjustment in the long term will bring down the debt level eventually.

The potential magnitude and duration of these increases in debt can be substantial. Markets have financed much larger debts than are predicted for the US and UK in the post-subprime years. The largest increases have been related to war, but Japan's experience since the 1990s shows that this is not always the case. Japan's public sector debt rose to 220 per cent of GDP in the period between 1991 and 2008. That was the highest public debt-to-GDP ratio in the G7.[1] A big chunk of its large public sector debt was due to the accumulative impact of endless fiscal stimulus programmes in the past twenty years. In the UK, between 1918 and 1932, debt increased from 121 per cent of GDP to 191 per cent. It was not until 1960 that debt returned to its 1918 level.

If fiscal adjustment occurs over the long term, how is it achieved? Experience from the G7 over the period between 1965 and 2008 shows that very little of the fiscal adjustment was achieved through inflation. In other words, there was no evidence for these governments inflating their way out of fiscal deficit. The adjustment mainly came from reduction in the government's primary deficit, that is, the deficit excluding debt interest payments. In Italy, one of the most profligate countries known, the average total fiscal deficit was 9.6 per cent of GDP, and it had never fallen below 6 per cent. During this period, its primary deficit fell from a high of 8.6 per cent of GDP in 1975 to 3.3 per cent by 1989 and a surplus of 5.4 per cent in 1997. In other words, Italy's fiscal adjustment was made mainly through changes in the primary budget balance over a very long period of time. In the interwar period, the UK only ran a total fiscal surplus in five years, and even then the surplus was small. However, every year between 1920 and 1938, the UK government ran a primary surplus that helped check the rise in debt and achieve long-term solvency.

All this means that governments should look at long-term fiscal solvency and articulate clearly how they intend to achieve debt stability. Forcing governments to achieve specific numerical targets by certain calendar dates is not an optimal solution during a crisis or post-crisis period. If further shocks occur or the crisis worsens, fiscal contraction will only risk complete economic implosion. Debt is a means by which governments accommodate economic shocks. Fiscal discipline is a virtue. But what markets, credit-rating agencies and analysts need to recognise is that government debt will, and should, remain at elevated levels for a very long period of time in the face of a significant shock, and the required fiscal adjustment is for the long haul, not just for three to five years as many have advocated as a policy prescription. Fiscal discipline and solvency are not inconsistent with decades-long debt build-up.

The real debt threat

Private sector debt is a different story. US households' debt-service cost has climbed steadily since the 1990s, from around 10 per cent of disposable income to over 13 per cent in 2007 (Figure 10.4). This steady rise was caused by a large and sustained increase in total cumulative debt load throughout the 1990s and in the 2000s till the eruption of the subprime crisis. The scale effect of this debt accumulation was so big that it overwhelmed the benign effect of falling interest rates on the debt-service cost. Thus, it is not surprising that the US household sector was hit the hardest in the subprime crisis, with soaring real estate foreclosures and personal bankruptcies. The household debt stress in the UK is even worse, with the household debt-service ratio hovering at over 20 per cent as of the second quarter in 2009, according to Moody's, a major credit rating agency.

The risk of a debt crisis clearly lies in the household sector, not the government. The household sector's debt-service cost burden is at a multi-decade high in both the US and the UK, suggesting that interest rates are the most important variable in controlling debt costs and financial stress and, hence, preserving economic stability in the post-subprime crisis era. It is, therefore, of utmost importance that the authorities do not hike interest rates prematurely. The post-bubble world is going through a major structural adjustment, which features a private sector saving glut (with both the developed and developing worlds increasing savings at the same time), deficient demand and a large output gap. All

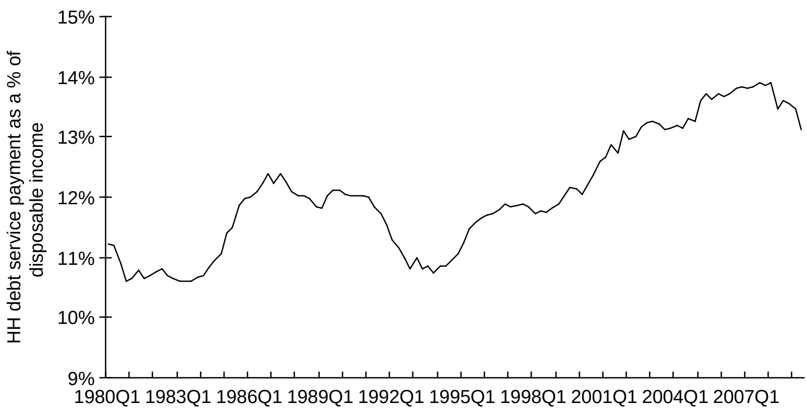

Figure 10.4 Rising US household debt-servicing cost-to-income

Source: CEIC.

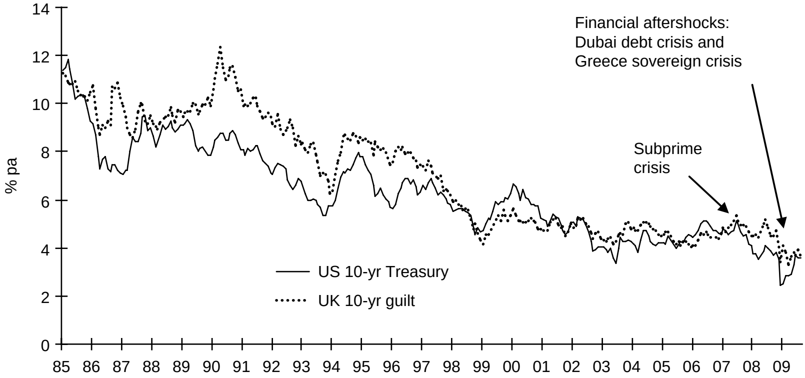

Figure 10.5 No signs of long-term government bond yields rising
Source: CEIC.

this will work to keep inflation and interest rates low for some years. This low interest rate environment will help the American and British consumers de-leverage. It will also strengthen the public sectors' borrowing capability so as to facilitate fiscal activism to offset the private sector contraction and keep the global economy from imploding.

At 10 per cent in the US and 6.3 per cent in the UK (as of 2009), these public debt-service cost ratios are both at multi-decade lows, suggesting that the US and UK sovereign financial stress is still manageable. In fact, the US and UK governments may continue to increase their debt loads without adding stress to the debt markets, provided that interest rates stay low for a prolonged period of time. Even by late 2009 and early 2010, when financial aftershocks from the subprime crisis were still emerging, the government bond markets had not shown any concerns about the US and UK running into a debt crisis any time soon. Overall, long-term US and UK government bond yields had not increased in the face of escalating public borrowing (Figure 10.5), mainly because the deterioration in public sector finances following the credit quake started from a much-improved position.

A Chinese debt crisis?

The worry about a debt blow-up in the post-subprime world has spread to China, especially since its economic recovery from the subprime crisis was largely driven by either direct public spending out of state budget or indirect quasi-fiscal operations via bank lending. Beijing has committed RMB1.8 trillion (US$264 billion) out of its own budget to finance the RMB4 trillion (US$586 billion) stimulus package to fight the impact from the developed world's subprime shock. The package mostly takes the form of infrastructure spending, and the financing of these projects is primarily in the form of bank lending, with the understanding that the attendant debt is guaranteed by central or local government.[2] The worry is that, if these investment projects were to fail, the underlying assets would turn into non-performing assets, and the loans involved would become non-performing loans (NPLs) unless the government guarantees were exercised.[3]

The big question, then, is whether Chinese governments, central or local, would have a sufficiently strong fiscal position to honour their commitments. The most important gauge for this is the government's debt level. It is true that the larger the fiscal deficit, the weaker the fiscal position. But this is true only when the government's initial debt level is taken into consideration. In practice, a low-debt government is considered as fiscally sound, while a high-debt government may keep a balanced budget or even a budget surplus but still be considered fiscally unsustainable. China's public debt in 2008 stood at 18 per cent of GDP, which is way below the 'dangerous' level. According to the Maastricht Treaty, the EU requires its member countries to observe a public debt ceiling of 60 per cent of GDP, above which the debt level is deemed unsustainable and actions must be taken to cut debt. While there is no such definite threshold for Asia and the emerging economies, 45 per cent of GDP is generally seen as the safety threshold. The threshold for the emerging markets is lower because they tend to have underdeveloped financial and capital markets, weak tax collection and weak balance of payments positions (this last factor is not applicable to Asia and China because the region has balance of payments surpluses), which limits the ability of governments to maintain high debt levels without jeopardising fiscal sustainability. Obviously, the Chinese government level is very low by this standard.

However, what the world really worries about is China's contingent fiscal liabilities. They include NPLs incurred by large state-owned banks before they were restructured and recapitalised, the transition costs of pension reform, and debts incurred by the local governments. According to IMF estimates, the loss stemming from NPL disposal is about RMB3.6 trillion, and the transition costs of pension reform are RMB1.6 trillion (IMF 2006). While local governments in China are not allowed to run fiscal deficits and thus incur debt, they have in practice been taking on various forms of liabilities. A study conducted by a think tank officially affiliated with the Ministry of Finance estimates that the hidden local government debt, formal and contingent, amounted to as much as RMB4 trillion as of 2008. Taking all these contingent liabilities into account, China's true public sector debt could be as high as RMB14.5 trillion, or 48 per cent of GDP in 2008. This is more than double the official level and higher than the 45 per cent safety threshold.

However, one should not lose sight of the asset side of the government balance sheet. Despite its high debt level, China's fiscal status is sustained by its strong asset position. This basically distinguishes Chinese governments from many governments in the rest of the world, which do not own many assets and whose ability to incur and service debt hinges on one key factor alone: their capacity to collect tax revenue on a flow basis. Chinese governments own sizeable liquid assets: cash and bank deposits. The outstanding central government treasury deposits in the banking system have been rising rapidly since 2005, and in 2008 they stood at RMB1.8 trillion, or 6 per cent of GDP. Moreover, the deposits owned by local governments and government agencies in the banking system stood at RMB2.2 trillion, over 7 per cent of 2008 GDP.

As well, according to official data, Chinese central and local governments own a total RMB14.5 trillion worth of equity, in terms of book value in SOEs as of 2007, or an equivalent of 48 per cent of 2008 GDP. This is roughly equal to the total amount of government debt (including contingent liabilities). But some may doubt the real value of the SOEs, which are seen as inefficient and poorly run enterprises. This is no longer quite true; to a large extent, this problem has been corrected by three decades of economic reform, which has fundamentally transformed the SOE sector in China, so that the aggregate value of the SOEs has risen sharply. Not only has the number of loss-making SOEs, as a share of total industrial enterprises, fallen steadily over the years (from over 17 per cent in 1999 to 2 per cent in 2009); the share of loss-making SOEs in the cohort of loss-making enterprises has also fallen (from 53 per cent in 1999 to 9 per cent in 2009; Figure 10.6). Further, between 2003 and 2007, Chinese industrial enterprises collectively made a profit of RMB8 trillion, of which 45 per cent was contributed by the SOEs.

Do not forget land. All non-agricultural land is legally owned by the State in China. While agricultural land is in theory collectively owned by the farmers, it is effectively under the control of the government because, like it or not, the government can take over land from the farmers at a cost that is substantially below market value. While there is no way to accurately estimate the value of land that is under direct or indirect control of the government in China, the cumulative revenue

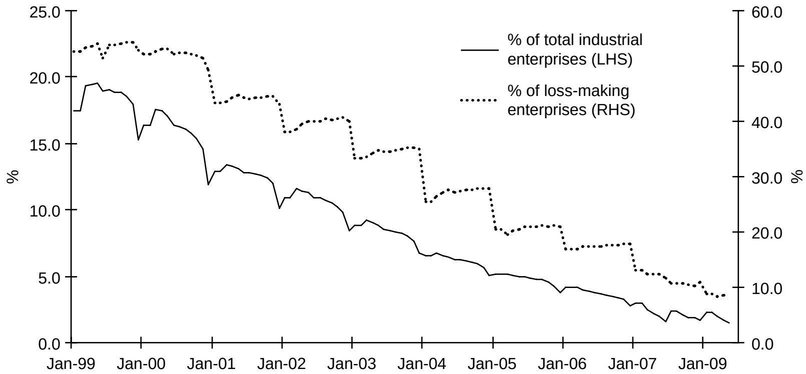

Figure 10.6 Loss-making SOEs on the decline
Source: CEIC.

from land sales accrued to the state budget gives a clue as to how valuable land is to the government. According to official data, the revenue from land sales added RMB4.1 trillion (or almost 14 per cent of GDP) to the government's coffers in 2008, and it is widely believed that official data tend to understate the actual land sales revenue due to data manipulation and government officials' corruption.

What all this means is that, while Beijing's stimulus programme to fight the impact of the subprime crisis would have been expected to result in a deterioration in its fiscal position in the coming years, the fact that both the central and local governments own a large amount of assets (including cash, SOEs and land) offsets the fiscal budget deterioration. Indeed, China's net fiscal balance position is very strong. This should enable the government to finance future structural reform initiatives (including establishing a basic and broad-based social security system) without any problems. On this note, worry about China running into a debt crisis in the post-subprime world is misplaced.

China abandoning the US dollar

China suffered only limited damages from the developed world's credit quake, due to it closed financial system, enabling it to become the first economy in the world to emerge from the crisis. This has also strengthened China's confidence as an emerging global player in economic affairs. Such confidence has, in turn, translated into an expectation, both in China and abroad, that the Middle Kingdom will shift out of

US dollar assets sooner or later to reduce its risk exposure to the world's largest debtor, the US. This expectation rattled the world markets and caused a big sell-off of the US dollar in the second half of 2009 and early 2010.

If Beijing were to diversify its foreign exchange (FX) reserves away from the US dollar into other currencies (including the Special Drawing Rights or SDR,[4] as noted frequently in late 2009 and early 2010) and/or asset classes (notably gold), that would shortly cause a large, protracted sell-off of the US dollar, creating chaos in the global markets and hurting the global economic recovery and, hence, China's economy. It would also hurt the US Treasury market and, hence, the value of China's FX reserves, and disrupt the gold market balance by creating a gold price bubble.

So, due to these significant potential disruptive impacts on the world markets and the inertia in the US dollar as the global reserve currency, it is implausible that Beijing will shift out of the US dollar any time soon in the post-subprime years. In fact, China did not support replacing the US dollar by the SDR as the world reserve currency in the G20 meeting in April 2009, despite its vocal suggestion before the meeting. China's FX diversification out of the US dollar will be a long-term and slow process. It will not be a major investment theme in the short to medium term, contrary to common market perception.

Let us take a look at the facts in perspective. China alone accounts for over 27 per cent of the world's total FX reserves. If it were to move out of the US dollar in search of an alternative reserve currency, other central banks and investors might follow, prompting a crash in the US dollar exchange rate. This alone would force the US Federal Reserve to raise interest rates sharply to stem the capital flight, wreaking havoc in the economy and financial system of the US and, eventually, the world.

Such a shift away from the US dollar would also have huge implications for financial markets beyond exchange rates. Foreign investors, including central banks, are estimated to have held 50 per cent (or US$3.2 trillion) of the US Treasury bond market. China is the largest foreign sovereign holder, accounting for 24 per cent of all foreign holding. The US Treasury market would crash if China and other sovereign holders started to desert it. That would force a sharp rise in US interest rates, strangling America's corporate bond and mortgage markets. All this would crush the US economy and asset market, sending negative shock waves around the world.

On the issue of replacing the US dollar by SDR as a reserve currency, it is not practical to do so even in the medium term (for the next 5 years at least). The suggestion made by Zhou Xiaochuan, the governor of China's central bank, the People's Bank of China, on 24 March 2009 that the US dollar should be replaced by the IMF's SDR, which are units of a currency basket including the US dollar, euro, pound sterling and Japanese yen, as the world reserve currency is a solid idea. This suggestion, in essence, implies that China would want to shift out of the USD into the SDR.

However, technically, it would be very complicated to implement the idea of a super-sovereign reserve currency (whether it is in SDR or some other currencies or a currency basket) because of the inertia in the US dollar's global status. Most international trade and financial flows and, hence, the international unit of accounts are based in US dollar terms. The global payments and settlement systems are thus dominated by the US dollar also. It will take a very long time for the global financial system to evolve into some alternative form to replace the US dollar's international reserve currency and medium of exchange status. Hence, most countries, including China, have very few options but to keep investing their foreign reserves in US dollar-denominated assets. Crucially, the US fixed income market is the most liquid in the world, which is probably the single most important issue for central bank reserves because those funds may be needed for emergency purposes at any time.

Fundamentally, the SDR is not a medium of exchange in the real world. There are no SDR assets at all. The SDR is only a unit of account in the IMF. When the IMF allocates SDRs, the recipient countries exchange them for local currencies at the local central banks. That money is then used to buy goods and services and to invest in and trade with other countries. No one is using, or will likely use, SDR in international trade.

There is also a political twist in using the SDRs for reserve and, hence, transaction purposes. Who decides the issuance and the pricing of the SDR – the IMF? Asia and many other emerging economies will almost certainly object to that, given the track record of the IMF's economic prescriptions sending their economies into tailspins. China, in fact, does not want to empower the IMF. That is why, in the 2 April 2009 G20 summit in London where Russia proposed an IMF or G20 Working Group to assess the idea of a global, or super-sovereign, reserve currency, there was no word of support from China.

The point is that that there is no credible successor to the US dollar in the medium term. No other economies and financial markets are large and deep enough to replace the USD. The euro, or even the RMB, might eventually become an alternative, but that will be a long way down the road. There is also some concern that the euro may eventually break up (for example, see Eichengreen, 2007; Fels, 2008). Meanwhile, the SDR is very much a long-term idea. Some baby steps are needed first to make it a real currency before one can even think about its role as a reserve currency.

There are two other alternatives that China could use to replace the US dollars in its foreign reserves: IMF bonds and gold. Throughout its sixty-year history, the IMF has never issued any bonds. At the time of writing, the IMF has not yet confirmed whether it will issue any bonds to bolster its funding resources for fighting this global financial crisis. If the IMF does go ahead, its new bonds will provide an alternative low-risk (triple-A rated) asset in which China can invest its FX reserves. But whether China can diversify away from the US dollar depends on whether the IMF bond will be issued in non-US dollar currency, the size of the issue and how much China can buy. At the time of writing, there is talk that the IMF might issue its debt in SDR terms. In whatever currencies the IMF bonds might be issued, the FX diversification effect for China would be small, as 70 per cent of China's FX reserves are estimated to be in US dollars, 20 per cent in euros and the rest mostly in Japanese yen.

If the IMF were to turn to the global bond market to raise funds, it would add to the global debt supply at a time when the global authorities are also issuing record amounts of debt after the subprime crisis to finance fiscal bailout of the global financial system. This would push up borrowing costs and hurt the global system further. To minimise the impact on borrowing costs, the IMF may not want to issue bonds; it may instead borrow directly from governments via private placements or bilateral loans. This has, indeed, already started at the April 2009 G20 summit, with China agreeing to contribute US$40 billion to the IMF, along with Japan and Europe, in the form of a bilateral loan. So, while IMF bonds would be an investment alternative for China's FX reserves, they would not help China diversify its FX reserves in any meaningful way. The only achievement for China would be to have a little more say in the IMF via a bigger quota due to its bigger funding contribution to the Fund.

To look at gold, currently China's central bank has about 1 per cent of its total official reserves held in gold, compared with the world's major central bank average of 10 per cent (Figure 10.7). The US, Germany, France, Italy, Switzerland, the Netherlands and Europe (via the European Central Bank, or ECB) are the largest gold holders. The US has almost 79 per cent of its official reserves held in gold, amounting

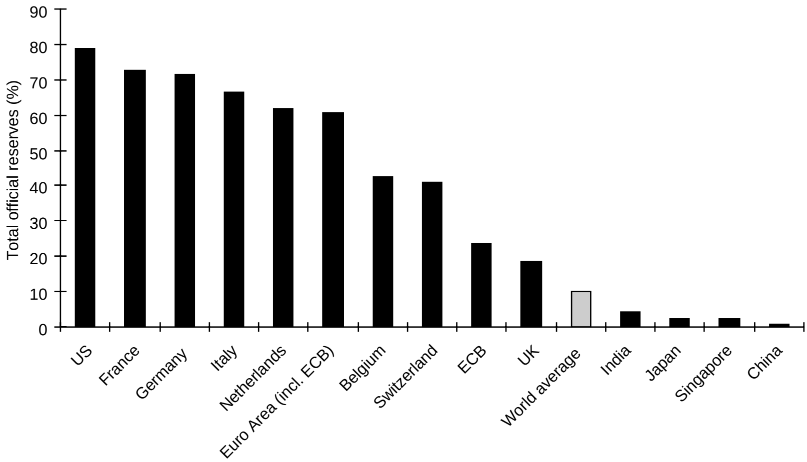

Figure 10.7 World official gold holding (March 2009)
Sources: CEIC, author.

to 8,134 tons (or 27 per cent of world total official gold holdings) as of March 2009. The Chinese State Administration of Foreign Exchange (SAFE) announced in April 2009 that China had increased its gold holdings by 76 per cent, from 600 tonnes in 2003 to 1,054 tonnes in 2008. That revelation sparked a rally in gold prices. But, even after this increase in the past five years, China's gold holdings still make up a very small proportion of its total official asset holdings. So the potential for China to increase gold holdings is considerable.

However, if China were to increase its gold holdings substantially over a short period of time, it could push up world gold prices sharply, creating a gold bubble. This is because world gold supply is pretty much fixed, at around 3,500 tonnes a year. Meanwhile, gold sales by the other central banks are expected to remain small due to the Central Bank Gold Agreement (CBGA), which was renewed in October 2009, with no CBGA signatories saying that they would increase their gold sales in the coming years.

But Chinas potential gold-buying power is huge. If China were to use 10 per cent of its US$2 trillion FX reserves to buy gold, assuming an average gold price of US$850/oz, China could buy 6,671 tonnes of gold with US$200 billion. That would be 1.92 years of gold supply in one go. Such a surge in demand would certainly disrupt the gold market by pushing its price through the roof. So, practically, China is not going to do this in a hurry, even if it wishes to increase its gold holdings. But isn't China's revelation of a jump in its gold holdings a sign of more buying to come? Unlikely, in my view. It would make more sense for China to announce a rise in its gold holdings when its buying programme was completed, rather than part way through it, to avoid chasing rising prices effected by its own purchase announcement.

Gold prices in the post-subprime world

China's rising demand for gold, partly due to its attempt to diversify its official reserves holdings out of US dollar assets, will certainly be a swing factor in affecting gold prices in the coming years. Gold is, in any case, in a long-term bull market with or without the China factor, in my view. Gold prices rose sharply from 2007 to 2009, despite the lack of inflation, mainly because of market uncertainty and investor panic during the subprime crisis. Gold prices will correct themselves as and when risk appetite returns. But the global central banks' aggressive reflationary measures, led by the US, to fight the aftermath of the subprime crisis have paved the way for gold prices to rise beyond the medium term.

The demand for gold for jewellery and industrial use will rise in the coming years, as the world economy climbs out of the post-crisis adjustment and the global authorities' infrastructure projects flow through. Investment demand for gold is another key propelling force, but this is more complicated and is affected by different factors at different times. In the past, inflation expectations were the key driving force for investment demand for gold and hence gold prices, especially in the 1970s and early 1980s. But this has not been the case in recent years; gold prices have risen sharply since 2000 without a rise in inflation. Thus, the long correlation between monetary creation (which affects inflationary expectations) and gold price movement has been weak (Figure 10.8). If we go back further in history, the first gold bull market was unleashed between 1931 and 1934 when the world was suffering from deflation after the Great Depression.

Recently, evidence has come from the US for a strong correlation between monetary creation, as expressed in the form of 'Marshallian k'[5] (or the ratio of money supply to nominal GDP), and gold prices (see Figure 10.8). The Marshallian K has risen sharply since 2000, reflecting the global authorities' ongoing efforts to use monetary easing to combat a series of deflationary shocks. Gold prices have risen in tandem.

It is unlikely that inflation will return in any big way in the next few years, due to the significant output gap opened up by the subprime

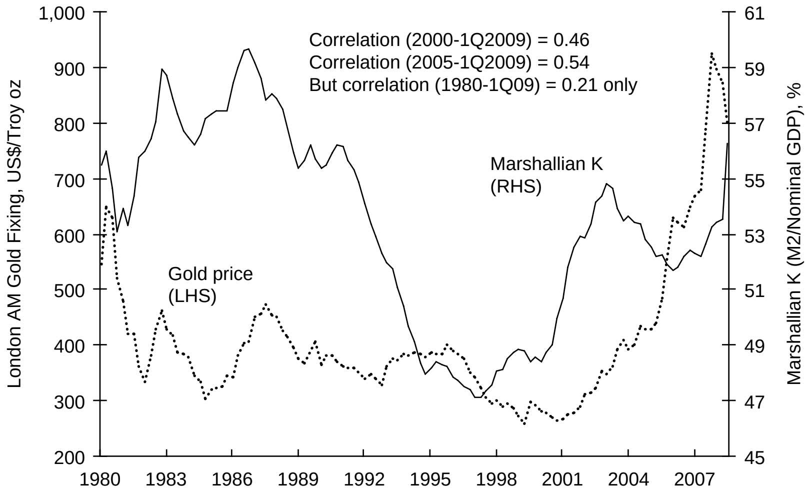

Figure 10.8 Marshallian K and gold price

Sources: CEIC, author.

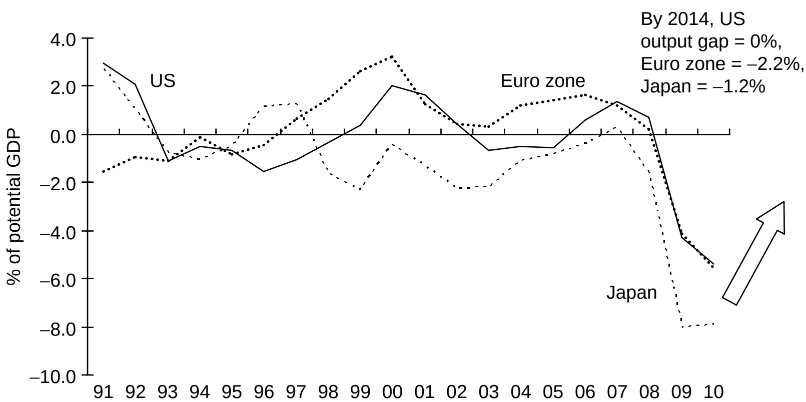

Figure 10.9 Output gap

Note: Forecast figures are IMF estimates.

Sources: CEIC, author.

crisis (Figure 10.9). The IMF forecasts that the world's output gap will not be closed for another four to five years (until 2014 at the earliest), *ceteris paribus*. But, since gold is a quasi-monetary standard, gold prices will rise even in a deflationary environment (just as in the post-Great Depression years of 1931–4 and the more recent years since 2000) when every country is trying to reflate its economy by devaluing its fiat currency via massive monetary expansion. Of course, the aggressive reflation efforts that the global authorities have taken to fight the subprime crisis will eventually raise inflationary expectations, which will become a factor boosting gold prices when the world economy recovers.

In a nutshell, due to the potential serious impact on the economy and financial markets of the world (including China), it is implausible for China to make any quick move to abandon the US dollar and replace it with other currencies and assets in its FX reserves. Even in the medium term (five years or more), it is unlikely that China and other central banks will be able to replace the US dollar in their FX reserves by the SDR, or dilute their USD asset holdings by IMF bonds, gold or other assets, in any significant way.

11
The Post-Subprime World

On a global basis, the post-subprime crisis adjustment will likely last for a much longer time than many would expect. The double whammy of deficient demand and supply of credit, on the back of massive deleveraging by the private sector, will hold back world economic growth for a long time, suppressing goods price inflation and producing periods of asset price deflation. The biggest policy challenge for the global authorities is to find the right moment to withdraw the massive policy stimuli they injected to fight the crisis, so as to avoid reigniting inflation and crowding out private investment. There is also a rising risk of fiscal problems getting out of hand in the post-subprime world. From a secular perspective, the world economy may have entered a new economic paradigm featuring absolute abundance, excess savings and oversupply of goods.

In the case of Asia, it is unrealistic to expect it to have developed an autonomous economic leadership. Developing Asia's GDP growth premium has been driven primarily by exports, supplemented by export-led fixed investment in infrastructure and production capacity, but not domestic consumption. The subprime crisis may serve as a wake-up call, again, for Asia to realise that the old ways of export-led growth have outlived their useful existence. But its resolve to change to consumption-led growth is uncertain. As Asia's growth has become China-centric, the Chinese imbalance problems suggest that there are serious questions about Asia's growth outlook and structure in the post-subprime world.

China's challenges in the post-subprime world are clearly to carry on with economic reforms rather than to focus on various populist policies, given the growing risks of policy complacency and interventionism. Finally, despite Beijing's efforts to push for an internationalised renminbi (the Chinese currency or RMB), it may not like the outcome. Realistically, the internationalisation of the RMB is many years away, in my view, because it lacks the foremost prerequisite to become a global currency – a sound financial system backing up a fully convertible currency.

The global environment in a nutshell

The years of post-subprime adjustment will feature goods price disinflation, periodic asset price deflation, de-leveraging by households in the developed world, overall contraction of the private sector and subpar economic growth. If nobody is borrowing and everybody is paying down debt or raising savings, even at zero interest rates, the deflationary spiral becomes a real threat in this situation. This is because those un-borrowed savings and debt repayment are leakages from the income stream. If left unattended, the economy will continue to lose aggregate demand equivalent to the un-borrowed amount until either private sector balance sheets are repaired or the sector has become too poor to save any money.

On the back of massive private sector retrenchment, the key policy response should be a rise in government spending to keep GDP from falling into a downward spiral. This will create income for households and banks to repair their balance sheets. Monetary easing, even in its extreme form of quantitative easing, is helpful but not sufficient to put global growth back on its feet. This is because, when the private sector is de-leveraging, it is in no position to respond even to zero interest rates and ample liquidity. Deficient credit demand is not the only problem in the post-bubble world. The supply of credit is a problem too, because banks that are shell-shocked, with impaired balance sheets, become risk-averse and, thus, wary of lending to the private sector. This double whammy of deficient demand and supply of credit can hold back economic growth for a long time.

During the process of balance sheet repair (on the part of both households and banks), public confidence is weak and the risk of the economy falling into a deflationary spiral is high. Raising government spending is far more effective than cutting taxes in boosting domestic demand in this situation, because any tax cut will likely be saved or used to pay down debt. Lax monetary policy, augmented by big fiscal expansion, will also go a long way towards overcoming deflationary expectations, which could easily become self-fulfilling and result in a vicious debt–deflation cycle. History shows that governments have indeed reacted strongly to financial crises by fiscal activism funded by public borrowing. Researchers at the University of Maryland and Harvard University studied thirteen big financial crises and found that, on average, real public debt in the crisis-affected countries soared by eighty-six per cent within three years after the crises occurred. In some cases the increase was over 150 per cent (Reinhart and Rogoff, 2009).

The IMF forecasts that, in the two to three years after the conclusion of the subprime crisis,[1] the ratio of gross public debt to GDP could reach 117 per cent in Italy, ninety-seven per cent in the US, eighty per cent in France and Germany, seventy-five per cent in the UK and 224 per cent in Japan (IMF, March 2009). Though these debt levels may not be too onerous, the IMF concludes, they do point to the expectation that the public sector will grow significantly in the post-crisis years to make up for the losses in private sector output and investment if the authorities want to prevent an economic and financial implosion.

The government should remain active and economic policies should remain expansionary until the credit market is normalised and the private sector balance sheet is repaired. As and when that point is reached, the government must be sensitive enough to withdraw the monetary and fiscal stimuli that it had injected into the system, so as to avoid igniting inflation and crowding out private sector investment. Overall, in the post-subprime adjustment years, private sector investment and consumption spending will be very weak. Public sector spending will rise sharply to fight the massive deflationary forces of private sector de-leveraging. In both the developed and developing worlds, infrastructure spending will be the key tool for fiscal activism. It is clear that countries such as China and India will need to continue building new roads, ports, railways, industrial parks and power grids, and improving the logistic network. In the developed world, infrastructure spending will mostly take the form of upgrading communication, transport and power links.

In the short term, the post-bubble adjustment will constrain demand growth and keep inflation and interest rates from going higher. The world will focus on fighting the deflationary risk. So investments with steady and high yield will be the preferred choice in this environment. In the medium term, there will be an infrastructure boom. Industrial commodities and construction materials will benefit directly. With most governments – from Asia (notably China) to the G7 countries – ramping up infrastructure spending, commodity prices are likely to remain on a secular bull-market trend in the next two decades. There will be cycles within this secular trend. But each time the commodity market's cyclical downturn will likely hit a bottom higher than the previous one, forming a so-called ascending-bottom trend.

However, when governments use pump-priming to save their economies from implosion, the risk of potential fiscal problems will also mount. The US economy could be the one at highest risk of a fiscal blow-out. At the time of writing, the financial markets have not yet priced in such a risk, but all players, including investors and policymakers, should monitor this risk going forward. According to OECD data, the US fiscal deficit and debt burden were already higher than those in the euro area at the end of 2009. The cyclically adjusted budget deficit of the US[2] will reach almost 9 per cent of GDP by the end of 2010, while the euro area's deficit will be only half as high (estimated at 4.4 per cent). Unlike the euro area and other G7 countries,[3] the US is unlikely to finance its budget shortfall through domestic savings, because its savings are much lower. End of 2009 official data show that the US national savings rate had fallen to a new post-war low of just 9.5 per cent of GDP, as compared with an average of 18 per cent for the rest of the G7 countries and a world average of 21.7 per cent (Figure 11.1).

Hence, there is a greater risk that the US Fed will monetise the government debt if interest rates or bond yields threaten to rise to levels that would hurt economic growth during the post-bubble adjustment period. In contrast, the ECB is strictly barred from buying government debt outright to salvage the economy, and all the G7 countries have much higher levels of national savings to support fiscal activism. There is another implication for the US dollar here. If the US Fed intervenes to

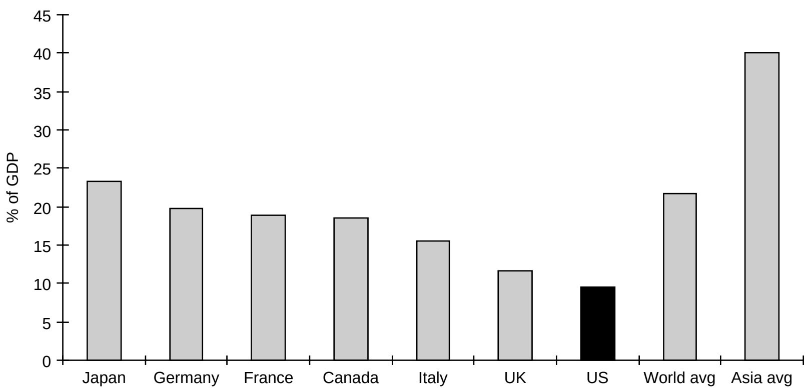

Figure 11.1 Gross national savings
Sources: CEIC, author.

prevent bond yields from rising, the adjustment process will be borne by a weaker US dollar. This is one key reason to expect a weak US dollar in the post-subprime years. While several European governments, including the profligate Portugal, Ireland, Greece and Spain (or the so-called PIGS countries), have started taking steps to rein in their fiscal deficits since 2010, there are no signs that the US is prepared to embark on a deficit control process. In the first three months of 2010, for example, the US government proposed a new spending bill almost every week. So the possibility of a US fiscal deficit blow-out, with related risks to the US financial market and US dollar, is a serious stress point in the post-subprime world.

A new paradigm

From a secular perspective, the evolution of the world economy may have entered a new economic paradigm. For instance, the 1970s and 1980s were characterised by excess demand, resulting in high inflation. In the 1990s and the first half of the 2000s, the world economy was characterised by disinflation achieved by supply side reforms and globalisation. The world became polarised, with US over-consumption on one side and Chinese over-saving on the other. Although the world economy was still balanced on an aggregate basis, it was in a stable disequilibrium, in my view.

The 2008–9 financial crisis and Great Recession, as it is known in the post-subprime era, could mark the beginning of a period characterised by absolute abundance, excess savings and oversupply of goods. US consumers have been the key source absorbing Asia's goods surplus since the 1990s. But this source of demand has disappeared since the subprime crisis, as American households have turned to a saving mode as part of the post-bubble adjustment. As a result, there has been a powerful surge in global savings.

In other words, the world needs to find new borrowers and spenders to sustain future growth, but they will probably not be easy to find in the coming years. Without question, economic recovery will bring back some of the lost spending power in the developed world, but the Americans are unlikely to return to the borrowing and spending binge they were engaged in before the subprime crisis. Re-regulation of the US banking system will also restrain credit growth and, in turn, hamper consumption growth in the years to come.

So it is likely that, on a secular basis, savings will stay relatively cheap and chronic deflationary pressure will prevail. This would imply a slow growth and low interest rate environment for a much longer period of time than many people would expect. Regarding this low interest environment, it is interesting to note that the 1997–8 Asian crisis suppressed global interest rates and fuelled the final blow-off of the US technology bubble. Similarly, the bursting of the technology bubble and the subsequent drop in interest rates created another giant bubble in real estate around the world. If history is any guide, the great reflation campaign that the global authorities have employed to combat the subprime crisis will create another financial mania and potentially massive bubble. This potential mania will likely occur in the emerging markets, with asset markets in China and Hong Kong being the primary targets of speculation. In particular, the bubble in China could go on much longer than many believe, because the Chinese bubble is funded by savings (principally cash) but not credit (see Chapter 9).

No Asian economic leadership

Asia's strong economic fundamentals have enabled the region to weather the developed world's credit quake without suffering significant or permanent damage. This has raised expectations that Asia, under the leadership of China, might develop some sort of autonomous economic leadership while the developed world is mired in post-bubble restructuring. This is not realistic!

Let us put things in perspective. Developing Asia expanded at an average growth rate of 8.3 per cent a year between 2001 and 2008, basically three times the 2.8 per cent average growth rate of the rest of the world economy. Putting it another way, the economic dynamism of developing Asia added an extra 1.2 percentage points to annualised global growth in this eight-year period. But there is a catch to this economic strength of Asia. Over this eight-year period, Asia had continued to direct an increasing portion of its output to others. This is reflected by the fact that developing Asia's export share in GDP rose to 51 per cent in 2008 from 40 per cent ten years before, while the share of private consumption in GDP fell to a record low of 37 per cent (Figure 11.2). In other words, Asia has not moved towards rebalancing itself, and thus does not satisfy the basic precondition of autonomous economic leadership – namely, an economy in which output support is increasingly dependent on internal demand rather than on exports.

In short, these are not the footprints of a new autonomous engine of global growth. As the mix of developing Asia's GDP indicates, the region's growth premium has been driven primarily by exports, and by

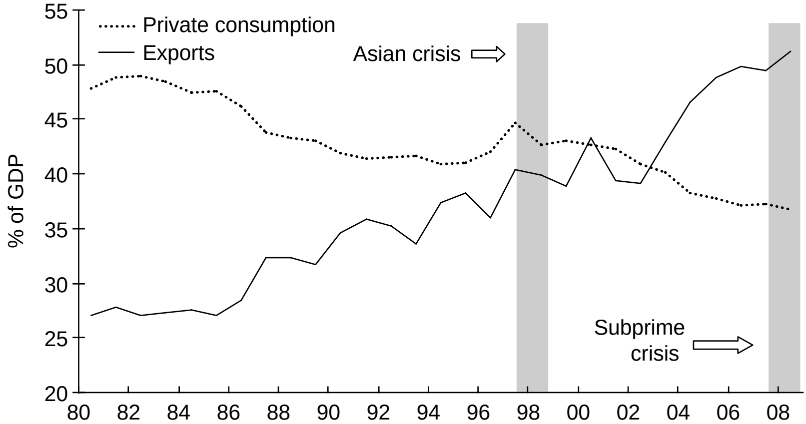

Figure 11.2 Asia remains export-dependent
Sources: CEIC, author.

the secondary support of export-led fixed investment in infrastructure and export-producing capacity, rather than by domestic consumption. If this trend does not change, the dreams of Asian-led global leadership are wishful thinking. Developing Asia is still more a follower than a growth leader. This point is clearly seen in the US-induced subprime crisis. Despite all the fuss about Asia decoupling from the growth cycles of the developed world (notably the US), every single Asian economy either followed the US into economic recession or experienced a sharp growth slowdown. Asia's ever-rising dependence on external demand for growth momentum made such an outcome inevitable. Asian consumers, despite all the hype about them driving the decoupling story, were not nearly strong enough to forestall this outcome.

The good news is that Asia appears to have rebounded faster and more strongly than the developed world now that the worst of the subprime crisis has passed. The bad news is that the quality of Asia's economic recovery is still poor, in the sense that it has not yet shown any of the clear structural changes that are needed to sustain steady growth in the long run. This is a worry, because the Asian recovery has been basically driven by an unprecedented, vigorous bank-funded investment boom, notably in China, where the Chinese banks lent RMB10.5 trillion in new loans in 2009 (and over 70 per cent of this new lending was front-loaded in the first half of the year), or 110.4 per cent year-on-year growth from 2008. It is the exponential growth rate of these loans in

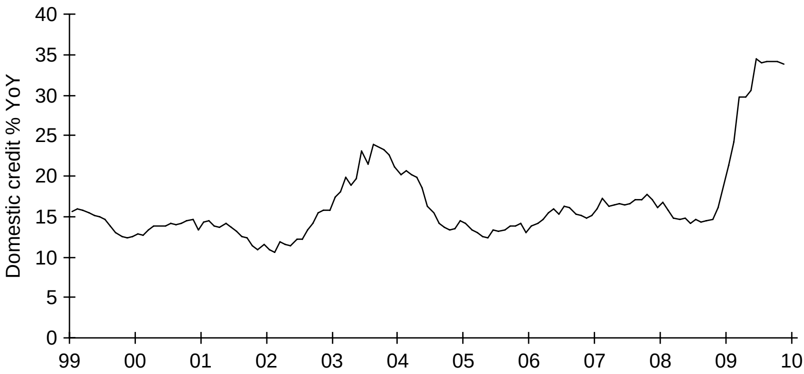

Figure 11.3 China's lending craze to combat the subprime impact
Sources: CEIC, author.

such a short period of time that raises alarm over growth quality and potential bad loans down the road (Figure 11.3). On the heels of this lending craze, surging fixed-asset investment accounted for almost 90 per cent of China's total GDP growth in 2009. That was more than double the 43 per cent average growth contribution made by this sector in the previous decade, and enough to push the investment share of Chinese GDP to over 45 per cent, an unheard-of investment ratio for any major economy in the modern world.

To the extent that Asia has become a China-centric growth machine, a transformation that can be confirmed by the increasing intra-regional trade flows focusing on China, the sustainability of the Chinese economic recovery holds the key to Asia's growth prospects. Due to the unbalanced character of China's post-subprime recovery and the uncertainty surrounding its structural changes towards a domestic demand-driven growth model, there are serious questions over Asia's growth outlook and structure in the post-subprime world.

Since Asia's hyper-growth is still much more a function of external than of internal demand, this lays bare the recipe for an Asia that can stand on its own – an autonomy that can be realised by drawing support from its own vast population of 3.5 billion people. This is the essence of Asia's next step to upgrade its growth – the daunting transition from an externally driven growth model to one that derives increasing support from internal private consumption. I have been hopeful that Asia would make that transition since the Asian crisis in 1997–8, but I have also been disappointed (see Figure 11.2 again). I remain hopeful, nevertheless, and a Chinese leadership is crucial to drive this transition. The subprime crisis may serve as a wake-up call for Asia, the alarm that underscores the danger of being overly dependent on external demand for too long.

The growth scare of late 2008 and 2009 was an extremely disconcerting development for the region. Nowhere was that more evident than in China. Chinese GDP growth slowed to a 6.4 per cent year-on-year rate in the fourth quarter of 2008. But, if this year-on-year comparison is restated on a sequential quarterly basis, growth in the final quarter of 2008 was close to zero, suggesting that the Chinese economy had pretty much hit a wall. The Chinese authorities knew this, and that is why they went all the way with a RMB4 trillion stimulus programme and directed banks to lend as if there were no tomorrow in 2009, in order to jump-start the economy at all costs. This was a startling and very worrisome development, in terms of both China's growth quality and its heavy-handed policy intervention, for an increasingly China-centric Asian economy.

In 2007, Chinese Premier Wen Jia-bao warned that, while China's economy looked strong on the surface, beneath the surface it was increasingly 'unstable', 'unbalanced', 'uncoordinated' and ultimately 'unsustainable'. These four 'uns' can only be effectively addressed if China, and the rest of Asia, embraces a new mantra of consumer-led growth. The Great Recession of 2008 and 2009 underscores a new urgency to this challenge. It is a wake-up call to Asia that the old ways of export-led growth have outlived their useful existence. Asia missed the opportunity to make this structural change after the Asian crisis. It can hardly afford to miss it again after the subprime crisis, and China can play a crucial role in driving this change in the post-subprime world.

China's challenges

The sharp growth rebound in the Chinese economy in 2009 suggests that it is easier to achieve 'fast' than 'quality' growth. Other rebalancing measures to effect structural changes in the Chinese economy include cutting excess capacity in some specific industries, reducing the economy's dependence on capital spending, improving energy and resource efficiency, fostering job growth through the service sector and small- and medium-sized firms, and reducing income inequality in the economy. But these issues are deeply rooted in the basic features of the Chinese economy and will prove very difficult to change in the short term.

China's challenges in the post-subprime world are clear. Its leaders have to carry on with the economic reforms that Mr Deng Xiao-ping started in 1978, rather than focusing on various populist policies. There have been virtually no new reform initiatives in China for quite some time. The last major step to liberalise the economy and the financial system was taken in the late 1990s, when then-premier Zhu Rong-ji took dramatic actions to privatise the economy (thereby destroying the state-owned enterprises sector) and make the Chinese currency convertible on current account transactions. The privatisation drive unleashed huge productivity gains that sustained the economy through a low-inflation boom that lasted for ten years. In a way, the current leadership is still reaping the benefits of the dramatic corporate restructuring that took place in the 1990s.

Against such a benign economic backdrop, the Chinese leadership has developed a tendency to lean on economic policies that are aimed at boosting their political popularity so as to secure their grip on power over the country. From an economic perspective, this policy complacency is bad for long-term structural development. The leaders also need to change their habit of relying on administrative measures to regulate the economy, and allow market forces to function properly. Luck has a lot to do with Beijing's ability to oversee an economic boom that has lasted for over ten years without any major bust. But the longer the economic boom lasts, the higher the risk of a bust later. Without further economic restructuring and financial liberalisation, the resilience of the Chinese economy will decrease and its ability to avoid boom–bust cycles will be reduced. Whether the current leadership has the resolve to push through more, and aggressive, reforms is uncertain, especially since it is due to step down in 2012. The incentive to keep the status quo is strong and may dwarf the willingness to effect any changes. A return of economic interventionism (see Chapter 9) is another obstacle to new reform initiatives.

Lastly, I would like to conclude with a note on Beijing's effort, which is in fact another policy challenge, to internationalise the Chinese currency, the renminbi. On the surface, the subprime crisis has presented an opportunity for China to start its attempt to internationalise the RMB. Beijing jumped at this opportunity and started the first phase of the plan in 2009. The process is still ongoing at the time of writing, and focuses on expanding the RMB's role in settling cross-border trade. To facilitate this move with its trading partners, China signed a total of RMB650 billion in bilateral currency swap agreements with six central banks (Republic of Korea, Hong Kong SAR, Malaysia, Indonesia, Belarus, and Argentina) between 2008 and 2009.

However, Beijing may not be aware of the side effects of its move to increase the usage of the RMB outside of China, and it may not like the results. First, successful cross-border trade settlement in RMB implies a growing accumulation of RMB holdings by China's trading partners around the world. This will increase the demand for parking these holdings in liquid and safe assets. As a result, pressure to access the RMB bond market should also build, along with a wider adoption of settlement in RMB. However, thus far, there has been little sign that China plans to allow foreigners meaningful access to its large domestic bond market.

Second, in theory, any significant progress towards RMB internationalisation would mean a significant shift away from the US dollar as the world's reserve currency. This would have huge implications for financial markets beyond exchange rates. Foreign investors, including central banks, are estimated to hold 50 per cent (or US$3.2 trillion) of the US Treasury bond market. China is the largest foreign sovereign holder, accounting for 24 per cent of all foreign holdings. The US Treasury market would crash if China and other sovereign holders started to desert it. That would force a sharp rise in US interest rates, strangling America's corporate bond and mortgage markets. All this would crush the US economy and asset market, sending negative shock waves around the world, and hurt China too, in terms of both the negative impact on its economic growth and the valuation of the US dollar assets held in its foreign reserves.

All these are potential unintended serious impacts on the world (including China). Beijing would not like to see (or experience) these as a consequence of pushing for the internationalisation of the RMB. So, in practice, it is unlikely to push for quick internationalisation. Even in the medium term (five years or more), it is unlikely that China and other central banks will be able to replace the US dollar in their foreign reserves by other assets and currencies in any significant way.

Fundamentally, for the RMB to be truly internationalised (i.e. to become a hard currency accepted anywhere in the world as a medium of exchange and a reserve currency), China has to be a large net importer of goods and a net exporter of capital to allow its partner nations to accumulate RMB assets in significant amounts. China will also need a strong financial system to withstand significant capital flows, and creditable economic policies to gain international confidence. All this requires significant changes in the economic structure (see Chapter 8), which may take decades to achieve. The popularity of the US dollar and British pound as reserve currencies is associated with at least 20 per cent overseas ownership of their respective domestic bonds, which is also a sign of international confidence in their respective economic policies. It could take a long time before offshore entities can hold similar amounts of RMB bonds and before China can acquire complete international policy credibility.

Finally, it remains uncertain how far China wants RMB internationalisation to go. Japan backed out of its Japanese yen internationalisation effort after a head start in the 1970s for fear of a negative impact on its domestic financial markets. The Japanese government has since taken a passive role in yen internationalisation. The point is that a weak and underdeveloped domestic financial system is an obstacle to currency internationalisation. And where does China's financial system stand, and how fast is Beijing willing to modernise it? We do not know for sure. In a nutshell, the RMB internationalisation effort taken by Beijing so far is at a very initial stage. Central to this point is that the RMB lacks the foremost prerequisite[4] to become a global currency – free and full convertibility – and movement towards this state, in turn, is dependent on the development of a sound, deep and properly functioning capital market in the country. When will this be accomplished? ... Anyone?

Notes

1 The subprime crisis is not a normal crisis

1. In general, the shadow banking system consists of non-bank financial institutions that play an increasingly critical role in the lending businesses. Shadow banking institutions are typically intermediaries between investors and borrowers. For example, an institutional investor such as a pension fund may be willing to lend money, while a corporation may be searching for funds to borrow. The shadow banking institution will channel funds from the investor(s) to the corporation, profiting either from fees or from the difference in interest rates between what it pays the investor(s) and what it receives from the borrower. By definition, shadow institutions do not accept deposits like a depository bank. Therefore, they are not subject to the same regulations. Familiar examples of shadow institutions included Bear Stearns and Lehman Brothers. Other complex legal entities comprising the system include hedge funds, SIVs, conduits, money funds, monolines, investment banks, and other non-bank financial institutions.

2 Post-subprime world still unbalanced

1. See footnote 1 in Chapter 1.
2. TED spread is the yield differential between 3-month USD London Inter-bank Offered Rate (LIBOR) and 3-month US T-bills. It is an indicator of perceived credit risk in the economy. This is because T-bills are considered risk-free while LIBOR reflects the credit risk of lending to commercial banks. When the TED spread increases, that is a sign that lenders believe the risk of default on inter-bank loans (also known as counter-party risk) is rising. Inter-bank lenders therefore demand a higher rate of interest, or accept lower returns on safe investments such as T-bills. When the risk of bank defaults is considered to be falling, the TED spread narrows.
3. Basis point = 1/100 of a percentage point.
4. The money multiplier measures how much the money supply changes in response to a change in the monetary base. It is estimated by dividing broad money supply M2 by base money M0.
5. The G7 is a group of seven industrialised nations, including Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
6. Moral hazard is the fact that a party insulated from risk may behave differently from the way in which it would behave if it were fully exposed to the risk. It is a special case of information asymmetry, a situation in which one party in a transaction has more information than another. Moral hazard arises because an economic agent does not take the full consequences and responsibilities of his or her actions, and thus has a tendency to act more imprudently than he or she otherwise would, leaving another party to hold

some responsibility for the consequences of those actions. For example, a person with fire insurance may be less cautious about fire prevention at home because the negative consequences of a fire are (at least partially) shouldered by the insurance company.

3 Subprime lessons: east meets west

1. This echoes my observation that the 1997–8 Asian crisis and the 2007–8 US subprime crisis were foreshadowed by similar macroeconomic symptoms in the ten preceding years. Hence, the subprime crisis was not a 'black swan' event. See Introduction for details.
2. The 'wisdom of crowds' logic is that the aggregation of information in groups will result in decisions that are often better than could have been made by any single member of the group.

4 Asia, a guilty bystander

1. The basic balance is equal to the current account balance plus capital account balance. The latter is approximated here by net foreign direct investment inflow, which has a major impact on Asia's economic growth and investment momentum.
2. The short-term foreign debt cover ratio = foreign reserves divided by short-term foreign debt. The higher the ratio, the better, because it means there are more foreign reserves to service and repay the short-term foreign debt.
3. In finance, the beta (β) of a stock or portfolio is a number describing the relation of its returns with that of the financial market as a whole. An asset with a beta of 0 means that its price is not at all correlated with the market; that asset is independent of market movement. A positive beta means that the asset generally follows the market. A negative beta shows that the asset moves inversely with the market; the asset generally decreases in value if the market goes up, and vice versa.
4. One basis point = 1/100 of a percentage point.
5. As a safety rule, an economy should keep a minimum of three months import cover to ensure its external payment ability.

5 China becomes a superpower?

1. The Association of Southeast Asian Nations, or ASEAN, consists of ten countries, namely Myanmar, Thailand, Laos, Vietnam, Cambodia, Indonesia, Malaysia, Brunei, Singapore and the Philippines. The Newly Industrialised Economies, or NIEs, include South Korea, Taiwan, Hong Kong and Singapore.
2. Basically, the PPP measurement adjusts for relative inflation and exchange rates between economies. It states that the exchange rate between two economies should be equal to the ratio of their price level of a fixed comparable basket of goods and services. Thus, when a country's domestic price level is rising faster than that of the other country (i.e., it is experiencing higher inflation), its exchange rate must depreciate to keep the purchasing power

between the two economies constant. The basis for PPP is the 'law of one price'. In the absence of transportation and other transaction costs, competitive markets will equalise the price of an identical basket of goods in two economies when the prices are expressed in the same currency. Thus, PPP calculation compares China's GDP with those of the other economies on a like-for-like basis.

3. This export elasticity to Chinese imports is estimated by regressing a country's export growth against Chinese import growth, using monthly data. The numbers in the parentheses in Figure 3 are R-squared of the individual equations. Typically, this elasticity is a positive number, indicating that a rise in Chinese import growth will lead to a rise in another country's exports.

6 Opportunity for learning

1. For example, throughput growth in some ports, notably those in Guangdong and Fujian, and traffic flows in some coastal provinces, notably in Guangdong, Zhejiang and Jiangsu, will slow sharply for as long as the post-crisis adjustment in the western world lasts because they all have high export/GDP ratios and focus on low-end export products. Even some regional property markets within China will be hurt, notably in Guangdong, whose export/GDP ratio is over 90 per cent. A significant slowdown in exports will result in not only plant closures and worker layoffs but also layoffs/relocation of company executives. This will cut demand for commercial, industrial and residential properties. In fact, Dongguan (Guangdong's most dynamic export base) became the first major Chinese city to see falling property prices when the subprime crisis deepened in 2008. As real demand falls, speculative demand for properties will disappear quickly, adding to the downward pressure on property prices.
2. In economics, the invisible hand, also known as the invisible hand of the market, is the term used to describe the self-regulating nature of the marketplace. It is a metaphor first coined by the economist Adam Smith in *The Theory of Moral Sentiments*. For Smith, the invisible hand was created by the conjunction of the forces of self-interest, competition, and supply and demand, which he noted as being capable of allocating resources in the society in an optimal way that no other/better allocation alternatives can achieve. This is the founding justification for the laissez-faire economic philosophy.
3. Tsai's book draws upon her unparalleled fieldwork in China's world of shadow finance to challenge conventional ideas about the political economy of development. She shows that business owners in China have mobilised local social and political resources in innovative ways, despite the absence of state-directed credit or a well-defined system of private property rights. Entrepreneurs and local officials have been able to draw on the uncertainty of formal political and economic institutions to enhance local prosperity.

7 Opportunity for economic expansion

1. Readers who are interested in studies on China's overseas investment development are referred to Sung (1996), Wall (1997), UNCTAD (2003), Wong and

Chan (2003), Wu and Chen (2001) and Asia Pacific Foundation of Canada (2005, 2006).
2. They are CNOOC, China Petro-Chemical and China National Petroleum.
3. For example, there are concerns about China's 'predation' of African oil resources and the so-called 'economic colonialism' (see Downs, 2007; Evans and Downs, 2006; *People's Daily*, 2006; Wang, 2007). There is also a general concern about China's increasing procurement of natural resources from emerging markets (*The Economist*, 2006).
4. Core inflation is headline CPI inflation less volatile food and energy inflation. Thus, core inflation shows the underlying price (demand) pressure when the volatility of the food and energy prices is stripped out. But some argue that excluding the food and energy components is not appropriate for analysing Asia because the weights of these two items, which are essential items in daily life, are much higher than in the developed world, so that changes in food and energy prices have a much bigger impact on underlying demand pressure in Asia than in the developed world.
5. Estimated hot money inflow = monthly increase (decrease) in foreign reserves minus trade surplus (deficit) minus FDI inflows minus exchange valuation effects on the foreign reserves.
6. First home buyers have to make a minimum down payment equal to 30 per cent of the home value, while second home buyers have to put down a minimum of 40 per cent.
7. A-shares were initially meant for Chinese investors only and are priced in the domestic currency, renminbi or yuan. But, since the implementation of the reforms in December 2002, foreign institutional investors have also been allowed to invest in A-shares under the system of QFII (Qualified Foreign Institutional Investor).
8. The term 'H-shares' refers to the shares of companies incorporated in mainland China that are traded on the Hong Kong Stock Exchange. Many Chinese companies float their shares simultaneously on the Hong Kong market and one of the two mainland Chinese stock exchanges. Huge price discrepancies between the H-shares and the A-share counterparts of the same company are not uncommon. A-shares generally trade at a premium to H-shares, as the Chinese government restricts mainland Chinese people from investing abroad, thereby locking up a huge amount of liquidity, which chases a limited supply of domestic shares.

8 Opportunity for structural changes

1. The urbanisation process in China allows a large number of people to make the transition from subsistence farming to salaried jobs, thus gradually increasing the size of the consuming population. The proportion of Chinese living in urban areas has risen from 11 per cent in 1949 to 47 per cent in 2009. But this share is still far smaller than many other Asian countries, such as the Philippines whose urban population accounts for over 60 per cent of the country's total. This also means that China's urbanisation process still has a long way to go, underscoring its large potential for consumption growth in the coming years.

2. Many analysts have confused the relevance of gross exports with that of net exports (i.e. gross exports less total imports) to economic growth. When one looks at the contribution to GDP, one should use net exports but not gross exports. This is because net exports are a GDP component (along with government spending, consumption and investment) and, thus, contribute to GDP growth, but gross exports are not.
3. For more details, see Dollar et al. (2003).
4. This surging IPO prices problem is widespread in China, and led to the CSRC's suspension of new issues between October 2008 and 2009. It continues to plague the Shenzhen senior exchange also. Guotai Securities, a Chinese stockbroker, estimated that the prices of the last twenty-six new issues trading on the Shenzhen exchange before July 2009 rose eighty-one per cent, on average, on their first trading day (also see China Daily, 2009).

9 Risks behind the opportunities

1. There is evidence that the number of social unrest cases has been on the rise, though this may also reflect the fact that the Chinese government has become more open about media reporting. For more discussion, see Lo (2007), pp. 9 and 121.
2. An undervalued currency makes money creation almost uncontrollable. This, in turn, fuels asset bubbles and overstimulates the economy, leading to escalating inflation in the end.
3. Net credit supply soared by RMB10 trillion, or 30 per cent of GDP, in 2009 following Beijing's policy instruction to banks to lend to fund the government-led investment programmes.
4. The term quantitative easing refers to an extreme form of monetary policy used to stimulate an economy when the inter-bank rate, which in the US is called the Fed funds rate, is either at, or close to, zero. In practice, the central bank buys financial assets (mostly short-term), including government papers and corporate bonds, from financial institutions (such as banks) using money it has created ex nihilo (out of nothing). Normally, a central bank stimulates the economy indirectly by lowering the discount rate or reserve requirements. But, when it cannot lower them any further, it can attempt to seed the financial system with new money through quantitative easing.
5. In general, M1, narrow money supply, is technically defined as the sum of notes and coins that are held outside banks, travellers' cheques and current (chequeing) accounts, minus the amount of money deposited at the central bank. M2, broad money supply, is the sum of M1, savings deposits (including money market accounts from which no cheques can be written) and time deposits. The exact money supply definitions will differ from one economy to another.
6. This means that, even if all foreign creditors want their money back at once, the Chinese will only have to use less than a quarter of the country's foreign exchange reserves to pay off all the debts.
7. From Beijing's point of view, any public grievances stemming from unsatisfactory housing, such as sky-high housing prices pricing the general public out of the market, could potentially cause social unrest. Thus, controlling the

development of the property market and the movement of property prices are top policy concerns on Beijing's control list.

8. A *hu kou* refers to the system of residency permits, or household registration record. The *hu kou* officially identifies a person as a resident of an area and includes information such the name of the person, date of birth, the names of parents, name of spouse if married, and divorce records. With the large rural population of poor farm workers, *hu kou* limits mass migration from the land to the cities to ensure some structural stability. The *hu kou* system is an instrument of the command economy. By regulating labour, it ensures an adequate supply of low-cost workers to the state-owned businesses. Like the internal passports of the former Soviet Union, China's *hu kou* system allows the state to provide preferential treatment to industrial workers and intelligentsia who would be more likely to protest and even revolt during periods of unrest. A person who moves out of his or her *hu kou* base loses all state benefits, including education, welfare and health services.
9. China's rural population is estimated at 53 per cent of the total population. See footnote 1 in Chapter 8.
10. The State-owned Assets Supervision and Administration Commission of the State Council (SASAC) is a special commission of the People's Republic of China, directly under the State Council. It is responsible for managing China's state-owned enterprises, including appointing top executives and approving any mergers or sales of stock or assets, as well as drafting laws related to state-owned enterprises.

10 More crises brewing?

1. The G7, or Group of Seven, countries include Canada, France, Germany, Italy, Japan, the UK and the US.
2. To give an example of the governments using banks as fiscal vehicles to fund investment projects, a number of local governments have set up special purpose vehicles (SPVs) such as 'municipal investment & construction companies' to raise funds, either through issuing bonds (which were bought by the banks) or direct borrowing from the banks, to finance these investment projects. These SPVs are *de facto* state-owned enterprises.
3. As many investors learned in the collapse of the Guangdong International Trust and Investment Corp. (or GITIC) in 1989, the so-called government guarantees in China could turn out to be no guarantee at all, as neither the central government nor the Guangdong provincial government honoured any of the investment guarantees that investors were promised in the first place (see Gamble, 1999).
4. A Special Drawing Right (SDR) is the monetary unit of the reserve assets of the International Monetary Fund (IMF). The unit was created in 1969 in support of the Bretton Woods system of fixed exchange rates to alleviate the shortage of U.S. dollar and gold reserves in the expansion of international trade. The SDR unit is defined as a weighted sum of contributions of four major currencies, re-evaluated and adjusted every five years, and computed daily in terms of equivalent US dollars. SDRs are not a currency, but they represent potential claims on the currencies of the IMF members. SDRs

obtain their reserve asset power from the commitments of the IMF member states to hold and honour them for payment of balances. The IMF uses SDRs for its monetary unit of account. SDRs are allocated to member states as a low cost alternative to debt financing for building foreign reserves.

5. The 'Marshallian k' comes from the Cambridge Equation of the Quantitative Theory of Money: M = kPY, where M is money demand (which is equal to money supply in equilibrium), P is price and Y is real GDP, so that PY is nominal GDP. So k = M/PY, or the ratio of money supply to nominal GDP. When the Marshallian k is rising, it suggests that the monetary authorities are increasing money supply faster than nominal GDP, so that the ratio rises.

11 The post-subprime world

1. At the time of writing, the jury is still out on the exact timing of the conclusion of the subprime crisis.
2. Cyclically adjusted budget deficit is an estimation of what the government's budget deficit would be if the economy were at a normal level of activity (or in a state of full employment without inflation). This estimate is normally made by assuming that the rules and rates concerning spending and taxes are unchanged. For example, as taxes are an increasing function of national income and government spending is a decreasing function, during a slump in economic growth the cyclically adjusted budget deficit will be smaller than the actual deficit.
3. The G7 includes Canada, France, Germany, Italy, Japan, the UK and the US.
4. For a concise discussion on the related issues, please see Wu (2009).

Bibliography

Adrian, Tobias and Shin, Hyun Song, *The Shadow Banking System: Implications for Financial Regulation*, Federal Reserve of New York Staff Reports, no. 382, July 2009

Asia Pacific Foundation of Canada, *China Goes Global: A Survey of Chinese Companies' Outward Direct Investment Intentions*, Asia Pacific Foundation of Canada, 2005

Asia Pacific Foundation of Canada, *China Goes Global – II: A Survey of Chinese Companies' Outward Direct Investment Intentions*, Asia Pacific Foundation of Canada, 2006

Asia Sentinel, 'China's Overinvestment Quandary: Concerns Grow About Distorted Investment Goals', 31 December 2008, http://www.asiasentinel.com/index.php?option=com_content&task=view&id=1641&Itemid=422

Barnett, Steven and Ray Brooks, *China: Does Government Health and Education Spending Boost Consumption?*, IMF Working Papers, January 2010

Blanchard, Oliver, *Sustaining a Global Recovery*, Finance and Development, International Monetary Fund, September 2009

Bond, Tim, 'Time to Stop Worrying and Learn to Love the Recovery', *Financial Times*, 30 July 2009

Borio, Claudio and William White, 'Whither Monetary and Financial Stability? The Implications of Evolving Policy Regimes', in *Monetary Policy and Uncertainty: Adapting to a Changing Economy*, pp. 131–212, Federal Reserve Bank of Kansas City, Kansas City 2003

Chang, Gordon, 'China: The World's Next Economic Crash', *The Christian Science Monitor*, 21 January 2010

Cheung, Yin-Wong and Xingwang Qian, *The Empirics of China's Outward Direct Investment*, CESIFO Working Paper no. 2621, April 2009

China Daily, 'New Shares Sizzle on Shenzhen Debut', 11–12 July 2009

Dollar, David, Mary Hallward-Driemeier, Anqing Shi, Scott Wallsten, Shuilin Wang and Lixin Colin Xu, *Improving the Investment Climate in China. Investment climate assessment*, World Bank and International Finance Corporation, December 2003

Downs, Erica S., 'The Fact and Fiction of Sino-African Energy Relations', *China Security* 3, pp. 42–68, 2007

The Economist, 'More of Everything: Does the World have Enough Resources to Meet the Growing Needs of the Emerging Economies?', 14 September 2006

Eichengreen, Barry, *The Breakup of the Euro Area*, NBER Working Paper no. 13393, September 2007

Elwell, Craig, *The US Trade Deficit: Causes, Consequences and Cures*, CRS Report for Congress, Congressional Research Service, 25 January 2008

Evans, Peter C. and Erica S. Downs, *Untangling China's Quest for Oil through State-backed Financial Deals*, Policy Brief #154, The Brookings Institute, 2006

Fels, Joachim, *Euro Wreckage? A Remix*, Morgan Stanley Global Economic Forum, 7 November 2008

Financial Times, 'Lunch with the FT: Larry Summers', 10 July 2009
Financial Times, 'China Acts to Shore Up Weakening Exports', 10 March 2009
Gamble, William, 'Economic Effects of Legal Infrastructure – Collapse of the Guangdong International Trust and Investment Corporation', *Emerging Market Strategies*, Vol. III, no. 2, 25 March 1999
Gorton, Gary, *The Panic of 2007*, NBER Working Paper No. 14358, September 2008
Grapper, John, 'China's Over-investment is its Achilles' Heel', *Financial Times*, 30 November 2009
Green, Stephen, *China's Stock Market: Eight Myths and some Reasons to be Optimistic*, The Royal Institute of International Affairs, February 2003
Huang, Yasheng, *Capitalism with Chinese Characteristics*, Cambridge University Press, 2008
International Monetary Fund (IMF), *Country Report no. 06/394*, October 2006
International Monetary Fund (IMF), *The State of Public Finances: Outlook and Medium-term Policies After the 2008 Crisis*, the Fiscal Affairs Department, March 2009
International Monetary Fund (IMF), *Global Financial Stability Report Responding to the Financial Crisis and Measuring Systemic Risks*, April 2009
Jahangir, Aziz and Li, Cui, *Explaining China's Low Consumption: The Neglected Role of Household Income*, IMF Working Paper 07/181, 2007
Javers, Eamon, 'Is China Headed Toward Collapse?', *Politico*, 10 November 2009
Kennedy, Paul, *The Rise and Fall of the Great Powers*, Vintage Books USA, 1989
Keynes, John M., *The General Theory of Employment, Interest and Money*, Macmillan, 1936, reprinted in 2007
Kindleberger, Charles, *World Economic Primacy: 1500–1990*, Oxford University Press, USA, 1996
Klingbiel, Daniela and Luc Laeven (eds), *Managing the Real and Fiscal Effects of Banking Crises*, World Bank Discussion Papers 428, January 2002
Koo, Richard, *Balance Sheet Recession: Japan's Struggle with Uncharted Economics and its Global Implications*, John Wiley & Sons (Asia) Pte Ltd, 2003
Lo, Chi, *Phantom of the China Economic Threat: Shadow of the Next Asian Crisis*, Palgrave MacMillan, 2006
Lo, Chi, *Understanding China's Growth: Forces that Drive China's Economic Future*, Palgrave Macmillan, 2007
Lo, Chi, *Asia and the Subprime Crisis: Lifting the Veil on the Financial Tsunami*, Palgrave Macmillan, 2009
New York Times, 'Contrarian Investor See Economic Crash in China', 7 January 2010
People's Daily Online, 'China Africa Energy Co-Op, Why the West Pokes Nose?', 2006, http://english.people.com.cn/200604/30/print20060430_262310.html
Pettis, Michael, 'There's a Cost to Mainland Overinvestment', *South China Morning Post*, 26 October 2009
Read, Colin, *Global Financial Meltdown: How We Can Avoid The Next Economic Crisis,* Palgrave Macmillan, 2009
Reinhart, Carmen and Kenneth S. Rogoff, *The Aftermath of Financial Crisis*, NBER Working Paper no. 14656, January 2009
Shiller, Robert, *The Subprime Solution: How Today's Global Financial Crisis Happened and What to Do about It?*, Princeton University Press, 2008

Sung, Yun-Wing, *Chinese Outward Investment in Hong Kong: Trends, Prospects and Policy Implications*, OECD Development Centre, Technical Papers No. 113, 1996

Surowiecki, James, *The Wisdom of Crowds*, Anchor Books, 2004

Taleb, Nassim Nicholas, *The Black Swan*, Random House, 2007

Taylor, John, 'Housing and monetary policy', in *Housing, Housing Finance and Monetary Policy*, pp. 463–476, Federal Reserve Bank of Kansas City, Kansas City, 2007

Taylor, John, *Getting off Track: How Government Actions and Interventions Caused, Prolonged and Worsened the Financial Crisis*, Hoover Press, 2009

Tsai, Kellee S., *Back-Alley Banking: Private Entrepreneurs in China*, Cornell University Press, 2004

UNCTAD, *China: An Emerging FDI Outward Investor*, E-Brief, United Nations, New York and Geneva, 2003

UNCTAD, *Asian Foreign Direct Investment in Africa: Towards a New Era of Cooperation among Developing Countries*, United Nations, New York and
Geneva, 2007

United Nations Development Programme (UNDP), Human Development Report, 2007–2008

Wall, David, *Outflow of Capital from China*, OECD Development Centre, Technical papers No. 123, 1997

Wang, Jian-Ye, *What Drives China's Growing Role in Africa?*, IMF Working Paper, WP/07/21, 2007

White, William, *Is Price Stability Enough?,* Bank for International Settlements working papers 205, April 2006

White, William, *Should Monetary Policy 'Lean or Clean'?*, Federal Reserve Bank of Dallas Globalization Monetary Policy Institute, Working Paper No. 34, August 2009

Wong, John and Sarah Chan, 'China's Outward Direct Investment: Expanding Worldwide', *China: An International Journal* 1–2, pp. 273–301, 2003

Wu, Friedrich, 'The Renminbi Challenge: the future role of the Chinese currency', *The International Economy*, Fall 2009

Wu, Hsiu-Ling and Chien-Hsun Chen, 'An Assessment of Outward Foreign Direct Investment from China's Transitional Economy', *Europe-Asia Studies* 53, pp. 1235–54, 2001

Zakaria, Fareed, *The Post-American World: And the Rise of the Rest*, Allen Lane, 2008

Zandi, Mark, *Financial Shock: A 360O Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis*, FT Press, 2008

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