## Mongolia

A guide to economic and political developments

**Ian Jeffries** 

### Mongolia

Mongolia has followed a highly distinctive path of economic and political transition compared with the other countries in this series. China, North Korea and Vietnam are still communist in a political sense and have adopted (to varying degrees) a more gradual economic reform process than Mongolia, which rapidly moved to political democracy and a market economy. In addition, Mongolia, in a sensitive geopolitical position between Russia and China, is a country rich in minerals eagerly sought by rapidly growing China in particular. This book provides a comprehensive account of political and economic events in Mongolia, with particular emphasis given to events since the collapse of communism in Eastern Europe and the former Soviet Union. It covers the important topics in Mongolia's recent development, including the political reform process and the economic reform process, including the transition to a market economic system, the role of the private sector, foreign aid, trade and investment, agriculture and economic performance (with due regard to climatic problems). Overall, this book provides a comprehensive account of economic and political developments in Mongolia, and is an important resource for anyone seeking to understand this country's affairs.

**Ian Jeffries** is Reader in Economics and a member of the Centre of Russian and East European Studies in the University of Wales Swansea. His main areas of research focus on economic and political developments in communist and transitional countries.

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Ian Jeffries Department of Economics and Centre of Russian and East European Studies University of Wales Swansea

### **Introduction and summary**

Mongolia follows North Korea, Vietnam and China in the series, published by Routledge, entitled Guides to economic and political developments in Asia. China is the example par excellence of gradualism in economic transition and has greatly influenced policies in Vietnam and even in North Korea (where economic reform has been on a far more modest scale). Mongolia is very different, and it is not difficult to make a case for saying that the country could be classified as having adopted a broadly 'big bang'/'shock therapy' programme for economic transition as opposed to 'gradualism'. (See Appendix 2 for a general discussion of these issues.) In the real world, of course, there are always various combinations of relatively fast and slow elements in policy packages adopted by individual countries. But it is still useful to make a distinction between the two approaches. After all, China's broad approach is patently different from that adopted, say, in Poland, Estonia or Slovenia!

Mongolia is also different from the other three countries in being a multiparty democracy. Communist China, Vietnam and North Korea remain oneparty states. The year 1990 was the watershed, with the first democratic election being held in July. Mongolia certainly has its fair share of political and economic problems, among them corruption, political inexperience within opposition parties, government reshuffles and changes of government, factionalism, constitutional disputes, poverty, unemployment, and a disruptive and significant reorientation of foreign trade (formerly overwhelmingly dominated by trade with Comecon countries, especially the Soviet Union). But through thick and thin Mongolia has maintained a remarkable degree of political stability and commitment to political democracy and economic reform.

Communism collapsed in Eastern Europe in late 1989, followed in late 1991 by the disintegration of the Soviet Union. Yugoslavia also disintegrated, and in a generally very bloody fashion. The world economies today are generally market-orientated to varying degrees. Mongolia can certainly be classified as one. Even politically communist countries such as China and Vietnam have been gradually moving increasingly in that direction for some time and are allowing the private sector of the economy to play an ever greater role. North Korea's economic reforms are much more limited, but the direction is plain to see (albeit with some backtracking towards the end of 2005 as regards reform in the food distribution system).

Mongolia is a large country in terms of land area (half the size of India), but with a tiny population of around 2.8 million. Traditionally a country of pastoral nomads, it was the heart of the empire of Genghis Khan (1162–1227). Geographically it lies sandwiched between Russia (the Tsarist Empire/the Soviet Union/Russia) and China. Mongolia, freed from Chinese control with the help of the Soviet Union, formally became the second communist (in Marxian terms socialist) country in 1924. It faithfully followed the Soviet lead politically and in terms of economic policy (see Appendix 1), but with the collapse of communism Mongolia generally moved ahead of new Russia on both fronts. Mongolia was a classically poor country (with a low national income per head and most of the labour force working in agriculture, for example) and remains one despite considerable progress. It has important mineral resources. Although the means to exploit them have typically not been commensurate, things are looking up in that regard. The demand for Mongolia's raw materials owes much to rapidly growing China. (See the companion book on China.)

Appendix 3 deals with bird flu. 'A bird flu outbreak in Russian Siberia worsened yesterday [10 August 2005] as neighbouring Kazakhstan confirmed cases of the deadly H5N1 strain of the virus and Mongolia reported its first cases' (*FT*, 11 August 2005, p. 7).

Until recently scientists believed that the major route of spread was through the transport of infected chickens and meat. But in the last few months outbreaks in which the virus appeared to have hopped from western China, to Mongolia, Russia and Kazakhstan – places that have little poultry trade between them – have highlighted the likelihood that wild birds have also disseminated the virus.

(IHT, 24 August 2005, pp. 1, 4)

(The appendix is detailed in part to bring the sections in the companion volumes on North Korea, China and Vietnam up to date.)

Readers will note in the bibliography that I have published extensively on communist and transitional economies, but most books deal with groups of countries. Since the collapse of communism in Eastern Europe and the Soviet Union in and after 1989, the number of countries I have analysed has grown from fourteen to thirty-five! Owing to the large number of languages involved, I have had to rely overwhelmingly on English sources.

I do not even read let alone speak Mongolian! Thus I am unable to undertake frontier research on the country. Nevertheless, a large amount of information is available in English and a book on Mongolia complements those on North Korea, Vietnam and China. There seems to be the need for a broad-ranging study covering both economic and political developments, with particular emphasis on events since 1990.

I have tried to write a book which will be of interest to governments, business and academics (from a wide range of disciplines, including economics, politics and international relations).

I present a richly endowed 'quarry' of up-to-date economic and political information (presented chronologically where appropriate) to allow the reader to dig out any desired facts and figures. This is not (and is not meant to be) original research but a broad-brush painting of the overall economic and political picture. I make extensive use of quality newspapers such as the International Herald Tribune (IHT), Financial Times (FT), The Times, the Guardian, the Independent and the Daily Telegraph. Publications such as the Vietnam Courier, The Economist, the Far Eastern Economic Review (FEER), The World Today, Asian Survey, Current Digest of the Post-Soviet Press (CDSP, known before 5 February 1992 as Current Digest of the Soviet Press), Transition and Finance and Development have also proven to be invaluable.

A review in the *Times Higher Education Supplement* (29 October 1993) kindly referred to my 'meticulous referencing', even though detailed referencing has the potential to be tiresome to readers. But since this is not original research and I am deeply indebted to many sources, I feel it necessary to make every effort to acknowledge the material used. It is not always feasible to name the correspondents or contributors, but I try, as far as possible, to ensure that credit goes where it is due. Partly for this reason and partly for accuracy I make extensive use of quotations, although where these include commonly quoted sayings or speeches I leave out specific sources.

# 1 Political, demographic and economic background

### Political background

A country of pastoral nomads, Mongolia was ruled by China during the Qing dynasty (1644–1911), although Mongolia actually ruled China during the Yuan dynasty (1271–1368).

The Mongols under Genghis Khan invaded China in the thirteenth century and they established their capital at Beijing (meaning 'northern capital'). The Mongol Yuan dynasty ruled for nearly a hundred years until the Mongols were expelled by the Ming in 1368.

(Jeffries 2006c: 9)

Genghis Khan (Chinggis Khan) (1162–1227) was proclaimed ruler of 'All the Mongols' in 1206 (Jeffries 1993: 126).

'Chinggis Khaan [is] the usual spelling in Mongolia' (*The Economist*, 23 December 2006, p. 105).

'The Mongol chieftain Temujin became Genghis Khan in 1206 when he united all the Mongol tribes' (*The Economist*, 7 August 2004, p. 53).

Genghis Khan was probably born in 1162 ... near the spot where he was proclaimed emperor of all the Mongols in 1206. By the time of his death ... [his] conquests extended from China to the Caspian Sea ... [He] was buried in 1227 ... An American–Mongolian expedition has discovered a walled burial ground ... that leaders of the group reported Thursday [16 August 2001 may be the secret tomb of Genghis Khan].

(*IHT*, 18 August 2001, p. 1)

When Genghis Kahn created the Mongol empire 800 years ago he consolidated the states under one system and opened them up to trade and cultural exchange. He was considered responsible for giving Mongolia a unified and ethnic identity and provided stability for the nation during uncertain times. Most Mongolians regard him as a great leader, whose infamy for brutality is balanced by the positive effects he had on the Mongol state ... In the

thirteenth century ... Genghis Khan consolidated several Mongolian tribes under his rule creating what was then the largest empire in the world.

(*IHT*, Survey, 23 May 2006, p. 21)

'Mongolia built the world's largest contiguous empire in the thirteenth century under Genghis Khan' (IHT, 20 September 2006, p. 19).

Genghis Khan's hordes killed from 30 million to 60 million people across Asia and Europe ... In October [2004] a Japanese-financed research team searching for the tomb said it had found it at Avraga, around 250 kilometres, or 155 miles, east of this capital ... Temujin, as he was called before he assumed the title Genghis Khan, or universal ruler, in 1206 ... In February 2003 the study 'The Generic Legacy of the Mongols', published by the American Journal of Human Genetics, estimated that Genghis Khan has more than 17 million direct descendants living today: one in every 200 people is related to him. In Mongolia alone as many as 200,000 of the country's 2 million people could be Khan descendants.

(www.iht.com, 9 May 2005; *IHT*, 10 May 2005, pp. 1, 4)

The number of people the Mongol horde killed is put at 40 million across Europe and Asia ... [China is] lavishing \$20 million on the renovation of a mausoleum to Genghis Khan which it first built in 1954 but which then fell into a decrepit state ... While the Chinese say their mausoleum marks his final resting place, there are at least two other rival claims. Last year [2004] a joint Japanese and Mongolia research team claimed to have identified the actual mausoleum in an area near the ruins of his palace complex, south-east of Ulan Bator. Meanwhile, a joint American and Mongolian team claims it is digging at the right place, near his original birthplace of Hentiy . . . His date of birth [is disputed but]... generally reckoned to be 1162... He died, apparently, in 1227.

(*Independent*, 11 May 2005, pp. 22–3)

Genghis Khan (1162–1227) was orphaned at thirteen. He began with a mere handful of followers, united the Mongolian tribes, and rose to become the most successful conqueror in history. His empire was the largest ever conquered by a single commander. It included the lands now known as Mongolia, northern China, most of Iran, Afghanistan, Pakistan, Turkmenistan and Uzbekistan. At its height, in the reign of his grandson, Kublai, it was the largest continuous empire in history, stretching east from the borders of Hungary, through Russia, the Middle East and reaching the Pacific Ocean. The Mongol empire was the first to know religious tolerance. In the capital, Karakorum, churches, mosques and temples stood side by side. In his empire women had equal rights with men, even among subject peoples. His laws prescribed the death penalty for merchants who allowed themselves to go bankrupt for a third time. He had 500 wives and concubines.

(*The Times*, Weekend Review, 23 April 2005, p. 5)

Genghis Khan laid the foundations for the Renaissance, according to Chinese historians. Khan's empire, which spanned Asia and Europe, also pioneered cultural and economic relations between the two continents and reopened the Silk Road, reviving the ancient trade link, they said.

(*The Times*, 21 July 2006, p. 39)

'Mongolians and Koreans have acknowledged their ethnic and cultural ties for centuries. There was considerable intermarriage among Mongolian and Korean elites in the thirteenth century. Koreans believe their ancestors came from Mongolia' (Batchimeg 2006: 277).

Mongolia was formerly the Chinese province of Outer Mongolia. Requesting Russian protection, Mongolia declared its independence from China on 1 December 1911. Although China recognized Mongolia's autonomy under its suzerainty as a result of an agreement with Russia in November 1913, Mongolia was finally induced to go along with this only in 1915. Mongolia reverted to being a Chinese province in the period 1919-21 after Chinese troops reestablished control. On 11 July 1921 independence was once again declared after Soviet troops had arrived in Mongolia in pursuit of White Russian forces. A limited monarchy prevailed initially (Jeffries 1993: 126).

The Mongolian People's Republic formally came into being in November 1924, the second communist (socialist in Marxian terms) country after the Soviet Union. Only the Soviet Union recognized the new republic until after the end of the Second World War. China formally recognized Mongolia's independence on 5 January 1946 (Jeffries 1993: 126).

Soviet troops stayed on until 1925. Five divisions were stationed in Mongolia in 1966 and one was taken away in 1987. According to Milivojevic (1987: 562), Soviet forces were 'officially' stationed in Mongolia from 1921 to 1925, from 1936 to 1956, and after 1966, but unofficially at least some Soviet forces were stationed there every year after 1921. Uniquely, communist Mongolia had no domestic armaments industry (p. 564).

The Mongolian People's Revolutionary Party (MPRP) was founded in March 1920 by Suhbaatar, who died in February 1923. Yumjaagiyn Tsedenbal became General Secretary of the MPRP in 1940. He became prime minister in 1952 after the death of Horlogyn Choybalsan and (after removal 1954-8) president in 1974. In August 1984 Jambyn Batmonh (sometimes written Batmunkh) replaced Tsedenbal as party leader. Batmonh became prime minister in 1974 and president in 1986; Tsedenbal was expelled from the MPRP on 15 March 1990 and stripped of all state titles on 20 April (Jeffries 1993: 126).

Diplomatic relations were established with communist China in 1949 and with the United States on 27 January 1987. Mongolia became a member of the United Nations in 1961. In 1985 border trade with China was resumed, but relations with China improved noticeably after Mikhail Gorbachev's Vladivostok speech in July 1986, in which he said that Mongolia and the Soviet Union were discussing a partial withdrawal of Soviet troops. A Soviet motorized rifle division withdrew between April and June 1987, a 25 per cent cutback of the

roughly 60,000 Soviet troops still left in Mongolia (Jarret 1988: 81). In his speech to the United Nations on 7 December 1988 Gorbachev promised that a 'large portion' of the troops would be withdrawn, subsequently quantified at three-quarters. The March 1990 agreement meant that Soviet troops and their equipment were to be withdrawn entirely by the end of 1992 (later fixed at September of that year). In 1987 Mongolia renewed scientific and technical co-operation with China after a span of two decades.

Mongolia pursues what it calls a 'third neighbour' policy. This involves remaining on good terms with its giant neighbours [Russia and China] but also reaching out to countries such as America and Japan (Mongolia's biggest aid donor).

(The Economist, 23 December 2006, p. 106)

#### President Nambaryn Enkhbayar:

This year [2006] we will celebrate the 800th anniversary of the nation of Mongolia, established by Genghis Khan . . . We Mongolians are a nomadic people. We have to be ready to move whenever it may be necessary. To make the change to democracy was like migration and moving to a new pasture.

(*IHT*, Survey, 23 May 2006, p. 21)

Chairman Mao Zedong may once have dismissed Genghis Khan as someone who 'only knew how to draw his bow at the eagles' ... Within China many people [still] retain the more traditional view that he was a barbarian invader ... [But] modern times [have seen the latter's official] reinvention as a Chinese hero . . . State-approved histories paint an idealized picture of an eternal 'Chinese' state grouping the majority Han with ethnic brothers such as the Mongolians ... The official justification rests essentially on the view that Genghis Khan is Chinese because his successors ruled China as emperors and many Mongolians live within Chinese state borders today . . . [There has been] a multi-million-dollar redevelopment of the site of the great khan's 'mausoleum' in [the Chinese province of] Inner Mongolia's Ordos prefecture . . . The Ordos 'mausoleum' is actually the site of a sacred enclosure where relics of the great khan were preserved. Now a complex of statues, plazas and museum halls has been built around the site in a style reminiscent of China's imperial tombs ... Traditional Naadam festivals of riding, shooting and wrestling, once banned, are now subsidized by the state.

(Mure Dickie, FT, 29 December 2006, p. 7)

The government has declared 2006 ... the 800th anniversary of the establishment of the Mongolian state ... a year-long celebration with special activities planned almost every day ... The culmination of festivities falls

on the national holiday, Naadam, on 11-13 July ... Naadam, or competition, is Mongolia's most important sporting festival and revolves around the country's most emblematic sports: horse racing, archery and wrestling. The centuries-old three-day-long festival, held in July, is a ritual which honours the mountain gods, and during which people traditionally drink fermented mares' milk and feast on cold meat pancakes, ice cream and fruit . . . Religions [are] Buddhist Lamaist, Shamanist, Christian and Moslem.

(IHT, Survey, 23 May 2006, p. 21)

### Demographic background

The population of this arid country reached 2,043,400 in January 1989 (compared with 649,300 in 1921), of whom 52 per cent were urbanized. The population was growing rapidly, a cause of some concern because of factors such as rising youth unemployment (Alan Sanders, FEER, 27 October 1988, p. 42). The population growth rate was 2.8 per cent and the infant mortality rate 75 per 1,000 (Alan Sanders, *Asian Survey*, 1990, vol. XXX, no. 1, p. 66).

The population was 2.18 million in 1992 (EIU, Country Report, First Quarter 1993, p. 5).

The death rate fell from 22 per 1,000 in 1940 to 8.4 per 1,000 in 1989. The literacy rate is 97 per cent (Denizer and Gelb 1992: 5).

Mongolia is half the size of India, but sparsely populated (Milne 1991: 2). It has a homogeneous population, with around 95 per cent Mongol-speaking.

The urban population increased from 44 per cent of the total in 1969 to 58 per cent in 1990 (Milne 1991: 2). The urban population is 60 per cent, and 25 per cent of the total population lives in the capital (Asian Development Bank 1992: xiii, 121-2). 'Almost half the people live in rural areas and some 40 per cent of the entire population rely for their livelihood on tens of millions of livestock' (*FEER*, 31 May 2001, p. 30).

Mongolia's 2.5 million people live in an area twice the size of France . . . During the 1960s tens of thousands of ethnic Chinese were expelled. In 1918 there were 100,000 ethnic Chinese Mongolians. By 1989 there were (officially) 247 ... Petty trade and barter across the Chinese border have ballooned as Mongolia has opened up. The Chinese are the biggest buyers (and smugglers) of cashmere ... and some 20,000 Chinese nationals are now reckoned to live in Mongolia . . . There is a large Kazakh minority and several culturally distinct Mongolian groupings.

(*The Economist*, 22 January 2000, p. 109)

Mongolia occupies 1.56 million square kilometres [603,909 square miles] of the Central Asian plateau, but its population [2.7 million in 2005, according to the United Nations] is much smaller than the Mongol population of China. The Sunni Moslem Kazakhs living in the western border regions are the only significant national and religious minority, comprising some 5 per cent of the total population, although migration to Kazakhstan in the 1990s has reduced their numbers . . . The major religion is Buddhism . . . A third of Mongolia's population lives in the capital city [Ulan Bator or Ulaanbaatar, meaning 'Red Hero'], while half the people herd livestock in the countryside . . . Life expectancy is sixty-two for men and sixty-six for women.

(www.bbc.co.uk, 4 February 2006)

One of the government's priorities for the 2005–8 period focuses on regional development . . . President Nambaryn Enkhbayar: 'One-third of the population lives in Ulan Bator and the capital city has potential, but we believe that in order to develop Mongolia in a balanced way we also have to modernize the regions. At present unemployment and poverty particularly affect the provinces and rural areas.'

(Mongolia 2006b: 1)

The population as of July 2005 was 2,832,224 (IHT, Survey, 23 May 2006, p. 21).

Life expectancy for men is sixty-two years and for women sixty-seven years. As regards religion: Buddhist Lamaist, 90 per cent; Shamanist and Christian, 6 per cent; Moslem, 4 per cent. Languages are Mongolian, Turkic and Russian (Mongolia 2006b: 2). '[There is a] 97.5 per cent literacy rate . . . [and] a young, multilingual population: English, Russian, Chinese and other languages are widely spoken' (p. 10).

### **Economic background**

Resource endowment comprises mainly land suitable for livestock, timber, brown and coking coal (important for power generation), copper, molybdenum, gold, fluorspar, iron ore, wolfram, zinc, tin and lead. Approximately 60 per cent of the country has never been subject to a proper geological survey (Eastern Europe Newsletter, 1987, vol. 1, no. 8).

Mongolia occupies 1.56 million square kilometres [603,909 square miles] of the Central Asian plateau ... The country has some of Asia's richest deposits of minerals, although these remain largely unexploited. Mongolia has an extreme climate, with a wide range of temperatures. Droughts and unusually cold and snowy winters have in the past decimated livestock.

(www.bbc.co.uk, 4 February 2006)

Mongolia is, by regional standards and for a country of its geographical size, poor in natural resources ... Mongolia ... [has a] relatively modest natural endowment – or at least . . . [it has] modest means . . . to exploit such an endowment as it has.

(Fish 2001: 325)

The mining sector is Mongolia's single largest industry, accounting for 55 per cent of the nation's industrial output and 46 per cent of its total foreign direct investment. According to the Foreign Investment and Trade Agency, the lucrative industry has a plethora of opportunities due to its vast mineral potential, as it has more than 6,000 mineral deposits and eight different minerals have been discovered ... Historically copper has been Mongolia's most abundant resource. However, recent years have shown gold to be an emerging opportunity. From 1993 to 2003 gold production grew tenfold. The nation also has substantial proven coal reserves, most often used for steam and electricity generation. Further potential exists in oil exportation, as the oil field in the Gobi region has allowed for crude oil exportation to China.

(IHT, Survey, 23 May 2006, p. 23)

Mining, the most important industry in Mongolia, represented 18 per cent of the economy and 76 per cent of exports in 2005 . . . The country claims to have the largest copper deposit in Asia. The Oyu Tolgoi mine, in southern Gobi, has 24 million tonnes of copper in reserve, which is more than one year of global consumption. The mine also has 800 tonnes of gold in reserve, almost one-fifth of world demand last year [2005].

(*IHT*, 20 September 2006, p. 19)

[There are] extensive mineral resources ... [Some] 70 per cent of the land surface is still untapped ... Mongolia is rapidly becoming a mineral power-house ... Having been voted the fourth most favourable mining destination worldwide, Mongolia's copper industry is highly valued and shows great potential ... Mongolia's resources count various assets besides copper, including coal, oil, phosphates and gold.

(Mongolia 2006b: 1–4, 10)

(For further details on mineral resources, see 'Foreign direct investment in the communist and post-communist periods', p. 67.)

In 1919 over 90 per cent of national income originated in agriculture (Jahne 1990: 71). (In 1985, by contrast, the figure was 25 per cent: Heaton 1987: 80. The figure for industry was 32.3 per cent: Heaton 1986: 87. Alan Sanders provides figures of 18.3 per cent for agriculture, 32.4 per cent for industry, and 31.6 per cent for trade and supply: Sanders 1987: xvii—xviii.)

Animal production accounted for over 90 per cent of national income. Industry accounted for 8.5 per cent of national income in 1940 and 14.6 per cent in 1960 (*Information Mongolia* 1990: 185–6).

Up to the start of the Second World War the limited amount of industrial activity largely concentrated on the processing of livestock products. The next two decades saw diversification into such activities as metalworking, timber processing and consumer goods, followed by full-scale industrialization, with intrabranch diversification and modernization (Sanders 1987: 867).

Agriculture's contribution to employment has decreased over time: 61 per cent in 1960; 47 per cent in 1970; 40 per cent in 1980; 29 per cent in 1990; 26.2 per cent in 1991 (industry, 21.1 per cent) (Asian Development Bank 1992: xiii, 28, 121–2).

Sanders (1987: 84–5) vividly describes the desperately poor state of the economy in 1921:

- The economy was dominated by nomadic cattle rearing. Ninety per cent of the population were nomadic herdsmen who owned no land. Fifty per cent of livestock was owned by feudal secular and church lords constituting just 7.8 per cent of the population; serfdom persisted until the revolution.
- Foreigners dominated industry (e.g. coal mining, gold mining, power sta-2 tions, leather, armouries and the telegraph system). Nationalization took place soon after the assumption of power
- There was heavy foreign indebtedness
- There was no national currency. Mediums of exchange included sheep, foreign notes, and silver and bullion coins. (The togrog or tugrik, equal to 100 mongo, was issued in 1925 and became the only legal tender three years later.)

In 1988 the percentage contributions to state budgetary revenue were as follows: turnover tax, 64.0 per cent; profits tax, 27.4 per cent; social insurance contributions, 3.7 per cent; taxes and dues from the population, 0.7 per cent; others, 4.4 per cent (Faber 1990: 415). The major state budgetary expenditures were as follows: national economic development, 45.4 per cent; socio-cultural expenditures, 38.7 per cent (Information Mongolia 1990: 229).

There are various estimates of *per capita* income:

- 1 \$658 in 1988 (official Mongolian estimate); \$552 in 1989 (IMF); less than \$240 (Asian Development Bank in a mid-1991 survey); \$440 in 1991 (Michael Kaser, *Economics of Transition*, 1994, vol. 2, no. 2, pp. 266–7).
- In 1989 GDP per capita was \$522 (Milne 1991: 2).
- The World Bank put GDP per capita in 1990 at \$360. Boone et al. assume the 1991 figure to be \$500 (Boone et al. 1997: 127).
- 4 Per capita real net material production (NMP) (at 1986 prices) declined to perhaps less than \$200 in 1991 (Asian Development Bank 1992: 91).
- In 1994 GNP per capita was \$340, according to the World Bank (FT, 17 July 1996, p. 31).
- Per capita income is a little over \$400 (The Economist, 6 May 2000, p. 118). Mongolia's GDP per head is under \$500 (The Economist, 8 July 2000, p. 89).
- GDP per person is \$450 (www.iht.com, 20 September 2005). 7
- Gross national income per capita in 2005 was \$590, according to the World Bank (www.bbc.co.uk, 4 February 2006).

### 2 Politics

#### The transition to a democratic state

Fish (2001) argues that: 'The absence of several factors that are often regarded as propitious for democratization has actually facilitated Mongolia's democratization' (p. 323). The five factors are as follows: superabundance of natural wealth; substantial geo-strategic significance and/or an external patron; regional power pretensions; a father figure; and concentration of executive power (p. 335).

Mongolia is, by regional standards and for a country of its geographical size, poor in natural resources ... Mongolia's relatively modest natural endowment – or at least the modest means that it has to exploit such an endowment as it has – has spared the country an enormous impediment to political development and to democratization in general ... Natural superabundance often reduces politics to competition over access to the agencies that control the proceeds of sales of natural resources. This game corrupts the political class and distorts the state apparatus.

(p. 325)

Post-communist Mongolia lacks not only a bounty of natural resources, but also an abundance of strategic value for powerful external actors. Correspondingly, major powers have not assigned great significance to the direction of Mongolian politics and the fate of one or another political force or leader in Mongolia . . . The attention of influential external actors is a mixed blessing at best in terms of democratization.

(pp. 325–6)

Post-communist Mongolia ... cannot harbour and has not harboured any pretensions to becoming a great power or a regional power.

(p. 328)

Mongolia ... did not have a single dominant leader at the time of regime change. No single person was universally regarded as the nation's founder

of independence and/or democratization. The absence of such an individual has proved to be a great blessing for democratization.

(p.330)

Democratization has been more robust in countries that disperse central power. Semi-presidential and moderate presidential regimes, both of which provide for a genuine division of power between the president and the legislature, have provided sturdy foundations for democratization . . . Mongolia's choice of a semi-presidential system has been a boon to democratization. Its pattern of relative success is also found in other countries that choose constitutions that invested formidable power in parliament and also granted the president prerogatives that extend beyond ceremonies and symbols.

(p. 331)

The year 1990 saw a profound change in Mongolia's political life. Opposition demonstrations started in December 1989 and these were officially condoned. On 21 January the MPRP decided to end party privileges (as illustrated, for example, by the closure of special shops, rest homes and hospitals, and a decrease in the number of official cars). At the 12-14 March plenum the members of the Politburo resigned, it was decided to end the 'leading and guiding role' of the party, and Gombojaviyn Ochirbat was named as the new General Secretary of the MPRP (confirmed on 13 April) instead of Jambyn Batmonh. On 21 March Batmonh lost his presidency to Punsalmaagiyn Ochirbat and Shaaravyn Gungaadori became prime minister (replacing Dumaagiyn Sodnom). The Politburo became known as the 'presidium' and the General Secretary as 'chairman', this being decided at the extraordinary party congress held 10-12 April (the first since 1921; delegates were also directly elected for the first time). Presidium members were not allowed to hold state posts in order to separate party from state. (This paragraph and unattributed ones following are indebted to Jeffries 1993: 126–7.)

Article 82 of the constitution was formally abolished on 23 March 1990 (this describing the MPRP as the 'guiding force' in society and the 'vanguard of the working people'). The extraordinary congress also ended party control over trade unions, cultural activities, the media, science and youth, although party cells were to remain in the police and army. Independent parties were formally legalized at the 10–11 May 1990 session of the National Assembly.

Free elections were held in July 1990, the first round on 22 July and the second on 29 July. The MPRP competed against independent parties for the 430 seats in the Great Hural (National Assembly). The Little Hural (newly revived) had fifty-three seats, fifty directly elected. The chairman, deputy chairman and secretary of this standing legislature were elected by the Great Hural (which met only infrequently: only four times over its five-year term). The Little Hural appointed a cabinet of ministers, e.g. Dashiyn Byambasuren was appointed prime minister on 10 September 1990.

The MPRP had a successful election, winning 345 out of 430 seats in the Great Hural and over 60 per cent of the votes for the Little Hural. The turnout was 92.4 per cent. The MPRP campaigned on a platform of 'humanitarian democratic socialism' and a 'state-controlled market economy' (more specific pledges including cancelling the debts of agricultural co-operatives). Other parties competing in the election included the Mongolian Democratic Party, the National Progress Party and the Social Democratic Party (these forming an electoral alliance and outperforming the other opposition parties), the Free Labour Party, the Greens and the Patriotic Front. The Mongolian Democratic Party was in favour of a more market-orientated economy, while the Free Labour Party was in favour of privately run shops and enterprises and market prices.

There was a coalition government. The Social Democratic leader, Radnaa-sumbereliin Gonchigdorj, became vice-president (the Little Hural electing him president of that body). The prime minister belonged to the MPRP, but he had deputies from the National Progress Party (which favoured a mixed, market economy) and the Mongolian Democratic Party.

On 28 November 1991 parliament decided to change the name of the country from the People's Republic to simply the Republic of Mongolia, this becoming law when the new constitution was introduced on 12 February 1992. The constitution stressed political democracy and the market economy.

In the 28 June 1992 general election, in which the turnout was 91.6 per cent, the MPRP won seventy of the seventy-six seats in the new single-chamber parliament. The Democratic Coalition won four seats, the Social Democratic Party one, and an independent one (Jeffries 1993: 127).

In the general election of June 1992 the National and Social Democrats received only five seats between them (they now have six) in the seventy-six-seat Great Hural, despite having won some 40 per cent of the vote. The ruling Mongolian People's Revolutionary Party's 'inclination [is] to monopolize the political scene' (Alan Sanders, *The World Today*, June 1994, vol. 50, no. 6, p. 105).

The Mongolian People's Revolutionary Party (MPRP) won 93 per cent of the parliamentary seats with only 56 per cent of the popular vote (Ginsburg 1995: 467). 'Mongolia's reform path has been remarkably peaceful when compared with its former patron to the north or the ethnically diverse nations of Central Asia' (p. 471). Ginsburg attributes the MPRP's success to a number of factors:

- 1 'Among the population, the close identification of the MPRP with the successful anti-Chinese nationalist movement of the 1920s is critical for understanding its survival today' (pp. 460–1);
- 2 the importance of personal contacts combined with the party's extensive network in the countryside (p. 470);
- 3 pragmatism as regards policy: 'Throughout the transition the MPRP has not launched a serious challenge to an economic reform agenda largely dictated by international donors and the political opposition . . . It has also served as a kind of umbrella for a wide spectrum of political views' (pp. 470–1).

A new opposition party was formed on 25–26 October 1992 under the leadership of Davaadorjiyn Ganbold. The Mongolian National Democratic Party was the result of a merger between the Mongolian Democratic Party (the leading party in the Democratic Coalition), the National Progress Party, the Mongolian Renewal Party and the Mongolian United Party. The Social Democratic Party remained a separate party. (Note that five smaller parties which did not do well in the 1992 general election formed the 'Third Force' alliance. The Coalition of Four Associations has also been formed.)

In January 1993 a new treaty was signed with Russia which excluded the mutual military assistance clause of the previous (1966) treaty (Tsedendambyn Batbayar, *Asian Survey*, 1994, vol. XXXIV, no. 1, p. 44).

### A chronology of political developments since 6 June 1993

6 June 1993. The presidential election (92.7 per cent turnout) was won by the incumbent Punsalmaagiyn Ochirbat, although as the candidate of the opposition National Democratic Party and the Social Democratic Party. (The MPRP did not adopt him as their candidate because of the president's increasingly independent stance, e.g. in July 1992 Ochirbat called for a coalition government and more recently the constitutional court upheld his view that the fixing of tax rates was the prerogative of the Great Hural and not of the government: Alan Sanders, The World Today, May 1993, p. 84.) Ochirbat attracted 57.8 per cent of the vote, while the MPRP candidate, Lodongiyn Tudev (editor of the party newspaper), attracted only 38.7 per cent.

18 June 1993. Ochirbat is sworn in as the first democratically elected president of Mongolia. He expresses a strong commitment to democracy and a market-orientated economy, his priorities being the strengthening of public order, social protection for the most vulnerable groups affected by the transition and the speeding up of privatization and other elements of the reform package (Tsedendambyn Batbayar, *Asian Survey*, 1994, vol. XXXIV, no. 1, p. 43).

April 1994. A hunger strike in Ulan Bator lasting twelve days is organized by the Mongolian Democratic Union. At its peak forty-one strikers demanded the resignation of the Jasray government and the dissolution of parliament on the grounds of bribery, corruption and general incompetence. Sheldon Severinghaus (Asian Survey, 1995, vol. XXXV, no. 1, pp. 70–1) believes the root of the strike is to be found in the 1992 parliamentary election, in which opposition forces, despite winning around 40 per cent of the vote, were essentially denied any meaningful outlet in parliament because of the small number of seats they won. But the strike ended peacefully through negotiation and compromise. President Ochirbat and the heads of the three political parties represented in parliament agreed that: (1) the electoral law would be revised so that the results of the next general election (1996) would more accurately reflect the will of the people; (2) a law would be drafted to create independent media free of government control and interference; (3) measures would be taken to combat corruption (note that a banking scandal surfaced in September 1994: p. 73). Severinghaus argues that

the power of the Mongolian People's Revolutionary Party is being modestly checked by three factors: (1) the elected president through his veto power, his right to initiate legislation and his role as ombudsman; (2) the constitutional court; and (3) the immature but committed and growing group of non-governmental organizations.

March 1996.

After a winter of precious little snow, the scene of combustion and firestorms was a horror story that began in March [some other sources say February] and was repeated every day throughout the spring across northern Mongolia. The fires are being called the most extensive since records were first compiled in 1978 and the worst that civil defence officials can remember.

(*IHT*, 10 June 1996, p. 7)

Fires have scorched about 23 million acres (9 million ha) of forest and grasslands (8.6 million acres and 14.3 million acres respectively). Up to a fifth of coniferous forest has been ravaged by fires. Civil defence authorities say that after three and a half months nearly all the fires are under control. So far twenty-six people and about 7,800 (out of 30 million) head of livestock have died. The Mongolian government estimates the total damage to the economy at \$1.9 billion (a figure equivalent to two years' output), but a number of foreign experts question this. Forest and prairies fires are a yearly occurrence and typically they burn several thousand acres every spring. In 1978, 2.4 million acres of woodlands burned (*IHT*, 10 June 1996, p. 7).

10 June 1996. It is announced that the last fire has been put out (*Independent*, 11 June 1996, p. 9).

30 June 1996. A general election is held for the seventy-six seats in the Great Hural. The turnout has been reported at 91 per cent (*FEER*, 27 March 1997, p. 23), 87 per cent (*Asian Survey*, January 1997, vol. XXXVII, no. 1, p. 61) and 90 per cent (*Guardian*, 3 July 2000, p. 17). The opposition Democratic Union Coalition unexpectedly defeats the ruling Mongolian People's Revolutionary Party (which previously held seventy seats).

The National Democratic Party (NDP, led by Ts. Elbegdorj) and the Social Democratic Party (SDP, led by R. Gonchigdorj, who took over the leadership in April 1996) previously had four and two seats respectively. They were the mainstays of the Democratic Union Coalition (led by Mendsaikhany Enkhsaikhan), which also included two smaller parties and non-party candidates. The coalition won fifty of the seventy-six seats (*FEER*, 27 March 1997, p. 23). The NDP won thirty-four seats, the SDP thirteen and allied independents three. The MPRP won twenty-five seats, with the conservative United Traditional Party winning one seat (Tom Ginsburg, *Asian Survey*, January 1997, vol. XXXVII, no. 1, p. 61).

According to James Pringle (*The Times*, 2 July 1996, p. 13), the NDP and SDP 'have been rivals and their coalition is a marriage of convenience which will now have to be sustained in power'. But they both stressed the need for

speedier political and economic reform (including reduced taxes and an improved climate for foreign investors) and brought attention to high unemployment, poverty and corruption. Their agenda includes raising the prices of petrol and electricity as well as selling state enterprises and closing unprofitable ones. Only the energy system would be off limits to foreign investors, but telecommunications, railways and gold, copper and uranium mining would be open to investment (IHT, 18 July 1996, p. 15). The parties promised to help pensioners, the unemployed and civil servants. They particularly appealed to the large younger sections of society. (Some 70 per cent of the population is under thirty years of age: *FT*, 2 July 1996, p. 6.)

Only two of the fifty members of parliament just elected from the four-party Democratic Coalition have held office before . . . Most cabinet members are likely to be around thirty-five years old, which could make this one of the youngest governments in the world.

(*IHT*, 18 July 1996, p. 15)

Enkhsaikhan was voted prime minister by the Great Hural on 19 July 1996.

Although few politicians here predicted the election results, the consensus in hindsight is that voters were fed up with the Mongolian People's Revolutionary Party, whose formally communist leaders clung to power after democracy arrived in 1990 but failed to undertake serious changes. In the election ... a clear majority chose the young and untested democratic opposition, which held just six of seventy-six seats in the previous legislature and said publicly that it hoped to win fifteen to twenty-five seats this year. Instead the bloc won fifty of the seventy-six seats . . . In his first three months Mr Enkhsaikhan and his team have reduced the central government from thirteen ministries to nine, drastically raised the prices of many essential goods and begun to avert a collapse of the central bank . . . An important tool of the campaign, many politicians agree, was the contract, which sets out more than 200 one-sentence promises. 'To ease the burden on tax payers by 20 to 30 per cent' is one pledge. According to the new chairman of the state committee on property, thirty-year-old Mr Enkhbold, Mongolia's 'contract with voters' promises a slash in government spending, a sharp reduction of aid to the needy and a top-to-bottom transformation of the government. In addition, 'By our contract with the voters we have to privatize 60 per cent of all state property.'

(Seth Faison, *IHT*, 2 October 1996, p. 2)

The government plans to take a third of recipients off government pension rolls (Seth Faison, IHT, 25 October 1996, p. 17).

The seven-month-old administration of prime minister M. Enkhsaikhan pledged at the close of 1996 to continue with what it calls 'economic shock

therapy'... The government's four-year plan, announced at the end of 1996, aims to privatize 60 per cent of state property. The focus for 1997: land, housing, and state enterprises ... Within weeks of taking office, it launched an ambitious programme of reforms, liberalizing consumer good prices, privatizing houses, lifting restrictions on some exports, and cutting back on government spending. The result: prices have soared and incomes plunged ... It did not help that 1996 saw a string of natural disasters ... Prairie fires raged for weeks in the spring ... An outbreak of cholera at the height of the spring season ... At the end of the year some of the harshest winter conditions in decades.

(Nate Thayer, *FEER*, 6 February 1997, p. 48)

1 August 1996. Mongolia signs a security agreement with the USA, stipulating that some Mongolian officers will be trained in US military academies. The USA will donate computers for Mongolian military schools and provide emergency aid for military hospitals during natural disasters. Diplomatic relations were established in 1987 (FT, 2 August 1996, p. 3).

October 1996. Local elections are still dominated by the MPRP, which wins 65 per cent of the vote and controls most of the local hurals (Tom Ginsburg, Asian Survey, 1997, vol. XXXVII, no. 1, p. 62).

18 May 1997. There is an 85 per cent turnout in the presidential election. Natsagiin Bagabandi (chairman of the MPRP) wins with 60.8 per cent of the vote on a platform of slower economic reform, greater social protection and reduced crime. Punsalmaagiyn Ochirbat, representing the Democratic Union Coalition, wins 29.8 per cent of the vote. J. Gombojav (candidate of the United Traditional Party) wins 6.6 per cent of the vote on an ultranationalist platform. (A two-thirds majority in parliament is needed to override a presidential veto.)

The vote for Bagabandi was interpreted as a protest over the rapid pace of economic reform . . . There was certainly dissatisfaction with rising inflation and unemployment, but Ochirbat had held the office for seven years and many also thought that it was time for a change. Mongolians also seem to have a preference for divided government, as there has been only one year since the adoption of the 1992 constitution that the president and government were from the same political grouping. Expectations that the new president would put the brakes on economic reforms proved largely unfounded. Instead, pragmatism ruled the day . . . [This was shown by] the president's subsequent co-operation with the government's reform programme . . . On the first day of the October session of the State Great Hural, the MPRP tabled a motion to dismiss the government ... President Bagabandi supported the government ... saying it was too early for a change in government ... The election of the MPRP candidate Bagabandi should be interpreted ... as a strengthening of the system of alternation of power on which democracy depends.

(Tom Ginsburg, Asian Survey, 1998, vol. XXXVIII, no. 1, p. 65)

'Mongolia's democracy has emerged as among the most vigorous in the post-communist world' (p. 68).

18 August 1997. The government coalition fails to win a by-election in the seat vacated by the newly elected president and thus fails to achieve the two-thirds majority in parliament necessary to override a presidential veto. 'Over the past year the once-dominant communists have regained hold of the national presidency and most provincial and local governments' (Lincoln Kaye, FEER, 11 September 1997, p. 26). New MPRP chairman N. Enkhbayar wins the by-election (Tom Ginsburg, Asian Survey, 1998, vol. XXXVIII, no. 1, p. 65).

1 January 1998. Mongolia adopts a forty-hour, five-day working week. Since 1921 there has been a forty-six-hour working week, with six hours being worked on a Saturday.

16–17 April 1998. The cabinet resigns and chooses Tsakhiagiin Elbegdorj as prime minister. (He is head of the ruling Democratic Union Coalition as leader of its largest party, the National Democratic Party, and has been barred from joining the government under laws that prevented members of parliament from being elected to the cabinet. Those laws were changed in 1998.) He replaces Mendsaikhany Enkhsaikhan, who belongs to the second largest coalition group, the Social Democratic Party (FT, 18 April 1998, p. 2).

1 July 1998. The deadline for using three names on legal documents, namely surname, given name and father's name.

After getting by on a first-name basis for more than sixty years, Mongolians this week are supposed to start using surnames again ... But the government sees months, if not years, of research ahead. The names were banished along with many other aspects of Mongolian culture by the Soviet-backed communist government that came to power in 1924. The suppression of names was intended to crush loyalties that might supersede loyalty to the state ... The entire population of Mongolia uses only first names, adding the initial of their father's first name for formal occasions and on official documents. As a result, few Mongolians know their ancestral family names ... So few people are ready for the change to last names that the government has opted for a phased introduction of the name rules over the next year.

(Thomas Crampton, IHT, 1 July 1998)

Mongolia's communist rulers attacked the hereditary aristocracy in 1921, killing tens of thousands of princes and princesses. Four years later . . . the communists banned last names. The intention was for people to forget which class they belonged to, forget that the state killed their relatives, forget Mongolia's past . . . Serjee Zhambaldorjiin, director of the state central library . . . [said] 'They did not even know they had lost their names. It was a way to eliminate the influence of the nobles and princes' . . . In 1991 Mongolia's then president, Punsalmaagiyn Ochirbat, called for legislation letting families reclaim their last names. In 1995 the Great Hural, or

parliament, passed a law reinstating them, and late last year [1999] Mongolia began issuing identity cards with last names. First, Mongolia deserved to reclaim its past, legislators argued. Second, the lack of names had led to inbreeding in some regions. Under communism Mongolians were barred from moving and because nobody knew whom they were related to after 1921 the potential for inbreeding was high ... Another problem was that many people in cities had the same name ... [The director] estimates that as many as 60 per cent of Mongolia's people ... do not know their last names. Those in the countryside fare better, he said. 'Herders in the countryside know two things well ... They have a keen eye for animals; they know which belongs to whom. And they know people' ... After seven years of work he retrieved 1,260 last names ... The big winner is Borjigin, tribal name of Genghis Khan, which means 'master of the blue wolf'. Up to 80 per cent of Mongolians so far are claiming it, Mr Zhambaldorjiin said.

(John Pomfret, *IHT*, 12 July 2000, p. 5)

24 July 1998. Prime minister Tsakhiagiin Elbegdorj and his government resign after losing a vote of no confidence in parliament (*IHT*, 25 July 1998, p. 4). There has been a quarrel over bank privatization.

Mr Elbegdorj's Democratic Coalition government and its reform efforts have been paralysed since the main opposition party began a boycott of parliament last month in protest over the merger of a bankrupt state bank and a private bank. The parliamentary gridlock has left crucial economic reforms to gather dust.

(FT, 25 July 1998, p. 4)

(In June 1998 the government merged the insolvent Reconstruction Bank with the private Golamts Bank: *Asian Survey*, 2000, vol. XL, no. 1, p. 134.)

August 1998. Parliament passes legislation to 'free the media of all state control'. It states that by January 1999 all government-owned newspapers will be 'dismantled' (later defined as 'privatized'), while state radio and television as well as the national news agency will be converted into 'national public media' administered by an independent board of governors, along the lines of Britain's BBC (FEER, 29 July 1999, p. 23).

September 1998. President Natsagiin Bagabandi approves parliament's nomination of Renchinnyamiin Amarjargal as Mongolia's third prime minister this year. The president rejected parliament's original choice, reformist Davaadorjiyn Ganbold, five times (FEER, 10 September 1998, p. 16).

2 October 1998. Infrastructure minister Sanjaasurengiin Zorig is murdered.

Zorig ... was expected to be nominated next week to be prime minister. President N. Bagabandi had rejected the nomination last week of Mr Bat-Uul as prime minister; he was the fifth politician to be rejected in the standoff between the coalition and the opposition. The opposition MPRP began a boycott of parliament in June after it accused the Democratic Coalition of trying to reap financial benefit for its members in a planned merger of a state bank and a private bank. Prime minister Tsakhiagiin Elbegdorj then lost a vote of confidence and resigned with his cabinet on 24 July, although he and his ministers have stayed on as caretakers.

(IHT, 5 October 1998, p. 2)

The murder on 2 October . . . has brought vows from the opposition to break the deadlock . . . [But] The Democratic Coalition . . . [has] an ambitious privatization plan. This would include selling most of its stake in Erdenet, a much indebted state-owned copper mine (a joint venture with Russia) that provides 40 per cent of the country's export earnings. But that – and plans for a bank merger earlier this year to help reform the ailing financial industry – is where government and opposition part company. The excommunists brought down the government in July (coalition splits caused the previous one to collapse in April) over the bank merger and have since attacked the plans for Erdenet. Capitalizing on popular discontent at growing hardship, they have won two by-elections this year.

(The Economist, 10 October 1998, p. 90)

'No matter who is in power, corruption is a constant . . . The truth of this was underlined by the brutal murder in 1998 of democracy pioneer S. Zorig' (Gordon Laird and Justin Guariglia, *FEER*, 6 July 2000, p. 83).

It has taken the gruesome murder of one of Mongolia's foremost democratic innovators to make the nation's feuding leaders ask who their real enemies are. Sniping that began in March between the Democratic Union Coalition and the opposition MPRP has left national politics in shambles. A boycott by the MPRP held up parliamentary legislation for eight weeks; two governments have fallen in a period of six months; and attempts to receive presidential approval for a string of nominees for prime minister have all failed ... Zorig was leader of the Mongolian National Democratic Party – the larger of the two parties comprising the coalition ... Some good could come of the violence as politicians of all stripes begin to show a willingness to make peace.

(Michael Kohn, FEER, 15 October 1998, p. 21)

Politics have brought the government's reforms to a standstill, endangering the core of its economic package – privatization of banks and major state-owned enterprises. The political crisis threatens the foreign investment and donor aid that Mongolia vitally needs ... Parliament finally looked poised to agree on Zorig [as prime minister], but he was murdered only days before the vote. In the weeks after Zorig's death President Bagabandi racked up his seventh rejection of the coalition's leading contender. The Democrats themselves continue to be split. The Mongolian National Democratic Party, the

senior coalition partner, was formed in 1994 from four pro-democracy parties. Under pressure it has cracked along its old party lines. Factional fighting drove the first coalition government of M. Enkhsaikhan to resign in April, delayed the assembling of a new cabinet for more than a month and ensured the new government lost a no-confidence vote in July ... [The MPRP] has worked hard to gain popularity. It boycotted parliament for two months this summer after the government announced a controversial bank merger as a key plank of its financial reform policy. Opposition leader N. Enkhbayar called the IMF-backed merger of an insolvent state-owned bank and a private commercial bank 'a conspiracy' to put public money into a private bank with strong ties to the ruling party. He also accuses the government of being 'deeply enmeshed in a web of corruption and official crime'. The charges struck a chord with the public and the government was forced to rescind the merger at a cost of several million dollars.

(Jill Lawless, FEER, 5 November 1998, p. 31)

One of the constitutional and legal debates that has persisted since 1996 is whether or not an MP can concurrently hold a ministerial post. At first the decision was 'no'. This state of affairs was one factor that brought down the Enkhsaikhan government. But then the decision was reversed, which is why S. Zorig was both an MP and minister at the time of his assassination. Under debate was also the role of the president in vetoing or approving prime ministerial candidates. Both debates occupied much of the government's time in 1998 and 1999. They greatly delayed the formation of new governments . . . As a result of such battles the period was characterized by ineffective governance and government. Some progress did occur near the end of the two-year period.

(Sheldon Severinghaus, *Asian Survey*, 2000, vol. XL, no. 1, pp. 130–1)

9 December 1998. Parliament approves Janlaviin Narantsatsralt as prime minister.

1 January 1999. The government officially liberates the news media as a new law takes effect, requiring disposal of the state outlets that still dominate the industry and an end to government oversight. A private media industry has cropped up since 1990 (IHT, 2 January 1999, p. 6).

'But more than six months after the privatization deadline, the details are still being hammered out' (FEER, 29 July 1999, p. 23).

10 April 1999.

On 10 April Mongolia's parliament, the Great Hural, stripped three MPs of their immunity from arrest. The next day two of them were detained for questioning over alleged bribe-taking – the first time any parliamentarian has been detained on suspicion of corruption ... The real wake-up call [about corruption] came with the October 1998 slaying of infrastructure minister S. Zorig, who was revered for moral rectitude . . . While no one has

been charged for the murder, police have uncovered all sorts of shady deals in the course of their investigations. One of these was the alleged rigging of a casino tender, which was won by investors from Mongolia and Portuguese-administered Macau. Police say the company, Mon Macau, handed out many gifts during the tender process ... Two of the alleged recipients were [the MPs] ... who lost their parliamentary immunity ... The installation of a graft-fighting prime minister, J. Narantsatsralt, in early December [1998] boosts the anti-corruption cause.

(Michael Kohn, *FEER*, 29 April 1999, p. 29)

(A court has convicted three members of parliament from the ruling Democratic Union coalition in Mongolia's first major corruption trial. Jail terms of up to three years were handed out for taking bribes in connection with the tendering of a casino licence in 1998: FEER, 4 November 1999, p. 17.)

June 1999.

The 1981 Russian-Mongolian agreement covering the operation of the long-secret Mardai uranium mine in north-eastern Mongolia was annulled in June 1999. This returned the mine to Mongolian control, though it is closed at the moment until new management and investors can be found.

(Sheldon Severinghaus, Asian Survey, January-February 2000, vol. XL, no. 1, p. 135)

July 1999. In late July the government of prime minister Janlaviin Narantsatsralt resigned in a row over the privatization of a Russian–Mongolian copper mine. Narantsatsralt was reported to have signed a letter setting out privatization terms for a Russian-owned stake in the Erdenet copper mine. Members of parliament said privatization would mean Mongolia forfeiting its right under a 1991 agreement to buy the Russian-owned shares (FEER, 5 August 1999, p. 15).

The Erdenet copper concern . . . a joint venture with the Soviet Union and now Russia, is Mongolia's single largest foreign exchange earner. It also has been in serious debt ... It was revealed in June 1999 prime minister J. Narantsatsralt had written to the Russian government about Russia's share in the mine. This caused outrage among some MPs, who argued that his action compromised national security.

(Sheldon Severinghaus, Asian Survey, 2000, vol. XL, no. 1, p. 135)

August 1999. In early August 1999 parliament approved the appointment of Renchinnyamiin Amarjargal as prime minister.

11 March 2000. A report by the UN and the Mongolian state emergency commission is released: 'A severe food shortfall is inevitable throughout the disaster-affected region beginning in May [2000]. The famine will continue for at least the next twelve months and probably longer.'

Mongolian herders will face hunger by May [2000] as their livestock die off after the harshest winter in thirty years ... The livestock deaths expected in the coming months will add to 1.5 million animals that already perished because of insufficient fodder, it [the report] said.

(IHT, 13 March 2000, p. 4)

[Mongolia] suffered its worst drought in sixty years last summer [1999], followed by a harsh winter. Huge losses of livestock have directly affected 500,000 people, 20 per cent of Mongolia's population, the report said ... Mounting livestock deaths in the coming months are expected to add to the problems of the herding population, which has already seen 1.5 million animals perish.

(*Guardian*, 13 March 2000, p. 16)

'By December [1999] 1.4 million registered livestock were recorded dead out of 33.5 million, while another 2.2 million had been forced to migrate in search of food' (*Guardian*, 15 March 2000, p. 15).

The Red Cross began distributing emergency supplies after the coldest winter in thirty years left more than 2 million cattle and horses dead. Aid experts are warning of widespread hunger, which has already affected a quarter of the country's population of 2.7 million.

(*FEER*, 11 May 2000, p. 15)

June 2000.

After the worst drought in sixty years and the worst winter in thirty, Mongolian herdsmen are facing the threat of starvation. UN and Mongolian officials warned this week that the deaths of some 3 million head of livestock – almost 10 per cent of the national total – have devastated the rural economy and society. About one-third of Mongolia's 2.4 million people are completely dependent on raising horses, cows, camels, sheep and cashmere goats . . . This year's rains have been insufficient, delaying the growth of new grass.

(*Independent*, 29 June 2000, p. 16)

'The winter of extreme frost and snowstorms known as the *dzud* [has] devastated livestock . . . Mongolia has lost nearly 10 per cent of its animals since the beginning of the year [2000]' (*Guardian*, 3 July 2000, p. 17).

'The *dzud*, or natural disaster, has seen 3 million head of livestock, 10 per cent of the national total, die from drought in a land where one-third of the people depend entirely on animals for their livelihood' (*Independent*, 3 July 2000, p. 12)

'A nasty winter killed 2.5 million head of livestock, one-tenth of Mongolia's total' (*IHT*, 3 July 2000, p. 3).

The dzud [is] a blight of extreme winter weather that has killed off 2.3 million livestock and pushed thousands of rural families – who make up roughly half of Mongolia's population – into wandering the country in search of food and fresh pasture ... The winter misery came as the final blow for animals already weakened by a ferocious drought over the previous summer ... About 350,000 Mongolians live in areas where the pastoral economy has been devastated by the dzud, while an estimated one in five of the country's total population of 2.6 million has suffered in some way.

(*FEER*, 6 July 2000, p. 81)

2 July 2000. In the general election the Mongolian People's Revolutionary Party sweeps back to power under its new, young (forty-two-year-old) leader Nambaryn Enkhbayar (partly educated in the United Kingdom), winning seventytwo of the seventy-six seats in the Great Hural. The turnout was 82 per cent.

The Mongolian National Democratic Party wins one seat.

After peacefully conceding power to democracy protesters in 1990 the communist party repackaged itself and won the first national election, serving as the government until 1996 – after which it invented itself again in opposition. 'The party's leadership was totally changed in 1996,' says [the] campaign manager ... 'Its platform was changed to a democratic socialist ideology' ... A poll in March [2000] by the Republican institute [the International Republican Institute, a private US organization] showed the old communists leading their opponents by over 30 points ... The upswing of support for the socialists comes from the fact that the rural vote tends to favour old-style parties that advocate social spending. And with the relatively prosperous capital electing just twenty of the parliament's seventy-six seats, the balance of power lies firmly in the impoverished countryside. But the dzud is just one of the many obstacles facing the outgoing Democratic Union Coalition. The government has suffered though serious accusations of corruption and a controversial economic reform programme based on mass privatization, modelled loosely on the Republican 'Contract with America' ... Hobbled by internal chaos, the parliament has seen no fewer than four different cabinets in four years – all were voted out by their own fractious supporters. The democratic coalition has since broken down into several new parties and sub-coalitions, adding to the clutter of twenty-four parties fighting the election ... The strategic value of being sandwiched between China and Siberia has helped bring in development aid and foundations in droves. In 1998 domestic revenue to the government was only slightly higher than foreign aid from development agencies and grants from China, Japan, Europe and the United States . . . The flood of foreign influence can even be seen as a factor in the revival of the communists, amid a growing nostalgia for the days of Mongolia as a proud, sovereign nation. With radical nationalism in the ascendant, monasteries and signs of traditional culture are sprouting up everywhere.

(Gordon Laird and Justin Guariglia, FEER, 6 July 2000, pp. 82–3)

The ruling Democratic Alliance has been plagued by corruption and growing poverty and unemployment, despite economic growth ... The MPRP, running on a platform of socialist welfare policies, clinched seventy-two of the chamber's seventy-six seats ... The MPRP, while declaring support for democracy and free markets, also said it would slow down capitalist reforms and improve relations with China and Russia.

(*FEER*, 13 July 2000, p. 12)

'The ruling coalition between the Mongolian National Democratic Party and the Mongolian Social Democratic Party has been forced through scandals and mismanagement to appoint four different governments since 1996' (*FT*, 1 July 2000, p. 6).

The Mongolian People's Revolutionary Party ... [has been] riding a wave of discontent with the chaos, corruption and incompetence of a coalition of young, idealistic, inexperienced and infighting liberal parties, who won in 1996 ... After rolling through four prime ministers in four years and enduring countless rifts in this fractious group, the coalition collapsed this year [2000].

(IHT, 3 July 2000, pp. 1, 3)

'The Democratic Union coalition [has been] weakened by infighting and economic paralysis' (*Guardian*, 3 July 2000, p. 17).

MPRP hacks went out to get the vote. In the countryside they convinced plenty of Mongolia's 800,000 nomadic herders [out of a total population of 2.5 million] that the Democrats were out to privatize and fence the land; there is no privately owned land in Mongolia. But, on the whole, the battle was not fought on ideological grounds.

(*The Economist*, 8 July 2000, p. 89)

The Mongolian People's Revolutionary Party [MPRP] ... are advocating caution on the key question of how and when Mongolia should privatize about seventeen of its largest state enterprises. Nambaryn Enkhbayar, the forty-two-year-old leader of the MPRP ... said the MPRP would push ahead with plans to privatize the Trade and Development Bank, the biggest state bank, the Gobi Cashmere factory, which earns about 30 per cent of the country's foreign exchange, MIAT (the national airline) and several other 'most valued companies'. But it would do so in a way that was less corrupt than the coalition, he said. The preferred methods of privatizing such mainstays of the economy would be to sell them to large, well-managed companies in the West [including Japan], he said.

(*FT*, 1 July 2000, p. 6)

In an interview ... Nambaryn Enkhbayar ... said he would continue the country's privatization programme and would not roll back economic

reform. Mr Enkhbayar pointed out that Mongolia receives more than 20 per cent of its annual GDP of \$1 billion from Western countries, aid agencies and the World Bank and IMF.

(*IHT*, 3 July 2000, p. 3)

'Mr Enkhbayar . . . has promised more jobs, free education and higher public service wages' (*Guardian*, 3 July 2000, p. 17).

The last opinion poll permitted before the election, on 25 June, gave the former communists 51 per cent of the vote ... 'We have tried to keep our leftist tradition, but we have moved towards the centre. We now call ourselves a centre-left party' [said Mr Enkhbayar] ... The MPRP's slogan: 'Let us recover the state from crisis and deliver the people from poverty'.

(Independent, 3 July 2000, p. 12)

#### Nambaryn Enkhbayar:

We have tried to adapt to a middle way. We are staying on the left side, but moving from the extreme to the centre . . . Privatization has been done in the wrong way in the past. We cannot just throw people out of work without thinking of the social consequences: we have to look at retraining and finding new jobs.

(*The Times*, 4 July 2000, p. 14)

Swept back to power with a strong mandate to tackle poverty, unemployment, crime and corruption, the Mongolian Revolutionary Party (MPRP) won a landslide victory in 2 July [2000] elections to the national assembly, the Great Hural. In an 82 per cent turnout, more than 50 per cent of voters chose the MPRP ... The four seats not won by the MPRP went to an exprime minister, Janlaviin Narantsatsralt of the Mongolian National Democratic Party; businessman Badarchiin Erdenebat, chairman of the Mongolian Democratic New Socialist Party; the murdered democracy leader Sanjaasurengiin Zorig's sister, Sanjaasurengiin Oyuun, who left the Mongolian National Democratic Party to set up the Civil Courage Party; and Mongolia's first independent MP, Lamjavyn Gundalay.

(FEER, Asia 2001 Yearbook, December 2000, p. 162)

'The Mongolian National Democratic Party and five other parties formed the Coalition of Democratic Forces to fight the local government elections on 2 October [2000], but the MPRP won 552 of the 695 provincial seats contested' (p. 163).

There was popular concern about foreign takeovers, and before the election Nambaryn Enkhbayar [chairman of the MPRP] called on the Great Hural to debate privatization issues again. An American offer to run Mongolian power stations stalled. The MPRP opposed privatization of commercial banks.

(*FEER*, *Asia 2001 Yearbook*, December 2000, pp. 164–5)

26 July 2000. Nambaryn Enkhbayar is elected prime minister.

6 December 2000. 'At a congress attended by about 1,500 people, members of five political parties announced the formation of a single new party called, simply, the Democratic Party ... The chairman ... [is] Dambyn Dorligjav' (Sheldon Severinghaus, *Asian Survey*, 2001, vol. XLI, no. 1, pp. 64–5).

The Democratic Party faced an unexpected challenge from a rump of members of the Mongolian Democratic Party, [one of the five parties] who refused to recognize it, but in April [2001] a court declared the merger of the parties into the Democratic Party to be legal. The MDP dissidents reconstituted the MDP in May and elected a new chairman, Damdindorjin Ninj.

(FEER, Asia 2002 Yearbook, p. 160)

20 May 2001. 'President Natsagiin Bagabandi ... was reelected to a second four-year term' (FEER, 31 May 2001, p. 30). 'In an 83 per cent turnout Bagabandi received 58.13 per cent of the ballot ... defeating the Democratic Party candidate Radnaasumbereliin Gonchigdorj (36.53 per cent) and the candidate of ... [the] Civil Courage Party [3.54 per cent]' (FEER, Asia 2002 Yearbook, p. 161).

When the Great Hural agreed to speed up the appointment of two new members of the constitutional court in May . . . Bagabandi finally gave way and set his seal on the [constitutional] amendments. They came into force immediately, clarifying the procedures for the appointment of prime ministers and introducing some changes to the practices of the Great Hural, including decision-making by a simple majority.

(p. 161)

The long-debated constitutional amendments were finally approved by the government in late April. The controversial amendments allow members of the Great Hural to simultaneously serve in the government cabinet, and reduce the president's powers to block the parliament's nomination for prime minister.

(Asian Survey, 2002, vol. XLII, no. 1, pp. 40–1)

11 September 2001.

The 11 September terrorist attacks in New York and Washington were condemned by President Natsagiin Bagabandi, who in a broadcast to the nation described the attacks as a crime against democracy, freedom and humanity.

A Great Hural resolution supported the 'world community's fight against terrorism'.

(FEER, Asia 2002 Yearbook, p. 162)

1 May 2002.

The Mongolian government said yesterday [1 May] that it would not give in to protesters' demands that it fire ministers by a 1 May deadline over alleged corruption and negligence ... Protests started two weeks ago when thousands gathered outside government headquarters to demand four ministers be dismissed. That was followed by a nine-day hunger strike in front of the labour ministry – one of the largest since the early 1990s when the opposition Democrats protested against the country's former communist rulers ... The hunger strike over the scandal ended last weekend [27-28 April] after the ministry and representatives of some seventy people demanding compensation signed an agreement which said the government would seek a swift court ruling on the case ... The labour minister under investigation . . . is accused of allowing a Korean businessman and his Mongolian partners to conduct business with an official licence granted by his ministry based on false documents. The Korean, who is being held by Mongolian authorities, had promised to arrange jobs in South Korea for a fee but had not refunded the money after his licence was cancelled.

(*FT*, 2 May 2002, p. 12)

June 2004. '[It is reported that] Mongolia, with only 2.7 million people, has passed a law restricting people born outside the country to 1 per cent of the population – a measure aimed exclusively at its southern neighbour [China]' (FEER, 24 June 2004, p. 31).

25 June 2004. 'Yesterday [25 June] was the last day to meet the deadline and register a family name to qualify for a new national identity card. Without the card voters are disqualified from participating in the national election' (*Independent*, 26 June 2004, p. 41).

'[In 1925] communists banned the use of noble tribal surnames ... By the end of June [2004] 50,000 Mongolians had adopted the name of Borjigid [the plural of Borjigin], the clan of Genghis Khan' (*The Times*, 5 July 2004, p. 5).

27 June 2004. A general election is held. A first-past-the-post system is used. The turnout is 77 per cent

The MPRP's record is mixed. Despite recent economic growth the party has failed to make good pledges to help the poorest people ... The Asian Development Bank says the number of people below the poverty line ... has stayed at 36 per cent since 1998 ... Growing inequality has added appeal to opposition promises to pay 10,000 tugriks (\$9) to children under eighteen as an exercise in social justice and economic stimulus ... Inability

to hold any kind of debate in the national media [is a feature of the campaign] . . . National broadcasts [are not allowed].

(*FT*, 26 June 2004, p. 8)

'The Motherland Democratic Coalition is offering 10,000 tugrik a month to everyone under eighteen, a considerable promise in a country where children account for nearly half the 2.5 million population' (*Telegraph*, 25 June 2004, p. 14).

Nambaryn Enkhbayar, Mongolia's British-educated prime minister, suffered a surprise defeat ... when his party lost half its parliamentary seats, despite monopolizing 90 per cent of all billboards in Ulan Bator . . . during the campaign. Not a single poll had predicted the downfall [of the prime minister] ... who sees Tony Blair [the British prime minister] as a role model ... The ruling MPRP refused to admit defeat ... and appealed to the general election commission to investigate allegations of vote-buying. A party spokesman said: 'The MPRP is, in particular, concerned with the organized movement of large number of non-residents into constituencies where their employers are candidates for the Motherland Democratic Coalition' ... The movement of voters across constituency borders can have a significant effect on election results. Voting is not easy. Most voters ride horses to reach polling stations . . . The domination of Mongolian politics by leaders trained in Britain is likely to continue. Sanjaasurengiin Oyuun, a geologist educated at Cambridge University, heads a powerful faction in the Motherland Democratic Coalition and is one of the contenders for the prime minister's post. Her brother Zorig [was assassinated in 1998] ... There are countless theories in Mongolia as to why Zorig was stabbed to death in his own flat in the capital, including problems with gambling syndicates, political rivalry and problems with the issuing of government licences. Oyuun won a by-election for his parliamentary seat and eventually formed an unruly horde of opposition groups into a punchy coalition, overcoming daunting hurdles.

(*The Times*, 29 June 2004, p. 14)

The governing party ... accused the opposition of bribing voters with alcohol after a shock defeat in parliamentary elections. Despite almost total control over the political system, the MPRP lost its overall majority in the Great Hural, winning just thirty-six of seventy-six seats, according to predictions ... Previously it had seventy-two. Its principal opponents, the Motherland Democratic Coalition, also won thirty-six, leaving the balance of power with four MPPs from minor parties. The prime minister ... said he would lodge a protest, alleging that the opposition had moved people to swing constituencies, bought votes and supplied voters with alcohol: 'I have a lot of information on embezzlement ... some candidates bought the votes. We must put an end to the fraud. The result is simply impossible' ... Given that a quarter of Mongolia's 2.7 million population are nomadic and in a

country twice the size of France many had to travel long distances on horse-back to reach a polling station.

(Telegraph, 29 June 2004, p. 15)

In a shock result the MPRP lost around half its seats in parliament, leaving it tied at around thirty-six seats each with the main opposition bloc (final results have yet to be determined) ... A series of court decisions could yet alter the results regarding several seats. The Motherland Democratic Coalition's thirty-six seats might be enough to form a government if it can woo three democrat-minded independent legislators. The MPRP is expected to team up with a lone Republican Party winner, giving it thirty-seven seats, still two short of an absolute majority, though possible court-ordered recounts and new ballots in a number of districts could yet send one or two more seats its way ... The MPRP suffered the vagaries of Mongolia's winner-takes-all election system. In 2000, helped by division in the opposition camp, it took seventy-two out of seventy-six seats in the Great Hural with just under 52 per cent of the vote. In this year's election it won half that number of seats with just under 49 per cent of the vote. The names on the ballots were often those of businessmen or Western-educated academics who saw politics as a way of spreading their influence in this clannish country of 2.5 million. These elites had to face ever-present campaign issues of poverty and unemployment, which have swallowed a third of the work force since the fall of communism in 1990. Broken promises of wealth and equality for all have determined past elections. In 1996 the MPRP was ousted from power for failing to implement economic reforms. In 2000 the Democrats were kicked out for corruption and instability. The 2004 election was largely dominated by economic issues. The Democrats, who favour faster economic reform, came up with a popular scheme that promised 10,000 tugriks (\$8.5) per month to every child until the age of eighteen. The MPRP, which also favours reform but places more emphasis on social issues, countered with its own offer of 500,000 tugriks for a newly-wed couple and 100,000 tugriks per new baby ... [The MPRP] set up a lavish, Western-style campaign with flashy adverts and big-name supporters . . . [In the] campaign . . . the Democrats appeared to vanish beneath a glitzy MPRP advertising crusade . . . The Democrats took a different approach, bumping across the steppes in jeeps and going village-to-village . . . Shocked by its demise the MPRP is countering with allegations of cheating - including claims that the Democrats handed out cash and vodka to voters.

(FEER, 15 July 2004, pp. 32–3)

Unemployment, corruption and child care were the major issues ... The country's 1.2 million voters cut the MPRP [founded in 1921] numbers in the seventy-six-seat parliament from seventy-two to thirty-six. On Wednesday [7 July] the general election commission confirmed that the opposition, the Motherland Democratic Coalition, known as the Democrats, won thirty-four

seats . . . The Democratic Coalition is a loose alliance of three parties . . . The Democrats claim to have won two more seats and have taken their argument to an administrative court. They are also wooing three independents in the hope of forming a government. Although the court has three more weeks to rule, it is expected to announce its decision on the two contested seats by Friday [9 July], before most Mongolians disconnect from politics for Naadam, a four-day mid-summer festival of horse races, archery contests and wrestling matches ... Both sides [are] claiming victory and the governing party [is] fighting for the allegiance of the three independents as well ... [The MPRP] claims to be the victim of opposition fraud . . . [The MPRP has] hastily mounted a 'museum of election fraud' . . . On display were gifts said to be handed out by opposition candidates ... [But] the evidence seems to tilt strongly in the opposition direction – that it was the ruling party that most heavily abused the rules. Mongolians for Open Society, a group founded by ... George Soros found that the ruling party used government halls without paying thirty-one times, compared with three times by the opposition. The survey found 384 cases of government cars used by the ruling party in campaign work, compared with three cases by the opposition. It also determined that state employees spent 2,873 days when they were supposed to be toiling for the government campaigning for the governing party instead, compared with 111 for the opposition. All this came on top of a mega media buy by the ruling party, which outspent the opposition by ten to one for television, radio and newspaper advertisements ... But a good dose of political ingenuity proved to be the tugriks' match. In the 2000 election the vote difference nationwide was only a few percentage points. The opposition lost dozens of seats by tight margins. So this time around the opposition carried out a homemade election-day redistricting programme. With 1.5 million voters scattered over an area twice the size of Texas, Mongolian law generously allows voting out of one's home district with minimum paperwork and advance notice. On election day it quickly dawned on the governing party that the opposition was employing fleets of minibuses to shuttle voters from opposition strongholds to swing districts. But even as the governing party scrambled to deploy its own fleets of minibuses, it watched in disbelief as safe seat after safe seat fell to bussed-in voters. For the government one of the most painful losses was that of Gurragchaa, a member of parliament who during the Soviet era became the only Mongolian cosmonaut to go into space ... [He] also serves as defence minister ... The government has also cried terrorism, citing what appears to have been a bomb hoax near the offices of the prime minister . . . On 1 July the Democrats got wind that the government planned to air conspiracy theories against the opposition. Largely cut out of television coverage, opposition demonstrators stormed the national radio and television building. After a standoff of several hours the government agreed to allow the opposition twenty minutes of free airtime every evening, which it used to rebut what it says are bogus smears.

(James Brooke, IHT, 9 July 2004, p. 2)

Voters delivered a surprise – a parliament about evenly split between the left-leaning MPRP, with thirty-six seats, and the rival Motherland Democratic Coalition (MDC), an aggregation of several smaller and generally more free-market-orientated parties [including the Civil Will Party], which collectively took thirty-four seats. Four more seats are held by independents ... [The MPRP's] poor performance can in part be explained by the MDC's clever tactic of bussing supporters from safe districts to contested ones. Mongolian law allows wide latitude on where a person votes. This may also be a backlash against the MPRP's near-total domination of the airwaves and billboards before the election. Several years of poor economic performance and high unemployment have also played against the government. Results in two districts are still disputed. Courts are involved and the election commission has not ruled yet ... Both sides are now saying that the most likely outcome is some sort of 'grand coalition'.

(*The Economist*, 7 August 2004, p. 53)

Naadam [is] a nomadic Olympics of wrestling, archery, racing and heroic drinking of airag horse milk liquor ... [Nomads have been drawn to] the cities . . . Most have moved into the capital. Ten years ago Ulan Bator was home to 500,000 people. Today the number is over a million and growing ... Nambaryn Enkhbayar ... has said he would like 90 per cent of Mongolians to live in cities ... Under one of the world's greatest land giveaways the government is offering 0.7 ha (1.7 acres) to every city resident and 13 ha to rural dwellers in the hope that they will borrow on this capital to start businesses.

(*Guardian*, 24 July 2004, p. 20)

'Mongolia has taken part in UN missions in the Congo, Western Sahara and Afghanistan, and contributed 165 men to coalition forces in Iraq' (Telegraph, 28 June 2004, p. 12).

Mongolia's rival Democrats and ... [the] MPRP have reached a deal to share power ... with Tsakhiagiin Elbegdorj of the opposition Motherland Democratic Coalition to be prime minister . . . The deal was reached earlier this week ... Mr Elbegdorj was among a group of young writers, artists, university teachers and students who rose up against . . . communist rule and demanded democratic elections in 1990. He previously served as prime minister for about eight months in 1998. The latest elections, on 27 June, became tangled after the MPRP and the opposition held separate sessions of parliament, each accusing the other of voting irregularities.

(*FT*, Saturday 14 August 2004, p. 5)

A Harvard-educated journalist was chosen by lawmakers Friday [20 August] to be Mongolia's next prime minister ... Tsakhiagiin Elbegdorj, forty-one, will lead Mongolia's first coalition government since the end of communist rule in 1990. It will be his second term as prime minister, following an eight-month stint in 1998.

(IHT, 21 August 2004, p. 4)

The MPRP and the Homeland-Democracy Coalition – an electoral grouping of three parties led by the Democratic Party - won thirty-six seats each in the ... country's seventy-six-seat legislature. The remaining four seats went to independent candidates and a small party ... The general electoral committee, citing polling irregularities, ordered revotes in two Coalition districts ... The Coalition ... took the matter to court [the supreme court], opening up months of legal wrangling. The MPRP responded by boycotting the opening of the new [legislature] . . . slated for 9 July 2004 ... Both sides recognized that co-operation, not confrontation, was needed . . . [There was an] agreement that loopholes in the election law needed to be addressed ... In late July [came] an agreement to negotiate the formation of a joint government via a 'grand coalition' ... [The legislature] was able to convene on 26 July ... Both sides agreed to split legislative and executive posts evenly between them, but it took several weeks to appoint as prime minister the Coalition's Tsakhiagiin Elbegdori, a former premier who holds a master's degree from Harvard University, and another month to form the full eighteen-member cabinet. The government took office on 28 September [2004] ... Despite the bitterness of the elections, the opponents' electoral platforms differed little. Both favoured job creation, tax reform, better health care, education and housing, and poverty reduction via methods including controversial taxfunded cash allowances to specific groups. Where the Coalition differed was in its emphasis on better protection of freedoms, especially freedom of the press. The fall session [of the legislature is] ... expected to pass legislation lifting government control of the public service broadcaster Mongolian Radio and Television as well rewriting the election law ... The new government pledged to continue Mongolia's open and 'multipillared' foreign policy.

(Nyamosor Tuya, *Asian Survey*, 2005, vol. XLV, no. 1, pp. 67–70)

November 2004.

In June last year [2003] Chinese President Hu Jintao visited Ulan Bator and offered the Mongolian government a \$300 million aid package ... [but] Mongolia has not yet accepted Hu's offer ... In November 2002 when the Dalai Lama visited Mongolia, China suspended rail services between the two countries for two days ... The US military helps train and equip Mongolia's army, which has sent a contingent to Iraq ... [and to] Afghanistan.

(FEER, 4 November 2004, pp. 32–6)

#### February 2005.

After taking office after the elections in June [2004] Elbegdorj shocked Mongolians by announcing that Mongolia would become a bilingual nation, with English as the second language. For Mongolians still debating whether to jettison the Cyrillic alphabet imposed by Stalin in 1941, this was too much, too fast . . . Until the collapse of the Soviet Union Russian was universally taught and was required for admission to university . . . Within a decade Mongolia is expected to convert the nation's written alphabet from Cyrillic to the Roman alphabet . . . [There is] a nationwide drive to make English the primary foreign language.

(*IHT*, 14 February 2005, p. 2)

#### 22 May 2005.

After a campaign dominated by promises to end widespread poverty, Mongolians voted for a new president Sunday [22 May], with polls showing the candidate of the ... MPRP ... Nambaryn Enkhbayar ... leading three rivals ... The Democratic Party's candidate [is] Mendsaikhany Enkhsaikhan ... Bazarsadyn Jargalsaikjan of the Republican Party is one of the country's richest men. His company ... processes cashmere ... Badarchyn Erdenetebat of the Motherland Party supported a referendum to give more power to the presidency ... Opposition parties complain that MPRP members still dominate the local election commissions that register voters and staff the voting stations.

(www.iht.com, 22 May 2005)

Nambaryn Enkhbayar of the MPRP [a former prime minister] ... won the presidential election ... receiving 53 per cent of the votes ... Mendsaikhany Enkhsaikhan of the Democratic Party received 20 per cent of the vote, while the other two candidates got 14 per cent and 11 per cent ... Frequent changes of government have made the once-ceremonial presidency more important ... turnout was 75 per cent ... [In the] last presidential election in 2001 [it] was 83 per cent.

(www.iht.com, 23 May 2005)

Mendsaikhany Enkhsaikhan ... won less than 20 per cent of the vote ... In the days before the election powerful passions stirred. Local media railed against graft, a rising blight ... Over one-third of Mongolians [are] impoverished and growth [is] threatened by graft ... Dark muttering of election trickery was also rife ... On election day his [Mendsaikhany Enkhsaikhan's] observers at several polling stations in Ulan Bator charged the MPRP with foul play. Yet the next day Mr Enkhsaikhan graciously joined his victorious rival for prayers at the country's main monastery.

(*The Economist*, 28 May 2005, p. 72)

[Nambaryn Enkhbayar won] in a relative landslide 55 per cent of the vote against three squabbling democrat-reformist rivals ... Mr Enkhbayar was the only candidate to endorse strongly Mongolia's participation in Iraq and Afghanistan ... Mr Enkhsaikhan at one point asked if the government's decision to join the Iraq effort was constitutional because it did not undergo Great Hural review ... although Mr Enkhsaikhan freely admitted that over 70 per cent of Mongolians supported a military presence in Iraq and Afghanistan.

(John Tkacik, *FEER*, June 2005, pp. 18–19)

#### 22 October 2005.

Donald Rumsfeld, the US Defence Secretary, went to Mongolia . . . to thank the country for sending troops to Afghanistan and Iraq . . . Mongolia, which has not lost any troops in Afghanistan and Iraq, currently has 146 soldiers serving in the regions... The Pentagon is helping Mongolia to develop a peace-keeping force, and is expected to provide \$18 million in military aid for equipment and training this year [2005].

(FT, 24 October 2005, p. 10)

('Mongolia's contribution of roughly 180 troops in Iraq and Afghanistan earned the country its first presidential visit and a possible free trade agreement': *IHT*, 20 September 2006, p. 7.)

21 November 2005. President George W. Bush pays a one-day visit to Mongolia.

'None of the previous forty-two US presidents had made the journey while in office ... Mongolia recently sent its fifth rotation of troops to Iraq – there are only 160 or so at a time' (www.iht.com, 21 November 2005).

#### 11–12 January 2006.

The Mongolian People's Revolution Party [MPRP] pulled out of the government Wednesday [11 January 2006], accusing the current leadership of failing to fight corruption and worsening poverty ... Miyeegombo Enkhbold (MPRP chairman): 'The current government does not perform well in tackling issues such as poverty, unemployment and fighting corruption' ... The MPRP ... on Wednesday demanded that ... prime minister Tsakhiagiin Elbegdorj ... a Harvard-educated former journalist and dissident [who is leader of the Motherland Democracy Coalition] ... resign ... Parliament was to meet Thursday [12 January] to consider the MPRP's withdrawal, which would leave the government without the minimum number of seats required to stay in power . . . The MPRP said it would try to form its own government but did not say who might join. The party has thirty-eight of seventy-six seats in the Great Hural, short of the thirty-nine required to take power ... A four-party coalition government was formed in

August 2004 after two months of legal challenges to election results and the refusal of opposition lawmakers to attend parliament. One party pulled out four months later but left the coalition with enough seats to stay in power On Thursday [12 January] ... some 1,500 protesters stormed the headquarters of [the MPRP] ... No injuries or arrests were reported ... There were no party leaders in the building at the time ... Up to 300 policemen stood by after failing to restrain the crowd ... Ulan Bator has been the scene of repeated protests over poverty, corruption and complaints about land reform.

(www.iht.com, 12 January 2006)

About 1,5000 . . . protesters stormed the headquarters of [the MPRP] . . . on Thursday [12 January], reportedly forcing the party to reconsider its decision to withdraw from the ruling coalition ... The protesters accused the party ... of trying to seize power by usurping the fifteen-month-old government and demanded it reverse its decision by Monday afternoon . . . The party agreed later Thursday to discuss the protesters' demands and consider rejoining the government.

(*IHT*, 13 January 2006, p. 5)

#### 15–16 January 2006.

The MPRP ... declared Monday [16 January] that it was confident of forming a new government after removing Tsakhiagiin Elbegdorj as prime minister ... Also on Monday about 2,000 people rallied in the capital in new protests over official corruption. They demanded the resignation of President Nambaryn Enkhbayar and the dissolution of parliament ... The protest was organized by the Mongolian United Movement, an alliance of three civic movements that have been calling for political reform ... Two days of angry demonstrations followed the collapse of the coalition government ... On Sunday [15 January] the party [the MPRP] appealed for other parties to join it in forming a new government.

(www.iht.com, 16 January 2006)

'[On 16 January] the MPRP chose its chairman, Miyeegombo Enkhbold, as the new prime minister' (IHT, 17 January 2006, p. 8).

'Parliament chose Miyeegombo Enkhbold, a former mayor of Ulan Bator, as the new prime minister' (*The Economist*, 28 January 2006, p. 7).

#### 18 April 2006.

Several thousand demonstrators marched outside the government headquarters Tuesday [18 April], burning effigies of the nation's leaders and demanding their resignations because of alleged corruption and the mishandling of mineral wealth. Some protesters have been camped in Ulan Bator's

central square for nearly two weeks. They demand the three-month-old government resign if it cannot obtain favourable terms from Ivanhoe Mines for the Canadian company's concession to mine a huge copper deposit in the southern Gobi region.

(*IHT*, 19 April 2006, p. 7)

5 June 2006.

Genghis Khan was the father of globalization, say academics meeting in China to mark the 800th anniversary of the founding of the Mongol Empire ... Hao Shiyuan (of the Academy of Social Scientists): 'Civilizations became linked. This is what globalization features ... disappearing borders.'

(Independent, 6 June 2006, p. 23)

15 June 2006.

[The fifth] anniversary meeting of the Council of Heads of Member States of the Shanghai Co-operation Organization (SCO), which is made up of Russia, China, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, was held yesterday [15 June] in Shanghai ... [President Vladimir Putin of Russia] spoke about the SCO's intention to 'take practical actions to enrich co-operation' with observer countries, which include Iran, India, Pakistan and Mongolia, and he made it clear that 'if necessary, especially in the event that crises should arise, SCO mechanisms can be used to resolve those crises'.

(CDSP, 2006, vol. 58, no. 24, p. 1)

July 2006.

Each day from a basement radio studio in Seoul ... Kim Seong Min's seven-person staff records a thirty-minute radio programme . . . Kim is head of Free North Korea Radio, or FNK . . . Within hours, beamed from a transmitter in Mongolia, Kim's radio signals penetrate North Korea's tightly sealed borders with news of the outside world ... Once a week Park Sang Hak and his colleagues travel to the border with North Korea and release balloons ... [that] release leaflets ... Kim and Park are defectors from the North, now settled in the South . . . Experts say Kim Jong Il's recent missile tests resulted in part from his insecurity over what he perceived as US attempts to topple his regime. The attempts include flooding the country with small radios, Korean language propaganda broadcasts and 'impure publications and video materials'. Pyongyang has demanded that South Korea disband FNK, calling it a 'lackey for US imperialists'. But, speaking in a US congressional hearing in April, Jay Lefkowitz, a special US envoy on human rights in North Korea, vowed to support operations like FNK as

'a possible precursor to a more robust broadcast platform that creates an open window to North Korea'. Kim and Park came up with the idea for FNK in 2004. At the time South Korea was switching off radio broadcasts and tearing down billboards and loudspeakers along the demilitarized zone, implementing a ceasefire in a decades-old propaganda war. Until then the two Koreas had bombarded each other with leaflets and radio signals ... [FNK] stirred controversy. None of Kim's staff had any radio experience. Seoul refused to give it a licence. Students marched on Kim's studio, demanding an end to 'anti-unification' broadcasts. Kim received anonymous phone calls threatening his life ... When Park and his friends first tried to send radio sets and leaflets by balloon, the police stopped them ... Still without a government licence, FNK runs only a website in South Korea. But last December [2005], with financial assistance coming indirectly from the US Congress, Kim's Mongolian radio station began its first shortwave broadcasting. Its thirty-minute programme is broadcast twice a day on two different channels to increase the chances of penetrating North Korea's jamming ... The Washington-based Radio Free Europe and Voice of America also send signals into North Korea ... It remains unclear how many North Koreans tune into Kim's radio or read Park's leaflets.

(www.iht.com, 20 July 2006)

### 20 August 2006.

North Korea has opened bank accounts in Vietnam and other foreign countries that the United States suspects are being used to handle money in the arms trade and for other illegal activities, a joint intelligence report said . . . The report was issued by unidentified agencies in the United States, Japan and South Korea ... According to the report ... North Korea has opened ten accounts [in Vietnam] ... Vietnam's central bank is 'seriously' investigating money transactions in the country, the report said ... North Korea's Tanchon Commercial Bank and Daedong Credit Bank opened the accounts in Vietnam, the report says, adding that the country has new agreements with twenty-three banks in ten countries, including Mongolia and Russia. The report, written in Japanese, says North Korea opened new accounts after the US Treasury in September [2005] accused the Banco Delta Asia, a Macao-based bank, of helping North Korea launder money. Macao's government took control of the bank and froze \$24 million in its accounts ... Illegal business activities by North Korea ... [include] the sale of drugs, counterfeit money and fake tobacco.

(www.iht.com, 20 August 2006)

('[It is claimed that] Vietnamese banks have been forced to shut North Korean accounts in the country ... Vietnamese authorities would say yesterday [23 August] only that they were investigating US allegations that North Korean funds had been parked in accounts in the country ... [It is claimed that]

Vietnamese banks shut the North Korean accounts several weeks ago ... [It is claimed that] Russia [is] one of the only countries – perhaps the only country – in the world that is allowing North Korea to bank': *IHT*, 24 August 2006, p. 6.)

#### 21 August 2006.

Mongolians are eagerly awaiting a visit this week by the Dalai Lama, although details of the revered Buddhist leader's travel plans remained secret amid concerns over likely protests from China. The Tibetan spiritual leader was to arrive Monday [21 August] in the Mongolian capital, Ulan Bator, almost four years after the last visit, which China condemned as part of an international campaign to promote political autonomy for Tibet. The Dalai Lama is being welcomed by the largest Mongolian monastery, Gandantegchinlen ... Although his official schedule had yet to be announced, the Dalai Lama was expected to hold a series of lectures for the public and members of the Buddhist clergy and was to stay at a special government guesthouse outside the capital . . . Mongolians are overwhelmingly Buddhist ... Although China has yet to issue any formal statement on the Dalai Lama's visit, news of which was officially announced late last week, Beijing has recently ratcheted up its rhetoric against the leader. 'His visits abroad are merely for the purposes of scraping together anti-Chinese elements and propagandizing and peddling his Tibetan independence thinking,' a hardline communist leader in Tibet, Zhang Qingli, was quoted as saying on 8 August.

(www.iht.com, 20 August 2006)

The Dalai Lama arrived in Mongolia late Monday [21 August], defying likely protests from China ... He was expected to hold several public lectures and meetings with Buddhist clergy ... Organizers kept the schedule under wraps to avoid angering Beijing.

(*IHT*, 22 August 2006, p. 6)

Thousands flocked to Ulan Bator to welcome the Nobel Prize-winning leader-in-exile to Mongolia, where Buddhism has staged a revival since the country shrugged off Soviet control in 1991 . . . Mongolia's foreign ministry stressed the visit was sponsored by a monastery and not the government.

(*FT*, 24 August 2006, p. 9)

#### 5 October 2006.

Mongolia's legislature yesterday [5 October] began debating a law on regulating the use of Genghis Khan's name, in a bid to prevent his memory ... from being cheapened. Since Mongolia emerged from the shadow of the Soviet Union in 1991 ... [Mongolia] has applied the moniker ... to more than half a dozen brands of vodka and beer and a variety of other

commercial products ... Under the provisions of the new law, use of the name Genghis Khan for commercial purposes would be granted only by the government, which would set fees for its licensing. The law would also give the president the right to select an official Genghis Khan portrait from one of about ten in circulation and define the organizations authorized to use it. It would forbid the Genghis Khan name or portrait to be employed in a degrading or insulting manner or to serve the interests of political parties or NGOs.

(FT, 6 October 2006, p. 7)

#### 24 November 2006.

Mongolia is naming an international sports award after Genghis Khan . . . A commission of athletes and journalists will nominate the first winner of the trophy, a gold statue of the leader on horseback on a silver globe, next month [December].

(*The Times*, 25 November 2006, p. 45)

# 3 The economy

# Economic planning and reforms in the communist period

The first attempt at a five-year plan was for the period 1931–5, but it was only after the Second World War that systematic planning took place. The first five-year plan ran from 1948 to 1952. Annual plans began in 1941 with the setting up of the Board of Planning, Accounting and Control. School leavers were directed to their place of work by the Directorate of the Mongolian Organized Work Force (Sanders 1987: 119). Enterprises and institutions were mainly responsible for housing their own work forces (p. 123).

Even when he first took over, Jambyn Batmonh attacked waste, losses and mismanagement, describing the system of economic management as the weakest link in economic work (Heaton 1986: 86). At the nineteenth Congress of the Mongolian People's Revolutionary Party in May 1986 he attacked bureaucracy, ill discipline, irresponsibility, narrow thinking and mere slogans (Heaton 1987: 79). (The 1986–90 and 1985–2000 plans were to have focused on agriculture and improving food supplies: Heaton 1986: 86.)

There started criticism of the 1960s and 1970s as an era of stagnation (*Eastern Europe Newsletter*, 1988, vol. 2, no. 10, p. 4). This echoed Soviet sentiments.

Yumjaagiyn Tsedenbal was not explicitly named until Batmonh's speech at the end of December 1988 (Alan Sanders, *FEER*, 19 January 1989, p. 21). Sanders describes the December 1988 plenum of the Central Committee as a milestone for economic and political reform (*Asian Survey*, 1990, vol. XXX, no. 59).

Ministerial reorganization took place in 1968. Ministerial amalgamations also included the 1986 decision to allow the ministry of agriculture to take over the ministry of water supply in October and the establishment of one body in charge of construction (the State Construction Committee) in December (Sanders 1987: 62). In the early 1970s industrial production associations along Soviet lines began to be formed. A Commission for Perfecting Management and the Economic Mechanism was formed in 1986 (and reported to the Central Committee the following year) as well as a Standing Commission for Agriculture and Food Supply and two committees for increasing efficiency in the use of materials and for improving the repair of machinery and vehicles imported from the Soviet

Union. The ministerial system was altered, the changes being designed to streamline the planning process (see Alan Sanders: FEER, 11 February 1988, p. 62; Asian Survey, 1989, vol. XXIV, no. 1, p. 52; Eastern Europe Newsletter, 1988, vol. 2, no. 4, pp. 6–7):

- The State Construction Committee was formed in early 1987 out of the ministry of construction and two design institutes.
- In December 1987 the ministry of light industry and food and the ministry of agriculture were reorganized into the ministry of agriculture and food industry, the latter thus taking over food processing from the former. (Ten ministries were dismantled. The ministries of agriculture and light industry were merged: FT, 9 April 1990, p. 6.)
- The ministry of foreign economic relations and supply assumed the functions of the ministry of foreign trade, the State Committee for Material and Technical Supply and the State Committee for Foreign Economic Relations.
- The ministry of power, mining and geology was formed out of the ministry of fuel and power industry and the ministry of geology and mining
- 5 A new ministry for environmental protection was established.
- The State Committee for Planning and Economy was formed at the end of January 1988 out of the State Planning Commission and the two committees for prices and labour.
- The State Committee for Science and Technology absorbed higher education in order to improve the link between university training and the research institutes.

Over 100 enterprises took part in a new 'economic experiment in financial autonomy. The participating sectors included light industry, food production, fuel and power, public catering, and transport and communications. Construction, timber and services were included during 1987. Plan fulfilment had to cover all the relevant products (Alan Sanders, *FEER*, 11 February 1988, p. 64).

At the June 1987 Central Committee meeting Batmonh stressed the need for the restructuring of economic management, intensive growth and increased efficiency. In an earlier speech, in May of the same year, he listed a number of problems: the stress on fulfilling net plan indices, the continuing shortages of foodstuffs and consumer goods, the poor quality of many products, bureaucracy, lack of initiative and deficient housing (Jarret 1988: 84).

Prime minister Dumaagiyn Sodnom referred to over-centralization as the main problem of economic management and planning, and said that the remedy lay in the need to limit the role of the State Planning Commission to general capital investment policy and broad targets, with ministries and state committees making decisions on aspects such as the purchase of machinery and equipment. Provincial and town administrations were to have great autonomy and be financially accountable (as were work teams within the enterprise), while enterprise performance was to be judged by the fulfilment of export orders and sales contracts (Alan Sanders, *FEER*, 10 December 1987, pp. 40–1).

The 1988 plan avoided the subjection of every enterprise to highly detailed plan targets, enterprises being allowed, for the first time, to fill in the details of their own plans on the basis of a restricted number of central plan targets (Alan Sanders, *FEER*, 11 February 1988, p. 62). Personal material incentives were given increased attention. In 1988 pay scales depending on enterprise revenue were introduced in light industry and food processing, internal trade and supply (Alan Sanders, *Asian Survey*, 1989, vol. XXIV, no. 1, p. 52).

Considerably less than 5 per cent of prices were subject to negotiations between enterprises (Faber 1990: 416).

There were experiments in electing enterprise managers and team leaders. Local authorities were given greater power over enterprises in their areas and were able to use a portion of the funds of enterprises for infrastructural purposes (*Eastern Europe Newsletter*, 1988, vol. 2, no. 10, p. 5).

Kaser (1992: 167) uses the term 'Mongolian perestroika' to describe the 1984–9 period, indicating the continuing influence of Soviet ideas. Kaser (1987b) considers that the reform proposals did not amount to as far-reaching a reform as in the other socialist countries of Asia, and a growing labour force and available land and natural resources made the drive for intensive growth less urgent. (Sanders reported a labour surplus in urban areas and a shortage in rural areas, since migrants were attracted to the former by higher incomes: *FEER*, 30 June 1988, p. 27.)

The November 1988 Law on the State Enterprise came into operation on 1 January 1989, emphasizing the financial autonomy of the enterprises (Alan Sanders, *Asian Survey*, 1990, vol. XXX, no. 1, p. 65).

As in the Soviet Union, the principles of full cost accounting, self-financing and self-management were stressed, the last seeking greater involvement of the work force in enterprise decision-making (including the election of the managers and a management council comprising at least 60 per cent workers) (*Information Mongolia*: 1990: 188).

'State orders' were a feature, while enterprise indicators included 'realized production taking into account commercially negotiated contracts', net value-added, profits and quality. Wholesale trade was expanded after late 1987, covering a wide range of producer goods (Kaser 1992: 169). Remuneration was to be based on performance; within numbers employable and the wage fund, both set by the ministry, management had some discretion (e.g. whether to choose time or piece rates). World prices were taken into account in the pricing of exportables and import substitutes and some prices were deregulated (Kaser 1992: 170).

Mongolia predictably followed in the Soviet Union's footsteps, with *Il Tod* (glasnost) and *Shinechiel* ('renewal'; perestroika) emphasized. There was talk of developing a 'state-controlled market economy' (Robert Thompson, *FT*, 11 April 1990), p. 22).

# The transition to a market economy

The transition to the market was scheduled to begin in January 1991 (Jeffries 1993: 133).

In 1990 it was said that state controls would remain in force only during the transition to a market economy (Alan Sanders, FEER, 31 May 1990, p. 28).

On 17 February 1990 prime minister Dumaagiyn Sodnom said: 'Our goal is to transform the central planning system ... into a system based on democratic principles' (The Times, 19 February 1990, p. 11).

In a 10 April 1990 speech at the 10–12 April extraordinary congress of the MPRP, General Secretary Gombojaviyn Ochirbat said that 'The [economic] situation is truly serious' and quoted an unemployment figure of 27,000. In early November deputy prime minister Dorligjav said: 'We have no time to lose to transfer to a market economy.' State enterprises and some land would be parcelled into lots and distributed equally to all the people of Mongolia (FT, 3 November 1990, p. 3).

The reforms, designed to move the economy to a market-based system over three and a half years, were supported by an IMF stand-by arrangement for SDR 22.5 million approved on 4 October 1991 (IMF Annual Report 1992, p. 61).

The power of ministries was reduced. Only four ministries remained, namely National Economic Development, Trade and Industry, Energy and Finance. In August 1990 the state bank monopoly came to an end and two commercial banks were set up in September (Kaser 1992: 172).

The State Planning Commission was abolished in September 1990 and a twotier banking system was approved in August 1990 (Milne 1991: 10, 30). It was not until May 1991 that the new banking law was passed, formally recognizing a two-tier banking structure. The Bank of Mongolia was formally made independent of the government. The governor is appointed by parliament to which he is responsible (Boone et al. 1997: 112–13).

By October 1992 the Mongolbank had raised its interest rate to 160 to 214 per cent (i.e. positive in real terms); the central bank exercised direct regulatory authority, such as the establishment of minimum interest rates on time deposits and quantitative ceilings on access to its overdraft facility (Tsedendambyn Batbayar, Asian Survey, 1994, vol. XXXIV, no. 1, p. 43).

A new banking law was adopted in 1995. A two-tier system was established, with the Bank of Mongolia handling monetary policy and other banks handling commercial transactions (Sheldon Severinghaus, Asian Survey, 1996, vol. XXXVI, no. 1, p. 97).

Despite progress on the privatization front, Mongolia had not created a market economy by 1993. The economy was becoming increasingly dollarized as people lost confidence in the tugrik (Pomfret 1993: 5). Interest rates were raised after September 1992 (p. 6). During the second half of 1992 economic reform appeared to be in danger of running out of steam, but it was about to gather speed again (p. 7). Monetary policy was helped by tax reforms introduced in January 1993, which moved the government's revenue base away from a turnover tax and towards profit and sales taxes (p. 9). In 1993 further budget cuts were decided upon (p. 7). ('The overall budget deficit in 1995 was 11.4 per cent of GDP... As in previous years, this was financed entirely by external concessional resources': Asian Development Bank 1996: 63.)

Denizer and Gelb (1992: 13–15) pointed to a slowing of the economic reform programme and an increase in administrative controls in the period July 1991–February 1992 (due to factors such as the drying up of Soviet aid and the collapse of foreign trade) and a pick-up in the pace of reforms after February 1992.

The EIU (*Country Report*, 1993, no. 1, p. 30) detected a lukewarm attitude towards economic reform, due largely to a wish to avoid the associated political costs. The government's priorities were food production, exports and the infrastructure.

State orders were gradually eliminated over the period 1991–93 (Boone *et al.* 1997: 121).

Boone (1994: 330–2) detected a lack of consensus about the speed and direction of reform, e.g. the central government being divided into several factions, resulting in varying speeds of and inconsistency in the reform process.

A bankruptcy law was passed in 1992 (Denizer and Gelb 1992: 7). EIU (*Country Report*, Fourth Quarter 1993, p. 37) reported that a sheepskin tannery had ceased production in July 1993, the first state enterprise to go bankrupt.

(A much more reformist government was elected on 30 June 1996.)

The lack of strong political backlash against economic transition is partially due to two economic stabilizers which smoothed the adjustment process: the traditional pastoral lifestyle and the flourishing informal sector ... [There is a] broad consensus on underlying fundamentals, including the desirability of a market-based economy and incorporating attitudes towards the pastoral sector and the informals.

(Pomfret 2000a: 149)

Elections were held in July 1990 ... The parliament was dominated by the successor to the Communist Party, which, despite its heritage, neither halted economic reform nor prevented the drawing up of a new constitution in 1992 under which Mongolia has had a democratic system with peaceful alternation of power ... Even allowing for reservations, the general impression, certainly within the country, was of a rapid transition from central planning which had resulted in considerable short-term hardship during the first half of the 1990s ... In Mongolia's June 1996 election the Democratic Coalition won a landslide victory. The Democratic Coalition were not only reformers, they were radical reformers ... The overall picture of the Mongolian economy by 1997 was that ... the economy was clearly market-based ... Why had the process happened so relatively

smoothly without a major political backlash after several difficult years? The adjustment process was helped by two economic stabilizers ... The traditional pastoral lifestyle was resilient to economic changes ... The informal sector eased the transition from central planning by maintaining a flow of desired goods and services and alleviating urban unemployment . . . The number of animals increased from 25.9 million in 1990 to 31.3 million in 1997. This followed the privatization of livestock production in 1991–2, after which, initially at least, the traditional lifestyle was seen to provide a reliable subsistence consumption level and some insulation from the collapse of the economy. Urban-rural migration was reflected in the decline of the urban share of Mongolia's population from 57 per cent to 52 per cent. Even within the cities there was a reversion to traditional lifestyles as families vacated their poorly maintained and erratically heated flats to live in felt gers with private stoves ... Around a third of livestock were privately owned in 1990 ... Privatization of the herds was implemented in two stages in 1991 and 1992 ... Between 1991 and 1993 the size of the herds was almost constant ... Beginning in 1994, however, aggregate numbers grew at record rates ... The second stabilizer was the informal sector, which grew rapidly in the mid-1990s, and, according to Anderson [James Anderson: World Bank Policy Research Working Paper 1916, May 1998, p. 16], accounted for around a third of economic activity by early 1997. The informal sector was a response of small-scale entrepreneurs to bureaucratic regulations ... The informals were not illegal and were not tax evaders; they paid a flat tax ... Anderson argues convincingly that the informals played a key role in improving economic well-being by making goods and services available which the formal sector was not providing . . . Mongolia's democracy can look chaotic, corrupt and incompetent when placed under a spotlight . . . Bank failures in 1998 due to loans to MPs led to bailouts with public money. Reversal of a decision on casinos in early 1999 subjected the government to a liability suit from the Macanese investors. The examples could be multiplied ... Nevertheless, on the big picture of economic policy the democratic process has produced a consistent development strategy, with an acceleration in 1996 in response to the will of the electorate ... The second half of 1998 illustrated the economic consistency amidst superficial political tension . . . The general pattern is of lively debate and party differentiation on some issues, but broad consensus on underlying fundamentals. The Mongolian People's Revolutionary Party, the successor to the sole pre-1990 party, has played a generally positive role . . . One key element has been the cultural homogeneity and continued orientation towards the traditional pastoralism which was shared by most Mongolians through the communist era ... After 1990 the distance between reformers and members of the former Communist Party was not huge. In particular, both camps accepted the desirability of livestock privatization (and undesirability of full private ownership of grazing land) and were willing to encourage the informal sector (or not to obliterate it

with a grabbing hand). These two economic stabilizers became especially important in easing the adjustment to a market economy from 1994 or 1995 onwards.

(pp. 151-7)

The government plans to slash income tax rates from 40 per cent to 30 per cent in an effort to broaden the tax base and enhance collection. In a move that caused concern among some international financial institutions, Ulan Bator dipped into the Treasury late last year [2003] for the bulk of the \$250 million it used to pay off a crippling Soviet Union-era debt nominally valued by Moscow at \$10 billion.

(*FEER*, 24 June 2004, p. 48)

Mongolia's commercial banks experienced a trilogy of harsh winters that saw five banks fold, mainly due to a high number of failed loans. A rigorous modernization process followed and consolidation is now beginning to harvest fruitful returns ... Whereas the non-performing loan portfolio in 2001 ranged from 8 per cent to 10 per cent, in 2005 this figure fell to 5.6 per cent ... The Central Bank of Mongolia increased the minimum paid-up capital to \$2 million in 2001, \$4 million in 2004 and \$8 million in 2006, respectively ... The country created the Financing Co-ordination Committee, which in only a few months started to actively supervise the financial institutions ... There are no restrictions to the flow of capital ... [Mongolia does not] impose any control of inflows or outflows of foreign exchange and that is why banking sector deposits are growing faster than any other country in the area.

(Mongolia 2006b: 8)

Amendments to the tax laws in 2006 lowered corporate taxes from 30 per cent to 25 per cent and value-added tax (VAT) from 15 per cent to 10 per cent ... A new windfall tax adopted in 2006, together with amendments to the minerals law, seem to have substantially increased the cost of doing business in the mining sector. Mining companies must pay a 68 per cent tax on profits from the sale of copper and gold (when prices move above certain levels). In addition, mining companies must list 10 per cent of their shares on the Mongolian stock exchange. Royalty rates have also been increased.

(EBRD 2006b: 150)

As part of a policy of tax reform, new tax legislation was approved by parliament in July 2006 (effective from January 2007) reducing a number of tax rates, including those for VAT and income tax ... The 2005 budget ended with a surplus of 3 per cent of GDP, the first time a surplus had been recorded since 1992.

# Prices in the communist and post-communist periods

In the communist period considerably less than 5 per cent of prices were subject to negotiations between enterprises (Faber 1990: 416).

In 1987 the government freed the prices of customer services from state control. Until 16 January 1991 only the retail prices of customer services and some luxury goods (such as furniture, fine leather and coats) covering some 20 per cent of total sales were liberalized. In the aftermath of the 16 January 1991 decree retail prices covering 50 per cent of food sales and 70 per cent of sales of other items, comprising more than 60 per cent of total sales, were liberalized. Some thirty-five groups of articles were still subject to fixed retail prices (e.g. coal, meat, flour, bread, milk and eggs), although these were increased by about 100 per cent on average. All wholesale prices were freed except for thirty items, such as petroleum products, power generation, steel, copper, wheat, livestock, water, electricity and heat (these thirty items comprised about 40 per cent of gross social product). There followed further gradual price liberalization. In October 1991 the number of commodities with fixed prices was reduced to seventeen. Beginning in March 1992 the prices of most commodities were freed, with the exception of items like fuel and rice (Asian Development Bank 1992: 81, 85).

In 1 January 1990 wholesale prices were adjusted closer to world levels (e.g. coal increased by 74 per cent and electricity 94 per cent). On 15 January 1991 fixed retail prices, wages and social security benefits were doubled (a limit being placed on the doubling of savings bank deposits, equivalent to eighteen months' average wage). Controls on other prices were changed to ceilings. The aim was to liberalize 80 per cent of retail prices by the end of 1991 (Kaser 1992: 173).

Price controls were to remain, for example, on housing, rents, telephones and some forms of energy. In September 1991, however, price controls were reimposed (Heaton 1992: 52).

By the end of 1991 the prices of goods remaining subject to government intervention were estimated to account for only 20 per cent of all prices, covering meat, milk, flour, eggs, children's clothing, coal and public utilities such as electricity and water (Milne 1991: 30).

Denizer and Gelb (1992: 9) reported the introduction of consumer rationing in January 1991. Half the rationed items, including sugar, rice and flour, involved imports. Meat rations covered about one-third of previous consumption levels.

On 16 January 1991 it was resolved that all retail prices were to be freed except for thirty-five categories of goods (approximately 50 per cent of the consumer price index being freed). Other state prices were to be doubled. Wages and household deposits were to be doubled. On 17 October 1991 the number of goods subject to retail price control was reduced from thirty-five to seventeen. The share of controlled prices in consumer baskets fell from 40 per cent of urban household budgets to 20 per cent as a result of this measure. In March 1992 all remaining retail prices were freed except for flour, bread and vodka under rationing. Energy and communications were freed. Farm gate prices were also freed, although grain was effectively controlled due to the monopoly of the flour mills (Boone *et al.* 1997: 120–1).

Tsedendambyn Batbayar (*Asian Survey*, 1993, vol. XXXIII, no. 1, pp. 63–4) reported that by March 1992 the prices of 90 per cent of all commodities and services had been freed. In late September 1992 the government freed the prices of flour, bread, meat, domestic electricity, public transport and livestock feed, thus completing price liberalization.

At the start of October 1992 most state-controlled prices were increased sharply, e.g. some grades of flour five-fold (Hannam 1992: 72).

But the EIU (*Country Report*, 1993, no. 1, p. 35) argues that reports indicating the lifting of price controls on all items except heating, water and sewerage are somewhat misleading. A range of basic foodstuffs, including rationed goods, are still subject to controls of some sort, although the government did allow price rises on 1 October 1992 and 1 January 1993 (e.g. domestic electricity and bus and air fares).

Pomfret argued that the government's approach to price reform had been conservative. 'They equate administered increases in prices to price liberalization' (Pomfret 1993: 6). The government was reluctant to abandon rationing, but by spring 1993 only flour and meat remained on the ration list. Utility prices, rents and bus services continued to be subject to controls, leaving their prices well below costs (p. 6).

Oil and gas prices were raised by almost 30 per cent in October 1994, the first time in sixteen months (Sheldon Severinghaus, *Asian Survey*, 1995, vol. XXXV, no. 1, p. 73).

At the beginning of September 1996 there were sharp increases in oil and petrol prices (*IHT*, 3 September 1996, p. 15).

# The role of the private sector in the communist period and post-communist privatization

By 1960 private trade no longer existed (Information Mongolia 1990: 226).

From the start of the 1960s policy centred on the merging of workers and herdsmen and of state and co-operative property, with the possibilities of private property thought to be exhausted. Co-operatives produced nearly 20 per cent of gross industrial output in 1972. In that year most were nationalized, the few remaining producing less than 3 per cent of output (Kaser 1992: 170).

Later communist policy was to encourage co-operatives and private enterprises in the food industry and in services (*Eastern Europe Newsletter*, 1988, vol. 2, no. 10, p. 5).

In 1988 an ordinance of the Council of Ministers encouraged the setting up of private co-operatives providing services, manufacturing and processing on a small scale (Alan Sanders, *FEER*, 30 June 1988, p. 27).

The November 1990 resolution of the Little Hural outlined a programme of privatization (Kaser 1992: 172). The state would still control key sectors

(energy, mining, the railways, garment making, meat processing and confectionery), but the remaining enterprises were to become joint stock corporations, whose shares would be distributed equally among Mongolian citizens of any age. Some arable land would be included, but grazing would revert to traditional common lands.

According to The Economist (19 October 1991, p. 92), each citizen was to receive a voucher with a nominal value of 10,000 tugriks (arrived at by dividing the notional value of state assets by the population) for 200 tugriks (or nothing if very poor); vouchers could be used in both small and large privatizations.

The programme involved 340 large and medium-sized enterprises and almost 3,000 mall enterprises (*IHT*, 10 February 1992, p. 11).

State-owned housing was to be sold off. By mid-1992 about 20 per cent of the vouchers had been turned in for stock and the process was expected to be completed by 1993 (IHT, 9 July 1992, p. 3).

The auction of shops started in Ulan Bator in May 1991. On 24 June 1991 a shop was sold with the land (the first time state land had been sold at auction) (Jeffries 1993: 134).

According to a report in the *Guardian* (8 June 1991, p. 8), the main features of the programme announced on 7 June 1991 were as follows: the aim was to sell off 57 per cent of state-owned assets by the end of 1993 (this to include 2,200 of the 2,600 state factories and enterprises); livestock co-operatives were also to be privatized, but the farms themselves could decide how.

According to a report in Euromoney (supplement on Mongolia, July 1991, p. 13), the intention was to transfer into private hands 100 per cent of the holding in small enterprises and 80 per cent of all state assets by September 1993. About 20 per cent of the shares in large enterprises were to be distributed to workers, while vouchers could be sold to domestic or foreign buyers rather than used in auctions.

The first stock exchange was opened in Ulan Bator on 7 February 1992. According to a report in the IHT (10 February 1992, p. 11), foreign investors would be able to buy shares after the opening of a secondary market, possibly later in 1992, that would sell stock for cash rather than vouchers; a foreigner would be restricted to owning a maximum of 49 per cent of any enterprise.

A report in the FT (27 November 1992, p. 6) analysed the privatization programme. Each citizen was to receive a voucher worth 10,000 tugriks, of which 7,000 tugriks could be used for larger privatizations and 3,000 could be used to buy livestock or small businesses. Between February and October 1992, 121 enterprises were floated on the Mongolian stock exchange and the target was set at 500 by the end of the year. The enterprises excluded from privatization were bankrupt ones or those considered too important (e.g. significant hard currency earners such as the Gobi cashmere enterprise). Around 90 per cent of small shops and 60 per cent of livestock were in private hands by then.

The privatization programme announced in 1991 (effective 1 July) aimed to privatize 344 large enterprises and 1,601 small enterprises by the end of 1992.

Each citizen was entitled to three red vouchers (tradable on secondary markets) and one blue one (non-tradable). Red vouchers, with a face value of 1,000 tugriks, were for the privatization of small enterprises and agricultural assets (except land and livestock). The total book value of small assets was 9.4 billion tugriks. Blue vouchers, with a face value of 7,000 tugriks, were for the privatization of the 344 large enterprises with a book value of 10.8 billion tugriks. Small assets were to be privatized at auctions, but workers employed in the small enterprises had the first right to acquire them at a value determined by the privatization commission. By the beginning of February 1992 around 80 per cent of all small enterprises were in private hands. Large enterprises were also to be privatized by voucher auction after having their plans approved by the privatization commission. Ten per cent of their shares would be granted to employees. Investment funds would not be able to control more than 20 per cent of the shares of a given enterprise. Foreigners would be able to buy shares only when secondary trading began (Denizer and Gelb 1992: 9–13).

Approximately 85 per cent of the assets of small shops and enterprises were sold to insiders (i.e. their employees) (Boone 1994: 350). The auctions for large enterprises began in early 1992 (p. 350). All small retail shops and enterprises have been sold for vouchers and by March 1993, 250 large enterprises (i.e. 60 per cent) had been converted to joint stock companies and sold for vouchers. Around 83 per cent of livestock is now privately owned. The aim was to complete the privatization programme by the end of 1993. A survey of the first 105 privatized enterprises found that 43 per cent of shares were held by employees and relatives of employees (p. 351).

The 1991 Companies Act laid down that state and co-operative enterprises were to convert to joint stock companies in that year. On average around 65 per cent of the assets of large enterprises were eventually to be privatized. The industrial sector comprises mainly state enterprises and several large joint ventures with former Comecon countries. The private sector is only now developing and, although large in number (with some 4,200 enterprises), it is quite small in terms of employment (about 8.6 per cent). The emerging private sector is concentrated in retail trade and in small manufacturing and handicraft activities (Asian Development Bank 1992: 60, 83, 111).

In July 1992 the prime minister said that 60 per cent of total livestock, 40 per cent of state enterprises and almost 100 per cent of retail trade and services had been privatized. (The centralized distribution and state procurement systems for agricultural products had been dismantled.) In the first half of 1992 the private sector produced 4.8 per cent of total industrial output (Tsedendambyn Batbayar, *Asian Survey*, 1993, vol. XXXIII, no. 1, p. 63). Prime minister Puntsagiyn Jasray has claimed that as of July 1993 privatization was 90 per cent complete in trade and services and 80 per cent complete in livestock farming. Individual herdsmen owned 27 per cent (and townspeople 19 per cent) of Mongolia's 18 million head of privately owned livestock (54 per cent of so-called 'privately owned' livestock belonged to companies and co-operatives, which are the old herding co-operatives) (*FEER*, *Asia 1994 Yearbook*, 1994, p. 173).

Large privatization under the law of May 1991 was proceeding at a slower pace than planned. Around 70 per cent of livestock was in private hands by January 1993, with the remainder the property of co-operatives or joint stock companies. A new law on land would allow citizens to buy or lease agricultural plots. Housing would be sold in three ways, namely to existing tenants under a voucher system, for cash or by extended payment (EIU, Country Report, First Quarter 1993, p. 34). The EIU (Country Report, Second Quarter 1993, p. 39) reports the announcement in April 1993 that 73.5 per cent of state properties earmarked for transfer were in private hands (over 4,000 small enterprises and 600 large ones) and the hoped-for completion date of the process was August 1993. The private sector now accounts for around 60 per cent of industrial output (EIU, Country Report, Third Quarter 1993, p. 40).

The initial intention was to complete the privatization of large enterprises by September 1992 (a schedule that was not met). The State Privatization Commission estimated that 92 per cent of state enterprises (65 per cent by value) would be privatized (although there are lower estimates). By May 1993, 267 enterprises had been privatized, employing 74,925 people. By the spring of 1993 over half the assets of large enterprises had been covered by the share sales. Almost all trade, food and other service enterprises had been privatized by the summer of 1993. Over 70 per cent of livestock has been transferred to private ownership. New developments in 1993 were the decisions to privatize 170 incomplete construction projects and to begin the privatization of housing accommodation. In 1992 the private sector accounted for about half national income (Pomfret 1993: 5).

Kaser (Economics of Transition, 1994, vol. 2, no. 2, pp. 266-7) cites Murrell's estimates that by the end of 1993 nearly 80 per cent of state enterprises had been sold off and that 67 per cent of all privatized enterprises ended up wholly owned by 'insiders' (managers, employees, pensioners and their families - children born by 31 May 1991 qualified). The share of foreign ownership in the total reached only 8 per cent.

Korsun and Murrell ascribe the rapidity of the privatization process to the fact that:

The overwhelming proportion of privatization has simply resulted in the transfer of ownership to those already inside the organizations being privatized ... Paradoxically, the privatization process might have achieved one of the primary objectives of its designers, speed, precisely because it did not achieve another of its goals, the creation of outside ownership.

(Korsun and Murrell 1995: 486)

Employees were given preferential rights to obtain shares in both small and large enterprises (pp. 477-8). From mid-1991 to mid-1992 both agricultural privatization and small privatization in the trade and service sectors were virtually completed. When worker buy-outs in small enterprises began in Ulan Bator there were significant discounts for workers. An attempt was made to moderate the discounts, but 'Ultimately valuation procedures were redesigned to yield valuations equal to estimates of a heavily discounted auction price' (p. 485). The beginning of large privatization was delayed until early 1992, but by mid-1993 it was nearly three-quarters complete (p. 478). Throughout 1994 the pace of large privatization slowed. But

this was not only a reflection of the government's preferences; the major task was over, since virtually all of the industrial, service and trade sectors were now private. The large enterprises remaining under state control were in the utility, mining and transportation sectors.

(p. 484)

Employees and their families have invested their vouchers predominantly in their own enterprises. Mutual funds garnered only 2 per cent of shares (p. 484).

Lee (1993: 630-1) argues that:

In addition to the absence of price liberalization, the monetary and labour market institutions appropriate to a market economy had not yet been developed. The privatized commercial banks were controlled by state enterprises which pre-empted credit disbursements, hence crowding-out borrowing by the private sector ... Administered wage scales from the central planning system still applied in state enterprises ... There was little evidence of enterprise restructuring and related steps to improve economic efficiency ... The industrial structure which had developed under central planning was highly concentrated ... It is not surprising, therefore, that the change in ownership was not accompanied by changes in the management and control of privatized enterprises.

Only one-fifth of the economy is in private hands, according to a estimate cited in *IHT* (18 July 1996, p. 15).

Under the privatization programme all small businesses, all livestock, all agricultural enterprises and co-operative farms, and 340 large state enterprises were to be privatized. But a government resolution issued on 7 June 1991 restricted privatization in some of the large enterprises to no more than 50 per cent of share capital and excluded state enterprises in mining, energy, transportation, communications and water supply from the privatization scheme. Share auctions for the large-enterprise privatization began in February 1992 at the stock exchange. Workers were given a preferential right to use their vouchers to buy shares of enterprises at the listed book value. This was a very modest benefit, giving workers the ability to purchase directly between 5 and 10 per cent of enterprise shares (Boone *et al.* 1997: 117).

Much-delayed trading on the stock exchange was due to begin by spring 1995. 'Since privatization scarcely altered management practices, most of the country's enterprises still lose money' (*Independent*, 12 January 1995, p. 13).

The stock exchange began public trading on 28 August 1995 (Transition, 1995, vol. 6, nos 9–10, p. 21).

Mongolia hopes to auction off virtually its entire state sector within the next two years, including Erdenet (the copper mining company which accounts for 70 per cent of foreign exchange revenues) and Gobi Cashmere (which is responsible for a fifth of the world's output of raw cashmere). The state will retain control of only a few assets, such as military hardware and the railway (jointly owned with Russia). The aim is to stimulate competition and arouse the interest of international investors (FT, 17 September 1997, p. 4).

In early 1997 the State Great Hural approved the much-awaited law on housing privatization, permitting 60,000 units of state-owned housing to be transferred to current residents free of charge. The government also announced plans to privatize the national airline MIAT and other major enterprises such as Erdenet copper (Tom Ginsburg, Asian Survey, 1998, vol. XXXVIII, no. 1, p. 66).

Large privatization was highly centralized ... every enterprise would be sold for vouchers on the stock exchange ... Every citizen received a set of seven vouchers dedicated for large privatization, which were non-tradable ... Buyers channelled their orders through a nationwide network of brokerage houses. These brokerages were the only entities allowed to run investment funds during the privatization process ... Parliament only gave a weak preference to employees. The concession was in allowing insiders to use their vouchers to purchase shares at the initial asking price of 100 voucher-tugriks ... Since the average voucher price turned out to be seventy-six ... the large majority of workers rejected the concession, waited for their own enterprise to be auctioned and then proceeded to buy shares in their own enterprise ... Secondary trading of shares began in August 1995.

(Anderson et al. 1999: 218–19)

Mean share ownership for all enterprises in the mid-1996 survey sample was as follows: state, 20.4 per cent; outsiders, 44.9 per cent; insiders and their families, 34.8 per cent (managers own 11 per cent of overall shares) (p. 220).

The large-enterprise privatization programme, which was formulated in early 1991 and ended in mid-1995, resulted in the privatization of 483 enterprises. The enterprises passing through this programme were ... in manufacturing, distribution and service sectors ... Airlines, railroad, telecommunications and utilities were not in the large-enterprises privatization programme . . . We surveyed in mid-1996 over half of the enterprises that had passed through Mongolia's mass privatization programme for large enterprises ... Of the 249 surveyed enterprises, 109 had partial state ownership ... In the sample of enterprises studied in this paper state ownership averages 20.4 per cent, while insiders and their families own 35

per cent and outsiders 45 per cent. Of the 249 enterprises in our sample, 109 had lingering state ownership. Although the size of state ownership varies from 0 per cent to 80 per cent, the most common values are either 0 per cent or 51 per cent. Two-thirds of the enterprise with partial state ownership, comprising 29 per cent of the whole sample, have a state share of 51 per cent ... Investment funds are not of any significance. Vouchers were non-tradable ... The secondary trading of shares began officially in August 1995.

(Anderson et al. 2000: 224–5)

To ascertain the prevalence of soft budgets and to find causes of softness, we surveyed Mongolian enterprises, asking whether state aid was expected when financial difficulties arose. One quarter of the enterprises expected soft budgets, a large proportion of which have central government ownership.

(p. 219)

In 1990 . . . most of the surveyed enterprises would have had soft budgets to some degree. Just five-and-a-half years later fully 73 per cent of enterprise directors do not expect any state aid when their enterprises encountered troubled times . . . This is an extraordinary turnaround in beliefs. The econometric results demonstrate clearly that privatization and decentralization were crucial factors in promoting the change in expectations ... Decentralization of ownership produces large effects on the presence of soft budgets, ones that are similar to those of privatization itself ... In Mongolia local governments have hard budget constraints, but also the flexibility to aid enterprises within these constraints.

(p. 243)

By 1995 ... all trade and services had been transferred to private ownership. As a policy matter, the government retained control of the mines and a majority ownership of telecommunications, large-scale transport and public utilities . . . In July 1997 the new Democratic Alliance coalition government under prime minister Mendsaikhany Enkhsaikhan defined the philosophy of privatization in Mongolia. The government launched an even wider-ranging privatization programme intended to privatize 60 per cent of the remaining state assets by 2000. The programme was designed to attract foreign investment (though Mongolian buyers were also welcome) and technology into key sectors of the economy ... It was also expected to generate revenue for the state budget. Among the state assets to be offered are the coal mines, the Erdenet Copper Plant, the Gobi Cashmere Company and MIAT Mongolian Airlines. Privatization of housing started that same year, but delays deprived many small entrepreneurs of access to the bank loans needed to take advantage of the opportunity.

(Goyal 1999: 636)

By mid-1999 some 60 per cent of GDP was generated by the private sector (FEER, Asia 2000 Yearbook, p. 167). The private sector as a whole now accounts for 65 per cent of GDP (*Independent*, Survey, 8 April 2000, p. 2). According to a government economic adviser, private enterprise generates more than 70 per cent of GDP (FT, 1 July 2000, p. 6). Seventy per cent of the economy has been transferred to the private sector (IHT, 12 July 2000, p. 5). 'About 70 per cent of the economy is in the private sector ... As of September 2000 90–95 per cent of the housing in Ulaanbaatar and the provincial capitals had been privatized' (Sheldon Severinghaus, Asian Survey, 2001, vol. XLI, no. 1, p. 66).

'The government in February [2001] gave a final go-ahead to the privatization of eighteen large state-owned enterprises. Not less than 5 per cent of the sale price is supposed to go to social investment, including job-creation schemes' (FEER, 8 March 2001. p. 21).

'Mongolia moved several years ago to ban Chinese companies from participating in its privatization process' (John Pomfret, IHT, 27 March 2001, p. 17).

This month [May 2001] parliament approved a measure to give a legal basis for privatization up to 2004. Companies due to go on the block this year include Gobi (Mongolia's largest cashmere processor), Neft Import Concern (the country's largest petroleum importer and distributor), the Trade and Development Bank and APU (a distillery, brewing and softdrinks firm) ... Prime minister Nambaryn Enkhbayar ... [said] 'We have plans to privatize small power plants – plants no. 2 and no. 3 which produce less than 20 to 30 per cent of national energy production' ... Corporate taxes will be frozen for the next four years and taxes on imported goods will be reduced in a bid to boost the processing sector, according to Enkhbayar.

(*FEER*, 31 May 2001, p. 32)

Mongolia launched a long-delayed plan to privatize key state companies yesterday [21 May] with the sale of its largest and best-performing commercial bank to a Swiss-US consortium ... [The consortium] won an international tender to buy a 76 per cent stake in the Trade and Development Bank.

(*FT*, 22 May 2002, p. 10)

'The Trade Development Bank was privatized last year [2002] and plans are under way to put other large state companies on the block' (FEER, 6 March 2003, p. 48).

The government's privatization programme, which has so far seen two banks sold off, will continue to draw foreign investment ... In the government pipeline are privatization plans for Gobi Cashmere, the country's largest cashmere wool maker, the national airline and some state-owned mining assets.

(*FEER*, 24 June 2004, p. 48)

for almost 80 per cent of national output.

Privatization plans continued during the year [2004] with the sale of the nation's biggest trader of petroleum products to a Mongolian distributor. Next in line for sale are the national airline and Gobi Cashmere, a major global producer of cashmere products. In 2004 private business accounted

(Nyamosor Tuya, Asian Survey, 2005, vol. XLV, no. 1, p. 69)

Gobi Corporation is one of the five largest companies in the world in terms of cashmere production ... [It is] Mongolia's leading manufacturer of cashmere ... Privatization has been on the cards for some years and 2006 might well see the breakthrough ... Currently 75 per cent of the company's shares are state-owned and 25 per cent of shares are floated on the stock market.

(Mongolia 2006b: 6)

'Mongolia's national carrier [is] MIAT ... [Its] planned privatization is in the hands of the Sate Property Committee, the Civil Aviation Authority, the Ministry of Transportation and Tourism, and the Ministry of Finance' (Mongolia 2006b: 9).

The Mongolian stock exchange [established in 1991], the smallest bourse in the world, said it expected to attract \$100 million worth of initial public offerings [IPOs] and bond sales next year [2007] as companies seek money to expand. The new sales will consist of five equity and twenty bond offerings, mostly from mining companies ... by the end of this year [2006] Zoloton, a gold mining company based in Ulan Bator, is expected to sell ... shares in an IPO ... The Mongolian government is also seeking to raise as much as \$500 million from international bond sales. The country currently has only Treasury bills ... The bourse, now 100 per cent government owned, is seeking to become a private company next year [2007].

(*IHT*, 20 September 2006, p. 19)

'The EBRD has estimated the private sector's share of GDP in percentage terms: 60 per cent in 2000, 60 per cent in 2001, 65 per cent in 2002 and 70 per cent in 2003, 2004, 2005 and 2006 (EBRD 2006b: 152).

Mongolia has received relatively favourable ratings in business environment surveys, such as the World Bank's 'Doing Business' report, particularly relating to starting a business, licensing, hiring and firing and registering property. Amendments to the tax laws in 2006 lowered corporate taxes from 30 per cent to 25 per cent and value-added tax (VAT) from 15 per cent to 10 per cent. Mongolia ranked higher than all the CIS [Commonwealth of Independent States] countries on Transparency International's 2005 Corruption Perception Index. Nevertheless, corruption is perceived as a major problem by foreign investors and domestic enterprises. Lack of transparency and accountability in government business transactions is also an

impediment to the development of the private sector. A new windfall tax adopted in 2006, together with amendments to the minerals law, seem to have substantially increased the cost of doing business in the mining sector. Mining companies must pay a 68 per cent tax on profits from the sale of copper and gold (when prices move above certain levels). In addition, mining companies must list 10 per cent of their shares on the Mongolian stock exchange. Royalty rates have also been increased. Moreover, the state will have the right to acquire up to 50 per cent (or 34 per cent if exploration is privately funded) of any strategic asset discovered in Mongolia . . . In the telecommunications sector new privatization guidelines were approved by parliament in July 2005 and a resolution to implement them was signed by the government in July 2006. These instruments define the restructuring strategy for the telecommunications sector ... There are seventeen banks, some of which have been sold to foreign investors during the privatization process. The only remaining state-owned bank – the Savings Bank – is due to be privatized by the end of 2006.

(EBRD 2006b: 150)

# Foreign trade in the communist and post-communist periods

Mongolia became a member of Comecon (CMEA) in 1962. Comecon trade was overwhelmingly dominant. According to *Information Mongolia* (1990: 231), 1988 figures showed the division of Mongolian exports as follows: CMEA, 92.0 per cent; other socialist countries, 2.6 per cent; capitalist countries, 5.2 per cent. The respective figures for imports were 95.6 per cent, 2.3 per cent and 2.1 per cent. The percentage contribution to exports in 1988 were as follows: machinery, equipment transport, zero (no domestic engineering industry being in existence); fuel, mineral raw materials and metals, 41.7 per cent; raw materials and products of non-food processing plus raw materials for making foods and foodstuffs themselves, 39.2 per cent; chemical products, fertilizers and building materials, 3.4 per cent; industrial consumer goods, 15.7 per cent. The respective figures for imports were 30.2 per cent, 33.5 per cent, 10.5 per cent. 7.0 per cent and 18.4 per cent.

Trade with the Soviet Union was dominant, although the exact proportion depended on Mongolia's relations with China. The Soviet Union was practically the country's only trading partner from the mid-1920s to 1953, when trade with China restarted. Eighty-five per cent of trade turnover was accounted for by the Soviet Union in 1956, 70 per cent in 1960 (when Mongolian trade with China reached 18 per cent) and 60 per cent in 1966 (Sanders 1987: 100). The figure then rose to around 80 per cent (Alan Sanders, *FEER*, 10 December 1987, p. 42). In 1986 machinery and equipment constituted over 36 per cent of imports from the Soviet Union, the reminder being oil and petrol, textiles, consumer goods and foodstuffs (p. 42). The first five-year plan agreement was signed with China in 1986. The 1984 and 1985 agreements were short term and concerned with border trade exchanges.

The state foreign trade monopoly was set up in December 1930. Foreign trade associations specialized by commodity. One factor inhibiting trade was the dependence on Soviet railways. The road network was built with links to the Soviet rail network in mind. Air transport increased in the later Soviet period (Ebon 1987: 20). In 1987 total trade turnover was 5.4 billion tugriks (£920 million). Western trade began to be encouraged. Japan was the leading 'Western' trading partner (£20 million turnover annually), others including Switzerland, West Germany and Britain (p. 8). The November 1988 Law on the State Enterprise allowed some enterprises to trade directly.

Currency auctions began in August 1990, made possible by the percentage of hard currency earnings allowed to be retained by exporters (Kaser 1992: 173). Customs duties were applied to all imports, rather than just private purchases, from 1 March 1991 (p. 173).

Mandatory state orders for exports were eliminated in 1992 (Denizer and Gelb 1992: 7).

Foreign exchange earnings on a substantial part of exports still had to be surrendered to the state at the official exchange rate (Lee 1993: 630).

Most export licences were abolished in January 1993, but a clause in the decree permits the imposition of quantitative export restrictions through border controls (Boone 1994: 349).

The tugrik was devalued from seven to forty to the US dollar on 14 June 1991 (Hannam 1992: 49)..

On 28 May 1993 the tugrik was allowed to float on the new Interbank Currency Exchange (EIU, *Country Report*, Third Quarter 1993, p. 41).

At first the government maintained a dual exchange rate system. Enterprises were required to turn over a percentage of their foreign currency earnings to the state at the official exchange rate (the percentage varied according to the activity, with a maximum of 90 per cent). The surrender requirements were supported by strict regulation of exports. Administrators appear to have used the threat of withholding licences to ensure that exporters fulfilled state orders at domestic prices. There was a large devaluation of the tugrik at the start of 1993; in May the exchange rate was unified and the tugrik was allowed to float (Pomfret 1993: 6–7).

'There are no restrictions to the flow of capital ... [Mongolia does not] impose any control of inflows or outflows of foreign exchange' (Mongolia 2006b: 8).

Russia is still the most important trading partner, accounting for 56 per cent of Mongolia's exports (the Soviet Union, 78.3 per cent in 1990) and 52 per cent of imports (the Soviet Union, 77.5 per cent in 1990). China now accounts for 18 per cent of Mongolia's imports (compared with 2.4 per cent in 1990) but the figure for exports is much lower (EIU, *Country Report*, 1993, no. 1, pp. 5, 36–7). China has become Mongolia's second largest trading partner; in the first half of 1993 China accounted for 25.7 per cent of exports and 20.7 per cent of imports (Tsedendambyn Batbayar, *Asian Survey*, 1994, vol. XXXIV, no. 1, p. 45). In 1992 China accounted for 14.5 per cent of trade, compared with only 1.3 per cent in 1990 (Boone 1994: 349).

'A third of Mongolia's imports come from Russia and about 10 per cent of its exports are destined for Russia. However, China is now Mongolia's largest export market, accounting about 45 per cent of exports' (FT, 2 January 2004, p. 7).

'China has become Mongolia's number one trading and investment partner' (IHT, Survey, 23 May 2006, p. 22).

Mongolia was badly affected by the disruption in Comecon trade relations, especially Soviet deliveries of energy, equipment and foodstuffs. Foreign trade fell 7 per cent in 1990 and even more sharply in 1991 (Heaton 1992: 53). In 1991 foreign trade fell by about 50 per cent (FT, 6 February 1992, p. 49). In 1991 trade with the Soviet Union fell by 60 per cent, with oil deliveries at 70 per cent of the contracted amount. But the Soviet Union still accounted for threequarters of foreign trade. Power cuts and rationing became widespread (meat being put on ration in Ulan Bator on 16 May 1991 (Hannam 1992: 4).

By 1991 imports had fallen to one-third of their 1989 level (Lee 1993: 625). In the period 1989–91 exports fell by 56 per cent and imports by 75 per cent (Denizer and Gelb 1992: 13). 'In the past two years the volume of trade between Russia and Mongolia has been cut in half, while fuel consumption in Mongolia is only 40 per cent of the 1989 level' (CDSP, 17 February 1993, vol. XLV, no. 3, p. 17).

In 1992 trade between Mongolia and Russia fell by 57 per cent; China accounted for 12 per cent of trade and Japan 9 per cent (FEER, Asia 1994 Yearbook, 1994, p. 175). ('In 2004 48 per cent of exports went to China': FEER, June 2005, p. 21).

Exports and imports fell by more than half between 1990 and 1993 (The Economist, 26 November 1994, p. 89).

Mongolia's trade with Russia fell from 82 per cent of total trade in 1990 to 32 per cent in 1995. Trade with the G7 countries now equals 24 per cent of total trade compared with only 3 per cent in 1990. In 1991 exports fell by 40 per cent and imports by roughly 50 per cent.

The loss of trade destroyed the industrial base, which was heavily reliant on Soviet technology and customers. It also caused power shortages and fuel shortages because all energy imports and mining and power-generation equipment were supplied and supported by the USSR.

(Boone et al. 1997: 124)

By the end of May 1993 all quantitative export and import controls had been eliminated (ibid.).

The 1994 government ban on the export of raw cashmere remained in force during 1995. The aim was to encourage the development of the domestic cashmere processing industry, but there were protests from the Asian Development Bank (Sheldon Severinghaus, Asian Survey, 1996, vol. XXXVI, no. 1, p. 97).

At the end of January 1991 President Ochirbat visited the United States (reciprocating a visit by US Secretary of State James Baker in August 1990). Trade and scientific agreements were signed and MFN (most favoured nation) status was granted (Jeffries 1993: 134–5).

Mongolia became a member of the Asian Development Bank in February 1991 (Jeffries 1993: 134).

In early 1996 Mongolia became a member of the WTO (*Asian Survey*, 1997, vol. XXXVII, no. 1, p. 63). Mongolia became an official member of the WTO on 29 January 1997 (*Asian Survey*, 1998, vol. XXXVIII, no. 1, p. 66).

'The parliament's April [1997] decision to scrap most tariffs on imports and exports provided Mongolia with one of the most liberal trade regimes in the world' (Tom Ginsburg, *Asian Survey*, 1998, vol. XXXVIII, no. 1, p. 66). The only duties that remain in place are those on tobacco, alcoholic beverages and a new tax import tax on cars. There is also an export tax on scrap metal. Tariffs were also eliminated on oil, the most crucial import item, and an excise tax of 20 per cent was put into place instead, amounting to a net reduction of the overall tax burden (ibid.).

On 1 May 1997 the government abolished customs duties and excise taxes on all imported goods except alcohol, tobacco, oil products and motor vehicles. The prevalence of unremunerative prices for wheat, flour and vegetables for farmers, owing to cheap imports flowing in from China and Russia, led the government to reimpose a 15 per cent import duty in July 1998 on flour and vegetable imports coming in through specified border provinces (Goyal 1999: 639).

Mongolia ... abolished import duties and capital controls ... The budget deficit stands at 11 per cent of GDP ... Given the state of the budget few people disagree with a scheme to impose a temporary duty of 5 per cent on most imports since 1 July [1999]' (*The Economist*, 3 July 1999, p. 72).

According to a government adviser, import tariffs, at an average rate of 5 per cent, are among the lowest in the world (*FT*, 1 July 2000, p. 6). 'Mongolia has a very open trade regime, with a 5 per cent import tariff across the board' (www.iht.com, 30 September 2004).

Mongolia, which has one of the most liberalized financial regimes in Asia, places no restrictions on foreign exchange ... The exchange rate has been stable for the last five years and the depreciation rate is little more than 10 per cent to the US dollar.

(IHT, Survey, 23 may 2006, p. 22)

Mongolia has a managed float exchange rate regime (EBRD 2006b: 152).

The death knell for Mongolia's garment industry will ring on Saturday [1 January 2005] when a decades-old global export quota system will end, freeing American and European fashion companies, in the long run, to buy as many clothes as they want from the lowest cost producers, notably China, India and Pakistan . . . Textiles and garments rank as Mongolia's second largest export item after minerals.

(*IHT*, 29 December 2004, p. 14)

The cashmere industry, which accounted for 16 per cent of exports in 2004, is in a depression with the expiration of the international Multi-Fibre Arrangement which abolished textile quotas. The end of the MFA means Chinese mills and weavers no longer need Mongolian factories for quota visas and now secretly (and illegally) ship raw cashmere wool across the border to Chinese factories, leaving 40,000 Mongolian workers idle.

(*FEER*, June 2005, p. 20)

China is dominant . . . in the cashmere industry . . . and covers 70 per cent of the market followed by Mongolia's 20 per cent. Iran and Afghanistan share 10 per cent. Nevertheless, it is the quality of Mongolian cashmere and not the quantity that has made it so wanted ... [Some] 70 per cent of raw Mongolian cashmere finds its way abroad ... The Gobi Corporation [is] Mongolia's leading manufacturer of cashmere ... Gobi Corporation is one of the biggest companies in the world in terms of cashmere production ... The company exports more than 65 per cent of the total national wool and cashmere processing sector's capacity, and has experienced a direct increase in exports as a result of the Mongolian government signing the Generalized System of Preferences (GSP+) with the EU ... Mongolia has also benefited from a Trade and Investment Framework Agreement with the United States. (Mongolia 2006b: 6)

('Mining ... represented ... 76 per cent of exports in 2005': IHT, 20 September 2006, p. 19.)

Mongolia joined the WTO in 1997, keen among other things to export more cashmere and meat. But according to Damedin Tsogtbaatar of the Mongolian Development Strategy Institute, the country has put rather more into the organization than it has got out of it. It 'chose, ironically, a rather Buddhist path of self-perfection and good WTO-consistent behaviour, without regard to whether other countries were doing the same'.

(The Economist, 5 August 2006, p. 68)

# Foreign aid in the communist and post-communist periods

Soviet aid was of substantial importance.

In the five years to 1986 Soviet aid may have amounted to around \$3 billion (Eastern Europe Newsletter, 1987, vol. 1, no. 12, p. 6).

Soviet aid was worth \$800 million a year (The Economist, 17 March 1990, p. 69).

There were 50,000 Soviet technicians and experts in the country (FEER, 22 March 1990, p. 11).

As of 1 November 1989 Mongolia owed the Soviet Union 9.5 billion roubles (CDSP, 1990, vol. XLII, no. 9, p. 9).

A debt of \$16 billion was quoted in January 1991, although in September

1990 it was agreed to postpone repayments until the year 2000 (there being no debt owed to Western banks) (Kaser 1992: 175).

Aid, largely from the Soviet Union and in the form of long-term, low-interest credit, financed about 50 per cent of investment during the late 1960s and the 1970s (Wallace and Clarke 1986: 98).

By the late 1980s Soviet aid was equivalent to 25 to 30 per cent of GDP (Lee 1993: 624). Large-scale financial assistance was provided by the Soviet Union and the other Comecon countries from the mid-1950s; in the period 1985–90 grants and loans averaged 30 per cent of GDP a year (Denizer and Gelb 1992: 3, 13). But Soviet financial assistance to cover the budget deficit halved in 1988–90, a loss equivalent to 15 per cent of Mongolia's GDP (p. 6). At the beginning of 1991 Soviet financial assistance totally dried up (p. 13).

According to Boone (1994: 330), the Soviet Union cut financial assistance to Mongolia by an amount equal to 46 per cent of Mongolian GDP, from 53 per cent of GDP in 1989 to 7 per cent of GDP in 1991.

In 1989–90 Soviet aid amounting to a third of GDP was abruptly withdrawn (*Independent*, 12 January 1995, p. 13).

Soviet support in the early 1990s amounted to perhaps 30 per cent of GDP (Sheldon Severinghaus, *Asian Survey*, 2000, vol. XL, no. 1, pp. 138).

The strategic value of being sandwiched between China and Siberia has helped bring in development aid and foundations in droves. In 1998 domestic revenue to the government was only slightly higher than foreign aid from development agencies and grants from China, Japan, Europe and the United States.

(Gordon Laird and Justin Guariglia, FEER, 6 July 2000, pp. 82–3)

The reforms, designed to move the economy to a market-based system over three and a half years, were supported by an IMF stand-by arrangement for SDR 22.5 million approved on 4 October 1991 (IMF Annual Report 1992, p. 61).

The Japanese prime minister visited Mongolia in August 1991 and pledged aid worth \$7 million; a further \$61 million was promised the following month (the Japanese ministry of international trade offering administrative guidance) (Jeffries 1993: 135). (In August 1992, however, the IMF froze two parts of the stand-by facility totalling SDR 8.8 million (\$12.6 million) until the specified conditions were met, especially monetary targets: Hannam 1992: 71. This triggered a halt in \$25 million of loans from the World Bank and the Asian Development Bank. Puntsagiyn Jasray was appointed prime minister on 21 July 1992 and he took some time to choose a cabinet and formulate an economic programme. Even so, at the start of October most state-controlled prices were increased sharply, e.g. some grades of flour five-fold, and interest rates were also raised: p. 72.)

At a meeting of international donors in September 1991, \$150 million of aid was pledged (Heaton 1992: 54).

In May 1992 the sum of \$312 million was announced, albeit conditional on continued reform (*The Economist*, 4 July 1992, p. 65).

The international donors held a further round of consultations on 14–15 October 1992 on the \$320 billion aid package pledged in May 1992. Concern had been expressed at Mongolia's lack of success in meeting the conditions laid down, and in August 1992 the IMF (Mongolia became a member on 14 February 1991) withheld some of its aid (EIU, Country Report, First Quarter 1993, p. 36).

The June 1992 agreement with Russia allowed for the postponement of Mongolia's 1991-5 debt repayments until the year 2000 on an interest-free basis (Tsedendambyn Batbayar, Asian Survey, 1993, vol. XXXIII, no. 1, p. 64).

In 1992 aid totalled \$220 million (FT, 8 July 1993, p. 36).

The Mongolia Assistance Group Conference met in Tokyo on 13–14 September 1993, and aid pledges of \$150 million to \$170 million were made (compared with \$155 million in 1991 and \$320 million in 1992) (EIU, Country Report, Fourth Quarter 1993, p. 40).

According to FEER (Asia 1994 Yearbook, 1994, p. 174), the donors agreed \$150 million and Japan had earlier issued a separate loan of \$20 million. Total international pledges for 1993 stood at \$356.7 million in financial aid and \$414.9 million in project aid and technical assistance. Disbursement of part of a \$35 million stand-by credit from the IMF was halted in August 1992 because of the failure to limit the budget deficit. But a satisfied IMF granted an 'enhanced structural facility' worth \$30 million in April 1993 and that opened the way to World Bank and Asian Development Bank loans which had also been withheld.

Soviet credits, which averaged 37 per cent of GDP annually, were abruptly stopped at the beginning of January 1991 (Boone et al. 1997: 103). Until 1990 a large part of industry was dependent on Soviet advisors. Almost all of them had gone by the following year (p. 119). During the first two years of reform Mongolia received approximately \$125 million in foreign aid. This was equivalent to 12 per cent of GNP on an annual basis. Most of the aid was in the form of shortterm balance of payments support in grants or highly concessionary loans. Mongolia's long-term debt to Russia amounts to 10.5 billion transferable roubles (p. 125). Mongolia continues to receive substantial Western aid in the range of 8 to 10 per cent of GNP annually (p. 126).

At the meeting in Tokyo held on 8-9 November 1994, donor countries pledged \$210 million for the next twelve months (The Economist, 26 November 1994, p. 92).

The February 1996 meeting of the donor group in Tokyo produced \$212 million in pledges of loans and credits (Asian Survey, 1997, vol. XXXVII, no. 1, p. 64).

On 7 October 1997, donor countries and international organizations pledged \$250 million (*IHT*, 8 October 1997, p. 4).

'Last week in Ulan Bator ... aid organizations were being asked by the World Bank [for aid] ... The sum eventually raised was \$320 million over the next eighteen months, much of it coming from Japan' (*The Economist*, 3 July 1999, p. 72).

'Donor countries meeting in Paris on 15–16 May [2001] pledged \$330 million in aid for the next year' (FEER, 31 May 2001, p. 32).

International assistance as a percentage of GDP was as follows: 1993, 24.0 per cent; 1994, 27.6 per cent; 1995, 21.8 per cent; 1996, 18.9 per cent; 1997, 27.2 per cent; 1998, 20.6 per cent (United Nations, *World Economic and Social Survey 2001*, p. 192).

Settlement of Mongolia's debt with Russia, under a deal announced yester-day [1 January 2004], means that for the first time in eighty years the country will not be in debt to its northern neighbour. Mongolia is paying Russia less than \$300 million to clear 11.4 billion in convertible roubles of debt accumulated during the Soviet era.

(FT, 2 January 2004, p. 7)

A Mongolian government official said the country would pay Russia less than \$300 million, which will be partly financed through the issue of new Treasury bills ... Standard and Poor's [the credit rating agency] recently estimated Mongolia's debt to Russia at \$10 billion – ten times Mongolia's GDP ... [The deal] marks the largest debt forgiveness by Russia of loans provided by the former Soviet Union. Mongolia was third behind Cuba and Syria in debt obligations to Russia.

(p. 17)

'Russia also has to resolve Soviet-era loans with Cuba, which owes Russia about \$19 billion, Syria \$13.23 billion, Afghanistan \$9.6 billion, Iraq \$8.4 billion, North Korea \$6.6 billion and Libya \$3.2 billion' (*FT*, 2 January 2003, p. 7). 'Mongolia's other debts are largely in the form of concessions from the IMF and donor countries (including the United States, Japan and Germany)' (p. 7).

Mongolia and Russia have finalized a deal slashing Ulan Bator's Soviet-era debt... from around \$10 billion to just \$250 million. That outstanding amount has been paid off... But the news is tempered by uncertainty about how the debt was repaid... [It is said that] Canadian firm mining firm Ivanhoe, which is exploring for copper and gold in southern Mongolia, agreed to buy \$50 million worth of Treasury bonds; a further \$50 million worth will be sold domestically, and the remaining \$150 million to finance the repayment came from national monetary reserves, the bulk of it from foreign exchange reserves. (FEER, 15 January 2004, p. 10)

The government plans to slash income tax rates from 40 per cent to 30 per cent in an effort to broaden the tax base and enhance collection. In a move that caused concern among some international financial institutions, Ulan Bator dipped into the Treasury late last year [2003] for the bulk of the \$250

million it used to pay off a crippling Soviet Union-era debt nominally valued by Moscow at \$10 billion.

(*FEER*, 24 June 2004, p. 48)

In early January [2004] the Mongolian press reported that by late 2003 Mongolia had repaid in cash \$250 million of its \$11.4 billion Soviet-era debt to Russia, with the latter writing off the remaining 98 per cent. The repayment scheme was not disclosed, but the government reportedly drew from its foreign reserves and issued dollar-denominated Treasury bills . . . In June 2004 Mongolia was selected for the US government's new assistance programme for developing countries.

(Nyamosor Tuya, *Asian Survey*, 2005, vol. XLV, no. 1, pp. 67–8, 70)

'In June last year [2003] Chinese President Hu Jintao visited Ulan Bator and offered the Mongolian government a \$300 million aid package ... [but] Mongolia has not yet accepted Hu's offer' (FEER, 4 November 2004, pp. 32–6). '[As of 24 May 2005] the Mongolians had not used one cent of the \$300 million in low-interest loans' (FEER, June 2005, p. 20).

'The United States has provided more than \$100 million during the last seven years in assistance and training for Mongolia's reform programmes ... The United States has given Mongolia \$11 million to improve its military' (IHT, Survey, 23 May 2006, p. 22).

During the fifteen years of transition from a centrally planned economy to that of a free market, Mongolia was heavily dependent on aid from mainly US institutions ... Mongolia receives \$25 million to \$30 million worth of concessional loans annually from the World Bank ... For 2006 an aid agreement was reached with the World Bank for \$26 million . . . The IMF has also been a strategic partner of Mongolia since 1991 through the Enhanced Structural Adjustment Facility, Poverty Reduction and Growth Facility projects, which have utilized \$105.1 million.

(Mongolia 2006b: 2, 8)

The external debt stock has risen gradually from \$837 million in 2000 to \$1.307 billion in 2005. However, owing to rapid growth over this period the ratio of external debt to GDP declined after 2003 to stand at about 70 per cent by the end of 2005 . . . The majority of Mongolia's external debt is comprised of multilateral loans, repayable at low interest rates over long periods.

(EBRD 2006b: 151)

## Foreign direct investment in the communist and post-communist periods

The earlier Soviet-Mongolian (pre-Second World War and early post-Second World War), such as those in banking, trade, transport and mineral extraction, were subsequently handed over into full Mongolian ownership. In the communist period there operated a number of companies in. for example, transport, power supply and mineral extraction. These were mainly in co-operation with the Soviet Union but also with Bulgaria and Czechoslovakia. In 1981 the Mongolian–Soviet Erdenet copper-molybdenum enterprise came fully on stream. Two new joint ventures with the Soviet Union were to be set up, involving the production of sheepskin coats and felt footwear, and discussions were going on about projects in agriculture, building materials, the timber industry and energy (*Eastern Europe Newsletter*, 1988, vol. 2, no. 10, p. 5). There was a Soviet uranium mine (Alan Sanders, *FEER*, 30 November 1989, p. 73).

Joint ventures with Western companies were formally allowed under the March 1990 legislation: two had already begun, UK partnerships in wind energy and telecommunications. Wholly foreign-owned companies were not allowed, but no ceiling was placed on foreign participation. They were especially encouraged in such sectors as high technology, mineral extraction and processing, and the processing of agricultural products. A February 1991 law allowed foreign participation in oil exploration. A joint venture with Japan to produce television sets was planned to start operating in late 1990 (*IHT*, 27 February 1990, p. 13). Under the new constitution, which came into effect on 12 February 1992, foreigners were able to lease land.

The March 1990 Foreign Investment Law contained provisions, subject to negotiations, for a maximum ceiling of 40 per cent on income tax and a three-year tax holiday. But the results were disappointing, only about two or three dozen small joint ventures with firms from China, Hong Kong and Japan (focusing on the restaurant and tourist industries) being established (Asian Development Bank 1992: 75)

A new law was passed in May 1993. There are no tax or any other concessions in the mining of precious metals, but most minerals and oil and gas carry a five-year tax holiday followed by a further five years at half the normal tax rate (*FT*, 8 July 1993, p. 36).

The Law on Foreign Investment came into force on 1 July 1993. Investors in power, transport and telecommunications are offered a ten-year tax-free period and an additional five years at half the normal tax rate. Investors in mining and metallurgy (excluding precious metals) need pay no tax for five years. Any joint venture exporting more than half its output will enjoy a three-year exemption and a further three years of tax at 50 per cent of the normal rate. Imported equipment is exempt from customs duty and sales tax for five years. Land may be leased to foreign companies for a period of sixty years with a forty-year extension (EIU, *Country Report*, Third Quarter 1993, p. 45).

A new set of laws was to take effect in April 1995 allowing private citizens to own land and foreigners to lease it (*Transition*, January–February 1995, p. 22). A new mining law was passed in January 1995, permitting full foreign ownership of mining ventures, including those involving precious metals. No longer are gold producers forced to sell to the Mongolian central bank at prices below the prevailing international price (*FT*, 16 June 1995, p. 31).

The only flourishing joint ventures are small service-sector ventures (Pomfret 1993: 4).

By mid-1993 more than 100 joint ventures had been registered, with partners coming from twenty countries (Tsedendambyn Batbayar, Asian Survey, 1994, vol. XXXIV, no. 1, p. 44).

Despite the relaxation of regulations, foreign investment has been low because of excessive bureaucracy and a lack of infrastructure (Alan Sanders, FEER, 8 February 1996, p. 47).

In 1995 there were two controversial long-term agreements between the government and foreign companies. One concerned a ninety-nine-year contract for exclusive access to 'mineral resources and other key economic sectors of Mongolia' and the other concerned the exclusive rights (for forty years) for the development of a wireless telephone system. The government later declared them null and void and there are reports that they are being renegotiated (Sheldon Severinghaus, Asian Survey, 1996, vol. XXXVI, no. 1,

'Foreign investment at \$10 million is still marginal ... In 1995 foreign direct investment was successfully attracted to the telecommunications sector' (Asian Development Bank 1996: 62).

Foreigners have invested only \$115 million in the last six years (*IHT*, 18 July 1996, p. 15).

In 1997 foreign interest in the minerals sector intensified and parliament passed a liberal minerals law (Tom Ginsburg, Asian Survey, 1998, vol. XXXVIII, no. 1, p. 66).

On 22 January 1999 parliament repealed a law allowing gambling halls, only a year after it had been approved (in January 1998) and just three weeks before the scheduled opening of a new casino being built in Ulan Bator (a Mongolian-Macau joint venture 70 per cent owned by the Macau company).

The parliamentarians ... realized that gambling may draw not only tourists but also organized crime ... [But] Western observers caution that potential foreign investors may be put off by the policy reversal . . . This is not the first time the government has overturned rules affecting foreign investors . . . Last November [1998] the government imposed a 10 per cent tax on gold exports, one of the country's major revenue earners. Mining companies – lured by promises that there would be no such tax – were furious. Many have scaled back their operations and are considering shutting down altogether.

(Jill Lawless, *FEER*, 4 February 1999, p. 51)

To further attract foreign investors, the government enacted a new tax law that abolished almost all customs duties by 1 July 1997 ... In all, 804 foreign companies from thirty-eight had invested some \$182 million in Mongolia by the end of 1997.

(Goyal 1999: 640)

By June 1999 \$240.5 million had been invested in 1,087 companies (*FEER*, *Asia 2000 Yearbook*, p. 167).

Foreign investment was \$145 million in 1999 compared with \$42 million in 1998. Mongolia Telecom was partly privatized in 1995 via a joint venture with Korea Telecom, which hold a 40 per cent interest in the operation (*Independent*, Survey, 8 April 2000, pp. 2, 4).

'[There was] a more than threefold increase in new foreign investment in 1999 – worth \$144.8 million . . . Of the 1,252 foreign-investment companies, 413 were Chinese-financed' (*FEER*, *Asia 2001 Yearbook*, December 2000, p. 164).

The enactment of the minerals resources law of 1997, which conferred equal rights to investors, regardless of their nationality, and allowed complete foreign ownership with no restrictions on the repatriation of dividends and profits, has led to a boom in exploration . . . The output of the mineral industry . . . contributed in 1998 about 55 per cent of the output of the industrial sector, 58 per cent of exports and 30 per cent of state budget revenues. The major export mineral products are gold, ore and concentrates of copper, fluorite and molybdenum.

(United Nations, World Economic and Social Survey 2001, p. 177)

New interest in Mongolia's natural resources, especially copper and gold, sparked a surge in foreign investment ... China ... is the source of 37 per cent (a little over \$100 million) of Mongolia's foreign investment in the past three years. That might not seem like much, but foreign investment could be on the rise.

(*FEER*, 6 March 2003, p. 17)

The Boroo mine, owned by Cameco [of Canada] ... has advanced the furthest of a dozen foreign mining projects — its mill is expected to start pouring gold bars by December [2003] ... A mining boom is being fuelled by a free-market economy, investor-friendly mining laws, new mineral discoveries and the spreading realization that Mongolia can become a close-at-hand supplier of raw materials [such as copper] to China ... This year [2003] Mongolia agreed to allow a Chinese-gauge railroad to be built to Oyu Tolgoi. By December China is to finish a 225-kilometre highway to the border ... Exploration is soaring ... Oil also figures in the picture, with a 500-barrel discovery by the London-based Soco International this summer in eastern Mongolia.

(*IHT*, 4 October 2003, p. 11)

The Mongolian and Russian governments have a 51 per cent/49 per cent joint venture ownership of the Erdenet copper mine, which accounts for about 13 per cent of Mongolia's GDP and 7 per cent of its tax revenues ... In the past year Mongolia has become a sought-after destination for the world's biggest mining companies following the discovery of a large copper

and gold deposit at Oyu Tolgoi near the Chinese border, by Ivanhoe Mines, the Canadian miner.

(*FT*, 2 January 2004, p. 7)

('Mongolian prime minister N. Enkhbayar visited Moscow from 26 June to 3 July 2003 . . . For the time being the Mongolian government would retain its 51 per cent share in Erdenet, with the Russian government for the first time paying taxes for rent of the land and the use of natural resources. The two sides agreed to divide the profits in the joint venture after all local Mongolian taxes had been paid': Asian Survey, 2003, vol. XLIII, no. 6, p. 970.)

'[In 2003] foreign direct investment was \$205 million, up from \$125 million in 2002' (FEER, 24 June 2004, p. 48).

Two weeks ago China's largest copper company signed a letter of intent to study investing in Mongolia's largest mining project. This week Mongolia's president, on a state visit to Beijing, invited China to drill for oil. Next month zinc production is to start at a new \$50 million Chinese mine in eastern Mongolia. To link it altogether Chinese aid is paying for Chinese crews this summer to pave major roads across Mongolia's steppes. More may come from a \$300 million loan offered by China's president when he stopped here [Ulan Bator] last year [2003] ... A Chinese company planned to start mining coal in eastern Mongolia this year [2004] ... According to the Chinese embassy, there are 1,100 Chinese companies in Mongolia ... The textile industry is pretty much 50 per cent Chinese. The leather industry is dominated by Chinese.

(*IHT*, 10 July 2004, p. 11)

What appears to be a large oil find has been reported (FEER, 31 October 1996, pp. 48-9).

Soco International ... a small UK oil and gas exploration company ... [which] specializes in operating in difficult frontier territories . . . is close to finding sufficient oil reserves to justify constructing a Mongolia-China pipeline ... [Soco's] chief financial officer said the company was on the threshold of being able to build a more permanent link in the form of a \$50 million pipeline ... Up to now Soco has trucked small quantities of oil through a specially opened Chinese border crossing 180 kilometres to the south for sale at the Horlot refinery ... Soco said yesterday [13 July] that successful completion of two wells in the Tamtsag Basin of Mongolia confirmed the size of a 20 million barrel discovery made in 1997 and indicated another reservoir of more than 30 million barrels of oil ... [Soco] has also obtained permission for a Chinese oil services company to operate in the country ... Soco is the largest exploration and production company active in Mongolia . . . The company plans to drill eight wells under a reduced cost contract with Huabei Oilfield Services, a Chinese group that has been allowed into Mongolia ... Oil was first discovered in Mongolia by Russian geologists when Mongolia was in the Soviet sphere of influence ... But little exploration and production has taken place since the Russians switched their attention to developing oil resources in Siberia in the 1960s.

(FT, 14 July 2000, p. 22)

An estimated 50 million tonnes of iron ore, 6 billion tonnes of coal and what might be the world's largest deposit of copper and gold [have been discovered] in the Gobi Desert . . . Mining companies such as Anglo-Gold, BHP Billiton, Ivanhoe Mines and Vale do Rio are betting that China and Mongolia will agree to build a rail link from the southern Gobi Desert to Baotou [in China].

(www.iht.com, 2 March 2004)

Mongolia . . . now has the world's largest mine drilling programme, according the mineral resources authority of Mongolia. The country gets twothirds of its export revenue from mining, the government body said ... Private exploration investment in Mongolia is set to rise by more than a third this year [2004] to \$50 million, from \$37 million in 2003 ... the mineral authority's chairman said ... China's economy is booming and needs minerals that Mongolia can supply ... The country also plans to supply Japan, South Korea and Russia as well ... Mongolia and China have not reached agreement, expected in the first half of this year, on a \$300 million loan that Hu Jintao, China's president, offered Mongolia during a visit to Ulan Bator last year [2003]. The loan is to build roads and railroads that would bring copper, coal and iron ore from the southern Gobi to China. While most of the exploration in Mongolia is focussed on copper, gold and iron ore, it could be China's need for electricity that speeds up spending on railroads in Mongolia ... The government said it will accelerate construction of power plants, including coal-fired units, in the next six years ... The country's mining legislation is based on laws in Australia, Chile and Canada ... The government has revised the laws twice since it moved toward a market economy in 1991 to attract investment ... Mongolia sent officials to Australia to study mining policy and is getting loans from the World Bank and the Asian Development Bank to build road and rail networks to help boost exports.

(www.iht.com, 15 September 2004)

'Mongolia . . . is now one of the world's hottest spots for mining exploration, according to [Mongolia] . . . By the end of this year [2004] about 40 per cent of Mongolia's explorable area is to be under licence, up from 22 per cent last year [2003]' (*IHT*, 15 October 2004, p. 17).

Shougang, the parent company of China's fourth biggest steel maker, will spend \$160 million developing an iron ore mine [a joint venture] in

Mongolia ... The project, which will include a railway and refinery, will supply nearly 1 per cent of the ... iron ore imported each year by China, the world's biggest user . . . China imported 40 per cent of its iron ore last year [2004], up from 36 per cent in 2003 ... Several international companies are investing in Mongolian mines [e.g. in coal, copper and gold as well as iron ore].

(www.iht.com, 10 January 2005)

'Mining accounts for nearly 60 per cent of industrial output' (Nyamosor Tuya, Asian Survey, 2005, vol. XLV, no. 1, p. 69).

'In 2004 ... 38 per cent of direct foreign investment came from Chinese companies' (FEER, June 2005, p. 21).

Since 1990 companies from seventy-four countries worldwide have invested in Mongolia. In 2004 foreign investment totalled \$228 million from 767 newly registered companies. Last year [2005] foreign direct investment increased by 4.7 per cent . . . Although China currently accounts for the largest amount of foreign direct investment at 34 per cent, capturing the attention of the United States, which currently represents only 3 per cent of total foreign direct investment, has become a primary target.

(Mongolia 2006b: 2)

Mongolian Railways, a joint venture between Mongolia and Russia, manages the country's 690-mile line between Russia and China ... As Mongolia's road infrastructure is not yet as developed as that of its railroads, transportation depends heavily on its system ... Mongolia is becoming a popular destination for tourists who wish to travel the great lengths of the country by rail.

(Mongolia 2006b: 7)

BHP Billiton and Vale do Rio Doce are among companies battling proposed changes to Mongolia's mining laws that they say may drive up costs and set limits on how long exploration properties can stay idle ... The head of a parliamentary group promoting the amendments told a government hearing in Ulan Bator last week that the changes were needed to stop speculation in exploration permits and to fund anti-poverty and environmental spending ... [He said that] one possibility was to allow local residents and local authorities to enjoy more benefits from mining operations in their local area, to give them a certain amount of compensation . . . The government is under rising pressure to distribute more of the country's mining wealth to the poor ... Parliament would debate the final changes to the law in a session starting next month [October] ... The session ends in February [2006] ... BHP, Vale, based in Rio de Janeiro, and Centerra Gold, based in Toronto, began exploring Mongolia after the country implemented the current mining law in 1997. The law guarantees holders of exploration licences the right to

convert them into mining permits, gives all applicants equal access to licences and sets no curbs on capital. The government is considering limiting the amount of time that companies can hold exploration rights ... The existing law allows companies to keep their rights permanently as long as they pay the required fees.

(www.iht.com, 20 September 2005)

The mining sector is Mongolia's single largest industry, accounting for 55 per cent of the nation's industrial output and 46 per cent of its total foreign direct investment ... The Minerals Law ... passed in 1997 ... enables the quick procurement of mining and exploration licences, which can be held for seven and 100 years respectively and places no restrictions on repatriation of dividends and profits ... The creation of the Erdenet Copper Mine Factory in 1976 was a joint effort by Russia and Mongolia, and it was founded in what was the new industrial city of Erdenet. Since then the city and the mine have developed into key players in Mongolia's economic growth, responsible for 14 per cent of GDP ... Before the mining started a small village was established in 1976. Two years later the mine was opened ... Today it is the second largest city in Mongolia with more than 75,000 inhabitants ... The Erdenet Mining Corporation's ... mine has been producing and exporting copper concentrate for twenty-eight years ... [The corporation's main goal is to develop downstream manufacturing capabilities. For example . . . [it is] currently planning to establish a new factory that manufactures copper wire, but it is still in the negotiation stages, so nothing has been decided yet.

(IHT, Survey, 23 May 2006, p. 23)

The largest company active in Mongolia's mining industry is the Erdenet Mining Corporation (EMC), owned jointly by Mongolia and Russia. While privatization of the copper giant is not yet on the government's table, a future sale is planned . . . Ivanhoe Mines, a Canadian company that has been prospecting the copper and gold deposits in Mongolia's Gobi desert since 2003, has presented its mine development plans, according to which it will have started its operations by 2008.

(Mongolia 2006b: 4–5)

Parliament's surprise passage of a hefty windfall tax on copper and gold late [on 12 May 2006] ... was intended to raise funds to improve welfare in the poverty-plagued nation. But the move could undermine one of its most vital industries ... The Great Hural approved a private member's bill imposing a 68 per cent tax on profits from sales of copper when its market price is above \$2,600 a tonne and on gold when it passes \$500 an ounce ... The measure could still be vetoed by the president, but with copper and gold prices already well above the tax-trigger level, it has shaken confidence in mining companies operating in Mongolia ... The bill reflected widespread

resentment at the profits made by foreign-backed mining companies in a democratic country where large sections of the population are mired in poverty. It was backed by both the ruling MPRP and the Democratic Party, the largest opposition group ... The Civil Party opposed the tax ... Observers said the measure was aimed at the Erdenet Mining Corporation, a joint venture copper mine with Russia that opened in the 1970s ... Backers of the windfall tax argued that more of the joint venture's profits that flow to Russia or are retained could be better used to fund public child support payments and economic development.

(FT, 17 May 2006, p. 9)

A revision of the 1997 mining [mineral] law [according to Mongolia] aims to balance investor interests with those of the country . . . This law has recently come under review amidst growing concerns that it might be disadvantageous to local investors and national interests. President Enkhbayar outlines the function of the new draft: 'The existing mining law, passed in 1997, created a favourable environment for foreign investors. At present we are trying to equilibrate these favourable conditions with the need of bringing benefits to the local community' . . . Mr Narankhuu, the Erdenet Mining Corporation's general director, says the outcome of the hotly debated law concerns all people involved in Mongolian mining: 'Small domestic capital requires equal treatment to foreign capital' .... Luvsanvandan Bold (chairman of the Mineral Resources and Petroleum Authority of Mongolia): 'An investorfriendly environment will be kept despite any amendments to the mining law. Tax laws are going to be changed, but they will lower the tax rates on corporations. After these changes the conditions for investors will be even friendlier. Nevertheless, we have to correct some shortcomings in the legislation concerning environmental issues linked to illegal mining operations, issues relating to provisions, and companies that acquire mining licences, but do not comply with their responsibilities.'

(Mongolia 2006b: 4)

Mongolia ... is seeking to lure more overseas investment into industries like mining, infrastructure and tourism ... Foreign direct investment in prospecting, oil exploration and mining was \$191 million last year [2005], or 61 per cent of the total from overseas.

(IHT, 20 September 2006, p. 19)

Hedge funds are turning to a new outpost in the drive to lift sagging returns: Mongolia . . . Hedge funds are private pools of capital that allow managers to participate in the gains of the money invested ... Rapid economic growth, fuelled by copper and gold mining, is attracting investors willing to tolerate corruption and unpredictable regulation ... International investment in Mongolian mining, tourism and telecommunications industries is spurring an economy where more than 30 per cent of the 2.5 million people are nomads ... The country has huge reserves of copper, gold, coal, tin and iron and rising mineral prices should ensure growth [of national output] exceeding 6 per cent this year [2006] ... In September [2006] Ulan Bator ... was host to a forum to attract investors seeking a new frontier ... The sale of state assets, which began in the 1990s, continues to provide investment opportunities. Gobi, the country's largest producer of cashmere, and MIAT Mongolian Airline, the national carrier, are among the state-controlled companies seeking capital.

(*IHT*, 2 November 2006, p. 17)

Mongolia has received relatively favourable ratings in business environment surveys, such as the World Bank's 'Doing Business' report, particularly relating to starting a business, licensing, hiring and firing and registering property. Amendments to the tax laws in 2006 lowered corporate taxes from 30 per cent to 25 per cent and value-added tax (VAT) from 15 per cent to 10 per cent. Mongolia ranked higher than all the CIS [Commonwealth of Independent States] countries on Transparency International's 2005 Corruption Perception Index. Nevertheless, corruption is perceived as a major problem by foreign investors and domestic enterprises. Lack of transparency and accountability in government business transactions is also an impediment to the development of the private sector. A new windfall tax adopted in 2006, together with amendments to the minerals law, seems to have substantially increased the cost of doing business in the mining sector. Mining companies must pay a 68 per cent tax on profits from the sale of copper and gold (when prices move above certain levels). In addition, mining companies must list 10 per cent of their shares on the Mongolian stock exchange. Royalty rates have also been increased. Moreover, the state will have the right to acquire up to 50 per cent (or 34 per cent if exploration is privately funded) of any strategic asset discovered in Mongolia . . . In the telecommunications sector new privatization guidelines were approved by parliament in July 2005 and a resolution to implement them was signed by the government in July 2006. These instruments define the restructuring strategy for the telecommunications sector ... There are seventeen banks, some of which have been sold to foreign investors during the privatization process. The only remaining state-owned bank – the Savings Bank – is due to be privatized by the end of 2006.

(EBRD 2006b: 150)

Net foreign direct investment was \$40 million in 2000, \$43 million in 2001, \$78 million in 2002, \$132 million in 2003, \$129 million in 2004, an estimated \$258 million in 2005 and a projected \$215 million in 2006 (EBRD 2006b: 153).

In April this year [2006] hundreds of nationalists staged a series of protests in Ulan Bator against the planned exploitation of large copper and gold deposits by Ivanhoe Mines, a Canadian company. The demonstrators attacked what they saw as foreign domination of Mongolia's resources ... A windfall tax was imposed in May on profits from gold and copper extraction when prices reach specified levels. Under a hastily introduced new law the government is entitled to own 34 per cent of privately discovered deposits of 'strategic minerals ... Chinese companies are not yet big direct investors in Mongolia's mining business. Among the largest confirmed Chinese investments is a 51 per cent stake in a zinc mine in south-eastern Mongolia, valued at \$38 million in 2004. But their interest is growing fast ... North of Darkhan is a potentially much bigger project (though still much smaller than Ivanhoe's). ... [namely] the Tumurtei iron ore deposit. Tumurtei is thought to be one of Mongolia's biggest iron ore deposits ... The state in the late 1990s granted exploitation rights to a consortium of Mongolian and Chinese companies, assisted by a \$12.5 million preferential loan from the Chinese government ... In late August [2006] the Mongolian government agreed that the mining licence had been sold illegally and declared it owned the deposit ... By law all gold output is supposed to be sold to the Bank of Mongolia, the central bank. This year [2006] the amount sold has fallen by half even though production has continued to rise, says the central bank's former governor, Orchirbat Chuluunbat. He blames a windfall tax that has encouraged small producers to sell gold on the black market rather than to the bank. Most black market gold is smuggled across the 4,677 kilometre border with China.

(*The Economist*, 23 December 2006, pp.105–6)

## Agriculture in the communist and post-communist periods

In 1919 over 90 per cent of national income originated in agriculture. Land was nationalized in 1921 and this was followed by a redistribution of stock and poultry to poorer households. The first state farms were established in 1922–3 for controlling arable land and for cereal cultivation. Collectivization started in 1929. By the end of 1930 nearly 30 per cent of poor and middle peasant households had been forced into collectives, but unrest and the slaughtering of animals led to a retreat. (According to Milivojevic, there was a nationwide revolt against both the regime and Soviet control, leading to the abandoning of collectivization and the reintroduction of large Soviet forces: 1987: 565.) Among the policies implemented during the Second World War was the imposition of state procurements and obligatory wool deliveries upon individual households. Collectivization took place during the second half of the 1950s, although some 'initial form' co-operatives, in most of which only work was collective, were set up after 1935 (Jahne 1990: 71). By the end of 1959 collective farms accounted for 99.3 per cent of individual family holdings and 72.3 per cent of the total stock (Information Mongolia 1990: 190).

'Family links' or 'bases' (typically two or three families) were long the basic work units, with the two or three brigades per collective farm fulfilling functions such as supply and planning (Jahne 1990: 82). The bases were joined into teams, which were specialized by, for example, animal group (Information Mongolia 1990: 196). Some fodder was grown by the collective, but this was done mainly by state farms. In 1969 the livestock machine stations (set up in 1937) were transferred, without compensation, to the collectives. Herdsmen's families lived in permanent settlements and the herdsmen themselves drove the livestock to pasture according to season. From 1979 onwards collective members became entitled to state old age pensions, and members had to work a minimum number of workdays for the collective (raised from 150 to 250 in 1967). There were controls on the number of livestock that could be held by individual members. In December 1987 co-operative members were permitted to own 100 head of stock per family living in the Gobi zone and seventy-five per family in the foreststeppe zone, compared with seventy-five and fifty, respectively, before that date (Alan Sanders, FEER, 11 February 1988, p. 62). Almost 25 per cent of livestock of a total of 22.6 million in 1987 was in private hands, either on townspeople's plots or in the herds of co-operative members (p. 62). Individual holdings of workers, employees and citizens after January 1986 were allowed eight to twenty-five livestock per household depending on areas. The same decree, as well as increasing the number of livestock allowed, permitted the sale of surplus produce through the co-operative trade network in addition to the state procurement system (the 1978 decree having fixed compulsory state procurements for some products).

A number of state farms developed into 'agro-industrial complexes', with their own processing plants (e.g. fruit and vegetables and flour) and utilizing industrial techniques in farming. During the 1980s a number of 'inter-cooperative associations' were set up, providing co-operatives with feedstuffs, transport and construction services (Jahne 1990: 77).

Alan Sanders reports on the start of production of preserves at the Sharyn Gol Fruit and Vegetable Industry Association, a ten-year project built with aid from communist Bulgaria. After 1986 state farms and co-operatives benefited from higher state prices for procurements above the annual average rate of growth attained over the period of the last five-year plan (Sanders 1987: 64).

Less than 1 per cent of the country was arable and permanent crop land; more than 80 per cent was pasture and 10 per cent was forest and woodland (Jahne 1990: 69). The division of arable land was as follows: state farms, 69 per cent; herding collectives, 21 per cent; personal holdings, 10 per cent. The corresponding figures for livestock were 6 per cent, 70 per cent and 22 per cent, respectively.

Alan Sanders reported several years of stagnant agricultural output, owing to declining productivity in the livestock sector, with falls in average slaughter weight, *per capita* meat production trailing behind population growth and meat exports declining. Livestock numbers totalled 22.6 million in 1986 and 1987, the same as in 1970 (*FEER*, 11 February 1988, p. 2).

Information Mongolia (1990: 192-3) provides information for 1987. Animal

products made up 69.7 per cent of gross agricultural output. State farms produced 31.9 per cent of total output (72.8 per cent of state output deriving from crops). Collective farms produced 47.2 per cent of total output (85.9 per cent of collective farms output deriving from animal products). The private sector accounted for 20.9 per cent of total agricultural output (26.4 per cent of total meat production, 40.8 per cent of total milk production and only 1.8 per cent of total potatoes and vegetables).

The 1985 Food Programme up to the year 2000 mimicked the 1982 Soviet programme of that name: an increase in food production, a decentralization of decision-making, an increase in private output and improved incentives (Jahne 1990: 77).

In 1989 the limit on private ownership of livestock was increased by twentyfive per household (Asian Development Bank 1992: 82). Restrictions on the private ownership of herds were eliminated altogether in 1990 (Denizer and Gelb 1992: 7).

Around a third of livestock were privately owned in 1990. Privatization of the herds was implemented in two stages in 1991 and 1992 (Pomfret 2000a: 151–7).

As mentioned above, Batbayar reports the gradual dismantling of the centralized distribution and state procurement systems for agricultural products by July 1992 (Asian Survey, 1993, vol. XXXIII, no. 1. p. 63). Prior to this the government had reduced the number and output coverage of targeted goods, especially meat, so that production in excess of state orders could be sold freely at higher prices (Asian Development Bank 1992: 84). In January 1991 farmgate prices for products such as skins, wool and butter were raised. State orders were reduced to cover only 50 per cent of meat output, 80 per cent of wool and 10 per cent of hides. Farm-gate prices on goods to meet state orders remained subject to control, although production in excess of these orders could be sold at freely negotiated prices (Milne 1991: 13). The procurement price for grain in September 1992 was 4.2 tugriks per kilo (compared with a free-market producer price of 25-30 tugriks) and for mutton 36 tugriks per kilo (compared with 80–100 tugriks). Even the privatized food-processing enterprises (such as abattoirs and bakeries) and retail shops were still expected to sell part of their output at controlled prices in order to implement the rationing system (Lee 1993: 628).

According to Boone (1994: 349), state procurement of meat and other products fell sharply in 1991 and 1992. In 1993 obligatory state orders were abolished and the ministry of agriculture began paying market prices for agricultural products. Each co-operative and state farm was permitted to choose its own method of privatization. Early reports suggest that co-operatives are breaking up into smaller family groups similar to the structure of the 1950s. The state farms have been maintained as large holding companies, with 51 per cent share ownership by the government. Around 83 per cent of livestock is now privately owned (p. 351).

Private ownership of (small areas of) urban land had been allowed in the 1990 constitutional amendment. Partial private ownership of agricultural land is provided for in the new constitution of 1992, although the Land Law has yet to be passed (Asian Development Bank 1992: 84, 181).

A new set of laws was to take effect in April 1995 allowing private citizens to own land and foreigners to lease it (*Transition*, April 1995, p. 22).

Land privatization remains the most controversial element of the programme, despite the fact that most land is pasture and barred from privatization by the constitution. Therefore the most ambitious reformers envisage privatizing only land in urban areas (0.3 per cent of the land mass) in the first phase and arable land (an additional 2 to 3 per cent of the land mass) in the second phase. After many attempts a land law was passed in late 1994, but it explicitly defers consideration of the mechanism for effective ownership transfer to later legislation. The current law explicitly prohibits foreign ownership (Korsun and Murrell 1995: 485). Co-operatives were given control over their own privatization (p. 477). In some cases members voted to break the co-operatives up into smaller units or to become completely independent (p. 482). The private share of livestock increased from 32 per cent in 1990 to 80 per cent by 1993 (p. 481).

According to EIU (*Country Report*, Fourth Quarter 1993, p. 38), all arable farming is now in the private sector.

A third of camels have been butchered since privatization began, with animals distributed indiscriminately to those who know nothing about livestock as well as to those who are skilled herders (*FT*, 16 February 1995, p. 21).

At the end of 1995 there were almost 28.6 million head of livestock, breaking the previous record of 27.5 million set in 1941. But there are meat shortages, mainly due to the scarcity of fuel and transportation. The shortage of meat has been compounded by the decline in the breeding of chickens and pigs. These and other intensive-farming methods like dairying have suffered considerably because of the collapse of the large collective and state farms that once guaranteed the necessary farm labour and supplies of fodder. The break-up of large farms is also a reason for the decline in the production of cereals. The 1995 harvest of 261,200 tonnes was only half the average of the previous four years. The area sown was a third less and the yield was low (Alan Sanders, *FEER*, 8 February 1996, p. 47).

During the Tsedenbal regime most of the traditional nomadic livestock producers were brought into agricultural co-operatives, while a capital-intensive crop, breeding and fodder-producing sector was concentrated in seventy-two state farms (of which twenty were primarily dedicated to the production of fodder). In the late 1980s the fifty-two crop producing state farms cultivated 75 per cent of arable land and produced 70 per cent of crop output. The 255 co-operatives cultivated 25 per cent of arable land and produced 90 per cent of meat and 70 per cent of milk. In 1990 all restrictions on the private ownership of cattle were removed and a beginning was made with the freeing of retail prices and further limitation of administrative pricing. While before 1990 only 25 per cent of cattle were privately owned, by the end of 1994 the share had increased to 95 per cent. By that time the state farms had been transformed into 330 shareholding companies with shares held by the workers and management, as well as partial or

complete state ownership. The livestock co-operatives had given way to 387 new entities, such as shareholding companies, limited liability companies and smaller co-operatives. Only 2,000 private crop producing farms had been formed. It is estimated that 70,000-80,000 herdsmen have organized themselves into livestock and fodder companies and small voluntary co-operatives or associations. A further 70,000 herdsmen are private independent livestock producers (Spoor 1996: 621). The ownership of most of the collectively managed herds has now been transferred to families through a voucher scheme. Although nominally all capital-intensive crop, animal husbandry and fodder farms have been 'privatized', the state retains a minimum of 51 per cent of the shares, while the remainder of the shares are now mostly held by the workers and former management. Agroindustry and trade parastatals continue to exercise monopolistic powers in agricultural markets (p. 619). During the period 1990-2 price liberalization was undertaken and the state order system was gradually transformed into 'negotiated agreements' between producers and the state (before largely disappearing in the following two years). But that does not mean that state influence in price setting has entirely disappeared. Some large enterprises in energy, trade, construction and industry are still partly or completely state-owned. In particular the agroprocessing sector is largely parastatal and by nature oligopolistic (p. 622).

When the state order system largely disappeared no adequate new rural marketing systems developed (lacking traders, transport, credit and local investment), causing a negative impact on the linked agro-industry. The preparation of hay and fodder, in particular for the intensive livestock sector, declined drastically. Private livestock producers retreated from markets as outlets disappeared and extension services were dismantled . . . The reduction in availability of foodstuffs is at least partly linked to the rapid decline of the food processing industry and the domestic 'state order system'. The linkages of the primary materials producers and agro-industry have been interrupted, the domestic marketing system is in disarray, and private herdsmen are adopting risk-aversion strategies directed at home consumption and retreat from markets (as in many cases these are 'missing') ... The absence of a combination of legal framework and micro institutions (including extension services, credit banks and local traders and warehouses) has aggravated the agrarian crisis, which is reflected in greatly increased income disparities, rural poverty and declining health services.

(pp. 623-5)

(In March 1994 26 per cent of the population was below the poverty level: p. 620.) Private ownership of land is still not legal (all land belongs to the state), but in practice long-term leasing of land is already legalized (p. 622).

Over 90 per cent of livestock is under private ownership and the assets of most co-operatives have been distributed to members. But some animal shelters, veterinary services and organized fodder services have not been maintained.

Some 51 per cent of the shares of state farms remain in state hands (Boone *et al.* 1997: 123).

'The 300 small private sector farms created in 1991 out of the fifty-five stateowned farms that were built with the help of aid from CMEA countries during the communist era have not been able to make Mongolia self-sufficient in food production' (Goyal 1999: 653). By 1995 about 95 per cent of livestock had been transferred to private ownership (p. 636).

'There is no privately owned land in Mongolia' (*The Economist*, 8 July 2000, p. 89).

Because of high prices for cashmere, made from the wool of goats, more and more Mongolians have taken to ... raising goats. In their numbers they have endangered the Gobi environment with overgrazing . . . China imports raw wool for its mills and is choking out Mongolia's stodgy but economically important garment industry ... In 1994 the government, hoping to encourage development of a cashmere processing industry, slapped a ban on the export of raw cashmere to keep its price artificially low. A bevy of investors from the United States and the West rushed in, opening more than fifty textile mills . . . Pressure from the World Bank, the IMF and the Asian Development Bank forced Mongolia to lift a ban on the export of raw cashmere in the mid-1990s ... In 1995 the Asian Development Bank held up \$17 million of a \$30 million loan until Mongolia dropped the ban ... Livestock privatization sparked an explosion of economic activity in Mongolia's pastures. That and the near-collapse of the economy in many of the country's counties prompted tens of thousands of Mongolians to ... return to the land. According to government statistics, there were 147,508 herdsmen in Mongolia in 1990, compared with three times as many last year [1999]. In 1990 Mongolia supported more than 33 million livestock – a number that had jumped more than 30 per cent by last year . . . The flood of new herdsmen into the market, along with the collapse of government services, created enormous stresses on the environment. Many of the herdsmen had no experience of raising livestock or understanding of nomadic life.

(John Pomfret, IHT, 18 July 2000, p. 6)

For the first time in its history Mongolia is attempting to introduce land privatisation. But the ruling Mongolian People's Revolutionary Party . . . is drawing fire from opponents . . . The existing law allows land leases for up to 100 years. That legislation is adequate, say opposition MPs, who are campaigning against the new proposals. With no central land-use registry and no property development plan in place anywhere in the country, the proposed new law would lead to a large number of disputes as well as expropriation of land, they say. A recent surge in construction in . . . Ulan Bator and a massive increase in the number of exploration licences being issued to local and multinational mining companies has lent urgency to the issue of land ownership.

(FEER, 4 July 2002, p. 9)

[There are] 27 million livestock in Mongolia ... Never have so many Mongolians – a third of the population, nearly double the number a decade ago – practised it [nomadic pastoralism] as today . . . Of some 275,000 households that own livestock fewer than 1,000 have more than 1,000 animals ... Private co-operatives are only now starting to take off . . . Great hardship . . . [caused herders] to fall back on small, uneconomic networks of family or friends, to breed ever more animals with less regard to their quality (numbers rose to a record 34 million in 1999) and to move closer to towns. This concentration has caused pastures near to the towns to be over-grazed and more distant ones to be under-used ... [Something] less than 10 per cent ... [of the steppe]... is reckoned to be degraded ... Between the summer of 1999 and early 2002 . . . some 7 million animals died . . . A 1995 law, only recently being implemented, allows herders to apply for the rights to use certain winter shelters. Many interpret this as entailing the rights to winter pastures around those shelters too. Rich herders have rushed to stake their claims, leaving poorer ones at a loss. A new land law, passed in mid-1992, gives Mongolians the right to own urban plots of land.

(The Economist, 21 December 2002, pp. 80–2)

More than 200 Mongolian farmers occupied a central square in Ulan Bator yesterday [7 April 2003] in protest against a new law they say will leave them landless ... Demonstrators tried to present a petition they said bore thousands of signatures to the government ... The new law allows those cultivating the land to buy it and the auction of that not bought.

(*FT*, 8 April 2003, p. 13)

'Under one of the world's greatest land giveaways the government is offering 0.7 ha (1.7 acres) to every city resident and 13 ha to rural dwellers in the hope that they will borrow on this capital to start businesses' (Guardian, 24 July 2004, p. 20).

The year 2005 was marked by a significant number of exchanges [between Mongolia and North Korea]. A January intergovernmental meeting on economic, trade, and scientific and technological co-operation in Ulan Bator produced an accord to boost co-operation in the trade, agriculture and construction sectors. As a result, vice ministers of agriculture subsequently exchanged visits, agreeing to establish joint farm operations in Dornod, Tuv and Hentii provinces of Mongolia. The first such farm will be set up in Dornod province in the first half of 2006, with North Korea planning to send up to thirty agricultural experts and workers.

(Batchimeg 2006: 283–4)

## Economic performance in the communist period

Table 1 shows growth rates for the economy as a whole during the period 1960 to 1989.

Table 1 Average annual rates of growth of GNP and GDP (%) 1960-89

	1960–70	1970–5	1976–80	1980–5	1985–7	1987–8	1989
GNP (%)	5.0	7.1	5.5	7.1	5.8	3.4	_
	-	-	-	-	1987	1988	1989
GDP (%)	-	_	_	_	4.5	5.1	7.3

Sources: Faber (1990: 413); Kaser (1992: 175); P Hannam (FEER, 6 February 1992, p. 49); Jeffries (1993: 128); various issues of United Nations Economic and Social Commission for Asia and the Pacific, Economic and Social Survey of Asia and the Pacific; various issues of Asian Survey.

## **Economic performance in the post-communist period**

### Growth and inflation

Mongolia had a rough time after the collapse of communism, especially with the demise of the Soviet Union. (See Table 2.) But GDP growth turned positive in 1994 after four successive years of negative growth (1990 to 1993 inclusive). Growth has been positive ever since. In 1998 GDP was 93.1 per cent of the 1989 level, compared with 93.4 per cent for countries of Eastern Europe, 71.4 per cent for the Baltic States and 54 per cent for the CIS (Commonwealth of Independent States) countries (Torsten Slok, Finance and Development, 2000, vol. 37, n. 3, p. 45). The EBRD has estimated that in 2005 the index of real GDP was 125 compared with 100 in 1989. By way of comparison the index for Russia in 2005 was only 88 (EBRD 2006b: 32). Economic performance has been adversely affected by natural disasters such as prairie fires (e.g. in the first half of 1996), drought (e.g. in the summer of 1999) and a number of exceptionally harsh winters starting in 1999–2000. Agriculture experienced double-figure negative growth in the years 2000 to 2004 inclusive. Inflation peaked in 1992 and was bought down to single figures in 1998. But double-figure inflation rates have been experienced periodically since then.

#### Unemployment

There are a number of estimates of unemployment (which is a serious problem):

- 1 By early 1992 urban unemployment was 20 per cent (Denizer and Gelb 1992: 28).
- 2 In January 1993 the unemployment rate was 10 per cent (EIU, *Country Report*, Second Quarter 1993, p. 40).
- 3 The unemployment rate was 6 per cent at the end of 1990 and 11 per cent in mid-1991 (Asian Development Bank 1992: 7).
- 4 In January 1992 the unemployment rate was 6.1 per cent (Lee 1993: 628).

- 5 Unemployment is now 8.5 per cent (The Economist, 26 November 1994, p. 89); in 1994 unemployment stood at nearly 9 per cent (*The Economist*, 23 December 1995, p. 90).
- 6 Unemployment has almost doubled since 1991 (Sheldon Severinghaus, Asian Survey, 1995, vol. XXXV, no. 1, p. 72). Unemployment officially stands at 7.6 per cent, but it is probably closer to 10 per cent (Sheldon Severinghaus, Asian Survey, January 1996, vol. XXXVI, no. 1, p. 97).
- 7 The official unemployment figure is 20 per cent of a labour force of 250,000, but independent estimates put it as high as 50 per cent (Nate Thayer, *FEER*, 6 February 1997, p. 48).
- 8 Unemployment is conservatively estimated at 28 per cent of the workingage population (Lincoln Kaye, FEER, 11 September 1997, p. 26).
- 9 The number of registered unemployed reached 76,000 in 1994 (8.5 per cent of the economically active population) with more than 50 per cent of these women. It is estimated, however, that only between 20 per cent and 26 per cent of Mongolia's unemployed actually register with the government. As of 31 December 1995, according to the cabinet secretariat, of the total labour force of 1,111,300 (including working children and pensioners) 217,700 were unemployed. Unicef believed the unemployment rate to be at least 22.3 per cent, while other estimates are even higher (Goyal 1999:
- 10 The EBRD provides end-year unemployment rates. These are based on the officially registered unemployed: 4.6 per cent in 2000, 4.6 per cent in 2001, 3.4 per cent in 2002, 3.5 per cent in 2003, 3.6 per cent in 2004 and an estimated 3.5 per cent in 2005. 'According to the 2003 population census, the real unemployment rate was 17 per cent' (EBRD 2006b: 153).

#### Poverty

Poverty is a serious problem:

- 1 Aid agencies estimate that 25 per cent of Mongolians live below the poverty line (*FEER*, 9 December 1993, p. 67).
- 2 One in four of the population live below the poverty line (Alan Sanders, The World Today, June 1994, vol. 50, no. 6, p. 104).
- 3 According to official figures, a quarter of the population now lives below the poverty line (*The Economist*, 26 November 1994, pp. 89, 92); a figure of around 22 per cent is mentioned later (The Economist, 23 December 1995, p. 90).
- 4 According to a study sponsored by the United Nations Development Programme, about 25 per cent of the population live below the poverty line (Asian Survey, 1995, vol. XXXV, no. 1, p. 72).
- 5 According to the UN's Food and Agriculture Organization, a third of the

Table 2 Selected economic indicators 1989–2005

Economic indicator	1989	1990	1991	1992	1993	1994	1995
Rate of growth of GDP (%)	7.3	-2.0	-9.9	-7.6	-1.3	2.3	6.3
Rate of growth of industrial output (%)	11.1	-4.7	-13.2	-13.1	-5.5	2.1	14.6
Rate of growth of agricultural output (%)	13.8	-1.9	-5.1	-3.9	-7.0	2.7	4.2
Inflation rate (consumer) (%)	_	-0.8	121.2	321.0	268.4	87.6	56.7
Budget surplus or deficit (% of GDP)	_	-14.0	-10.5	-9.9	-13.0	-5.2	-1.5
Population (million)	2.05	_	_	2.18	_	_	2.389

Sources: Various issues of United Nations Economic and Social Commission for Asia and the Pacific, *Economic and Social Survey of Asia and the Pacific*; Asian Development Bank, *Asian Development Outlook*; *Asian Survey*; IMF, *World Economic Outlook*, *FT*; and *The Economist*; Goyal (1999: 638, 644, 646); Pomfret (2000a: 150); Mongolia 2006b:1–10; EBRD 2006b: 152–3.

#### Note

- population now lives below 'nutritional-starvation levels' (*FEER*, 27 March 1997, p. 21).
- 6 On 22 October 1997 the United Nations food agency announced that around 143,000 people have experienced a dramatic fall in nutritional standards, in particular children, pensioners and the unemployed. Mongolia needs about 90,000 tonnes of food aid in 1997 and 1998 and 23,000 tonnes of that should be provided as emergency aid for the poor (*IHT*, 23 October 1997, p. 4).
- 7 'Poverty is at its highest level since 1990 and average caloric intake has declined. Unemployment and the high cost of living are causing residents of provincial centres to move to the countryside or to more populous urban areas' (Tom Ginsburg, *Asian Survey*, January 1998, vol. XXXVIII, no. 1, p. 67).
- 8 'Taking the income definition of poverty (a situation in which people's income is insufficient to meet their basic needs), it has been estimated [by the World Bank] that 26 per cent of the total population lives below the minimum standard of living set by the Mongolian government ... On the basis of the weighted poverty line constructed by the World Bank ... 36.3 per cent of the population was found to be poor in June 1995' (Goyal 1999: 649).
- 9 'One-third of Mongolia's 2.4 million people live below the poverty line on less than \$10 a month' (*IHT*, 3 July 2000, p. 3).
- 10 'A 1997 survey showed that more than one in five children under five was

<sup>\*</sup>These figures are estimates.

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
2.4	4.0	3.5	3.2	1.1	1.0	4.0	5.6	10.6	6.2	6.0*
-3.2	-3.3	3.8	1.1	1.6	16.2	5.4	3.0	15.4	-0.9	_
4.4	4.3	6.4	4.2	-14.9	-18.5	-10.7	5.8	18.9	7.7	_
46.9	36.6	9.4	7.5	11.8	8.2	1.5	4.6	11.0	10.0	6.0*
-2.6	-9.1	-14.3	-11.6	-7.7	-4.5	-5.8	-4.2	-2.2	-3.3	_
2.413	3 2.434	4 2.45	4 2.47	4 2.49	7 2.52	3 2.55	2 2.582	2.614	2.646	<u> </u>

- seriously under-nourished and more than a third showed clinical symptoms of rickets' (Guardian, 3 July 2000, p. 17).
- 11 A 1999 United Nations study found that more than half of Mongolia's 2.6 million population had too little to eat (FEER, 6 July 2000, p. 81).
- 'In 2004, as in the past eight years, 36 per cent of Mongolia's population lived below the poverty line' (Nyamosor Tuya, Asian Survey, 2005, vol. XLV, no. 1, p. 69).
- 13 The share of the population living in poverty in 1998 was 74.9 per cent (EBRD 2006b: 153).

## Problems of climate and weather

Livestock totalled 33.3 million head, a new record, according to the 1999 census. However, autumn drought had left millions of sheep, goats, cattle and horses short of fodder. Ill-prepared for the harsh winter, 2.89 million head of the weakest animals died of starvation or severe cold.

(FEER, Asia 2001 Yearbook, December 2000, p. 165)

'After drought in autumn 1999 and a winter freeze, 3 million livestock starved' (p. 163).

A bitterly cold winter – one of the most severe in decades – could wipe out millions of livestock, threatening tens of thousands of herders with starvation, the United Nations said Tuesday [30 January 2001] ... More than half a million animals have already died.

(*IHT*, 31 January 2001, p. 4)

The United Nations has appealed to member states . . . to help Mongolian herders enduring one of the severest winters on record ... Aid workers fear a repeat of last year's events ... The summer drought has left animals too weak and low on body fat to survive the cold. The UN fears that as many as 6.6 million animals could die by May - 21 per cent of the nation's livestock. A third of Mongolia's population of 2.4 million depend on livestock ... A blizzard has ... [already] killed 500,000 animals . . . This is the second consecutive winter of disaster and follows two summer droughts ... The United Nations has launched an \$11.8 million appeal.

(*The Times*, 31 January 2001, pp. 17, 21)

'[The 2000–1 dzud] killed about 10 per cent of the nation's livestock, a repeat of the previous 1999–2000 winter' (Asian Survey, 2002, vol. XLII, no. 1, p. 39). 'The 2000-1 dzud brought a reported loss of 3.4 animals' (p. 43).

A drought last summer [2000] stunted forage, leaving animals unable to fatten for winter. Now what herders say is the coldest winter in twenty to twenty-five years has killed ... up to 1 million livestock across this vast country gripped by two straight years of terrible weather and herd losses – a devastating combination called dzud. Some 6 million livestock face death this year [2001], the government says, double the number killed by last year's dzud . . . Free-market reforms first introduced . . . [in 1990] prompted herd numbers to rise sharply, by 4 million between 1996 and 1999 alone ... Large-scale overgrazing is the result ... Goats [which have increased particularly rapidly because of the rise in the price of cashmere] pull up grass by the roots and eat the entire plant, contributing far more than other animals to overgrazing ... Foot-and-mouth disease ... broke out in February [2001] in two eastern provinces ... The rural [human] population has risen slightly over the last decade. In the past year tens of thousands of people have arrived in the capital, home to one-third of Mongolia's 2.4 million people ... [There are] 100,000 Mongolians living and working abroad, whose remittances help many families.

(David Murphy, *FEER*, 8 March 2001, pp. 20–1)

Much more could have been done to prepare for this crisis. Food stocks have been declining for years in Mongolia as subsidised, state-run farms have been sold. Private farmers have been unable to get enough loans to buy seeds, fertilizer and machinery and to pay for vets. Fewer fields are now cultivated and yields are down. Wheat production has fallen by more than half, from roughly 700,000 tonnes a decade ago to under 300,000 now . . . [There has been] an increase in unemployment and with it an increase in the number of people dependent on herding. One report suggests that an extra 150,000 people took up herding between 1990 and 1992 alone. The animal stock has also grown, from an estimated 26 million in 1992 to 33 million six years later, but the area under pasture has not. Though the government was warned, after the drought, that another difficult winter was on the way, only a few thousand tonnes of hay were allocated for herders. Deliveries were made only last month [February] ... Mongolia has also been hit by footand-mouth disease.

(*The Economist*, 17 March 2001, pp. 81–2)

In 1993 there were about 23 million head of livestock ... Now there are over 33 million ... [Leading to] overgrazing ... Experts say the losses can be reduced with good preparedness planning and the financial resources to back it up.

(Sheldon Severinghaus, *Asian Survey*, 2001, vol. XLI, no. 1, pp. 68–9)

'A second successive dzud (a drought followed by severe cold and deep snow) killed another 3.3 million head of livestock. Over 7,360 families lost all their animals and thirty-three died in the severe weather' (FEER, Asia 2002 Yearbook, p. 162).

This year [2004] the weather has been good, after several years of summer droughts and harsh winters. Agricultural output, which contributes up to 30 per cent of GDP, rose for the first time in three years and livestock numbers were up 6 per cent to 25 million.

(*FEER*, 24 June 2004, p. 48)

#### **Pollution**

As the nation suffers an increase in pollution ... authorities are acting to protect the environment . . . Air pollution is an increasingly serious problem in Mongolian cities. Since 1994 the concentration of noxious pollutants has exceeded safety standards, its main causes being the ger communities which have no direct heating systems. Due to the extreme cold and the need to provide adequate heating they burn wood and coal. Another cause of air pollution is the rapid growth in the use of vehicles that do not burn fuel efficiently. Mongolia suffers from a lack of efficient energy production with low-grade coal, inefficient heating systems, shortage of insulation and a need for incentives to conserve energy use. As a result, the country suffers from the highest levels of carbon dioxide emissions per capita in all of Asia. The government is initiating a campaign to combat industrial pollution by promoting renewable energy sources such as solar and wind power. Authorities are planning a comprehensive air quality management strategy

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for all major cities as well as enforcing pollution control systems. Power plants in Ulan Bator are being urged to adopt efficient clean coal technology and improve efficiency in boilers and coal stoves. In the fight against vehicular pollution the authorities are expanding the public transport system and setting stricter emission norms. There is also a campaign for more public awareness and environmental education about air pollution.

(IHT, Survey, 23 May 2006, p. 23)

# Appendix 1

## The Soviet (Stalinist) economic system

Appendix 1 relies heavily on Jeffries (2002c: 1–5, 51–62, 90–2, 97–8, 110, 118, 155–7, 170–3). The Soviet Union was the world's largest country in terms of land area, occupying a sixth of the earth's land surface excluding Antarctica. It was well endowed in terms of natural resources, although there were climatic, transport and soil difficulties. Stalin (who died in 1953) and his successors succeeded in making the Soviet Union one of the world's two 'superpowers', rivalling the United States in terms of conventional and nuclear capacity. In 1990 the population was 290.1 million, the third largest after China and India. When the Bolshevik Revolution succeeded in 1917 the country was backward and agrarian despite considerable industrial growth during the last three decades of the Tsarist era.

The Soviet command economy was not introduced until 1928. Stalin's basic aim was to catch up with and surpass the leading capitalist countries, especially in terms of heavy industrial capacity and military power. A high rate of investment was achieved and priority was given to industry, especially heavy industry. In a quantitative sense foreign trade did not play a large strategic role, although vital capital goods embodying the latest technology (which was copied) were imported.

Before embarking on an analysis of command planning, it is important to understand the pivotal role played by the Communist Party It dominated economic, political and social life in this one-party state, e.g. it formulated and implemented economic policies. In turn, the tyrannical Stalin dominated the party. A cult of personality developed (the extreme adulation of an individual).

The basic allocative decisions about what to produce and in what quantities were taken by the state (used as an instrument by the Communist Party), although in reality the whole economic hierarchy had to be involved in decision-making. The enterprise manager, for example, had some decision-making autonomy with regard to input substitution and production choice within the aggregate plan target.

The State Planning Commission (Gosplan) was at the apex of the planning pyramid, branch ministries were at the intermediate level and enterprises (production units) were at its base. Gosplan received instructions about basic economic magnitudes from the party, especially the Politburo (the top party body), relating to growth rates of national income and of its sub-categories of consumption, investment and defence, and to vitally important goods. These instructions were relayed via the state apparatus, especially the Council of Ministers (the top body of government), and Gosplan combined these with the data/requests/proposals flowing upwards from the hierarchy to draw up plans of varying duration by means of 'material balances' (the aim being roughly to equate the major sources of supply and demand for particular commodities). The annual, quarterly and monthly plans were operational; medium (five-year) plans and perspective plans of at least fifteen years' duration were much more highly aggregated and were operational only in relation to the investment plan. Many projects were spread over a number of years, and thus longer-term plans were needed for guidance.

It is vital to stress the distortion of information flowing up the hierarchy. For example, in trying to achieve as low an output plan as possible, enterprises have an incentive to understate capacity (see p. 96). A reliable source of information, however, is what enterprises have already achieved. This accounts for the persistence of the so-called 'ratchet effect' despite its severe problems (see p. 96), planners essentially setting output targets on the basis of what had been produced in the last plan period plus a bit more.

The Soviet economy suffered endemic supply problems, the reasons including the following:

- Balances: these were heavily aggregated, the number of balances being far fewer than the number of 'commodities'.
- The 'iterative' problem: if, for example, the output of a particular good were increased, in the early years of planning usually only the first-order iteration (repetition) was carried out (i.e. estimates made of the effects on direct inputs). Further iterations (effects on the inputs needed to produce the increased inputs and so on) were ignored. For this reason excess demand was tackled as much as possible by, for example, reducing both the use of inputs per unit of output ('tightening of norms') and the consumption element of final demand (i.e. using the consumer sector as a buffer), as opposed to changing supply (i.e. increasing output).

Although stockpiles of goods could arise on occasion (see p. 98), one of the basic features of the Soviet Union was widespread shortages, i.e. it was a 'shortage' economy. This will be pursued later, but some of the ill-effects of shortages need stressing at this stage:

- 1 The opportunity cost of queues to consumers and the rest of society in terms of foregone work and leisure was enormous.
- 2 The 'soft budget constraint' (see p. 97) shielded enterprises from bankruptcy and thus encouraged inefficiency. In turn, workers were generally

guaranteed a job for life. This tended to have a deleterious effect on incentives, which were further undermined by the fact that widespread shortages ensured that money income was not an automatic command over real goods and services.

3 There was a loss of the benefits of specialization as enterprises and ministries attempted to produce as many inputs as they could themselves because of the unreliability of the materials allocation system.

Material balancing was never supplanted by other techniques (such as input-output and linear programming) as the core of command planning and was improved over time (e.g. by a greater number of iterations).

The allocation of most non-labour inputs was handled by the 'materials allocation' system – the administrative distribution of raw materials, intermediate goods and capital goods. The supplying and using enterprises were matched centrally and the all-important document was the *naryad* (allocation certificate), which specified the quantity of the product and the supplying organization.

Command planning was well named in the sense that the production unit (the enterprise) eventually received plan targets in the shape of a technicalindustrial-financial plan (tekhpromfinplan). But since it was impossible for central planners to produce detailed, concrete plans in the abstract, the economic hierarchy had to be involved, with the emphasis in the traditional system on vertical as opposed to horizontal (i.e. enterprise to enterprise) linkage. More specifically tentative, crudely balanced output targets ('control figures') were passed down the planning pyramid to be increasingly disaggregated (made more detailed) by ministries and enterprises. Suggestions/requests (the zayavka being an input indent, for example) were made at each echelon and passed back up the hierarchy. While the centre's major allocative decisions were preserved, this process of haggling and bargaining could be influential, as in suggested input substitution to meet a given output target. Annual plans were often late and were frequently changed; failure to fulfil by one enterprise had repercussions on others. (It is worth noting at this point the importance of informal linkages that oiled the wheels of the economic mechanism in reality. Examples include, as is to be seen below, shady deals and downright illegal relationships between enterprises.)

It is important to note that two areas of the economy were left, in more normal times, largely to the market mechanism, namely the distribution of consumer goods and the allocation of manpower. These were interrelated in both a micro- and a macro-economic sense. Wages and salaries paid out in the production sector constituted the main means of payment for the consumer goods and services made available in the plan (which, in turn, provided the main incentive to work), while avoidance of inflation meant matching the cash (rouble notes and coins) injected into the economy with the aggregate supply of consumer goods and services at established prices.

As regards the distribution of consumer goods there was essentially consumer choice (as opposed to sovereignty) in the command economy. This meant that consumers could choose among the consumer goods and services made

available in the plan, rather than being able to determine the allocation of resources, as in a competitive market economy. As discussed on p. 92, queues were an endemic feature of the Soviet economy. Among the causes of queues were prices for consumer goods and services being typically below market-clearing levels and the restricted number of poorly organized distribution outlets. Queues imposed considerable economic and social costs on the Soviet consumer. But it is worth noting that the opportunity cost of time spent queuing was lower for groups such as pensioners, and the Soviet élite had the best of both worlds – assured access to scarce goods and services (e.g. via special shops and hospitals) at low or even zero prices! The poor quality, non-availability and erratic supply of many consumer goods and services, coupled with the frequency of queues and rationing, provided a breeding ground for activities of varying degrees of legality. Black markets were rife.

As regards the allocation of manpower, the fulfilment of plan output targets obviously required the necessary labour and non-labour inputs. But there were contrasting ways of obtaining them. While the latter were essentially administratively allocated by means of the materials allocation system, the former mainly involved the use of the market mechanism, with administrative methods and moral suasion also employed. The internal passport system, introduced in 1932, helped to control the geographical movement of people.

The command planning solution of labour direction, although used during the Second World War, was ruled out in more normal circumstances because of adverse effects on incentives. Market forces were heeded when the planners determined basic wage differentials, while the state controlled the education system, including the number of places available for particular courses of study. The industrial worker's pay crudely consisted of two parts: (1) a state-guaranteed basic wage, which varied according to industrial branch, skill and region; and (2) the residual. This residual was affected by bonuses, related to such factors as plan fulfilment and the nature of the job (dangerous working conditions, for example). This formal system enabled the state to encourage labour to move to desired industries and regions and to adopt the desired skills. In addition, there was *de facto* room to manoeuvre for the enterprise manager, even within the constraints of an enforced wage fund, by manipulating norms and skill designations, for example. In the early period piece rates, as opposed to time rates, were dominant.

The non-market elements in manpower allocation varied enormously over time. Forced labour camps were busy as a result of the collectivization of agriculture and Stalin's purges. Although used for activities such as mining in inhospitable places, the camps served a mainly political function. High labour turnover during the 1930s, seen as a threat to plan fulfilment, was combated by means such as the 'work book'. This was introduced in 1938 and held by the enterprise manager; without it a worker could not, in principle, find another job. Increasingly harsh legislation eventually made even absenteeism and lateness criminal offences. Graduates of universities and technical schools were assigned to a place of work for two or three years. Moral suasion exercised by the party

could be seen in operation, for example, when students and workers helped out at harvest time.

Trade unions were an arm of the state in the traditional model. They were organized along industrial lines with the result that worker and manager belonged to the same union. There was no collective bargaining between trade unions and management about basic wage and salary differentials, although the former exercised some marginal consultative roles. Strikes were considered to be counter-revolutionary and in any case unnecessary, although they were not actually outlawed in the constitution. This reduced the role of trade unions to the transmission of party policies, ensuring favourable conditions for plan fulfilment, protecting workers' interests (legal requirements as to health and safety, for example) and administering the social security system relating to sickness, work injury and pensions.

Unemployment was officially declared to be eliminated by the end of 1930. Work was regarded not only as a right but as a legal obligation.

State ownership dominated the non-agricultural sectors. In the traditional Soviet economic system the legal private industrial sector was negligible. Private enterprise was severely limited as regards area and employment. Handicrafts, agriculture and certain consumer services were acceptable, but selling goods made by other people was not allowed. The employment of another person outside the immediate family in the production of goods for sale was illegal. Direct taxes were heavier than normal.

At the bottom of the planning pyramid was the enterprise. The typical industrial enterprise in the early period was a state-owned plant, operating on the principle of one-man responsibility and control (edinonachalie) by a director appointed by the state (more strictly by the Communist Party). (The nomenklatura system - list of key posts - was one in which the party made all important appointments.) Lower levels of management included the deputy director and chief engineer, complemented by the party cell and the trade union branch. The basic function of the industrial enterprise was to fulfil its 'technical, industrial and financial plan' (tekhpromfinplan), which appeared at the end of a haggling and bargaining process. The operational plans (annual, quarterly and monthly) were expressed in terms of plan targets ('success indicators'), varying over time in terms of number and priority as particular problems arose. There was no 'all-round' indicator such as profit in a market economy. Instead, production decisions were broken down into individual targets. Output targets, however, were typically paramount. (Enterprises producing goods for export or using imported commodities were shielded from the world market by the state monopoly of foreign trade and payments. This separation of Soviet and foreign industrial firms greatly aggravated the problems already experienced with product quality since the disciplining force of world competition was absent. This is discussed in greater detail in the section on the role of foreign trade in the Soviet economic system, pp. 101–2.

The industrial enterprise was a financially separate and accountable unit operating on a *khozraschyot* (economic accounting) basis, for the purpose of

efficiently implementing the plan. Prices were fixed by the state and the enterprise account had to be kept in the local branch of the State Bank (Gosbank). The purpose of the latter was to help ensure plan compliance, the idea being that only payments in conformity with the plan should be permitted. Budgetary grants covered fixed capital needs and Gosbank had a monopoly over the granting of short-term credit, available at a nominal rate of interest which was fixed to cover only administrative costs. Management motivation involved negative consequences for non-fulfilment of the plan, such as loss of bonuses, expulsion from the party and its associated privileges, and possible imprisonment or even capital punishment for 'economic sabotage' during the darkest periods. Positive incentives were associated with fulfilment and overfulfilment. Bonus, sociocultural and investment funds were linked to success indicators, especially output.

Although the traditional system played a crucial role in carrying out Stalin's goals, micro-economic problems of a severe kind arose:

- 1 There was a neglect of user need. Output had only to be produced and not sold in the traditional Soviet economic system, while emphasis on one indicator led to neglect of others. The result was that quantity was stressed at the expense of quality. For example, physical indicators such as weight, number or length resulted in too large, small or narrow objects respectively being produced, relative to user need. This neglect of the qualitative aspects of production was especially acute in low-priority sectors involved in heterogeneous output, such as textiles, and helps explain the seemingly paradoxical phenomenon of stockpiles of unsaleable products in a situation of general consumer goods scarcity.
- 2 There was a tendency to understate productive capacity. The director had an incentive to provide such false information in the hope of achieving a 'slack' plan, one that called for less than feasible output, since no bonuses were paid for anything less than 100 per cent fulfilment. ('Taut' planning prevailed in general, with pressure to maximize output from given resources.) Although extra bonuses were available for overfulfilment, the director was careful not to overfulfil by too much, since that would endanger fulfilment of subsequent plans. The 'ratchet effect' (known in Eastern Europe as the 'base-year approach') meant that a particular period's achievement was the starting point for next period's plan: 'planning from the achieved level', as it was also called (Birman 1978). The ratchet effect was a persistent problem because of its simplicity of use by data-deficient planners; in a world of distorted information, planners could rely on what had already been produced in the previous period and they simply added a bit more.
- 3 There was a tendency to over-indent for non-labour inputs and to hoard these as well as labour. Manpower was hoarded to meet unforeseen needs or the frequent changes in plans and to compensate for the erratic supply of inputs (catching up on production when they did arrive). These non-labour

- inputs too were hoarded, owing, for example, to the horrendous supply problems associated with the materials allocation system and to the fact that capital was a factor free to the enterprise. This led to such phenomena as *tolkachi* (expediters, unofficial supply agents, who bartered with each other, among other things) and a powerful inducement to self-sufficiency in the supply of inputs; parts of Soviet industry were notoriously non-specialized.
- There was the problem of 'storming' (*shturmovshchina*). This was the mad rush to fulfil plans at the end of the planning period (such as the month), explained by such factors as the bonus system, delays in receiving inputs from other enterprises and the unwillingness of enterprises to show early eagerness in an environment where plans typically arrived late and were frequently changed (Bleaney 1988: 63).
- There was an anti-innovation bias at the micro level. Innovation is the appli-5 cation of new ideas about products and techniques to the production process. New priority large-scale technologies, in armaments for example, were readily dealt with by command economies. (Although technology generally lagged behind the West, the Soviet Union was much more successful in areas such as armaments and space vehicles.) But vital, spontaneous, micro-level innovation was hindered by the traditional Soviet economic system: there was no competitive pressure to stay in business as in market economies; the incentive system meant jeopardizing short-term plan fulfilment and the prospect of 'ratchet effects'; state-determined prices might have meant adverse effects on value indicators; there were the aforementioned problems of input supply; R&D, which traditionally took place in specialized organizations within ministries, was separated from production (Berliner 1976); there was frequent shifting around of managers to prevent 'familiness' (friendliness developing between the various individuals within an enterprise; coalitions could thwart the enterprises' superiors).

One of the fundamental problems of the Soviet economy was the existence of the 'soft budget constraint', to use Kornai's famous term (Kornai 1992b: 7). Any losses made by state enterprises were automatically made good by the state; thus enterprises were not allowed to go bankrupt and workers were shielded from unemployment. This automatic bailout was a recipe for disaster in terms of efficiency. 'No state-run enterprises could ever go bankrupt. The result of that situation was the bankruptcy of the whole [Soviet] system' (Alexander Yakovlev, *Moscow News*, 19–26 January 1992, p. 11).

There were other problems affecting the Soviet economy which furthered the cause of economic reform. One of these was the so-called 'scattering' (excessive spread) of investment resources (*raspilenie sredstv*), construction projects whose completion times were excessive relative both to plan norm and to those taken in Western countries. Responsible factors included the greater ease involved in obtaining resources to complete projects as opposed to starting them, the absence of a capital charge before the mid-1960s, the tendency of output-orientated indicators to reward starting more than finishing, and the absence of

the threat of bankruptcy in the event of investment failure. As the Soviet economy developed it became more complex to plan. Soviet growth was of an 'extensive' type (largely due to increases in inputs, rather than to greater efficiency in the use of inputs). The drying up of the traditional sources of inputs (such as the influx of manpower from the countryside, increases in participation rates — especially among women — and increases in the proportion of national income devoted to investment) put massive pressure on the Soviet Union to adopt a more 'intensive' pattern of growth. Environmental problems became severe (owing to factors such as the stress on output growth at all costs, the arms race, the self-interest of various groups in the economy, secrecy and the lack of any effective opposition groups).

In the traditional system industrial producer prices were formally fixed by the state on the basis of planned branch average cost of production and a small profit mark-up on costs. The aim was to ensure overall branch profitability while providing an incentive to lower costs. Costs included labour, raw materials, intermediate inputs, interest on short-term credits, and depreciation (though not allowing for technical obsolescence), but excluded a capital charge and a rental charge reflecting favourable location or plant modernity. Prices were not efficiency prices, but they were not, of course, meant to play an important allocative role (factor substitution being one area where they were active.) Instead, in line with the essential passivity of money, they served as a means of control and evaluation (*khozraschyot* and value indicators, for example). Prices were fixed for long periods of time, partly for administrative reasons and partly the better to assess enterprise performance over time. Domestic prices were separated from world prices by the state foreign trade monopoly.

For consumer goods the difference between the wholesale price (based on average cost), including the mark-up of the wholesale organization where appropriate, and the retail price, less the retail mark-up, was the 'turnover tax'. Since the general rule in the case of goods such as consumer durables was to try to set the retail price at market clearing levels, the turnover tax was generally price-determined (i.e. a residual). The tax was price determining only when it was in effect an excise tax of a given amount. Retail prices (unlike wholesale prices) reflected demand to varying extents. But market-clearing prices were typically not achieved, either because demand was wrongly estimated in the first place or because demand may have changed over time (prices often being set for extended periods of time). If the price was too low (as was typically the case), then excess demand resulted and other forms of market clearing, such as queues, had to be employed. If the price was set too high, then excess supply caused stockpiles of commodities. (The poor quality of many Soviet consumer goods may be seen in this context as demand being less than that estimated by planners.)

It is important to note that the state deliberately underpriced some consumer goods and services and these were either formally rationed or distributed through queues, literally or in the form of long waiting lists. Foodstuffs (such as bread, dairy products and meat in the postwar period), transport fares and

housing rents were typically heavily subsidized and remained constant for decades for political and income distribution reasons. In 1985 rents for state housing, fixed in 1928, took up only 3 per cent of an average family budget (Trehub 1987: 29). Queues were usually allowed to form for foodstuffs in state retail outlets and there were periods when rationing was general (such as in the first half of the 1930s). There was, of course, a substantial black market for many consumer goods and services, where prices reflected supply and demand.

Any economy that wishes to reap the benefits of extensive specialization and exchange needs money to function as a medium of exchange, unit of account, store of value and standard for deferred payments. The command economy used money. But, given that resources were largely centrally allocated, it played an essentially passive role. This is best illustrated by repeating the point that an enterprise's non-labour inputs were distributed administratively; it was the *naryad* that was the vital piece of paper, money being automatically forthcoming. Price tags were attached to items of expenditure and revenue in order for it to be possible to draw up the account necessary for purposes of evaluation and control. (Note, however, that since market elements were important, differential wage rates actively influenced manpower allocation, and consumers often exercised choice over the goods and services made available in the plan.) Money was needed because it was impossible to plan physically the output of every single good and in order to monitor performance.

The concept of the total money supply in a command economy was not very meaningful because there were two payments circuits, 'household cash' and 'deposit transfer'. The latter circuit comprised the bookkeeping changes that covered practically all inter-enterprise transactions, while the former had implications for macro financial equilibrium. The state was concerned to keep a balance between the cash injected into the economy, largely via the paying out of wages and salaries, and the supply of consumer goods and services made available under the plan at established prices, in order to avoid inflationary pressures. This can be expressed with the aid of an equation: PQ = Y + TP - S - T, where P is the general retail price level (i.e. average retail price), Q is the quantity of consumer goods and services, Y is household income in the form of wages and salaries earned in the production of *all* goods and services, TP is transfer payments, such as pensions, paid out to households, S is household savings, and T is direct taxes levied on households.

In principle the Soviet Union was thus able to prevent open and repressed inflation. It is interesting and instructive, therefore, to examine why significant open inflation was a feature of the 1930s. While plans for the production of consumer goods were generally underfulfilled, there was a large leakage of cash into the system through the overdrawing of wage funds. This originated in (1) the high level of labour turnover, which itself was the result of a predominantly undisciplined labour force, recently arrived from the countryside, in search of higher earnings; and (2) the plight of enterprise directors desperate for labour to fulfil the all-important output targets. Managers indulged in all sorts of activities, such as artificial upgrading, to get round state-determined wage rates. The

State Bank allowed wage fund transgressions for fear of jeopardizing output plans. (The leak associated with Y was later plugged by tighter regulations, which specified, for example, that overspending had to be made good within a matter of months.)

There were attempts to correct the financial imbalance by encouraging household savings (S), including what were in effect forced bond sales, but the massive increases in direct taxes that would have been needed were ruled out by the necessity to preserve work incentives. What was left was P. Retail prices were increased to move nearer to market clearing levels (thus causing turnover taxes, which were usually price-determined, to increase) and to soak up some of the excess purchasing power. (Note that in the 1930s the Soviet Union experienced full employment and open inflation while the reverse situation existed in the capitalist West.)

If retail prices are not raised sufficiently to achieve financial equilibrium, the result is 'repressed' inflation, which takes the form of queues, rationing and blocked purchasing power (i.e. forced savings or 'monetary overhang'). The extent to which repressed inflation existed in the Soviet Union in later decades, however, was a very controversial point. 'Monetary overhang' may be seen as an unplanned accumulation of cash and savings accounts because of the lack of desired goods and services. Work incentives are severely adversely affected by the uncertainty of being able to translate money income into command over real goods and services.

Real resource flows were determined in the plan, but were also reflected in the 'consolidated' budget at all levels of government. The major elements of expenditure were for the 'national economy', especially capital grants and subsidies, and for socio-cultural purposes, such as health and education. The budgetary category of defence significantly underestimated the real total, with elements such as weapons research tucked away under other headings. On the revenue side, the outstanding point to note was the overwhelming reliance on indirect rather than direct taxes. One important reason for this was to preserve the wage differentials needed for incentives in a market environment. The turnover tax was more important than profit payments in the early years. Since resource allocation was determined in the plan, the budget played a role in the quest for financial equilibrium.

Banking was a state monopoly in the traditional economic system. The State Bank (Gosbank) was a 'monobank': that is, there was not the separation between the central bank and private commercial banks to be found in the West. Gosbank fulfilled the following functions in that it: issued cash; had a monopoly of gold and foreign exchange reserves (a specialized Foreign Trade Bank dealing with international payments); acted as the fiscal agent of government, collecting budgetary revenue and disbursing current expenditures (a separate Construction Bank handling the doling out of investment grants); had a monopoly of short-term credits for working capital purposes in line with the state plan; monitored plan fulfilment by enterprises by means of the obligatory account. The Savings Bank serviced the needs of individuals. The overriding

task, then, reflecting the essentially passive role of money, was to aid plan fulfilment. Contrast this with the active exercise of monetary (and fiscal) policy in market economies.

In the traditional Soviet economic system the state had a monopoly of foreign trade and payments, the purpose being to help carry out party policy and shield the domestic from the international economy. The institutional hierarchy ran from the State Planning Commission to the Ministry of Foreign Trade and on to the foreign trade corporations, which normally specialized in a particular product or group of products and which operated on a *khozraschyot* basis. The industrial enterprise was assigned to a foreign trade corporation. The industrial enterprise that produced the good designated in its *tekhpromfinplan* as an export did not receive the world price but the domestic wholesale price, with appropriate adjustments in case of factors such as quality differences. The ultimate user of an import was charged the price of its nearest domestic substitute.

With direct control exercised over exports and imports, tariffs lost their conventional significance as protectors of home industry and sources of budgetary revenue. Two-tariff schedules were used, however, as bargaining levers with the West in the quest for 'most favoured nation' treatment (the lowest tariff applying to all).

In the traditional Soviet economic system the rouble was an inconvertible currency. It was not freely convertible into gold or other currencies and was not, therefore, subject to supply and demand forces in world foreign exchange markets. There was a multiple exchange rate system (the term 'coefficients' was often used), with various rates for different products or groups of products. The separation of domestic and world prices resulting from the state monopoly of foreign exchange ensured that exchange rates were arbitrarily determined (with the exception of the tourist rate of exchange), with a tendency towards overvaluation. (Comecon - the Council of Mutual Economic Assistance - was founded in January 1949 and held its last meeting on 28 June 1991. Within this communist trading bloc there was also the phenomenon of 'goods inconvertibility'. If, for example, the Soviet Union had a trade surplus with another communist country, this could not be automatically converted into a claim on particular goods. The claim could only be met by negotiations with the latter country, which would then have to make provision in its central plan. See Jeffries 1993: Chapter 2 for an analysis of Comecon.)

In the traditional Soviet system, exports were viewed as a means of paying for the import of goods either totally unavailable or in short supply at home, goods deemed essential to fulfil national plans; exports were not seen, for example, as a means of achieving full employment. Inefficient domestic prices and arbitrarily determined exchange rates precluded a meaningful calculation of the gains from trade. The commodity structure of trade was determined by political factors (sales of armaments, for example), domestic resource endowment (the Soviet Union was the world's largest producer of oil) and the relative inefficiency of the economic system (reflected, for example, in difficulties selling manufactured goods in Western markets).

The separation of Soviet and foreign firms, except for perhaps contact over minor details such as precise delivery times, severely aggravated the problem of quality in production and marketing. Industrial enterprises produced according to plan and were unaffected by either competition in or, in any automatic sense, the movement of prices on the world market.

Lenin (who died in January 1924) tried to attract foreign capital and enterprise during the New Economic Policy of 1921–8. But he was not very successful. 'At the end of the NEP there were only fifty-nine foreign concessions, accounting for less than 1 per cent of the output of state industry' (Gregory and Stuart 1986: 63). Stalin forbad such concessions and it was not until 1 January 1987, under Mikhail Gorbachev (who became General Secretary of the Communist Party in March 1985), that direct foreign investment was next allowed.

All land in the Soviet Union belonged to the state, although other bodies were allowed use of it. The main agricultural production unit in the early system was not the state farm (sovkhoz), but the collective farm (kolkhoz). Collectivization during the 1930s was forced, bloody and brutal. Only a nominally independent co-operative, the kolkhoz was subject to state plans and delivery quotas at state-determined prices which sometimes bordered on the confiscatory. In 1936 the compulsory procurement price for wheat, plus handling costs, was 15 roubles a tonne; this wheat was sold to state milling enterprises at 107 roubles per tonne, the turnover tax thus amounting to 92 roubles (Nove 1961: 99). During the 1930s the compulsory procurement price for potatoes of 3.6 roubles a tonne contrasted with free market prices varying between 37 and 200 roubles a tonne.

Peasant income for work on the collective farm was residual in nature, constituting that remaining from gross revenue after deduction of all other costs, including social security and equipment. The workday (trudoden) was not literally a calendar day, but each particular piece of work was valued at so many workdays. Its value was not known until the end of the year, the residual being divided by the total number of workdays earned. This uncertainty, the infrequency and low levels of remuneration (in kind as well as in money), the negligible impact of individual effort on total farm income, and the fact that the burden of a poor harvest was placed on the shoulders of the peasants (there was even a man-made famine in areas such as the Ukraine) had a disastrous effect on incentives. Peasants devoted so much time to their private plots that a minimum number of days of collective work had to be introduced. Although severely restricted in terms of size and livestock holdings, these plots were a vital source of peasant cash income and of supply of such products as fruit and vegetables, dairy products and meat, which were either consumed in the household or sold on the free market. Private plots contributed 25 per cent of total agricultural output even in the late Soviet period.

We are dealing with a sector which ... still contributes over 25 per cent of total agricultural production and is still vitally important as a producer of potatoes, vegetables, eggs, fruit, meat and daily produce ... The little plots ... (most often 0.25 ha) receive a disproportionate amount of care and

attention ... [this] helps explain the ... fact that 3 per cent of the sown area produces 25 per cent or more of the produce.

(Nove 1977: 123)

There is still controversy about the role of agriculture as a source of forced savings, but collectivization provided food for the rapidly growing urban labour force, raw materials (like cotton) for industry and agricultural products for export (generally at relatively low cost to the state), and encouraged the movement of labour necessary for rapid industrialization. It was also hoped that collectivization would reap the benefits of industrial mechanization applied to large-scale farming units and secure party control in the countryside.

The cost of collectivization was great. In the short term there was a reduction in agricultural output of around a fifth during 1928-32 and massive slaughter of livestock by unwilling peasants. The long-run health of the sector also suffered, agriculture often being described as the Achilles heel of the economy. Apart from the income distribution system in collective farms (exacerbated by the large size of these multi-product farms, which made the link between effort and reward even more tenuous), the central planning of agriculture faced special problems. These problems included the following: (1) the variety of constantly changing local conditions and difficulties of supervision; (2) the vital importance of a *timely* supply of (typically scarce) inputs in a sector dominated by seasonal factors (e.g. spare parts for repair and maintenance); and (3) the fact that land and produce could be put to better use, as far as farmers were concerned. Other factors explaining the poor shape of Soviet agriculture were geographical features (deficiencies with regard to climate and soil), the poor rural infrastructure (e.g. roads) and the ageing rural population. The environmental legacy was quite horrendous, e.g. the effects of cotton production (via irrigation and fertilizers) on the poisoning and drastic shrinking of the Aral Sea.

### Appendix 2

# General issues in the transition from command to market economies

Appendix 2 relies heavily on Jeffries (2002a: 383–407).

In late 1989 the world witnessed the start of the stunning and unexpected collapse of communism in Eastern Europe. The Soviet president, Mikhail Gorbachev, was unwilling to use force to preserve Soviet control over the East European Comecon countries. Indeed, towards the end of 1991 the Soviet Union itself ceased to exist. Gorbachev did not intend this to happen but, again, he did not try to preserve it by force.

Not surprisingly, the question of how to handle the transition from 'communism' to 'capitalism' has led to immense controversy and problems. But while there are major areas of dispute as to how to handle the economic transition, it may be argued that the virulence of the debate often hides substantial areas of agreement.

Only the main aspects of the theoretical debate can be given here. There are two broad approaches to transition, 'big bang'/'shock therapy' and 'gradualism', although even definitions are not as clear as one might wish for. Thus 'large' privatization is a relatively lengthy process even in the former, while China's 'gradualism' includes relatively rapid agricultural reform. Vietnam has clearly been influenced by China, but the bundle of reforms in 1989–91 has a 'big bang'/'shock therapy' look about it.

'Big bang'/'shock therapy' is a programme of rapid and comprehensive market transformation (comprising a package of interdependent measures) coupled with macroeconomic stabilization where necessary. The terms 'big bang' and 'shock therapy' are often used interchangeably, while the term 'shock therapy' is more often than not used in a broad sense to cover both (1) severe austerity measures and (2) a rapid and comprehensive change in the economic system. But at times the term has been used in a narrower sense, referring only to (1). Current usage renders the composite term 'big bang'/'shock therapy' more appropriate. The measures constituting 'big bang'/'shock therapy' are as follows:

1 *Liberalization*. This includes the end of central planning and the freeing of prices in the context of a liberal international trade regime, i.e. a rapid

progression to a market economy. Rapid *current* account convertibility of the currency is recommended. (The Asian financial crisis began with an attack on the currency of Thailand in July 1997. Russia suffered its own financial crisis in August 1968. The crisis bolstered the arguments against undue haste in dismantling controls on the capital account.)

- 2 Privatization. The rapid expansion of the private sector through deregulation (i.e. freedom of entry into sectors of the economy by new enterprises) and the privatization of state enterprises is recommended. It is acknowledged that 'large' privatization will take longer than 'small' privatization. In the meantime the remaining state enterprises will need to be disciplined by measures such as demonopolization, exposure to domestic and foreign competition and the ending of 'soft budget constraints'. (Where soft budget constraints operate inefficient enterprises are bailed out by the government through such means as direct budget subsidies, soft credits from state banks and tax concessions including write-offs.)
- 3 Stabilization. Macroeconomic stabilization is needed in order to bring inflation under control and generate confidence in domestic money. Severe austerity measures are necessary in cases of chronic inflationary pressures. If repressed inflation exists a 'big bang' liberalization of prices will transform this into open inflation, i.e. if a 'monetary overhang' exists these forced savings will be eroded in real terms.

Proponents such as Jeffrey Sachs (1994) also recommend a 'social safety net' (especially an unemployment compensation scheme) and see the need for a generous international aid (and trade) policy.

There are various arguments supporting 'big bang'/'shock therapy':

- It is argued that the various measures are interdependent, e.g. price liberalization is feasible even with uncompetitive market structures if there is simultaneous foreign trade liberalization, foreign companies thus providing the competition. (The details of price liberalization are dealt with below.)
- 2 'Big bang'/'shock therapy' provides unambiguous signals of intent as to the direction of reform.
- 3 The bureaucracy is bypassed and the rapid reduction of state regulations helps deter corruption and crime.
- 4 Vested interests in shrinking sectors (which attempt to delay reform) are outweighed by new vested interests in favour of reform.
- 5 Governments can make use of a brief political 'honeymoon period' after being elected to undertake rapid, comprehensive and often painful measures. This 'window of opportunity' is to be used to ensure that the reform process becomes irreversible, i.e. the further the process of reform proceeds the more infeasible it becomes to return to the old system.

The advocates of 'big bang'/'shock therapy' also argue that they have been vindicated by actual developments in the transitional countries of Eastern Europe and the former Soviet Union. Frequent mention is made of the fact that Poland (which, in 1990, was the first to start rapid and comprehensive change) was the first to return to positive growth (in 1992) and the first to regain its 1989 level of national output (in 1996). Thus Sachs (1996a: 128) argues that 'The first lesson of the first five years is that rapid systemic transformation can work. It is possible to introduce the institutions of a market economy within five years and to reestablish economic growth.'

Major advocates of 'big bang'/'shock therapy' include Jeffrey Sachs, Anders Åslund and Leszek Balcerowicz (who was Poland's finance minister 1989–92 and implemented the first actual 'big bang'/'shock therapy'; he was reappointed as Poland's finance minister on 31 October 1997 but was replaced on 8 June 2000; in early 2001 he became chairman of Poland's central bank).

It is worth exploring the controversy about 'big bang' price liberalization versus gradual price reform. In the former 'communist' countries most prices were determined by the state. There is a debate about (1) whether economies in transition should free most prices at once (typical exceptions including energy prices and housing rents) as part of a programme of rapid and comprehensive economic reform and macroeconomic stabilization or (2) whether to allow the market to determine prices only gradually over time.

Among the arguments in favour of rapid price liberalization are the following:

- 1 The need to make use of the political 'honeymoon' period to make painful economic decisions.
- 2 Market-determined prices lead to a more efficient allocation of resources.
- Queues and forced substitution of goods are eliminated when price controls are ended. Confidence is restored in the currency. The benefits of the elimination of queues include more leisure time and greater incentives to work (since money income can command control over goods and services). There is the argument that the welfare costs of monopoly are less than those of queues. Controls over prices and the consequent shortages encourage corruption and 'rent-seeking' (the seeking of favours, such as subsidies, from the government).
- 4 Repressed inflationary pressures are eased as any 'monetary overhang' (forced savings) is eroded. Although the release of most price controls leads to an immediate increase in open inflation, macroeconomic stabilization policies will gradually bring down the rate of increase in the general price level.
- 5 The liberalization of foreign trade, including rapid current account convertibility, is emphasized. 'International competition would provide the competition in the internal market that ... firms themselves would not provide at the start. If free trade could be introduced, prices could be

liberalized' (Sachs 1994: 50). Likewise, Balcerowicz (1994: 28) recommends that 'a comprehensive price liberalization should be complemented by comprehensive liberalization of foreign trade'. It is thus not only inadvisable but not even necessary to wait until privatization and competitive domestic conditions are created. (The existence of a healthy private sector at the start of the transition would, of course, enhance the supply response. Thus Poland was in a better position than Russia to engage in 'big bang' price liberalization.)

- 6 'Big bang' price rises will lead to dishoarding and increased supply, while demand will be reduced (thus encouraging a subsequent fall in prices). With staged price increases supplies will be withheld from the market in anticipation of future price rises, while consumers try to speed up their purchases.
- Woo (1994: 278–9) argues that the common consequence of partial price reform is that the state is obliged to accede to requests for subsidies from loss-making firms that have their output prices controlled. There is little incentive for such firms to increase their efficiency because it is hard for the government to determine whether the losses are due to price controls or to mismanagement and misappropriation. Similarly, Balcerowicz believes that slow price liberalization would prolong the existence of distorted prices. Thus the performance of enterprises cannot be judged reliably and the soft budget constraint is likely to persist as loss-makers are able to blame distorted prices.

Among the arguments in favour of gradual price reform are the following:

- The communist legacy was a structure of industry dominated by large stateowned enterprises. Releasing most prices in these circumstances would not lead to the sort of elastic supply responses assumed by 'big bang' advocates, while monopoly profits on a large scale would be made. Monopoly price rises would increase inflationary pressures. Thus prices are best released gradually, in line with privatization (defined broadly to include the creation of new firms) and the creation of more competitive conditions through demonopolization and regulation of remaining monopolies. Tsang (1996: 190) forcibly argues against a sudden freeing of prices: 'The price elasticity of supply is so low that the inflation rate will shoot up to unprecedented levels, seriously derailing production and generating extreme impacts on income distribution and people's livelihood . . . The monopolists in the CPEs [centrally planned economies] may simply get abnormal profits ... The non-monopolists will not be able to cope with the huge rises in production costs and will probably suffer huge losses ... Together, these phenomena may generate a serious situation of stagflation, which not only threatens the short-term prospects of reform, but also the long-term growth potential of the economy.' (Note the arguments against the rapid liberalization of foreign trade below.)
- 2 If macroeconomic stabilization measures are not successfully taken the

price rises could set off a price—wage spiral. McKinnon (1994: 462) argues that 'the big bang argument for total price decontrol is flawed if the important actors bidding for scarce resources have soft budget constraints'. Indeed, 'until budget constraints are hardened, uncontrolled bidding by state enterprises will cause the producer price to increase indefinitely'. (Russia in 1992 may be cited as an example. There was hyperinflation.)

- 3 There is the danger of social unrest as the real value of savings is rapidly eroded by large price rises. This danger is enhanced if increases in money wages and pensions are not kept in line with price rises as macroeconomic stabilization measures are implemented.
- 4 Foreign aid may be inadequate and/or not synchronized with the ending of price controls.
- 5 China has shown that gradual price reform is compatible with an impressive economic performance. Hussain and Stern (1994: 7) argue that one lesson of the Chinese experience is that 'market transactions can flourish even under a heavily distorted price structure and in particular economic sectors, whilst others remain closed. Once established they themselves can become a powerful force for a rationalization of prices. Experience with market transactions enhances the capacity of agents to adapt to changes in relative prices.'

The advocates of 'gradualism' criticize various aspects of 'big bang'/'shock therapy':

- 1 There are doubts about the feasibility of achieving so much so quickly (although the precise time scale involved is another debate in itself). The proponents of 'big bang'/'shock therapy', it is argued, are generally too optimistic about the time needed to adjust, e.g. the time needed for appropriate institutions (political, legal and economic), attitudes and behaviour to develop (including informal codes of behaviour such as 'gentlemen's agreements'). There is, for example, a vital need for an efficient and honest legal system to enforce contracts and property rights. (This is dealt with in detail on pp. 110–13, in the section on seeking a compromise.)
- 2 The cost of making a mistake in a rapid and comprehensive programme is likely to be large. With a more gradual approach the cost of smaller errors can be contained and corrective action taken more quickly. This may encourage a more positive reaction to the whole reform process among the population. A modest but successful start to the reforms would also boost political support. (China prior to 1978 had a history of huge, albeit left-wing mistakes.)
- 3 The wisdom of attempting 'big bang'/'shock therapy' is questioned because severe strains could be put on society. There is the danger that democracy and markets could become associated in many people's eyes with intolerable hardship for too long a period of time, exacerbated by growing inequalities in income and wealth (often earned in shady or downright criminal

ways in the 'Wild East' stage of transition). It is argued that proponents were generally too optimistic about the prospective costs of transition, including falling output and living standards and increasing open unemployment.

- 4 A liberal foreign trade policy (e.g. low tariffs) could have severe adverse effects on domestic producers, especially if there is a fixed exchange rate regime, i.e. too early and radical an opening to foreign competition could decimate generally relatively inefficient domestic industry in transitional economies.
- Tsang (1996) stresses the problems arising from the difficulty of asset valuation and from the inheritance of 'implicit contracts' from the socialist era: low wages in return for housing subsidies (p. 186); 'the implicit rights of many citizens to the previously state-owned property and assets' (p. 185); 'the worker's implicit rights to the state enterprises' (p. 187). The neglect of such contracts would 'lead to unfair and counter-productive outcomes' (p. 185).
- A sub-division of gradualism is the 'evolutionary' school typified by the views of Peter Murrell (1993: 113). Evolutionists like Murrell advocate a gradual phasing out of the old institutional framework, e.g. the private sector should be actively encouraged to grow as opposed to 'forced' privatization (p. 119).
- 7 The example of China since 1978 shows the virtues of gradualism.

But while there is general agreement that the sort of 'tinkering around' indulged in by most of the communist countries was largely a dead end, China's overall economic success since 1978 has led to a considerable debate about whether the transitional countries of Eastern Europe and the former Soviet Union should adopt (or, rather, should have adopted) China's model. Woo goes so far as to say that 'gradual reform in China was not the optimal reform for China' (1994: 306). But sceptics, recognizing China's economic successes, generally put forward the following arguments against its relevance in Eastern Europe and the former Soviet Union:

- 1 China's position in 1978 was generally more favourable in terms of inflation, foreign debt and trade with the West. Initial circumstances in countries can vary and thus policy responses may have to differ.
- 2 The critical aspect in which China differed was the structure of the economy. The World Bank (1996: 21) points out that in 1978, 71 per cent of the work force were employed in agriculture and only 15 per cent in industry (the respective figures for 1994 being 58 per cent and 18 per cent). By way of contrast the respective 1990 figures for Russia were 13 per cent and 42 per cent.
- 3 Sachs and Woo (1994: 103–43) argue that rapid growth in China was possible because the large agricultural sector contained vast surplus labour and did not enjoy subsidies. This labour fuelled the rapidly growing new

industries in the non-state sector, while the reallocation of labour allowed all groups to gain. In Eastern Europe and the former Soviet Union the much larger state sector has impeded the necessary structural adjustments. Gradualism would not work because curtailing subsidies would produce losers who would use their power to resist this adjustment. Gradualism would not result in sufficient productivity gains to overcome the losses. Layard (*Economics of Transition*, 1993, vol. 1, no. 3, p. 358) argues that Russia has a huge industrial sector which must be improved; it is no good simply to rely on entry by new firms. Others, too, point to the necessity of restructuring and privatizing the large industrial sectors in Eastern Europe and the former Soviet Union. China has been able to continue subsidizing its industrial sector because it is relatively small.

- 4 Even Nolan (1996b), a strong defender of the Chinese model, admits that 'careful study of China's reform path would have been relevant to devising a reform strategy for the country in the late 1980s. It is not much relevant to Russia's current situation' (p. 248). 'The fundamental cause of the Soviet collapse lies in the destruction of the nation state and the state administrative apparatus under Gorbachev ... To be successful an economic reform strategy requires political stability and effective government ... Once the state apparatus had collapsed the range of options for any successor government was greatly reduced' (pp. 242–3). 'Without a coherent, effective state apparatus ... it was impossible to follow an "East Asian" approach to the transition' (p. 244). (There are, of course, objections to a one-party state in itself.)
- For China's township-village enterprises to work there is need for a culture in which decisions can be made in the absence of conventional property rights. 'The key missing element [in conventional property rights theory] is the ability of a group to solve conflicts internally, without explicit rules, laws, rights, procedures and so forth' (Weitzman and Xu 1993: 28).
- 6 China was able to tap the vast capital and entrepreneurial resources of ethnic Chinese in other countries. (This source of capital was adversely affected by the Asian financial crisis, which began in July 1997.)

There has been a quest for compromise. Since everybody agrees that not 'everything' can be done 'at once', the question of the correct 'sequencing' of reforms comes to the fore. Sequencing explores the merits and demerits of various sequences or orders in which reforms can be introduced. Economists are at odds over issues such as the following: (1) whether price liberalization should precede or accompany/follow demonopolization/privatization; (2) whether the restructuring of the typically very large enterprises (e.g. breaking them up) should precede or follow privatization; (3) when to liberalize the financial system.

Another sequencing problem is how quickly to liberalize the foreign trade sector. Those advocating gradual change argue that too early and radical an opening to foreign competition could decimate generally relatively inefficient domestic industry in transitional economies. The Asian financial crisis started in July 1997 with a speculative attack on the currency of Thailand and then spread

to other emerging markets. Russia started to be affected in October 1997 and May 1998 was a bad month. But disaster struck on 17 August 1998 when Russia was forced to devalue the rouble and default on its domestic debt. The Asian/Russian financial crisis bolstered the arguments against undue haste in dismantling controls on the capital account. 'Because implementation of the necessary structural and macroeconomic measures requires time to become effective governments should explore market-based means of containing the volatility of short-term capital flows while significant vulnerability remains' (EBRD 1998b: vi—vii).

There is increasing recognition that the institutional basis of a market economy takes a long time to put in place.

Some aspects of a market economy can and have been created quickly in transition economies, in particular through market liberalization and privatization. However, developing the institutions and business practices required for a well-functioning market economy takes much longer ... Developing the capacity of the state to regulate effectively, as well as to provide other institutional arrangements required in a market economy, demands a radical reorientation of governance away from the direct control of economic activity to an effective supporting role. This reorientation inevitably takes time since it depends on the development of the necessary skills and practices. As the example of regulation shows, much remains to be done in transition economies in building this new role for the state.

(EBRD 1998b: iv)

'The financial systems of the transition economies remain underdeveloped, burdened by the legacies of central planning and the structural and macroeconomic upheavals early in the transition' (EBRD 1999b: 4). 'The evidence now shows clearly that the central lesson of transition is that markets will not function well without supporting institutions, a state that carries through its basic responsibilities and a healthy civil society' (p. 5).

Some aspects of a market economy can and have been created quickly, in particular through liberalization and privatization. However, developing the institutions and behaviour required for well-functioning markets and private enterprise takes much longer. The promotion of effective institutions, such as government structures, laws and regulations and the sound behaviour of governments, enterprises and financial institutions lies at the heart of the challenge of transition as it enters the next decade' (p. iv). 'Building institutions that support markets and private enterprise remains a fundamental challenge of transition, but establishing the appropriate laws and regulations is not sufficient. They must be embodied in the social norms, practices and behaviours of both government and the private sector — institutions that need social capital and social foundations,

'Social capital may be defined in terms of voluntary compliance with established laws, trust, co-operative behaviour and basic codes of conduct' (p. 5). 'In the more advanced countries rapid liberalization and sustained macroeconomic stabilization have laid the basis for gradual institutional change' (p. vi). 'Countries that have achieved sustained progress in liberalization, macroeconomic stabilization, small-scale privatization and openness to foreign trade and investment have also advanced steadily in the development of market institutions' (p. 38).

The World Bank's conclusion is interesting. 'Gradual, partial reforms were not an option for most ... countries' of Eastern Europe and the former Soviet Union (World Bank 1996: 23).

Differences between countries are very important, both in setting the feasible range of policy choice and in determining the response to reforms. Which works best, rapid or gradual reform? This question has no single or simple answer . . . Nevertheless, for the bulk of these economies [the countries of the former Soviet Union and Central and Eastern Europe] the answer is now clear: faster and more consistent reform is better.

(p. 143)

A country's starting circumstances, both economic and political, greatly affect the range of reform policies and outcomes open to it. Within this range, however, the clear lesson of the past few years' reforms is that, regardless of the starting point, decisive and consistent reform pays off.

(p. 9)

'In every case [including China and Vietnam] what matters is the breadth of the policy reforms attempted and the consistency with which they are maintained' (p. 21). 'Consistent policies, combining liberalization of markets, trade and new business entry with reasonable price stability, can achieve a great deal – even in countries lacking clear property rights and strong market institutions' (p. 142).

Mitra and Selowsky (2002: 48–51) summarize the findings of *The First Ten Years: Analysis and Lessons for Eastern Europe and the Former Soviet Union* (World Bank 2002). 'We asked what explained the differences in economic performance: initial conditions, policy reforms or external shocks, such as war and civil strife.' Initial conditions included the following: the structure of the economy (such as the share of industry and trade dependence on other communist countries); initial distortions (such as repressed inflation and black market exchange rates); and institutions (such as experience of markets and nationhood prior to transition). The extent of reforms was measured by combining the World Bank's liberalization index with the transition indicators of the EBRD – which include policies to increase the role of markets in resource allocation and reforms ensuring an efficient functioning of markets. One of the key findings was as follows:

The speed of reforms seems to matter. The analysis shows that annual output is related to the level of the reform index – that is, cumulative policy

reforms. The quicker that reform level is achieved and sustained, the sooner the economy can attain faster growth.

(p.49)

The question essentially revolves around how much can or should be attempted at the 'same' time. Scepticism about the wisdom and feasibility of a 'big bang' solution must be countered by awareness that doing next to nothing brings about economic catastrophe. (In the early years of Ukrainian independence there was hyperinflation and collapsing output at the same time, hence the term 'Ukrainianization'.) Consequently, there may be merit in the idea of (1) a 'critical mass' of co-ordinated measures on a sufficient scale to provide an irreversible and ongoing momentum to the reform process and (2) a credible programme for which a democratically elected government must seek and maintain popular approval (as stressed by the United Nations Economic Commission for Europe: 1993: 9). Choosing the appropriate blend and scale of measures best suited to individual countries is a political art rather than an economic 'science'. The initial circumstances vary between countries, such as the severity of macroeconomic disequilibrium, the size of the private sector, the extent of the previous reforms, the burden of foreign debt and the availability of aid.

The debate seems to boil down to what is politically and economically feasible. As Clague (1992: 15) points out, the difference between the 'big bang' and evolutionary approaches 'lies primarily in judgements about what is politically feasible' (Clague 1992: 15). In similar fashion, Åslund (1994a: 37) has concluded that 'the interesting limitation [on swift and comprehensive change] is what is practically and politically possible, and nothing else'. Portes (1994: 1180) usefully adds:

The range of sensible strategies is limited and there may be little margin for choice. Some elements of stabilization and liberalization make sense only when done simultaneously. The range observed across countries is in fact surprisingly limited and mainly a function of initial conditions.

Rhetoric has often concealed considerable agreement in a new area of economics where clear definitions are often hard to come by. Many of the alleged protagonists would probably agree that as much as possible should be done as quickly as possible, but the problem is that this begs all sorts of questions.

There are special problems facing transitional economies in privatizing industrial enterprises. It is 'large' privatization that is emphasized here, namely the privatization of medium-sized and large enterprises. 'Small' privatization (of shops and restaurants, for example) presents far fewer difficulties and has typically been rapid in transitional economies. There is also much less resistance socially to small privatization, for the benefits in terms of much needed improvements in the quantity and quality of consumer goods are quickly apparent.

The sheer scale of state ownership in the former socialist ('communist') economies makes the issue of privatization a vital one. The communist legacy

also included the following: one of generally inefficient enterprises (which were often social units as well, providing benefits such as health care); managers working in a non-competitive environment and often chosen for political loyalty rather than expertise; and monopolistic structures of industry.

Property rights include the right to use an asset, to enjoy any income generated by the asset and to sell the asset. Such rights give an incentive to use property efficiently. State ownership (and 'social ownership', as in the former Yugoslavia) has the potential for property abuse ('everybody's property'). This is especially the case where, as in command economies, a 'soft budget constraint' operates, i.e. where inefficient enterprises are kept in operation by governments unwilling to see unemployment and closures on a large scale. Support includes direct budget subsidies, soft credit from state banks and tax concessions (even write-offs). (Note that 'commercialization' or 'corporatization', which helps clarify property rights, involves the conversion of state enterprises into joint stock companies free of ministerial control. The state owns the shares at first but these can be sold later. The issue of whether to restructure enterprises before or after privatization is not considered here.)

The important (and academically non-controversial) question of encouraging new private firms is not considered here. But lifting constraints such as those on employment can be done very quickly.

Research shows start-up firms [greenfield activity] are overwhelmingly most efficient and superior to even the best privatized firms . . . An equally important conclusion is how the presence of start-up firms contributes to the appropriate competitive environment and puts pressure on newly privatized firms of all types to achieve comparable efficiency.

(Havrylyshyn and McGettigan 1999: 10)

A relatively slow process of large privatization can still bring benefits when state industrial enterprises are made to face 'hard budget constraints' (i.e. no automatic bail-outs by the state) and competition from domestic and foreign companies. 'Investigation shows that Polish managers of state firms performed well because they expected privatization and hoped their achievements would assure their survival when it came' (Havrylyshyn and McGettigan 1999: 5). (But Poland has had problems with sectors such as coal, which continues to rely on state subsidies.)

The potential for abuse is massive. Thus there is need for an honest, democratic and hence accountable state to control the process of privatization (and for an efficient and honest legal system to enforce contracts and property rights). Otherwise state assets may be taken over in ways which vary in their degree of legality and which benefit only certain sections of society. 'Spontaneous' privatization essentially means that managers and other members of the *nomenklatura*, in unregulated fashion, get their hands on state property at below market prices. 'Those entrusted with state assets take possession of them in one way or another or initiate arrangements for their disposal to private agents.'

Earlier forms of uncontrolled or 'wild' spontaneous privatization in Eastern Europe involved 'a more of less sophisticated theft from the state or society as a whole', such as obtaining shares or guaranteed jobs in the new companies (United Nations Economic Commission for Europe 1992: 231). The creation of a small number of fabulously wealthy 'financial oligarchs' in Russia is often quoted as an example of abuse on a gigantic scale (e.g. the infamous 'shares-forloans' scheme of late 1995 resulted in the transfer of valuable assets for a fraction of their real worth).

There are a variety of methods of privatization, although in reality privatization programmes are mixtures (packages) of some sort or another. The varying emphases in these mixed programmes reflect political as well as economic circumstances. Russia's weak central (federal) government, in what was called its 'insider' stage of privatization which lasted until mid-1994 (although it involved some vouchers), claimed that it needed to 'buy off' a powerful managerial lobby (in a society sceptical about the value of privatization). In contrast, the former Czechoslovakia adopted a mass or voucher privatization programme. The country had a strong central government which was not faced by severe inflationary pressures and, therefore, had less need to raise revenue for budgetary purposes. Although burdened by a large per capita foreign debt, Hungary has not sought debt forgiveness. Hence revenue raised from sales has been particularly important. The director of the Slovenian privatization agency has said that 'the political conditions here would make it impossible to do it all through the state like in Germany, because all managers here believe they already own the companies' (Patrick Blum, FT, Survey, 12 April 1994, p. 32).

There are pros and cons of all the various schemes:

- 1 The sale of state-owned industrial enterprises to 'outsiders' (domestic or foreign).
- 2 Management–employee buy-outs. Existing managers and employees (referred to as 'insiders') may be allowed to use vouchers and/or cash to purchase all or a controlling portion of shares in 'their' enterprises, perhaps on relatively favourable terms. With management–employee buy-outs shares of an enterprise are thus sold or given to some combination of managers and other employees. Straight management buy-outs are possible at one extreme.
- 3 Mass (voucher) privatization. In a programme of mass privatization citizens (all or those deemed eligible by age, for example) are allocated (equally or with account taken of such things as length of employment) vouchers for free or at nominal cost. These vouchers may or may not be tradable for cash. But vouchers can be exchanged directly for shares in enterprises to be privatized, in private investment funds which then buy shares in enterprises, or in (perhaps temporary) government-created (but not run) investment funds that own shares in enterprises. This 'top-down' approach is more feasible in a country where the central government is strong (as in the former Czechoslovakia).

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4 Restitution. Property may be returned in physical form ('natural' restitution) to former owners or their heirs. Because of the problems associated with physical restitution there may be financial compensation or compensation in the form of vouchers exchangeable for shares in enterprises to be privatized. Uncertainty of ownership and long delays in sorting out claims to property were among the problems that forced reunified Germany to substantially amend legislation which initially emphasized physical restitution. (Note that as a rule restitution has typically been much more important in agriculture and housing than in industry.)

## Appendix 3

#### Bird flu

On 13 January [2004] the World Health Organization announced that two Vietnamese children and one adult had died of ... bird flu ... Vietnam, South Korea and Japan are scrambling to control a fresh epidemic ... So far, Vietnam appears to be the only country where the dreaded H5N1 avian influenza is affecting humans ... The big question is whether human-to-human transmission will be detected ... The epidemic has triggered a mass poultry slaughter in all three countries.

(*FEER*, 22 January 2004, p. 11)

'The bird flu... could become a bigger problem for the region than SARS... The same strain of bird flu killed six people in Hong Kong in 1997' (*IHT*, 15 January 2004, p. 3).

'No confirmed or suspected deaths have been reported in South Korea, Japan and Taiwan, which are all coping with their own bird flu outbreaks' (www.iht.com, 19 January 2004).

An outbreak of the virulent H5N1 strain of bird flu in Hong Kong in 1997 infected eighteen people, killing six. It was the first time an avian virus had been observed crossing directly to humans. Hong Kong authorities slaughtered the territory's 1.5 million chickens. Hong Kong was hit by a second bird flu scare in 2001. Another mass slaughter was ordered ... In February 2003 ... in Hong Kong two cases of H5N1 were confirmed in a nine-year-old boy and his father, who died ... In July 2003 a flu outbreak in Vietnam led to the cull of 20,000 chickens.

(FEER, 29 January 2004, pp. 12–13)

Indonesia reported Sunday [25 January 2004] that millions of poultry had fallen ill with avian influenza ... South Korea, Japan, Vietnam, Cambodia, Thailand and Hong Kong have previously confirmed the disease in birds, while Taiwan has reported a less dangerous strain of bird flu in some chickens there.

(*IHT*, 26 January 2004, p. 20)

'The virus has infected millions of chickens in Thailand, Vietnam, Cambodia, South Korea, Japan and Taiwan' (www.iht.com, 26 January 2004).

China said Tuesday [27 January] that avian flu had been found in fowl in three regions, as three international agencies issued a global appeal for donor nations to help bankroll Asia's fight to forestall a lethal flu epidemic in humans ... Ten Asian governments have reported outbreaks among poultry, with Laos joining the list Tuesday.

(www.iht.com, 27 January 2004; IHT, 28 January 2004, p. 4)

China denied a British publication's report blaming it for the beginning of the epidemic ... The *New Scientist* said it appeared that the bird flu cases began a year ago, most likely in China. It alleged the Chinese authorities hid the emergence of the disease.

(IHT, 30 January 2004, p. 5)

The WHO has said that the current outbreak of H5N1 in birds started in South Korea in December [2003]. However, *New Scientist*, a British magazine, said experts had told it that the outbreak probably began a few months earlier in China.

(The Economist, 31 January 2004, p. 56)

The WHO ... said Sunday [1 February] that China ... must improve its detection and handling of diseases ... [China] must quickly improve its surveillance network of animal diseases or face increased risks that the strain of the bird flu could jump to humans there ... China announced new suspected infections of bird flu in two more provinces on Saturday [31 January] ... The WHO has said that China's chances of halting bird flu are dwindling.

(*IHT*, 2 February 2004, p. 2)

A teenage boy in Vietnam and a woman in Thailand on Monday [2 February] became the latest deaths from bird flu ... [which] has now killed twelve people ... The two countries are the only ones where humans have died from this strain of avian influenza ... Infections in people have been reported only in Thailand and Vietnam ... Bird flu spread between humans in a 1997 outbreak in Hong Kong that killed six people.

(www.iht.com, 2 February 2004)

'China reported more confirmed and suspected outbreaks of the virus in its poultry stocks' (www.iht.com, 3 February 2004).

The death toll from Asia's bird flu outbreak rose to fifteen on Wednesday [4 February] as the virus ravaged poultry flocks in ten countries and spread in China. Vietnamese authorities said tests confirmed a six-year-old boy

who died earlier in the week had been infected with the H5N1 virus ... Twelve of China's thirty-one provinces have confirmed or suspected outbreaks of the disease. The UN agency said bird flu had been confirmed in fifty-three of Vietnam's sixty-four provinces ... The death of a seventeenyear-old girl from avian flu in Vietnam was the country's tenth death from the virus. All fourteen deaths in the region so far are believed to have resulted from direct contact with infected poultry.

(www.iht.com, 4 February 2004)

Asia's human death toll from bird flu rose to fifteen on Wednesday [4 February], while China addressed its broadening zone of infected poultry by creating a bird flu headquarters . . . New deaths were announced Wednesday in Vietnam, where a sixteen-year-old girl became the country's tenth bird flu fatality, and Thailand, where a six-year-old boy died, bringing that country's total to five. Human cases of bird flu have not been reported in any other countries. China said Wednesday that it had no human infections, but that officials were investigating cases in poultry in twelve of its thirtyone regions.

(*IHT*, 5 February 2004, p. 2)

'The death toll from the bird flu epidemic sweeping through Asia rose to sixteen on Thursday [5 February] ... as Vietnam announced that a sixteen-yearold girl had become its eleventh flu victim' (www.iht.com, 5 February 2004).

The WHO said on Thursday [12 February] that it could find no evidence that human-to human transmission of bird flu was responsible for the deaths of two Vietnamese sisters last month [January]. Although the new test results could not prove the sisters did not catch the illness from their brother, they were nonetheless reassuring, officials from the UN health agency said.

(www.iht.com, 12 February 2004)

'Ten governments in the region have dealt with strains of bird flu since South Korean officials reported an outbreak there in early December [2003]' (www.iht.com, 13 February 2004).

Bird flu claimed its twentieth fatality in Asia [on 14 February] . . . with the death of a thirteen-year-old boy in Thailand ... It is confirmed to have killed six people in Thailand and fourteen in Vietnam ... WHO officials have expressed concerns that China may also be suffering human cases, given the broad range of poultry infections there.

(*IHT*, 16 February 2004, p. 2)

'[In March] in Vietnam a twelve-year-old boy died, taking Asia's death toll from the virus to twenty-four' (FEER, 1 April 2004, p. 13).

According to the available data, all infected people contracted the virus from birds. There is no confirmed evidence of human-to-human transmission yet ... Airborne influenza viruses are much more easily spread than SARS, partly because still-healthy carriers shed large amounts of virus. This is why the basic containment measures – isolation and quarantine – that worked so well for SARS would not work for a recombined avian–human influenza.

(IHT, 12 April 2004, p. 8)

'China reported a new outbreak of bird flu Tuesday [6 July 2004] and Thailand said it had a suspected case' (*IHT*, 7 July 2004, p. 8). 'In China official said they had found a single infected bird . . . in Anhui province' (www.iht.com, 7 July 2004).

Scientists voiced growing alarm on Wednesday [7 July] that avian flu may have become impossible to eradicate in Asia and could eventually spread easily among humans. The warning came as China, Thailand and Vietnam, which all found chickens dying of the disease again in the past week, began culling thousands of birds in the hope of preventing a human outbreak Earlier this year [2004] ten countries reported cases in poultry and more than 100 million chickens were killed ... [A journal article] concludes that the disease is firmly rooted in domesticated ducks in southern China.

(www.iht.com, 7 July 2004; IHT, 8 July 2004, p. 8)

A senior Chinese health official disclosed on Friday [20 August] her country had found a lethal strain of avian influenza among pigs at several farms, a discovery that could move the virus one step closer to becoming a global problem for humans ... The A(H5N1) strain of avian influenza, or bird flu, infected chickens in at least eight countries this year [2004] and killed twenty-three of the thirty-four people in Thailand and Vietnam who caught the disease directly from poultry ... The discovery of the bird flu strain in pigs is alarming ... because scientists have long regarded pigs as an important conduit for new influenza strains in humans. Most kinds of influenza viruses live only in birds, not people. But pigs can be infected with both bird strains and human strains of influenza. When these viruses mix and reassort genes inside a pig, the result can be a new virus for which humans have little immunity.

(*IHT*, 21 August 2004, p. 5)

'The avian influenza virus ... has crossed another species barrier to infect cats, and can be spread among them as well, Dutch scientists have found' (www.iht.com, 3 September 2004).

'An outbreak of A(H5NI) in Hong Kong in 1997 included several probable cases of human-to-human transmission' (*IHT*, 29 September 2004, p. 5). '[A Thai lady] is the first person believed to have contracted the disease from

another human, rather than poultry . . . The country's tenth confirmed fatality . . . [Her] daughter was cremated and there is no proof she died of A(H5N1) avian influenza ' (www.iht.com, 29 September 2004). 'Thai and international health officials confirmed on Tuesday that the first probable human-to-human transmission had been recorded in Thailand' (*IHT*, 30 September 2004, p. 6).

Vietnam confirmed a new bird flu death to bring Asia's human toll to thirty on Wednesday [29 September] ... A baby in Hanoi became Vietnam's twentieth victim ... The recent deaths in Vietnam and Thailand are part of a second wave of outbreaks since ... the start of this year [2004].

(www.iht.com, 29 September 2004)

The strain, A(H5N1) has killed thirty of the forty-two south-east Asians it infected in the past year . . . A handful of cases of human-to-human transmission may have occurred during bird flu outbreaks in Hong Kong in 1997 and in Europe a year ago, but neither resulted in a pandemic.

(www.iht.com, 1 October 2004)

The human toll from bird flu reached thirty-one on Monday [4 October] when Thailand confirmed that a nine-year-old girl had died from the disease ... The girl's death brought to eleven the number of human deaths in Thailand ... In Vietnam, the only other country to suffer human cases of the virus, twenty people have died.

(www.iht.com, 4 October 2004)

'As more human bird flu cases occur, the chances become greater for the deadly virus to acquire more ability to be transmitted from person to person. That could spark the next global pandemic – possibly killing millions' (www.iht.com, 21 January 2005).

A conference expected to attract international scientists and representatives from countries battling bird flu will open Wednesday [23 February 2005] in Ho Chi Minh City ... organized by the World Organization for Animal Health and the Food and Agriculture Organization ..... Vietnam is the only country to have suffered bird flu-related human deaths this year [2005]. It has been the worst hit by the disease, with thirty-three human deaths from two outbreaks of the A(H5N1) strain of the bird flu virus since late 2003 ... The bird flu epidemic, which has hit several Asian countries and has killed forty-five people since 2003 ... Bird flu has already affected Cambodia, Thailand and Vietnam in 2005, after being discovered in eight countries in 2004, including China, Indonesia, Japan, Laos and South Korea. Twelve have died in Thailand.

(www.iht.com, 21 February 2005)

Shigeru Omi (regional director of the World Health Organization):

[The virus appeared to be] evolving in ways that increasingly favour the start of a [human] pandemic . . . We at the WHO believe the world is now in the gravest possible danger of a pandemic. We must all work together to make sure what is happening in the animal world does not spill over and cause health emergencies for humans . . . There are many terrible diseases in Asia, but this one is the most urgent because global health is now at risk . . . We are now confident in our judgement that this virus has become endemic in Asia. We have been through three waves of human cases of the virus in Vietnam over the last year.

(FT, 24 February 2005, p. 11; www.iht.com, 24 February 2005)

Since 2003 avian flu has killed forty-six people – about 80 per cent of those identified as infected . . . Two may have caught it from other humans. International health officials fear the virus may mutate – or recombine with a human flu virus – into a form easily transmitted from person to person.

(*FT*, 24 February 2005, p. 11)

'A sixty-nine-year-old man has died of bird flu in Vietnam, the fourteenth fatality from the disease in the country this year' (*IHT*, 28 February 2005, p. 6).

'[This is] the forty-sixth fatality in South-East Asia this year' (*Independent*, 28 February 2005, p. 27).

A twenty-six-year-old male nurse who tended a patient with bird flu has caught the virus that has killed forty-seven people in Asia, a health official said Monday [7 March]. It was not yet clear whether the nurse had caught the virus, known as H5N1 from the patient or through other means ... Experts fear that if the versatile and resilient virus mutates into a form that could easily jump between humans it would kill millions in a global pandemic. Almost all of the Asian victims – thirty-four Vietnamese, twelve Thais and a Cambodian – have caught it from infected poultry. Bird flu kills more than 70 per cent of those known to have been infected, but doctors say victims can be saved if they are diagnosed early.

(www.iht.com, 7 March 2005)

For the first time North Korea confirmed an outbreak of bird flu and said Sunday [27 March] that hundreds of thousands of chickens had been culled ...North Korea had previously declared itself free of the disease, which has swept much of East and South-East Asia, killing forty-eight people and millions of birds since late 2004 ... Since late 2004 the WHO has registered more than sixty-nine cases of humans infected with the H5N1 strain of avian flu. It has killed thirty-four Vietnamese, twelve Thais and two Cambodians.

(www.iht.com, 27 March 2005)

North Korea admitted bird flu had broken out in Pyongyang . . . although it remained unclear if the virus spotted was the H5N1 strain, which has been

known to spread to humans from birds ... South Korea confirmed nineteen cases of the H5N1 strain at poultry farms between December 2003 and March 2004.

(*FT*, 28 March 2005, p. 6)

'South Korea was the first Asian country to report a bird flu outbreak in December 2003 . . . the country reported one case of low-pathogenic bird flu last year [2004]' (FT, 29 March 2005, p. 6).

The human toll from bird flu reached fifty yesterday [6 April] ... that a tenyear-old girl had died ... on 27 March ... She had the H5N1 virus ... Over the last sixteen months bird flu has killed thirty-six people in Vietnam (fifteen of those in the past four months), twelve people in Thailand and two in Cambodia.

(*Guardian*, 7 April 2005, p. 16)

Prior to the latest outbreaks bird flu was thought to be rare in poultry and unlikely to spread between countries. Today, however, it has affected eleven countries all the way from Japan to Indonesia and caused the death of over 120 million Asian birds. This outbreak is without precedent.

(*The Economist*, 16 April 2005, p. 53)

Indonesian health officials confirmed the first human case of bird flu in the country on Thursday [16 June 2005] ... Indonesia is the fourth country to report a case of the bird flu virus in humans . . . The virus has infected more than 100 people and killed fifty-four people in Vietnam, Thailand and Cambodia since late 2003.

(www.iht.com, 16 June 2005)

'The World Health Organization has confirmed 107 cases of human infection in South-east Asia, fifty-four of them fatal. China has reported no cases of human infection' (www.iht.com, 22 June 2005).

In response to the possibility of a worldwide avian influenza pandemic, UN experts convening here [Kuala Lumpur] unveiled on Tuesday [5 July] the most comprehensive global strategy to date to address the current crisis in Asia and to prepare other regions for similar outbreaks . . . There is no evidence that the highly pathogenic bird flu virus is easily transmissible between humans, but health experts are concerned that the volatile virus, which has surfaced across Asia in various strains, could mutate and trigger a global pandemic. Such a pandemic could kill millions of people, WHO officials said.

(www.iht.com, 5 July 2005)

'[Bird flu has] infected 108 people, killing fifty-four' (FT, 7 July 2005, p. 11).

Indonesia confirmed its first human deaths from [the H5N1 strain of] bird flu Wednesday [20 July], a man and his two daughters ... who died earlier this month [July] ... bringing Asia's toll from the disease to fifty-seven people ... Though there is no evidence yet that the three had contact with infected poultry ... [the Indonesian health minister] said human-to-human transmission of the disease appeared unlikely at this stage ... Bird flu has killed thirty-eight people in Vietnam, twelve in Thailand, four in Cambodia and – with the latest deaths – three in Indonesia. Experts say most of the deaths so far have resulted from an animal passing the virus to a human.

(www.iht.com, 20 July 2005)

Virologists have long been concerned about bird flu, worrying that the virus which causes it might mutate in a way that allowed it to be transmitted easily from person to person. This, they fear, might result in a catastrophic epidemic among humans, similar to the one just after the First World War that killed 20 million to 40 million people.

(*The Economist*, 23 July 2005, p. 79)

Global health officials fear ... the H5N1 flu virus ... could mutate into a lethal strain that could rival the 1918 Spanish flu pandemic that killed between 20 million and 40 million people. Bird flu was first seen to jump the species gap to people in 1997 in Hong Kong, when it infected eighteen people and killed six ... The spread of H5N1 avian flu has so far been confined to south-east Asia ... However, even though the cost to human health has so far been relatively small, the virus has devastated the poultry trade in many Asian countries. Investment bank CLSA said the crisis had already cost the region between \$ 8 billion and \$12 billion. The EU has prolonged its ban on poultry meat and live bird imports from eight Asian nations until September [2005] and this may be extended still further.

(Alan Bullion, *The World Today*, 2005, vol. 61, nos 8–9, pp. 30–1)

Russian authorities confirmed yesterday [Monday 25 July] an outbreak of highly infectious avian flu in Siberia that has already resulted in the death of about 1,200 birds The virus recently detected was different from earlier registered virus strings ... The first cases were registered in the Novosibirsk region last week. Domestic poultry are believed to have been infected by migrating migratory birds. This is the first outbreak of the disease in Siberia or central Asia.

(*FT*, 26 July 2005, p. 12)

'Investigators have determined that a strain of bird flu infecting fowl in Russia is the type that can infect humans ... The agriculture ministry identified the virus as avian flu type A(H5N1)' (*IHT*, 30 July 2005, p. 3).

'Russia will today [2 August] begin a mass cull of poultry in eighteen Siberian villages' (FT, 2 August 2005, p. 7).

'In the Kazakh province of Pavlodar officials said they had slaughtered 2,350 geese and 250 ducks after 600 poultry died from bird flu' (*The Times*, 2 August 2005, p. 24).

[Russia] said Tuesday [2 August] that the deadly bird flu virus had been found in a third Siberian province, as officials began a mass culling to contain its spread ... The virus was found in the west Siberian province of Tyumen, following an announcement of outbreaks in the provinces of Novosibirsk and Altai ... The A(H5N1) subtype has killed at least sixty people in parts of South-east Asia since 2003.

(*IHT*, 3 August 2005, p. 5)

'The outbreak began in the Novosibirsk region [of Russia] early last month [July] and has killed thousands of domestic fowl' (*The Times*, 3 August 2005, p. 34).

US government scientists say they have successfully tested in people a vaccine that they believe can protect against the strain of avian influenza that is spreading throughout Asia and Russia. Officials have been racing to develop a vaccine because they worry that if that strain mutated and combined with a human influenza virus to create a new virus it could spread rapidly. Tens of millions of birds have died from infection with the virus and from culling to prevent the spread of the virus. About 100 people have been infected and about fifty have died from this strain of the avian flu virus, called A(H5N1). So far there has been no sustained human-to-human transmission, but that is what health officials fear, because it could cause a pandemic ... An earlier vaccine against A(H5N1) avian influenza virus was prepared after the virus first appeared in the world, in Hong Kong in 1997. That vaccine was never fully developed or used, and the strain has mutated since then ... The only medicine known to work against bird flu [is called] Tamiflu ... Only a few human cases of A(H5N1) influenza have been found. Although a few cases may have been transmitted from person to person in Asia, the A(H5N1) strain has not gathered enough strength to spread widely among humans anywhere. As of Friday night [5 August], according to the WHO, the avian strain has killed fifty-seven of the 112 people it has been known to infect in four countries. The countries are Cambodia (with four cases), Indonesia (with one case), Thailand (with seventeen cases) and Vietnam (with ninety cases).

(www.iht.com, 7 August 2005; IHT, 8 August 2005, p. 4)

'A bird flu outbreak in Russian Siberia worsened yesterday [10 August] as neighbouring Kazakhstan confirmed cases of the deadly H5N1 strain of the virus and Mongolia reported its first cases' (*FT*, 11 August 2005, p. 7).

An outbreak of the bird flu virus that health officials are battling in Asia has spread westward in Russia from Siberia to a Ural Mountains region, the

agriculture ministry said on Monday [15 August] ... [The ministry] said in a statement that the A(H5N1) strain had been detected in a settlement in the Chelyabinsk region... No cases of human infection have been found. The authorities say they believe the virus was brought to the country by migratory birds.

(IHT, 16 August 2005, p. 8)

'An outbreak of avian flu among wild and domestic birds in Russia is spreading west and starting to approach Europe' (*The Times*, 16 August 2005, p. 27).

'The outbreaks in Russia and neighbouring Kazakhstan prompted the EU to declare a Europe-wide ban on imported birds from both to contain the spread of the disease, although neither country exports poultry to the EU' (*FT*, 17 August 2005, p. 10).

Amid further reports of bird deaths in Russia, just over the mountains that separate Asia from Europe, European countries were preparing Tuesday [23] August] for the possibility that migratory birds might carry the dread avian influenza virus to Europe in coming months ... Until recently scientists believed that the major route of spread was through the transport of infected chickens and meat. But in the last few months outbreaks in which the virus appeared to have hopped from western China, to Mongolia, Russia and Kazakhstan – places that have little poultry trade between them – have highlighted the likelihood that wild birds have also disseminated the virus ... Although scientists have long known that the disease could be spread by either domestic or wild animals, the shipment of infected animals between farms and markets was previously thought to be the major route ... Because officials had long assumed that domestic poultry was the primary culprit in disease transmission, the EU had previously sought to protect itself from outbreaks by banning all imports of meat from China and south-east Asia. That ban was extended to Russia and Kazakhstan on 12 August, when the disease was discovered in these countries ... [The Netherlands] declared that as of this week all commercial chickens and turkeys would have to be housed indoors or in outdoor pens that would prevent contact with wild birds ... An outbreak of a less virulent strain of bird flu decimated the country's poultry industry just two years ago ... They lost 50 per cent of their poultry population in 2003 ... Dutch officials had long suspected that their 2003 outbreak may have been caused by migratory birds, since no other origin was ever discovered.

(*IHT*, 24 August 2005, pp. 1, 4)

'Finnish authorities said they found a suspected case of bird flu in the north of the country ... The case involved a gull. Final results of the tests are not expected for three weeks' (*Independent*, 27 August 2005, p. 24).

Indonesia yesterday [19 September] declared a national 'extraordinary event' after four children were taken to hospital with suspected bird flu and

the Jakarta zoo was closed for three weeks after nineteen birds tested positive. None of the patients . . . are thought to have caught the H5N1 strain of the illness . . . at the zoo. But experts have yet to discover how they became sick, just as they cannot yet pinpoint where the woman who died of bird flu in south Jakarta ten days ago caught the virus. She was the fourth Indonesian to die of bird flu, all of them in unexplained circumstances. At least sixty other people have died of the virus since November 2003 in Vietnam, Thailand and Cambodia . . . Indonesia [said it] could not start the culling procedures recommended by the United Nations because it could not afford to compensate poultry owners.

(Guardian, 20 September 2005, p. 20)

Indonesia has officially confirmed four human deaths since July from bird flu, all of them in Jakarta ... H5N1 was first found in Indonesian chickens in August 2004 ... The first deaths were confirmed in July. But officials continue to resist calls for a cull, declaring it too costly and impractical ... preferring to vaccinate selectively instead ... Doctors ... were yesterday [20 September] monitoring at least seven suspected human cases ... Indonesia's health minister on Monday [19 September]] officially declared an 'extraordinary' outbreak, giving officials legal powers to force treatment on anyone showing symptoms.

(FT, 21 September 2005, p. 7)

'Since the deadly H5N1 strain of bird flu was detected in chickens in the archipelago in 2003, Indonesia has conducted only selective culls of poultry' (*FT*, 22 September 2005, p. 10).

[Results of tests relating to] a woman's death of avian flu in Jakarta . . . [showed] that the virus had not yet mutated in ways likely to make it more of a threat to people ... The WHO's representative ... [said that it] 'seems like a virus that has gone directly from birds' . . . The government of Indonesia had declared Monday that the disease was an 'extraordinary event', a step allowing additional spending beyond usual budget restraints and allowing the government to force suspected victims to be hospitalized and isolated ... The Indonesian government has also begun an extensive slaughter of chickens in or near flocks where birds have been infected with the disease. The culling marks a shift in policy, as Indonesia had resisted large-scale culling last year [2004] when the disease spread through Thailand and Vietnam; Indonesia tried then to vaccinate chickens instead ... The WHO added another bird flu death ... to its count for Vietnam. That brought the total there since the beginning of last year to sixty-four cases, twenty-one of them fatal. There were also seventeen confirmed cases of bird flu in Thailand last year, twelve of them fatal.

(www.iht.com, 21 September 2005)

A five-year-old girl died [in Jakarta] yesterday [21 September] after suffering from bird flu symptoms. Initial tests gave proved negative for the virus, but ... [it was announced that] more tests would be done ... Four Indonesians are confirmed to have died since July from the H5N1 strain of bird flu ... Bird flu has killed sixty-four people in four Asian countries since late 2003.

(Independent, 22 September 2005, p. 29)

'[In] Indonesia a fifth victim died on Monday [26 September]' (www.iht.com, 30 September 2005).

Worried scientists have finally managed to catch the attention of politicians. Last week at the United Nations General Assembly President George W. Bush announced a new international partnership to discuss flu and pandemic influenza. World health ministers will meet in Canada next month [October] to discuss how to pool resources, boost surveillance and improve the capacity to contain and respond to an outbreak. The WHO wants more governments to draw up preparedness plans (only forty have these so far) and agree on how they will co-ordinate their responses ... In the global pandemic of 1918 25 million to 50 million people died. Many scientists now believe that another influenza pandemic is inevitable some time soon.

(The Economist, 24 September 2005, p. 113)

South-east Asian nations approved the creation of a regional fund to fight bird flu and other animal diseases, officials said Friday [30 September] ... Details of the fund and other measures to curb bird flu were expected to be announced later on Friday at the end of the meeting by the Asian ministers and their counterparts from China, Japan and South Korea ... Asean [comprising Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam] will also endorse a global plan to contain avian influenza, which has killed sixty-six people in four Asian countries since late 2003 . . . Millions of birds have been destroyed, causing estimated losses of \$10 billion to \$15 billion to the poultry industry [according to the Food and Agriculture Organization] . . . Asean would also endorse the global bird flu plan proposed by the world animal health body OIE [World Organization for Animal Health], the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). The three agencies plan to hold a bird flu conference in December to try to raise the \$102 million they say is needed over the next three years to contain the virus . . . The WHO, the UN health agency, said on Thursday that if the bird flu virus spreads among humans the quality of the global response would determine whether it ends up killing 5 million people or 150 million.

(www.iht.com, 30 September 2005)

South-east Asia's agriculture ministers endorsed a United Nations plan Friday to combat bird flu – a move they hope will win enough international

aid to halt the disease before it becomes a catastrophic epidemic with the potential to kill millions of people globally. The ministers from the tenmember Association of South-east Asian Nations said in a statement that fighting avian flu ... requires 'an all-out co-ordinated regional effort' ... David Nabarro of the WHO has been appointed as the UN co-ordinator to lead a global drive to counter a human flu pandemic, which could strike if the bird virus mutates into a strain that is deadly to humans and can easily spread among people ... Nabarro: '[It would be] extremely wrong [to ignore the serious possibility of a global outbreak] ... The avian flu epidemic has to be controlled if we are to prevent a human influenza pandemic. We expect the next influenza epidemic to come at any time now, and it is likely to be caused by a mutant of the virus that is currently causing bird flu in Asia. Between 5 million and 150 million people could die in a pandemic – the higher figure being likely if governments fail to act now' ... The meeting ended with the endorsement of a regional plan for control and eradication of bird flu and directed a task force to formulate 'a detailed action plan for implementation and proceed to identify potential sources of funding', according to a joint statement. The plan covers 'eight strategic areas over a period of three years from 2006 to 2008 to prevent, control and eradicate the disease', the ministers said. The plan was drafted in May by the UN Food and Agriculture Organization and the World Organization for Animal Health and will be presented to donors in December for implementation early next year [2006].

(www.iht.com, 30 September 2005)

The WHO... said Friday [30 September] that it was impossible to estimate how many people might die from a new influenza pandemic, though it added that it had warned countries to prepare for a death toll as high as 7.4 million... Dick Thompson (a spokesman for the WHO): 'We think this is the most reasoned position... [Even though several estimates could be plausible the agency] cannot be dragged into further scaremongering'... Scientists' estimates of how many people could die in a flu pandemic have ranged from fewer than 2 million to more than 100 million, depending on how contagious and lethal the virus is. Neither factor can be known until a pandemic strain emerges.

(IHT, 1 October 2005, p. 6)

'The WHO said yesterday [30 September] 2 million to 7.4 million deaths was a reasonable forecast for a global pandemic – distancing itself from . . . David Nabarro's] figure of up to 150 million' (*FT*, 1 October 2005, p. 6).

Scientists have made all sorts of predictions, ranging from fewer than 2 million to 360 million. Others have quoted 100 million. Last year [2004] WHO's chief for the Asia-Pacific region predicted 100 million, but until now that was the highest figure publicly mentioned by a WHO official.

(Independent, 1 October 2005, p. 29)

Two teams of federal and university scientists [in the United States] announced Wednesday [5 October] that they have resurrected the 1918 influenza virus, the cause of one of history's most deadly epidemics, and have found that, unlike the viruses that caused more recent flu pandemics of 1957 and 1968, it was actually a bird flu that jumped directly to humans . . . The new studies find that today's bird flu viruses share some of the crucial genetic changes that occurred in the 1918 flu . . . [The 1918] virus killed 50 million people.

(*IHT*, 6 October 2005, pp. 1, 7)

'Flu viruses that caused the pandemics of 1957 and 1968 ... were not bird viruses but were human viruses that picked up a few genetic elements of bird flu' (www.iht.com, 6 October 2005).

The virus responsible for the 1918 Spanish flu pandemic which killed an estimated 50 million people worldwide originated from a bird flu virus, preliminary studies have shown ... The research ... will help scientists find new treatments for the most dangerous types of flu ... In 1957 and 1968 an existing human virus underwent genetic mixing with a bird flu to produce a new 'reassorted' strain in one step. In 1918, however, an entirely avian virus gradually adapted to function in humans through a sequence of mutations.

(FT, 6 October 2005, p. 10)

'Scientists have recreated the Spanish flu virus that killed up to 50 million people in 1918–19' (*The Times*, 6 October 2005, p. 31).

'The Spanish flu pandemic killed an estimated 40 million people' (FT, 8 October 2005, p. 11).

'The Spanish flu outbreaks of 1918 ... killed between 20 million and 40 million' (*Independent*, 10 October 2005, p. 20).

More than sixty-five countries and international organizations are participating [in a meeting in Washington] ... The meeting comes a day after two teams of scientists announced that they had reproduced the 1918 Spanish flu virus, the cause of one of history's most deadly pandemics, and found it to be bird flu ... Since 1997 bird flocks in eleven countries have been decimated by flu outbreaks. But so far nearly all the people infected [with bird flu] – more than 100, including more than sixty who died – contracted the sickness directly from birds. However, there has been little transmission between people ... Indonesia lowered its official total of bird flu deaths from six to three in line with WHO's records, the health minister said Thursday [6 October] ... Investigations have produced no evidence that the virus is spreading from person to person.

(www.iht.com, 6 October 2005)

'So far sixty-two people have died from bird flu in the region' (*The Times*, 7 October 2005, p. 43).

Three cases of suspected bird flu have been reported in Romania, which if confirmed would be the first in Europe. Officials detected the cases in domestic birds in the Danube delta ... [Romania] would not say whether the flu was believed to be the virulent H5N1 strain ... In August Finland reported a suspected case of bird flu in a gull ... Tests are believed to have proved negative ... The H5N1 strain has killed at least sixty-two people, all in south-east Asia and led to the slaughter of about 140 million birds in more than ten countries. No human-to-human transmission has been proved but there has been one case in Thailand where a woman is thought to have caught it from her daughter.

(Guardian, 8 October 2005, p. 16)

The birds that tested positive for the disease were domestic ducks, meaning they probably contracted the disease from other birds that had migrated to the area. The WHO has confirmed 116 human cases of bird flu, all in Asia, and sixty-three deaths since the latest outbreak began in December 2003.

(FT, 8 October 2005, p. 11)

'The Turkish authorities began slaughtering poultry Sunday [9 October], one day after the agriculture minister confirmed the country's first bird flu case at a turkey farm' (www.iht.com, 9 October 2005).

The Asian flu seemed to continue its westward march as two outbreaks of avian influenza were reported in Europe over the weekend. Romania reported its first cases on Saturday [8 October] and Turkey on Sunday [9 October], both presumed to be carried there by birds that migrate from Asia in the autumn. There was no confirmation that the birds had succumbed to the deadly Asian H5N1 strain . . . If the birds are infected with A(H5N1) it would be the first time that the virus has been seen in Europe . . . In Romania outbreaks were reported in the region of the Danube Delta, with both wild and domestic birds affected . . . The authorities took hundreds of birds from the farms and killed them and then declared a quarantine on the villages and six counties in the area . . . [Turkey] confirmed that an outbreak of bird flu had occurred on a farm in the western part of the country . . . The village was put under quarantine and all birds and street dogs killed as a precaution.

(IHT, 10 October 2005, p. 3)

[In Vietnam] the WHO has recorded ninety-one cases of avian flu, including forty-one that have resulted in death . . . The health organization has warned that a possible pandemic of avian influenza could kill as many as 7.4 million people . . . 'At present there is no convincing evidence of sustained human-to-human transmission of the H5N1 virus,' the organization said in a statement. 'However, there have been incidents, in Thailand, Vietnam and Cambodia, where limited transmission between humans was suspected.'

(www.iht.com, 10 October 2005)

'The Asian virus does not appear to spread among humans' (*IHT*, 12 October 2005, p. 5).

Bird flu has not been detected in Romania, EU veterinary experts said on Wednesday [12 October] ... Officials stressed, however, that more tests were still being taken of birds in Romania ... The authorities in Bucharest continued with plans to cull thousands of domestic birds in the Danube Delta.

(IHT, 13 October 2005, p. 4)

Experts have confirmed that a bird flu virus found in samples taken from dead birds in Romania's Danube Delta is the H5 type, authorities said Thursday [13 October]. The samples are being sent to Britain to identify the specific strain of the virus. So far there are no indications it is the H5N1 strain.

(www.iht.com, 13 October 2005)

'The EU on Thursday said the bird flu virus found in Turkish poultry was the H5N1 strain that scientists worry might mutate into a human virus and spark a pandemic' (www.iht.com, 13 October 2005).

Thousands of birds that died in Turkey over the past week succumbed to ... the H5N1 virus ... medical test ... confirmed Thursday [13 October] ... It is the first time that the disease has been reported in a European country ... The United Nations Food and Agriculture Organization ... predicted that tests completed in the next few days would probably show that recent bird deaths in Romania were also caused by the virus ... The deadliest strain of all bird flu viruses, H5N1, has also infected 120 humans, generally people in close contact with sick birds. About half of them died.

(*IHT*, 14 October 2005, p. 1)

Researchers have identified a mutated form of H5N1 bird flu that is resistant to Tamiflu, the drug being stockpiled around the world to counter a feared influenza epidemic ... The strain was found in a case in Vietnam, a fourteen-year-old girl who may have caught the flu from her brother rather than directly from infected birds ... However, tests on lab animals showed that the resistant virus is sensitive to another drug.

(*IHT*, 15 October 2005, p. 3)

'[On 15 October] the European Commission said . . . that the virus detected in Romania was identical to the lethal strain that had hit Turkey and Asia' (*FT*, 17 October 2005, p. 9).

The first known case of the A(H5N1) strain of avian influenza was found in 1996 in a goose in China. While the Beijing authorities insist that no poultry

in the country has the disease now, Hong Kong University scientists who have studied the genetic evolution of the virus wrote in *Nature* in July that infected migratory birds in western China appeared to have contracted the disease in southern China; the virus has since spread from western China to East Asia, Russia, Kazakhstan, Turkey and Romania ... Beijing officials criticized the researchers last summer for writing that the disease was still present in poultry in southern China ... Though no human cases of the disease have been reported in China, the size of China's human and poultry populations makes it possible that the spark will happen there ... A lingering concern is whether local and provincial authorities, fearing censure, are hiding cases from the central government. This occurred in the SARS outbreak in late 2002 and again during a flare-up last summer of a pig disease in central China ... While China shared samples of the bird flu virus last year [2004] with international health agencies, it has not done so with migratory bird virus samples this year [2005], preferring to analyse them in Chinese laboratories and showing the results to officials . . . [like one from] the UN agriculture organization.

(IHT, 17 October 2005, p. 2)

Greece became the first member of the EU to report a case of bird flu yesterday [17 October], when the H5 virus was identified in a turkey from the Aegean island of Oinousa ... [Greece said that tests] would determine whether the virus was from the deadly H5N1 strain.

(*FT*, 18 October 2005, p. 10)

'Bird culls to control probable new outbreaks of bird flu started on farms in Russia and Macedonia . . . The Chinese authorities reported another outbreak of H5N1 in the province of Outer Mongolia' (*IHT*, 20 October 2005, pp. 1, 8).

'Thailand announced its thirteenth fatal case of the disease ... [The] man who died Wednesday [19 October] was the first in more than a year to die from the disease' (*IHT*, 21 October 2005, p. 3).

Taiwan reported its first case of avian flu Thursday [20 October], discovered in a smuggled cargo of exotic cage birds . . . Taiwan said it had encountered the H5N1 strain of bird flu in birds shipped in a container smuggled from China.

(*IHT*, 21 October 2005, p. 3)

[The H5N1] strain of bird flu ... began circulating in South Korea in 2003 ... Millions of birds have caught the disease and 150 million poultry have been culled. Despite this action the virus is now endemic in many parts of Indonesia and Vietnam, some parts of Cambodia, China and Thailand, and possibly Laos. Yet only 117 people have caught the virus ... In the unlikely event it is caught it is lethal. More than half those infected, sixty people, have died. Those most at risk are poultry workers in these countries, their

families and those working with wild birds ... China's handling of bird flu has been characteristically secretive ... Outbreaks of H5N1 in Japan, North Korea and Malaysia were quickly brought under control and are now believed to have been eradicated ... The virus can infect and kill a range of other animals ... The less severe pandemics in the second half of the last century, in 1957 and 1968, were caused by a human flu virus that had swapped genes with a bird flu virus. The more serious 1918 pandemic was caused when a bird flu virus adapted on its own to become transmissible between humans. The mortality rate was about 2.5 per cent and 40 million to 50 million died.

(*The Economist*, 22 October 2005, pp. 91–3)

The H5N1 strain of bird flu ... has killed sixty-seven people ... Bird flu, a common ailment among fowl, is difficult for people to contract and most human cases have been linked to direct contact with sick birds ... There was confirmation from Moscow on Wednesday [19 October] of an outbreak of the H5N1 virus in the Tula region, south of the Russian capital.

(www.iht.com, 21 October 2005)

On 23 October it was confirmed that an imported parrot in quarantine in the United Kingdom had died of the H5N1 strain of bird flu.

'[The] parrot imported from Suriname and under quarantine in Britain . . . [is] thought to have been infected by a consignment of birds from Taiwan' (*IHT*, 25 October 2005, p. 3).

[On 25 October]] Indonesia confirmed its fourth fatality from avian influenza [a man who died in September] ... H5N1 infections have killed sixty-two people in Asia since 2003 – more than half in Vietnam ... [China] reported an outbreak of the deadly H5N1 avian flu in the eastern province of Anhui ... In contrast with the widespread criticism of China's initial tardiness in tackling the 2003 SARS outbreak and sharing information with its neighbours, international public health experts have praised Beijing's recent efforts to fight avian influenza ... There is clear evidence that China is promptly sharing information about avian influenza with the international community ... A bird flu pandemic ... would have a devastating impact on Asian countries, the Asian Development Bank warned Tuesday [25 October] ... The economic impact would dwarf the downturn following the 2003 SARS outbreak that led to estimated losses of between \$30 billion and \$50 billion.

(www.iht.com, 25 October 2005; *IHT*, 26 October 2005, p. 3)

[On 26 October] China reported another outbreak in poultry ... In China's latest case of H5N1 infection, the third since last week, hundreds of chickens and ducks died in a village in central Hunan province. China had

notified the United Nations of the latest outbreak on [25 October] ... In Europe Croatian officials said tests had confirmed that wild swans found dead in eastern Croatia last week were infected with the lethal H5N1 bird flu strain ... The WHO says 121 people have been infected in four Southeast Asian nations and sixty-two have died.

(www.iht.com, 26 October 2005)

On the French island of Reunion in the Indian Ocean preliminary tests on a man who had returned to the island after a trip to Thailand showed he might have the H5N1, the authorities said Wednesday [26 October] ... [It was announced that] the number of suspected bird flu cases in Reunion had risen to three ... The EU Commission announced Wednesday that the H5N1 virus strain, which has killed sixty-two people in Asia, had been found in dead swans in Croatia. It was detected earlier in birds in Romania, Russia and Turkey.

(*IHT*, 27 October 2005, p. 3)

The WHO on Friday [28 October] asked China to conduct further tests to determine whether a twelve-year-old girl died of avian influenza and cautioned that provincial health officials may have acted prematurely in declaring that her death was not linked to the fatal disease . . . The death of the girl quickly attracted attention because she lived in a village in Hunan province where the latest outbreaks had occurred. Reports in the Hong Kong and mainland media suggested that the girl and her brother had fallen ill after eating a sick chicken.

(www.iht.com, 28 October 2005)

Romania announced Friday [28 October] that the virulent H5N1 strain of bird flu has spread to the country's north-east from the Danube Delta region, after tests on a dead heron proved positive for the virus. The heron was found a week ago ... near Romania's border with Moldova. The announcement marks the first time the H5N1 virus has been reported outside the Danube Delta region.

(*IHT*, 29 October 2005, p. 5)

Vietnam said Monday [31 October] that it needed tens of millions of dollars to fight the spread of bird flu as disaster co-ordinators from Pacific Rim countries met in Australia . . . [Vietnam said it] needed \$50 million and help building up its stockpile of bird flu drugs . . . Vietnam has been hardest hit by bird flu, which has killed more than forty people in the country and prompted the authorities to destroy tens of millions of birds. Vietnam . . . [a] country of 82 million . . . has enough viral drugs to treat 60,000 people . . . Officials said last week that they wanted enough to treat 30 per cent of the population.

(www.iht.com, 31 October 2005)

[On 4 November] China reported its fourth bird flu outbreak in three weeks ... Vietnam also confirmed bird flu outbreaks in three northern villages ... The Japanese authorities have detected signs of bird flu at a northern farm and plan to kill 180,000 chickens after they discovered anti-bodies in some for the H5 family of bird flu. The deadly H5N1 strain of bird flu, which is the only one that has spread to humans, has not yet been detected in Japan, but the less virulent H5N2 strain hit the country last year [2004].

(IHT, 5 November 2005, p. 3)

China and Vietnam each confirmed new bird flu outbreaks [on 4 November] and warned of more infections to come, amid predictions that a flu pandemic could kill up to 3 million people in Asia ... cost the region billions ... and plunge the world into recession. The latest Chinese outbreak [is] the fourth in the past three weeks ... In Vietnam more than 3,000 poultry died or were culled this week in three villages ... Vietnam began vaccinating its 150 million poultry flock in early August, but a shortage of vaccine imported from China may delay the programme's completion by two weeks.

(www.iht.com, 4 November 2005)

China and Vietnam have reported major bird flu outbreaks in poultry ... [In China's case this is] the fourth outbreak in a month ... In Vietnam, where forty-one people have died of avian influenza, a ... woman with a fever and respiratory problems is the latest suspected case after Indonesia said three children were being tested for bird flu ... In Asia it has killed sixty-two people and infected 122 since late 2003. It is difficult for people to catch and is spread almost exclusively through human contact with birds.

(Independent, 5 November 2005, p. 31)

In a report released Thursday [4 November] the Asian Development Bank outlined a number of scenarios – some catastrophic – that could face Asian Nations in the event of a global flu outbreak. In a worst-case scenario in which the psychological impact of a pandemic lasts a year, the bank said Asia could lose almost \$282.7 billion – or 6.5 per cent of its GDP – in consumption, trade and investment and another \$14.2 billion due to workers' incapacity and death. The report said 'growth in Asia would virtually stop' and the economic impact would likely force the world into recession. That scenario assumes about 20 per cent of Asia's population would fall ill and 0.5 per cent would die. In a less pessimistic forecast, the bank said that if the psychological impact of an outbreak lasted six months the cost to Asia in lost consumption, trade and investment would be about \$99 billion. China, Hong Kong, Singapore, Malaysia and Thailand would likely be hardest hit by the pandemic, the ban predicted. A separate report by the World Bank said a human pandemic triggered by bird flu could cost the world economy as much as \$800 billion.

(www.iht.com, 4 November 2005)

'The deadly H5N1 strain of bird flu has killed at least sixty-two people – including forty-one in Vietnam – and resulted in the deaths of more than 100 million birds since 2004' (www.iht.com, 4 November 2005).

In the 1918 Spanish flu epidemic between 20 million and 40 million people worldwide died. There was about a 2 per cent mortality rate. In subsequent pandemics in 1957 and 1968, which killed far fewer people, it was about 0.45 per cent.

(*IHT*, 5 November 2005, p. 3)

The Chinese government said Sunday [6 November] it had asked for help from the WHO in determining whether the H5N1 bird flu virus killed a twelve-year-old last month [13 October] and sickened two others [who recovered]. If any of the cases are confirmed it would be China's first reported case of bird flu in humans ... Meanwhile Indonesian health officials said Saturday [5 November] that a nineteen-year-old woman had died of bird flu ... Her death brings the number of people killed by the disease in Indonesia to five.

(www.iht.com, 6 November 2005)

'As yet the only human cases reported around the world have gotten the disease by direct contact with an infected bird' (*IHT*, 7 November 2005, p. 7).

The [H5N1] virus might infect someone already sick with a strain of human flu, and the two viruses could have sex, thus creating a new virus that contains some genes from each. Such viral hanky-panky is thought to have led to the flu pandemics of 1957 and 1968. Or the virus could mutate in such a way that it becomes able to travel between people. Mutations to an avian flu virus are thought to lie behind the 1918 pandemic.

(*IHT*, 7 November 2005, p. 8)

The World Bank announced the creation Monday [7 November] of a \$500 million loan programme aimed at quickly getting money to poor South-east Asian countries that are struggling to combat an outbreak of avian flu among birds. It also warned that a global human pandemic, should it occur, could cause \$800 billion in global economic losses ... or 2 per cent of annual global output ... So far sixty-three people have died from avian flu and 124 people have been infected, all residents of agricultural areas of South-east Asia that came into contact with infected birds.

(*IHT*, 8 November 2005, p. 3)

Vietnam confirmed on Tuesday [8 November] its forty-second death from bird flu, its first in more than three months ... The H5N1 strain of bird flu in Asia, as of Tuesday, is known to have killed at least sixty-three people out of 125 known cases ... Despite ... the fact that those viruses have been

circulating in China for more than a dozen years, almost no human-to-human spread has occurred.

(www.iht.com, 8 November 2005)

The World Bank said Wednesday [9 November] that up to \$1 billion would be needed over the next three years to fund a global strategy to tackle the spread of the H5N1 bird flu. On the final day of a three-day meeting of the WHO, World Bank officials said it was crucial to stamp out the disease in poultry as well as prepare countries for a potential human flu pandemic ... World Bank officials said the budget estimate did not cover funding for measures in the event of widespread human-to-human transmission leading to a global human pandemic ... The Asian Development Bank said it was making an extra \$300 million available to help fight bird flu in countries such as Vietnam, Laos and Cambodia ... The bank has already announced \$170 million in grants and loans. The extra \$300 million will be focussed on worst-hit countries such as Vietnam, Laos and Cambodia ... Many poor Asian countries lack adequate surveillance and reporting mechanisms and cannot compensate farmers for poultry culls. Africa, which many experts said is likely to be the next front line in the fight against bird flu, faces similar problems ... The Chinese prime minister, Wen Jiabao, warned Wednesday that China faced a serious threat from bird flu, since the disease is still not under control despite massive nationwide efforts to stop its spread. (www.iht.com, 9 November 2005)

China on Thursday [10 November] reported two new incidents of avian flu among chickens in its north-eastern province of Liaoning, bringing the total number of reported cases in the past month to six . . . Vietnam, the country worst hit by bird flu so far, said on Thursday that it would send soldiers and the police to help contain the spread of the virus as more outbreaks erupt and the sudden deaths of ducks in two provinces hint at the emergence of a more virulent strain. Bird flu has been spreading fast in Vietnam, but provincial authorities are not showing enough urgency, the agriculture minister said.

(www.iht.com, 10 November 2005)

'China reported two new bird flu outbreaks in poultry Thursday [10 November] and quarantined 116 people, while Kuwait confirmed the first known cases in the Gulf – in an imported peacock and a wild flamingo' (*IHT*, 11 November 2005, p. 4).

The first case of bird flu in the Gulf Arab region was reported in Kuwait yesterday [11 November]. A migrating flamingo ... was carrying the lethal strain of the H5N1 virus ... An earlier case found in a shipment of birds from Asia was found to be the less virulent H5N2 strain.

(Independent, 12 November 2005, p. 35)

On Saturday [12 November] China tested an ill poultry worker for bird flu and Vietnam reported two new outbreaks of the virus ... The Indonesian authorities are investigating whether a twenty-year-old woman ... died from bird flu ... [She died] late Saturday ... The H5N1 strain has devastated poultry flocks across Asia since 2003 and jumped to humans, killing at least sixty-four people.

(www.iht.com, 13 November 2005)

'Of the sixty-four people who have so far died of bird flu, forty-two were infected in Vietnam' (www.economist.com, 11 November 2005).

Scientists in Vietnam believe the H5N1 bird flu strain has mutated, allowing it to breed more effectively in mammals, though not necessarily in humans ... Scientists found significant variations in twenty-four samples from humans and poultry. The findings corroborate the belief that H5N1 would not have to mix with a human flu strain to become a form causing a human pandemic.

(Guardian, 14 November 2005, p. 18)

[China] said Tuesday [15 November] that the government plans to vaccinate all the country's 14 billion poultry against bird flu as two new outbreaks of the disease in the far west were announced ... China has more than 14 billion farm poultry, accounting for almost 21 per cent of the world's total ... Also Tuesday the government confirmed the tenth and eleventh outbreaks in the past month ... A total of 320,000 poultry have been slaughtered ... Infections have been reported in almost every part of the country since 19 October ... On Tuesday China said it would ship 45 tonnes of bird flu vaccine worth \$780,000 to Vietnam, the country hardest hit by the disease ... Bird flu has killed at least sixty-four people in Asia since 2003, mostly those who have come in contact with infected birds.

(www.iht.com, 15 November 2005)

[China said] said that it would try to vaccinate all of the nation's chickens and other poultry against bird flu ... China has stocks of 4.2 billion chickens and a billion ducks, geese and turkeys last year [2004] ... Three-fifths of the poultry in China are kept by families, who let the birds and other domesticated animals wander around the neighbourhood, the yard and the house ... Experts at the UN Food and Agriculture Organization ... said that more information was needed to assess the wisdom of China's decision to vaccinate all poultry ... [China] said it was 'highly probable' that a boy and a girl who suffered high fevers last month [October] – the girl died – had been China's first human cases of bird flu ... There had been no sign of human-to-human transmission of bird flu ... China reported fifty outbreaks of bird flu in sixteen provinces last year, and reported eleven more to international health agencies this autumn, including two more small outbreaks

Tuesday ... [China] reported last week that a fake flu vaccine, possibly including active virus, may have actually spread the disease instead of preventing it ... China has developed its own version of Tamiflu.

(*IHT*, 16 November 2005, p. 7)

[Experts] now believe that the disease was brought to Britain in a consignment of 101 mesias, or finches, from Taiwan. It was previously thought that the first source of the virus was in a ... parrot from Surinam ... It is not certain how many [of the finches] died of the bird flu ... Experts admitted that they could not be definitive about the source of the virus because tissue from the parrot and a sick mesia were mixed for testing. However, 'on the balance of probabilities', they blamed the mesia ... No evidence of the H5N1 strain was found in any of the other birds [in quarantine] ... Crucially, there was no infection in four British chickens used as 'sentinel' birds in the quarantine premises.

(*The Times*, 16 November 2005, p. 8)

China confirmed its first three bird flu cases Wednesday [16 November], including two fatalities ... A twelve-year-old girl in central Hunan province and a twenty-four-year-old female poultry worker in Anhui province in the east died of the virus ... The third confirmed infection was the Hunan girl's nine-year-old brother who has since recovered ... Chinese and WHO experts had been reviewing the children's cases ... The two children and a teacher who also fell ill in their village had tested negative for bird flu ... Also Wednesday Vietnamese authorities reported bird flu outbreaks in three more provinces ... bringing to twelve the number of cities and provinces affected in the latest wave, which began about a month ago.

(www.iht.com, 16 November 2005)

The Chinese government announced Wednesday that it had confirmed the country's first three cases of bird flu ... [China said] that bird flu had been confirmed in a nine-year-old boy and his twelve-year-old sister in central China's Hunan province and a thirty-six-year-old woman in Anhui province in east-central China. The boy has recovered and was released from hospital last weekend while the girl and woman died. In confirming all three cases as infections with the H5N1 bird flu virus, the Chinese authorities went even further than the WHO was willing to go. The WHO agreed late Wednesday that the boy and the teacher had been infected with bird flu. But the sister's body had been cremated before her case became the subject of medical attention, and the WHO concluded that samples drawn before she died were not adequate for concluding whether she had bird flu. Determining whether the boy and the girl both had the disease is important because scientists are watching to see if the disease develops the capacity to more easily from person to person, which could lead to a global epidemic in people. The WHO has concluded that most human infections

so far have come directly from birds, but has acknowledged that it is very difficult to determine the sources of infection when multiple family members fall ill. The family members are likely to have been exposed to the same birds as well as to each other . . . The earliest cases of H5N1 virus were found in birds in south-eastern China in 1996 and researchers have been finding the virus practically every year since then. The widespread presence of the disease in Chinese poultry has prompted suspicions that human cases were also occurring in China but were not being reported to national authorities by local and provincial authorities leery of censure for failing to protect public health ... China becomes the fifth country to confirm human cases of bird flu since the beginning of last year [2004], following Cambodia, Indonesia, Thailand and Vietnam, and bringing the total to 128 cases, of which sixty-five were fatal. Vietnam has had ninetytwo cases of which forty-two were fatal, Thailand has had twenty-one cases and thirteen deaths, Indonesia has had nine cases and five deaths, and Cambodia has had four cases, all dead.

(IHT, 17 November 2005, p. 4)

The Food and Agriculture Organization estimates the economic impact [of bird flu] has been more than \$10 billion ... [The] director of its animal-production and health division says that a single large outbreak in 2004 cut GDP across South-east Asia by up to 1.5 per cent ... The next influenza pandemic – an event that occurs about three times a century – it could last for up to a year ... [The World Bank] suggests it might cost at least \$800 billion.

(The Economist, 19 November 2005, p. 95)

Indonesian officials said yesterday [17 November] they had confirmed two more human fatalities from H5N1...[bringing Indonesia's confirmed fatalities to seven, with four other people having survived]. Western health experts believe at least two other fatalities can be attributed to the virus and many more cases are probably not being detected.

(*FT*, 18 November 2005, p. 11)

Indonesia's toll [rose] to seven out of eleven infections and the number of global fatalities [rose] to at least sixty-seven ... In China the WHO ruled out human-to-human transmission in the case reported on Wednesday as two new outbreaks in poultry were reported.

(Guardian, 18 November 2005, p. 18)

China's plan to vaccinate billions of chickens against avian flu could backfire and end up spreading the disease, according to poultry and vaccine experts. Vaccination teams could easily carry the virus from farm to farm on their shoes, clothes and equipment unless they changed or sterilized them each time ... Also, experts said, the task is likely to be overwhelming because the Chinese eat about 14 billion chickens a year so mass vaccinations would have to be repeated again and again.

(*IHT*, 21 November 2005, p. 10)

'Beijing yesterday [21 November] issued new rules to combat bird flu, threatening to punish local authorities that delay or misreport findings' (*FT*, 22 November 2005, p. 11). '[The] new rules require local Chinese officials to set up disease-warning networks and to stockpile disinfectant and other emergency supplies. Officials who fail to pinpoint and report outbreaks quickly face firing or jail' (www.iht.com, 22 November 2005).

On Monday [21 November] two new outbreaks among poultry, the sixteenth and seventeenth, were reported in China ... A suspected human death from the virus was reported in Jakarta Tuesday [22 November], which, if confirmed, would bring Indonesia's toll to eight ... If confirmed it would be the sixty-eighth avian flu death worldwide.

(www.iht.com, 22 November 2005)

A study published this month [November] by scientists in a global network organized by the WHO pointed out that there was no evidence that the H5N1 virus had acquired human or any other avian influenza genes in the eight years since it had begun infecting humans.

(*FT*, 24 November 2005, p. 21)

'China is preparing to test a bird flu vaccine on people, state media said Thursday [24 November 2005] after officials confirmed the nation's second human death from the virus ... The vaccine trial will involve 100 people' (www.iht.com, 24 November 2005).

With China reporting its first two human deaths from bird flu, international health experts are warning that current tallies may greatly underestimate the problem, both in China and elsewhere. Scientists have long been mystified by the low number of cases in humans reported in China . . . The WHO . . . [believes] that systems to diagnose a virus like bird flu are often poorly developed and underfinanced in the rural areas that have suffered most . . . While Vietnam, Indonesia and Thailand have provided international experts with samples of the virus from each bird outbreak, China has been unwilling to share such material. It has provided only one sample . . . Vietnam has reported ninety-one cases of bird flu in humans, with forty-one people dead . . . [according to] new data [presented on 23 November].

(*IHT*, 25 November 2005, p. 5)

Roche, the Swiss pharmaceutical company that controls the patent for Tamiflu ... the antiviral drug used to treat bird flu ... gave Indonesia permission Friday [25 November] to start producing it for the domestic market.

The company said it did not have a patent there, so Indonesia does not have to obtain a licence ... So far Indonesia and Vietnam are the only countries to have secured permission from Roche to produce Tamiflu on their own. Other countries are in talks with the company ... Jakarta health officials confirmed an eighth ... human death from the H5N1 virus ... but are waiting for definitive tests to come back from Hong Kong.

(www.iht.com, 27 November 2005)

China reported two new outbreaks of bird flu in poultry on Tuesday [29 November] The outbreaks were China's twenty-third and twenty-fourth since 19 October ... China has sent 3 million doses of bird flu vaccine to Indonesia, where H5N1 was found in twenty-three of thirty provinces. Unlike other countries, Indonesia does not routinely cull birds, citing a lack of funds. Indonesia has reported twelve human cases, seven of which have been fatal. China has also exported 43 tonnes of bird flu vaccine to Vietnam., the country hardest hit by the disease ... At least sixty-eight people have died from the H5N1 bird flu virus since it emerged in Asia in 2003 ... So far most human cases have been traced to contact with infected birds.

(www.iht.com, 29 November 2005)

China claims a domestic population of about 14.2 billion birds. The mass vaccinations illustrate . . . the immense challenges involved, including the possibility that the rural health workers themselves might spread the virus . . . China is estimated to have 640,000 to 1 million villages where birds are raised in close proximity with humans . . . International experts say Beijing's official figure of only two human deaths from bird flu is suspicious. Some speculate that dozens or even hundreds may have died already.

(*IHT*, 1 December 2005, p. 7)

'China reported its twenty-fifth outbreak of H5N1 in poultry' (*The Times*, 2 December 2005, p. 54).

Ukraine yesterday [4 December] began combating what appeared to be the biggest outbreak yet in Europe of the deadly strain of bird flu, after more than 2,000 domestic birds died in a remote region of the Crimea. A state of emergency [was declared] in five villages on Saturday [3 December] after the agriculture ministry said it had identified the H5 subtype of bird flu virus ... Confirmation that the outbreak was caused by the H5N1 strain that can kill humans was awaiting the results of tests in Britain and Italy. But officials left little doubt that they were dealing with the same deadly strain that has shown up in Romania and other parts of south-east Europe ... The [Ukrainian] agriculture minister told a press conference he was alerted on Friday [2 December] after the villagers saw up to 20 per cent of their birds die overnight ... Villagers told television reporters they were mystified by

the disease that had been killing birds for more than a month ... Romania said at the weekend it was dealing with what appeared to be a new H5N1 outbreak in the country's south-east, its first outside the Danube delta.

(*FT*, 5 December 2005, p. 6)

'A state of emergency [was declared] Saturday after ... Ukraine ... recorded its first case of type H5N1 bird flu' (*IHT*, 7 December 2005, p. 3).

'President Viktor Yushchenko, angry over delays in reporting a virulent strain of bird flu, ordered the dismissal on Monday [5 December] of Ukraine's top veterinarian officer' (*IHT*, 6 December 2005, p. 10).

'A five-year-old boy became Thailand's second bird flu fatality ... since October ... China [reported] its fifth human case' (www.iht.com, 9 December 2005).

A five-year-old Thai boy became the seventieth person to die of bird flu, it was reported yesterday [9 December] ... The boy's death took Thailand's bird flu death toll to fourteen out of twenty-two known cases ... China has reported a new case of H5N1 ... [but] the Chinese victim has since recovered.

(Independent, 10 December 2005, p. 31)

'The death of the five-year-old boy from Thailand took the country's bird flu cases to fourteen out of twenty-two known cases since the virus broke out in Asia in late 2003' (*Guardian*, 10 December 2005, p. 18).

Roche, the Swiss drug maker, said Monday [12 December] that it had reached a sub-licensing agreement with China's state-owned Shanghai Pharmaceutical Group to manufacture the influenza drug Tamiflu and is in talks with twelve other companies [in other countries]... The agreement with Shanghai Pharmaceutical is the first full sub-licence that Roche has awarded for Tamiflu ... the anti-viral drug [that] has shown in clinical trials to work against the symptoms of the H5N1 strain of bird flu ... The agreement with Shanghai Pharmaceutical comes after some Asian governments, including China's, said they would allow local companies to produce a generic version of the drug — without Roche's permission, if necessary ... Tamiflu is not protected by patent in Thailand, the Philippines and Indonesia, meaning local companies there are free to produce the drug ... In Vietnam Roche has agreed to allow local companies to put the finished ingredients of Tamiflu into capsules ... So far seventy people in five Asian countries have died of the disease.

(*IHT*, 13 December 2005, p. 16)

Ukraine on Wednesday [14 December] announced that tests had confirmed that a potentially deadly strain of avian flu ... H5N1 ... had established itself in the Crimean Peninsula, and said that thousands of birds were being

culled . . . [The] H5N1 [strain] has been responsible for the deaths of at least sixty-nine people in Asia since 2003.

(IHT, 17 December 2005, p. 3)

A thirty-five-year-old man in eastern China became infected with the ... H5N1 virus ... making him the country's sixth human bird flu case, the state news media said Friday [16 December] . . . [He] fell ill on 4 December ... [but is] recovering in hospital ... The H5N1 strain of bird flu has killed at least seventy-one people since 2003 ... On Friday Indonesia said a ... man had died from the H5N1 strain.

(www.iht.com, 16 December 2005)

The first scientific study of humans with bird flu who have received the antiviral drug Tamiflu has found that the bird flu virus can rapidly become invulnerable to the medicine ... In the new study ... colleagues at Vietnam's Hospital for Tropical Diseases in Ho Chi Minh City treated eight patients with Tamiflu. Vietnam has had more human bird flu cases than any other country ... In half of the patients Tamiflu worked brilliantly ... In two patients the bird flu virus rapidly developed strong resistance to the drug. The patients died ... The remaining two patients died despite treatment, although the drug may have been started too late in their illness to help them. From a public health perspective the development of resistance in even a quarter of cases is worrisome, since it means that such patients, before they die, can pass on a resistant form of virus that is even harder to treat.

(IHT, 22 December 2005, pp. 1, 8)

'The reports increase suggested levels of resistance to nearly 10 per cent, or three out of the thirty-one known human cases of H5N1 treated with Tamiflu ... The virus has so far infected 139 people and killed seventy-one' (FT, 22 December 2005, p. 12).

Roche, the Swiss pharmaceutical group, has signed a pioneering deal authorizing an Indian drugs company to manufacture and sell its anti-viral flu medicine Tamiflu under licence in a number of developing countries. Hetero ... becomes the second drug company after Shanghai Pharmaceutical Group to receive a sub-licence that will allow it to sell large volumes of Tamiflu at a price it chooses . . . The Indian deal is important because for the first time it authorizes a partner company to produce and sell Tamiflu not only in its home market – as is the case with Shanghai – but also in other less developed and developing countries ... The deal, which initially lasts for two years, would allow Hetero to sell Tamiflu at whatever price it chooses in India and countries where there is no or poor intellectual property protection for the drug.

(IHT, 24 December 2005, p.5)

China confirmed a new outbreak of bird flu in the south-western province of Sichuan on Wednesday [4 January 2006], but the agriculture ministry said the situation there was under control. More than 1,800 birds were found dead on 22 December [2005] at a farm . . . On Tuesday [3 January] samples tested at a laboratory confirmed the birds had died from the H5N1 virus.

(www.iht.com, 4 January 2006)

'Turkey has confirmed two cases of bird flu, including a fourteen-year-old farm boy who died ... His sister, who is in a serious condition in hospital, also tested positive. A third sibling is also suspected of having bird flu' (*Independent*, 5 January 2006, p. 21).

Two siblings who lived on a farm in rural Turkey have died of avian influenza, health officials there said Thursday [5 January], making them the first human victims of the disease outside of China and South-east Asia. Both children had close contact with sick poultry . . . It has not yet been confirmed that they succumbed to the virulent H5N1 strain virus, although everything points to that conclusion . . . [The girl was] fifteen and her [brother was] four-teen . . . Their eleven-year-old sister . . . and some neighbours have been hospitalized . . . All the children were involved in caring for poultry, although there are no officially reported outbreaks in the village where they live.

(www.iht.com, 5 January 2006; IHT, 6 January 2006, pp. 1, 4)

Two children [died] in a suspected outbreak of H5N1 ... The brother and sister, who lived close to poultry at their farm in a village near the border with Armenia, were the first human victims of the disease in Europe. Seventy-four people have died of bird flu in Asia in the past three years ... [The fifteen-year-old girl] died early yesterday [5 January]. Her brother [aged fourteen] ... died on Sunday [1 January] ... Their eleven-year-old sister is among the eighteen other patients who were in hospital last yesterday with bird flu-like symptoms ... Samples of the dead birds were due to arrive in ... the UK and would be tested to show whether the birds died of the H5N1 strain.

(*FT*, 6 January 2006, p. 7)

An eleven-year-old girl died Friday [6 January] of suspected bird flu in eastern Turkey, days after her brother and sister succumbed to the disease ... Their doctor said the youngsters most likely contracted the virus while playing with the heads of dead chickens infected with the disease ... The Turkish agriculture minister ... said the problem of containing bird flu in eastern Turkey was aggravated by the fact that almost every house has poultry and people keep the birds inside their homes at night when temperatures drop. Most of those who have died from the virus have been farm workers in Vietnam, Thailand and Indonesia, who came into close contact with poultry, said the WHO.

(www.iht.com, 6 January 2006)

Health officials in Europe said they were on 'high alert' Friday [6 January] as a third child in eastern Turkey was confirmed to have bird flu and more than two dozen people suspected of having the disease were in a local hospital ... An international reference lab in England confirmed for the first time Friday that at least three children in the Turkish cluster had the H5N1 virus and further testing was under way ... The full extent of the cluster is unclear, as tests for H5N1, which are difficult to perform, are still under way [in England] ... On Friday the lab confirmed that ... the two siblings who died ... were infected with H5N1. So was another unrelated boy, who is severely ill in the same hospital in the city of Van ... Even though their chickens were dying, there were no reports of H5N1 in the remote village when the children fell ill.

(IHT, 7 January 2006, p. 3)

A third child from the same family in Turkey died yesterday [6 January] after tests confirmed that two of the victims had been infected with the H5N1 virus ... The children had all eaten infected chicken that had lived partly in their home.

(FT, 7 January 2005, p. 6)

Two young children were being treated for deadly bird flu at an eastern Turkish hospital Sunday [8 January], the day after health officials confirmed that at least two of the three siblings who died last week had been infected with the virus. A British laboratory has confirmed the virus in a five-yearold hospitalized in the Turkish town of Van, near the Iranian border, while tests in Turkey and Britain also found the strain in a eight-year-old girl ... The British lab also confirmed that a fourteen-year-old boy and his fifteenyear-old sister, who died Friday [6 January] had H5N1 ... In all thirty-eight people were hospitalized with symptoms like those of bird flu . . . Dozens of people with flu-like symptoms, who had recently been in close contact with fowl, were hospitalized across Turkey ... So far the lethal H5N1 strain of the bird flu has been capable in rare cases of passing from poultry to humans in close contact with them, but not from human to human.

(www.iht.com, 8 January 2006)

In the eastern town of Dogubeyazit, in Van, three children from the same family died last week ... A local hospital has been besieged by panicked residents seeking treatment for symptoms ... Two children and an adult have tested positive for the deadly H5N1 bird flu strain in Turkey's capital Ankara, the city's governor has said. The results have not been confirmed by WHO labs ... The three people who tested positive in Ankara come from a town about one hour's drive [sixty miles] from the city.

(www.bbc.co.uk, 8 January 2006)

Four children from villages near Van in remote eastern Turkey have now been officially confirmed to have been infected with the H5N1 strain of the flu by the WHO, and at least thirty people are hospitalized in Van City as possible victims. Like many people in these poor villages, the four children - two of whom have died - had close contact with birds, health officials said, and probably became infected as a result. A sibling of the two victims has also died, although tests for the virus have so far been negative. In addition, Turkish officials announced Sunday [8 January] that tests had confirmed five more cases of H5N1, two in Van and three from around Ankara - two young brothers and an elderly man. The Ankara cases have the most alarming implications since bird flu has never been reported in that part of the country. It is a relatively well off area, where it is not the norm for humans and animals to live under one roof. The boys infected had contact with dead wild ducks ... and the man a dead chicken ... The United Nations Food and Animal Organization ... said the organization now believed the outbreaks had been occurring for some time, starting perhaps as early as October or November [2005] ... In one village near Van, Dogubayazit, four children from the same family have apparently come down with the disease. A third also perished, although the first test was negative ... [The test is] being repeated because the test is complicated and is sometimes falsely negative . . . A total of fifty patients are in hospitals in Van and Ankara with possible bird flu ... all of whom had close contact with birds ... The cluster of cases in Turkey is extraordinary and concerning, scientists said. In all of East Asia, where the disease has been rampant in birds for years, only about 140 people have ever become infected and there has never been this kind of grouping. Scientists are exploring various theories to explain the Turkish clusters ... When temperatures drop below zero – as they do frequently around Van in the winter – people may be more likely to bring chickens indoors and that could increase exposure.

(IHT, 9 January 2006, pp. 1, 8)

The Turkish health ministry said two children and an adult from near the capital, as well as two people in the eastern city of Van, had tested positive for the H5N1 strain of bird flu ... Samples from them are expected to be sent to the UK for testing ... Seven cases of the H5N1 strain [have been] confirmed in Turkey.

(*FT*, 9 January 2006, p. 1)

Preliminary tests showed that five more people have been infected with the deadly H5N1 strain of the bird flu in Turkey, a health ministry official said Monday [9 January], indicating the disease was spreading. Turkish labs detected H5N1 in the five new cases, discovered in four separate provinces ... The new cases raise the number of suspected and confirmed cases in Turkey to fifteen. Ten people had earlier tested positive for H5N1 in tests in Turkish labs, four of which have been confirmed by the WHO. Those four include two siblings who died last week in the eastern city of Van, the first confirmed fatalities caused by the virus outside eastern Asia, where seventy-

four people have been killed by H5N1 since 2003. A third sibling died in Van of bird flu, but a WHO lab has yet to confirm H5N1 ... The cases in Ankara included two young brothers and a sixty-five-year-old man, all of whom tested positive for H5N1 in preliminary tests by Turkish labs ... Vietnam has not detected any bird flu outbreaks among its poultry in more than three weeks, but the country still faces a high risk of future flare-ups, an official said Monday ... The northern provinces of Ha Giang and Cao Bag bordering China were the last two provinces where no outbreaks were reported in twenty-one days ... The virus is considered to have been contained if no new outbreaks have been reported in that period, according to Vietnam's animal health decree. Vietnam has been hit harder by the virus than any other country. Since early October [2005] nearly 4 million birds have died or been slaughtered in twenty-four affected provinces nationwide. All those areas have since gone at least twenty-one days without an outbreak ... A thirty-nine-year-old man who died in Indonesia on 2 January had been infected with the bird flu, a senior health ministry official said Monday ... If the results are confirmed by a WHO-sanctioned laboratory, the country's human toll from the disease would climb to twelve.

(www.iht.com, 9 January 2006)

Five more children in Turkey tested positive in preliminary tests for the deadly H5N1 flu strain. The country now has fifteen suspected or confirmed cases of the strain and three children from the same family have died. The new cases were discovered in four provinces, indicating that the disease is spreading . . . The WHO said, however, that the Turkish victims appeared to have contracted the virus directly from infected birds, allaying fears that it might now be passing from person to person.

(IHT, 10 January 2006, p. 3)

The WHO says fifteen people have been infected with bird flu in Turkey. Five of those – reported by the Turkish health ministry on Monday [9 January] – are considered 'preliminary positive' because the organization has not yet received enough information about them ... A team that began investigating the cases has initially reported that the cases were caused by 'direct contact with diseased poultry' ... The governor of Istanbul ...announced Monday that birds in three districts of this city of 12 million had been diagnosed with the flu, although it was not yet clear if they carried the most dangerous H5N1 strain ... In addition to the fifteen confirmed cases, the governor said that more than twenty people in Istanbul potentially had bird flu.

(*IHT*, 10 January 2006, pp. 1, 8)

[On 9 January] the [Turkish] health ministry announced that five more people had been infected with the deadliest strain of the virus, bringing the total to fourteen . . . Scores of suspected bird flu cases were reported across

western and northern Turkey and a mass cull of poultry continued in the east.

(*FT*, 10 January 2006, p. 8)

The [Turkish] health ministry said fourteen people had tested positive for the virus, including the three dead children . . . A fourth child from the same family, aged six, was discharged from hospital after being confirmed as free of the disease . . . Worldwide seventy-six people have died of the H5N1 strain of avian influenza and the total number of confirmed cases has reached 146 in Vietnam, Thailand, Cambodia, China, Indonesia and now Turkey. Vietnam has the highest number, with ninety-three cases and forty-two deaths. China has reported seven cases and three deaths.

(Independent, 10 January 2006, p. 18)

New research offers some ground for optimism: it is likely that many people who contract the disease will not become seriously ill and will recover quickly. Although not definitive, a study published Monday [9 January] in Archives of Internal Medicine suggests the virus is more widespread than thought. But it also probably will not kill half its victims ... Anna Thorson (of Karolinska University Hospital in Stockholm): 'The results suggest that the symptoms most often are relatively mild and that close contact is needed for transmission to humans' ... The new study involved 45,476 randomly selected residents of a region [in Vietnam] where bird flu is rampant among poultry – Ha Tay province, west of Hanoi. More than 80 per cent lived in households that keep poultry, and one quarter lived in homes reporting sick or dead fowl. A total of 8,149 reportedly had flu-like symptoms, with a fever and cough. Residents who had direct contact with dead or sick poultry were 73 per cent more likely to have had those symptoms than residents without direct contact. The researchers said between 650 and 750 flu-like cases could be attributed to direct contact with sick or dead birds. While most patients said their symptoms had kept them out of work or school, the illnesses were mostly mild, lasting about three days. In contrast, most of the more than 140 human cases linked to bird flu and reported to the WHO since January 2004 have been severe – killing more than half the patients ... The study's authors said that without blood tests to prove the Vietnamese residents had bird flu the results were only suggestive and far from conclusive.

(www.iht.com, 10 January 2006)

'[The study] suggested that the H5N1 virus might cause a wide spectrum of disease, but that doctors in Asia might only detect the severest cases, the ones that went to hospital' (*IHT*, 11 January 2006, p. 8).

Swedish researchers said ... there could be up to 750 cases of infection compared with the eighty-seven officially reported ... Those infected did

not seek hospital treatment and were not counted in official figures ... The finding indicates the disease may be milder ... but it also suggests it is more widespread in humans, increasing the chances of a mutation that could trigger a pandemic.

(Independent, 10 January 2006, p. 18)

Japan said Tuesday [10 January] that seventy-seven poultry workers had tested positive for bird flu in the first ever confirmed infections of humans involving the weaker strain of the virus ... H5N2 ... [But] developing countries hit hardest by bird flu rarely bother trying to confirm cases of the weaker strain ... The farm workers ... were infected at some point but ... none of them showed signs of the disease ... Japan has so far suffered one case of human infection of the more deadly virus, but no deaths ... Most of the human infections in the world have been linked to direct contact with sick poultry ... There is no known cure or vaccination for H5N1 in humans. (www.iht.com, 10 January 2006)

'China on Tuesday [10 January] recorded its thirty-third outbreak of bird flu since early 2005, with the latest epidemic hitting the southern province of Guizhou' (www.iht.com, 10 January 2006).

The WHO said [on 10 January] that preliminarily it supported analyses from Turkish laboratories of fifteen cases of the H5N1 virus in humans, pending confirmation from a second foreign test abroad, which was in line with normal practice. Three siblings from eastern Turkey have died from the H5N1 strain but authorities said yesterday [10 January] that none of the remaining individuals suspected of infection was in a critical condition ... The [Turkish] health ministry said another human case of the H5N1 strain had been found in a woman in Siyas.

(FT, 11 January 2006, p. 11)

The WHO said Wednesday [11 January] that two more people sickened by bird flu in China have died, bringing the total number of humans killed by the disease in that country to five and pushing the death toll worldwide to seventy-eight.

(www.iht.com, 11 January 2006)

Fifteen people [in Turkey] have contracted the deadly strain H5N1 ... and more than 100 people are in hospitals under observation ... Massive bird deaths started in mid-December [2005] ... In Dogubayazit ... all four children in the Kocyigit family came down with the disease after helping their mother slaughter sick birds on 24 December ... The government has announced it will provide compensation, but poultry owners must apply after the birds are killed and are not given money on the spot.

(IHT, 12 January 2006, pp. 1, 4)

All the human cases of avian influenza in Turkey – at least eighteen have been confirmed – have occurred after close contact with sick birds . . . The largest outbreak in Turkey, which has resulted in three human deaths, is in the border town of Dogubayazit.

(IHT, 13 January 2006, p. 3)

Turkish officials announced a rise yesterday [12 January], from fifteen to eighteen, in the number of human bird flu cases . . . Tests also showed that an eleven-year-old girl who died last week was suffering from H5N1 . . . [Her] brother . . . and sister . . . also died of the disease last week, bringing the number of confirmed bird flu fatalities in Turkey to three – all of them children.

(*Guardian*, 13 January 2006, p. 28)

A twenty-nine-year-old Indonesian woman has died of bird flu, health officials said Thursday [12 January] ... The woman died Wednesday ... Samples have been sent to a Hong Kong laboratory – accredited by the WHO – to confirm the diagnosis ... Indonesia is awaiting results from tests in Hong Kong on a thirty-nine-year-old man who died last week. Local tests, usually reliable, confirmed he had died of bird flu. If tests confirm the two fatalities were caused by bird flu, Indonesia's death toll from the H5N1 virus would rise to thirteen.

(IHT, 13 January 2005, p. 3)

'Indonesia: the WHO confirmed the country's twelfth human death from the H5N1 strain' (*FT*, 14 January 2006, p. 5).

'The virus has killed a twelfth person in Indonesia, a twenty-nine-year-old woman. It brings the death toll worldwide from the disease since it struck Asia in 2003 to seventy-eight' (*Guardian*, 14 January 2006, p. 18).

The Turkish health ministry ... confirmed three more cases of infection by the deadly H5N1 strain of bird flu in humans, bring the total to eighteen ... A four-year-old girl died in hospital in Turkey yesterday [13 January] ... The EU yesterday [13 January] pledged \$97 million towards tackling bird flu, adding to contributions from Japan and the United States as leading countries geared up for an international donors' conference in Beijing next week to help prevent a human pandemic. At the close of a conference in Tokyo yesterday ... The WHO ... said \$1.5 billion was needed to tackle the problem ... Japan has pledged \$155 million.

(FT, 14 January 2006, p. 5)

Health authorities in Turkey are investigating whether a four-year-old girl who died yesterday [13 January] has become the country's fourth child fatality . . . Eighteen people have already been infected . . . Patients there [in Turkey] have been said to be responding well . . . to Tamiflu.

(Guardian, 14 January 2006, p. 18)

The Turkish authorities were trying to determine whether a twelve-year-old girl who died Sunday [15 January] was the country's latest victim of bird flu after her seven-year-old brother tested positive for the virulent H5N1 virus The girl's brother was in a serious condition, officials said . . . [They are] from Dogubayazit . . . The health ministry said the latest test results on the sick boy brought to at least nineteen the number of people in Turkey known to have contracted the H5N1 strain . . . Health authorities have said all those with confirmed H5N1 infections apparently had touched or played with sick birds and that there was no evidence of person-to-person infection . . . The virus is now confirmed in twenty-six of Turkey's eighty-one provinces . . . The three fatalities in Turkey last week were the first known deaths from the virus outside East Asia and South-east Asia, where at least seventy-seven people have died from bird flu since the outbreak began, according to the WHO tally.

(*IHT*, 16 January 2006, p. 3)

'So far seventy-nine humans have died from the virus' (FT, 16 January 2006, p. 9).

This week ... health ministers, leaders of UN agencies and top officials from the World Bank and other lending institutions gather in Beijing to raise as much as \$1.5 billion to fight bird flu ... For now much of the money being offered to poor countries to fight bird flu involves loans, not grants ... The danger, even some managers of bird flu programmes are starting to say, is that donors focus so intently on a single disease that they unintentionally disrupt many other health programmes ... In Laos ... despite the apparent disappearance of bird flu . . . it has consumed the time and attention of Laos's best doctors and veterinarians for the past two years ... Not one human case of bird flu was ever confirmed in Laos ... Laotian government officials reported to the UN agency within hours on a weekend last September [2005] the country's only suspected human case of bird flu so far. A laboratory in Japan determined it was a false alarm . . . Unlike the situation in neighbouring Vietnam, Thailand and China, where live poultry is often transported large distances to markets, sometimes on bicycles, in sparsely populated Laos most chickens and ducks are raised in backyards and eaten by their owners. This limits the disease's spread.

(www.iht.com, 15 January 2006)

Initial tests carried out by the Indonesian authorities indicate that a thirteenyear-old girl who died over the weekend was infected with bird flu, an Indonesian health ministry official said Monday [15 January] ... The girl would be the thirteenth Indonesian fatality from the virus, which has killed nearly eighty people in Asia since 2003. Three people have also died in Turkey ... The WHO confirmed Friday [13 January] that a twenty-nineyear-old Indonesian woman was the twelfth Indonesian death from bird flu. Indonesia is also awaiting results from test in Hong Kong on a thirty-nineyear-old man who died earlier this month. Local tests, which are usually reliable, confirmed that he also had bird flu.

(www.iht.com, 16 January 2006)

Twenty people in Turkey, all of whom have had close contact with sick birds, have been confirmed as infected over the past two weeks. The most recent victim was a twelve-year-old girl, who ... died Sunday [15 January] ... It was determined Monday [16 January] that she had the virus ... In South-east Asia, where bird flu first appeared in 1997, there have been about 140 cases over a period of three years ... There are now nineteen confirmed outbreaks of bird flu in Turkey and the government announced Monday that it was culling birds in twenty-nine provinces where flu was 'confirmed or suspected'.

(*IHT*, 17 January 2006, p. 3)

Top officials from around the world said here [Beijing] on Tuesday [17] January] that governments would have to spend heavily for years to prevent bird flu from spreading widely among humans, and cannot just rely on the many stopgap steps taken so far. A two-day conference that began here on Tuesday morning is expected to produce pledges of \$1.2 billion to \$1.5 billion in bird flu spending from the conference's sponsors – the EU, the World Bank and China – and from other donors, including the United States. The recent spate of twenty human cases of bird flu on Europe's doorstep in Turkey, including four deaths, has prompted criticism at the conference of Turkish officials for not having spotted the disease in local poultry sooner. This failure has led to calls for a broad international effort to build up many nations' veterinary capacity to spot outbreaks early, when they can still be contained fairly easily through steps like culling or vaccinating chickens . . . [It was said that] the EU would announce on Wednesday [18 January] an increase in its previous pledge of \$120 million ... The predictions of a long and costly campaign came as Roche announced in Basel, Switzerland, that it would donate another 2 million treatment doses of its anti-viral medicine, Tamiflu, to the WHO . . . The director-general of the World Organization for Animal Health said it was crucial to catch an outbreak within the first fortyeight hours and that Turkey had failed to do so.

*IHT*, 18 January 2006, p. 2)

The Roche donation ... [of] another 2 million treatments of Tamiflu ... would have a market value of about \$36.2 million if sold at its usual commercial prices to western governments ... [Tamiflu] is designed to both reduce the death and illness from bird flu and to prevent its spread ... The latest Roche donation follows a previous 3 million treatment stockpile it provided for free.

(*FT*, 18 January 2006, p. 7)

Preliminary tests indicate that another Turkish child is infected with the H5N1 strain of bird flu, increasing the total number of human cases in the country to twenty-one ... The child ... was from Dogubayazit, the home town of all four of the other children who have died of H5N1 infection.

(IHT, 18 January 2006, p. 2)

'Bird flu has killed at least seventy-nine people since 2003 and nearly 150 people are known to have been infected in six countries' (*Guardian*, 18 January 2006, p. 16).

The international community yesterday [18 January] promised \$1.9 billion to fight avian flu in the worst affected countries, with the largest commitments coming from the United States with \$334 million and the EU pledging around \$260 million ... [Other promises included Japan's \$159 million, Russia's \$45 million, Australia's \$42 and China's \$10 million] ... The funding, promised at an international conference in Beijing, was well in excess of an initial target set by the World Bank to raise at least \$1.2 billion ... Of the \$1.9 billion, about \$900 million would be in the form of loans and the rest in grants ... David Nabarro, the United Nations flu envoy, said the funds were intended to fill a gap in flu-related financing in countries with serious outbreaks ... There are widespread concerns that an unmanageable outbreak or virus mutation in a single country may quickly spread beyond borders.

(FT, 19 January 2006, p. 10)

Thirty-three countries and multilateral institutions pledged \$1.9 billion Wednesday [18 January] to fight the disease. The pledges, at the conclusion of a two-day conference in Beijing, exceed the \$1.2 billion to \$1.4 billion that the World Bank said was needed over the next three years. The money will pay for such tasks as strengthening veterinary and medical surveillance for outbreaks, stockpiling of surgical masks and other protective equipment and expanding research . . . [The World Bank] said that the oversubscription would make it possible for poor countries to rely more on grants than loans in fighting the disease. The \$1.9 billion includes \$1 billion in grants and \$900 million in loans, including \$500 million in World Bank loans ... Migratory birds have carried the virus out of southern China and South-east Asia to infect chickens around the Black Sea and the Caucasus, leading to illness in at least twenty-one people in Turkey. The oversubscription also makes it somewhat less likely that money would have to be taken from existing economic development programmes to pay for fighting bird flu [the World Bank said] ... The United States pledged \$334 million in grants, for example, of which \$31.3 million is money transferred from funds previously earmarked for helping survivors of the tsunami on 26 December 2004. But \$280 million comes from bird flu-related legislation passed by Congress just before Christmas [2005], while another \$22.7 million comes mostly from money previously set aside for international health issues ... Japan pledged \$159, the EU pledged \$120 million and the EU members separately promised \$138 million ... China pledged \$10 million.

(www.iht.com, 18 January 2005; *IHT*, 19 January 2006, p. 4)

'Tests have confirmed that the H5N1 virus killed a teenage girl in Iraq and a thirty-five-year-old woman in China' (*Independent*, 19 January 2006, p. 31).

The near-total absence of adequate health care in much of the [Chinese] countryside has sown deep resentment among the peasantry while helping to spread infectious diseases like hepatitis and tuberculosis and making the country – and the world - more vulnerable to epidemics like SARS and possibly bird flu.

(Howard French, *IHT*, 16 January 2006, p. 4)

Two children from the same family died from bird flu, the WHO has confirmed, bringing Indonesia's toll from the virus to fourteen, the government said Sunday [22 January] ... The four-year-old boy and his thirteen-year-old sister died last week, but confirmation that bird flu was responsible was not known until Saturday ... Like most of the other cases, the victims lived on Java, a densely populated island that is home to more than half of the country's 220 million people ... Doctors suspect a French woman who recently returned from Turkey could have contracted bird flu and are examining her, the health ministry reported Sunday.

(www.iht.com, 22 January 2006)

Initial tests ... [on] a French woman ... were negative ... Hospitalization does not indicate likely infections and it is common when countries are on high alert concerning a disease. Two weeks ago a German who fell ill after being in Turkey was hospitalized ... Only 150 people worldwide have fallen ill from ... the H5N1 virus.

(*IHT*, 23 January 2006, p. 3)

On Friday [20 January] the Turkish government accused several of its neighbours of concealing bird flu outbreaks and hampering efforts to prevent the spread of the disease. Turkey did not name the countries it believes are covering up the infections. Turkey has reported possible H5N1 outbreaks of poultry in twenty-six provinces, including areas bordering Azerbaijan, Armenia, Iran, Iraq, Syria and Georgia ... Since 2003 eighty-one people have died from bird flu in Turkey and eastern Asia. All the victims appear to have contracted the disease after close contact with infected poultry and health officials say that so far there is no evidence that the virus can be transmitted from human to human.

(*Guardian*, 23 January 2006, p. 19)

The costs of the [H5N1] virus cannot be ignored. Already millions of dollars have been lost to economies in Asia where widespread culling has taken place. The World Bank estimates the damage in a country such as Vietnam at up to 0.2 per cent of GDP ... Even SARS ... cost east Asia an estimated 2 per cent of GDP in the second quarter of 2004.

(*FT*, Survey on the World in 2006, 25 January 2006, p. 6)

The EU authorities have confirmed the presence of the deadly H5N1 strain of avian flu in a sample of poultry taken from northern Cyprus, the European Commission said Sunday [29 January] ... Turkey has reported twentyone human cases of H5N1, including four deaths, although the WHO has not confirmed the figures.

(www.iht.com, 29 January 2006)

'Bird flu has been detected in northern Cyprus ... Tests on dead birds showed they were carrying the lethal H5N1 strain' (FT, 30 January 2006, p. 12). 'Test showed a bird in northern Cyprus ... the Turkish-Cypriot enclave ... was carrying the H5N1 strain' (Independent, 30 January 2006, p. 23).

A fifteen-year-old Iraqi girl has died of the H5N1 virus, Iraqi and international health officials confirmed Monday [30 January], indicating the arrival of disease in yet another country ... More alarming still, officials said, the finding suggests that the disease may be spreading widely - and undetected - among birds in countries of Central Asia that are poorly equipped to pick up or report infections. Bird flu has never been reported in animals in Iraq. As in Turkey earlier this month [January] the spread of bird flu to a new part of the world was heralded by a human death. The girl ... died earlier this month [17 January] in Sulaimaniya, in the Kurdish region of northern Iraq, three days after touching dead birds . . . Her uncle, who died last week, is also presumed to have succumbed to the disease, although tests are pending ... Two other people in distant parts of Iraq have also been tested for bird flu ... A serious bird flu outbreak has killed four people and hundreds of thousands of birds in the Kurdish part of neighbouring Turkey over the past six weeks ... A large ethnic Kurdish area includes portions of several different countries ... A slow start in Turkey allowed the disease to spread throughout the country and the government is now struggling to contain fifty-five outbreaks in fifteen provinces.

(IHT, 31 January 2006, pp. 1, 8)

The WHO is carrying out tests to confirm the first human case of bird flu in Iraq, following the death of a fourteen-year-old girl . . . Preliminary results ... showed the deadly H5N1 bird flu virus, but it [the WHO] was seeking further tests.

(*FT*, 31 January 2006, p. 8)

Bird flu has spread from South-east Asia to the borders of Europe, killing at least eighty-five people in six countries. A girl in Iraq also apparently died from the virus, though the WHO has not confirmed the cause of that death and included it in its tally ... [Roche's] Tamiflu and GlaxoSmithKline's Relenza are the only two drugs currently being sold that studies say may help people infected with bird flu.

(www.iht.com, 1 February 2006)

Bird flu appears to be taking root in Hong Kong now that it has surfaced in local wild birds and chickens ... York Chow (Hong Kong's health secretary): 'Since different kinds of wild birds and chickens have this virus we can be quite sure that this virus is endemic in our birds ... [The virus] will exist in neighbouring areas, southern China as well as Hong Kong'... Later a health bureau spokesman said Chow meant that bird flu is endemic in Asia, not Hong Kong specifically. The UN Food and Agriculture Organization says an area is considered endemic after tests determine a cycle of disease recurrence within a given area, and that the virus has not simply been imported from another place.

(IHT, 4 February 2006, p. 5)

[The Hong Kong health secretary] said that positive tests for H5N1 in a bird brought to Hong Kong from China indicated that the virus was endemic ... The chicken was one of four bids that have died from the virus in Hong Kong this year [2006] ... [His comment] raises concerns about detection within the Guangdong region of China, which has not reported any cases of bird flu ... The H5N1 strain was first detected in 1997, in Hong Kong. It has infected 161 people and killed eighty-six since 2003 ... Indonesian officials confirmed yesterday [3 February] that a fifteen-year-old boy had died of the disease.

(*The Times*, 4 February 2006, p. 47)

The bird flu virus continued its alarming global march, confirmed Wednesday [8 February] for the first time in birds in Africa, a continent that is ill-prepared to contain its spread, international health authorities said. The Nigerian health authorities reported the continent's first outbreak to the World Organization for Animal Health in Paris . . . In an outbreak that began on 10 January, more than 40,000 chickens have died at a commercial laying farm in Kaduna state in northern Nigeria . . . A UN laboratory in Italy confirmed late Tuesday that the culprit was H5N1 . . . UN veterinary officials said Wednesday that they were investigating similar rumours of bird deaths in a number of other African countries . . . In Nigeria . . . home to about 140 million poultry . . . the outbreak began with bird deaths on 10 January but was not reported until Wednesday . . . Nigerian samples were only sent to the UN reference laboratory in Italy last week . . . The food and agriculture agency has been tracking rumours of bird deaths in Nigeria for several weeks . . . and is investigating similar rumours in a handful of other African nations,

including Mali, Egypt, Malawi and Libya ... Worldwide about 160 people have become infected with bird flu, almost all of whom have had extremely close contact with sick birds. About half of them have died.

(www.iht.com, 9 February 2006)

The World Organization for Animal Health confirmed yesterday that the first recorded case of H5N1 bird flu in Africa had been found in the northern state of Kaduna [in Nigeria], on a farm of 46,000 chickens, geese and ostriches... The Italian health ministry confirmed that the 'highly pathological strain' of H5N1 found in Nigeria was similar to those discovered in Siberia and Mongolia.

(Independent, 9 February 2006, p. 25)

Many people [in Africa] live in close proximity to poultry, just as in Southeast Asia... [There are] fears that bird flu is now spreading through Iraq... Worldwide eighty-eight of the 165 people confirmed as having been infected with the avian virus have died... Samples from wild waterfowl in Malawi, Sudan and Kenya will soon be tested... in South Africa.

(*Guardian*, 9 February 2006, p. 17)

'The H5N1 strain of bird flu has been detected in two more northern states [in Nigeria]' (*Independent*, 10 February 2006, p. 38).

Nigeria struggled Friday [10 February] to contain the first known outbreak in Africa of bird flu, as officials warned it is spreading rapidly through flocks in the north of the country. Overnight the police and agricultural workers moved into a farm at the centre of the outbreak of avian influenza. They shot ostriches and bulldozed the charred remains of 45,000 chickens into the ground ... Azerbaijani officials said Friday that a British laboratory had confirmed the presence of bird flu in dead birds found along the Caspian Sea coast ... Azerbaijan shares a short border with eastern Turkey, where four children died after becoming infected with bird flu.

(www.iht.com, 10 February 2006)

Azerbaijan on Friday became the latest country to report the discovery of the H5N1 strain of avian flu, when migratory birds were found dead on its Caspian Sea coasts. The health ministry said Friday that a British laboratory had confirmed the presence of the H5N1 strain in wild ducks and swans on the Absheron Peninsula, which includes the capital, Baku, and surrounding villages.

(*IHT*, 11 February 2006, p. 6)

The Chinese government said Wednesday [8 February] that a twenty-six-year-old woman in an area with no reported outbreaks in poultry of the virulent flu strain was the latest person to become infected with bird flu in

China . . . Researchers looking into why many of the eleven people infected with bird flu in China came from areas without outbreaks in birds suspect it might be a result of contamination spread by dead poultry, the Chinese health ministry said Friday [10 February] . . . China has reported twentynine bird flu outbreaks in poultry since October [2005] in areas throughout the country. The government has destroyed millions of chickens, ducks and other poultry to contain the virus. Seven of the people infected have died.

(www.iht.com, 10 February 2006)

'China announced Friday the death of a twenty-year-old woman, bringing the death toll from the virus to eight' (*IHT*, 11 February 2006, p. 6).

Italian veterinary and health officials gathered Sunday [12 January] to plan a response to the country's first confirmed cases of the deadly H5N1 bird flu virus, which was discovered in wild swans in southern Italy. The cases in Italy and others confirmed in northern Greece on Saturday [11 February] marked the first time the highly infectious strain of the H5N1 virus had been detected within the EU. The virus was detected in five swans in the three southern Italian states of Puglia, Calabria and Sicily ... The swans had arrived from the Balkans, likely pushed south by cold weather ... Bird flu has killed at least eighty-eight people in Asia and Turkey since 2003, according to the WHO in a 9 February update. On Sunday a WHO-sanctioned laboratory confirmed another two deaths in Indonesia. It has been ravaging poultry stocks across Asia since 2003, killing or forcing the slaughter of more than 140 million birds.

(www.iht.com, 12 February 2006)

Indonesia said that two women died last week from bird flu, pushing the death toll from the disease there to eighteen ... European officials announced Saturday that bird flu had been detected in wild birds in Italy, Greece and Bulgaria, the first time its presence had been detected in the EU ... The Italian health minister ... announced that seventeen swans had been found dead in three southern regions.

(www.iht.com, 12 February 2006)

The H5N1 bird flu virus has been detected in wild birds in Italy and Greece ... It was also detected in Bulgaria ... [Italy] confirmed H5N1 in five of the dead swans and tests on others were continuing ... In Greece health officials announced that three swans in the northern part of the country had tested positive for the virus. Hours later EU officials said that some swans in Bulgaria, near the Danube Delta, had as well ... The variant strain of H5N1 found in Turkey and confirmed in Africa last week is identical to one found in a nature reserve in northern China and later in Siberia. It is different from strains circulating among poultry in South-east Asia and Indonesia. (IHT, 13 February 2006, p. 4)

Slovenia imposed controls yesterday [12 February] after a suspect case ... a dead swan ... was discovered near the Austrian border ... Samples have been sent to ... the UK ... to test if it is the strain that can infect humans ... The H5N1 variant of bird flu has killed at least ninety people in seven countries since 2003, according to the WHO.

(*FT*, 13 February 2006, p. 10)

Concerns grew over the weekend after bird flu appeared for the first time in the EU, in swans in Greece and Italy, while Nigeria waited for test results on two children suspected of being the first Africans to be infected ... The virus has killed at least ninety people in Asia and the Middle East ... since late 2003.

(www.iht.com, 13 February 2006)

Iraqi doctors are investigating six suspected cases of bird flu in southern Iraq, including one in which a twenty-five-year-old fisherman died after contact with birds he was keeping in his yard, Iraqi and US health officials said Sunday [12 February] ... Test are being performed to determine whether the fisherman, who died in hospital ... was infected with the H5N1 strain of the virus.

(www.iht.com, 13 February 2006)

Scores of government workers search rural areas of Hong Kong for poultry on Monday [13 February] to enforce a ban on backyard fowl ... Hong Kong [is] already on edge following eight deaths from bird flu in mainland China, after six wild birds and two chickens in the city were killed by the H5N1 strain of avian influenza in the past three weeks ... Hong Kong has not had any bird flu infections in people since the outbreak began in Asia in late 2003 ... The government wants to wipe out bird flu from the city where the virus made its first known jump to humans in 1997, killing six people.

(www.iht.com, 13 February 2006)

Twelve people died from bird flu in Thailand in 2004 but only two died last year [2005]. In Vietnam, by contrast, fatalities have continued apace, with twenty deaths in 2004 and nineteen last year ... Thailand has mobilized about 750,000 volunteers, one for every fifteen rural households ... The disease first struck Thailand in late 2003 ... [A] six-year-old [boy] ... was Thailand's first confirmed human case of avian influenza ... In Vietnam the government has urged the media to uncover cases and encouraged the general public to report sick or dead poultry, but there is no network of volunteers, according to ... the WHO ... In China surveillance efforts are haphazard [according to the WHO].

(www.iht.com, 13 February 2006; *IHT*, 14 February 2006, p. 8)

'A fourth bird sample ... a wild goose ... has tested positive for the deadly H5N1 strain in Greece' (*Independent*, 14 February 2006, p. 18).

[On 14 February] H5N1 was identified in two dead swans in Germany and at least two swans in Austria ... The swans [in Germany] found on the Baltic Sea island of Rügen registered positive in an initial test for the virus ... Iran also indicated for the first time yesterday [14 February] that it had identified the virus in wild swans ... Morocco was also conducting tests ... To date ninety-one people [in Asia and Turkey] have been confirmed dead as a result of the virus, from 169 identified as infected ... according to the WHO.

(*FT*, 15 February 2006, p. 8)

'Slovenia confirmed six new cases of bid flu near the Austrian border yester-day [15 February' (*Independent*, 15 February 2006, p. 18].

'The Italian press reported Wednesday [15 February] that two swans that died in southern Italy had tested positive for the virus, bringing to eight the number of birds to have died from H5N1 in Italy' (www.iht.com, 15 February 2006).

H5N1 was confirmed in a type of migratory swan in Greece, Bulgaria and Italy on Saturday [11 February] and in Germany on Wednesday [15 February]. Probable cases were detected in the same species in Slovenia and Croatia on Sunday, in Austria on Monday and in Denmark on Tuesday.

(*IHT*, 16 February 2006, p. 1)

'Germany and Austria became the latest countries to confirm cases of avian influenza . . . German officials said yesterday [15 February] that the two swans found on a beach on the Baltic island of Rügen had died from H5N1' (*Guardian*, 16 February 2006, p. 24).

'The bird flu that reached western Europe this week seems to have been carried by swans fleeing a Balkan cold snap' (*The Economist*, 18 February 2006, p. 41).

France yesterday [17 February] confirmed that it had found a dead wild duck carrying the H5 virus, joining Italy, Greece, Slovenia, Germany, Hungary and Austria on the list of EU countries that have found cases of bird flu ... The Dutch government ... announced last night that two dead swans had tested negative.

(*FT*, 18 February 2006, p. 9)

On the German island of Rügen tests on Friday [17 February] confirmed that ten wild birds had the H5N1 flu strain. France said a dead duck in the south-east tested positive for an H5 subtype and that more testing was being conducted. In Egypt official confirmed that country's first cases ... in and around Cairo.

(*IHT*, 18 February 2006, p. 3)

[France said] a duck found dead in the east had tested positive for the virus and that it was likely to be the H5N1 strain ... The bird was found dead on

Monday [13 February] near Lyon ... The disease has infected chickens in Egypt for the first time and there were cases reported in Azerbaijan and Slovenia.

(*Guardian*, 18 February 2006, p. 16)

France ... confirmed over the weekend that a duck had died from the virus ... France was the seventh European country discovered to have been infected by the H5N1 strain over the past week ... India began the slaughter of ... chickens Sunday [19 February] as health ministry officials investigated the death of a poultry farm owner from the country's first suspected case of bird flu ...... The first reports from New Delhi of suspected infections came on Friday [17 February] ... India is a major poultry producer, with an estimated 500 million birds.

(www.iht.com, 19 February 2006)

First reports of bird flu cropped up this weekend in widely separated countries – India, Egypt and France – highlighting the disease's accelerating spread to new territories ... The recent acceleration has perplexed many experts, who had watched the H5N1 virus stick to its native ground in Asia for nearly five years ... In Egypt the authorities on Sunday [19 February] closed the Cairo zoo and seven other state-run zoos around the country after eighty-three birds died there, some from the H5N1 strain of flu ... Since Friday [17 February], when the first announcement was made about bird flu outbreaks, the Egyptian authorities have reported cases of bird flu among poultry in at least eight provinces.

(*IHT*, 20 February 2006, pp. 1, 4)

Bird flu was detected for the first time on the German mainland yesterday [19 February] ... Bird flu has killed a twenty-three-year-old worker in Indonesia, a government official said on Saturday [18 February] ... The country's nineteenth victim of the H5N1 virus died on 10 February.

(*FT*, 20 February 2006, p. 6)

Vietnam, the worst affected country in the world with ninety-three human cases and forty-two deaths, has become the first to successfully contain the disease ... according to the WHO. No new cases of avian flu have been reported in humans since last November [2005] and in birds since last December, Hans Troedsson, director of the WHO in Hanoi said. Vietnam's breakthrough in containing the disease comes as the worldwide outbreak was confirmed in India, France and Iran ... Under WHO guidelines a country is designated disease-free when no new cases have been reported for twenty-one days. Thailand has also recorded no new cases since last November but has been less severely affected than Vietnam with twenty-two human cases and fourteen deaths ... The success curbing the disease in Vietnam and Thailand ... are especially encouraging ... [because] it has

been achieved in a part of the world where there are tens of thousands of peasant farmers keeping small flocks of chickens. Dr Troedsson said that a combination of vaccination, culling and public communication had proved the disease could be halted, even in a less developed country such as Vietnam. Almost 200 million birds have been vaccinated and up to 5 million culled ... [Places] like Hong Kong, Vietnam and Thailand have been able to contain [the disease] ... But Dr Troedsson warned that the H5N1 virus was almost certainly still in Vietnam and vigilance was essential.

(*Independent*, 20 February 2006, pp. 1–2)

There have been a total of 169 cases of avian flu in humans and ninety-two deaths. The respective figures for countries are as follows: Cambodia, four and four; China, twelve and eight; Indonesia, twenty-five and nineteen; Iraq, one and one; Thailand, twenty-two and fourteen; Turkey, twelve and four; Vietnam, ninety-three and forty-two (*Independent*, 20 February 2006, p. 2).

Hungary has reported five cases of suspected H5N1 and sent samples to an EU laboratory for testing . . . Two dead swans found in central Bosnia have tested positive for an H5 strain of bird flu and samples were sent to the laboratory in Britain to determine the exact strain.

(www.iht.com, 20 February 2006)

Nigeria confirmed Monday [20 February] that Africa's first bird flu epidemic had spread to three new states and the capital, Abuja, but underlined there had been no human infections ... To date [there are in total] six states ... where bird flu has been confirmed.

(IHT, 21 February 2006, p. 4)

Niger has become the second sub-Saharan country with confirmed cases of the deadly H5N1 bird flu strain ... The tests were confirmed Monday [27 February] ... H5N1 had earlier been confirmed in Nigeria, Niger's southern neighbour, and officials had said in mid-February they were investigating whether it had surfaced in Niger. It has also been confirmed in Egypt ... Bosnia, meanwhile, confirmed its first case [of H5N1] ... The two migrating [wild] swans had died in mid-February ... [The WHO] on Monday raised its tally of officially confirmed human cases of bird flu by three to 173. It said ninety-three of those were fatal, raising the number by one. The new cases of the WHO's list are two people in China reported in critical condition and a twenty-seven-year-old woman from Indonesia who died last week. WHO figures usually lag behind reports in individual countries, because it considers a person to have bird flu only after samples have been sent abroad and confirmed in a foreign laboratory. Almost all human deaths from bird flu have been linked to contact with infected birds.

(*IHT*, 28 February 2006, p. 4)

'Georgia found the H5N1 strain in wild swans' (Independent, 28 February 2006, p. 24).

Health workers in western India were wrapping up a massive slaughter of chickens Tuesday [21 February] to contain the H5N1 bird flu virus, while Malaysia began killing birds after reporting its first case of the disease in more than a year ... The Hong Kong government said a dead magpie ... was infected with bird flu ... On Tuesday bird flu was confirmed [in three dead wild swans] in Hungary, the seventh country in the EU to be affected by the disease.

(www.iht.com, 21 February 2006)

The spread of the H5N1 strain of bird flu into Hungary and Croatia was confirmed Tuesday [21 February] ... At least fifteen nations have reported outbreaks in birds this month [February], an indication that the virus ... is spreading faster. Migratory birds are thought to be at least one transporter of the disease. More than thirty countries have reported cases since 2003. Seven have recorded human infections. Hungary said Tuesday that tests had showed the virus in three dead swans found last week. Croatia confirmed that H5 N1 had been found in a dead swan on an island in the Adriatic Sea.

(*IHT*, 22 February 2006, p. 3)

'Avian flu can be controlled. In the past three years bird flu broke out in Malaysia, Korea and Japan and all three countries have eradicated it' (IHT, 22 February 2006, p. 8).

China and Vietnam have used widespread vaccination of poultry with great success. Vietnam, which has vaccinated 120 million birds since last year [2005], had the highest human death toll from bird flu in 2004. It has had neither a new outbreak nor a human case in more than four months.

(*IHT*, 23 February 2006, p. 8)

Indonesia said Wednesday [22 February] that a twenty-seven-year-old woman had died of bird flu [on 20 February] . . . in the capital, Jakarta, after coming into contact with sick chickens ... Indonesia has now recorded nineteen human bird flu fatalities ... The announcement came as international health experts expressed concern over the unprecedented spread of bird flu from Asia to Europe and Africa ... The virus has been detected in birds in fourteen countries since early February . . . [and has] killed at least ninety-two people.

(www.iht.com, 22 February 2006)

About 170 people have become infected with bird flu ... For the first time on Wednesday [22 February] the deadly H5N1 bird flu virus was detected in poultry in the twenty-five-country EU. Two chickens in Graz, Austria, were contaminated in an animal compound ... where an injured swan had been housed

(*IHT*, 23 February 2006, p. 8)

The WHO has confirmed twenty-six cases of human bird flu in Indonesia, nineteen of them fatal. Eight of those deaths have occurred in 2006, more than in any other country this year [2006] ... The more than 12 million residents of Jakarta, where the majority of Indonesia's bird flu deaths have occurred, live in close proximity to chickens and ducks, often with birds running freely on their property. Local tests this week revealed another possible fatality in a twenty-seven-year-old woman from Jakarta, but the WHO-sanctioned Hong Kong lab has yet to confirm the results.

(www.iht.com, 23 February 2006)

France suspects that an outbreak of the H5N1 bird flu virus has hit a turkey farm in the east of the country, the agriculture ministry said Thursday [23 February]. If confirmed it would be the first case of the virus spreading to domestic birds in the EU . . . The farm is in the Ain region, where two wild ducks had already been found to have the virus . . . The H5N1 version of avian influenza was also reported for the first time in Slovakia . . . in a duck and a falcon . . . bringing to eight on Thursday the number of EU countries in which the virus has been found . . . More than 100 wild birds in Germany have been infected . . . The H5N1 virus has killed ninety-two people since 2003, mostly in South-east Asia, China and Turkey. The victims were all in close contact with birds infected with the virus.

(*IHT*, 24 February 2006, p. 3)

[The] case of bird flu detected at a turkey farm ... raises concerns for the poultry industry because the French turkeys were infected despite being kept indoors ... The French government last week ordered all poultry farmers to move birds indoors.

(*IHT*, 25 February 2006, p. 3)

'The owner of the turkey farm [in France] where the flu was confirmed ... [said] he thought the virus was carried on bales of straw that he had put into his indoor pens' (*IHT*, 27 February 2006, p. 3).

It is increasingly apparent that the real and most immediate issue is to what extent wild birds, or humans themselves, are responsible for the inspection's spread in poultry. A research paper in *Proceedings of the National Academy of Sciences*, published online on 10 February, shows that the H5N1 virus has persisted in its birthplace, southern Russia, for almost ten years and has been introduced into Vietnam on at least three occasions, and to Indonesia. The authors suggest that such transmissions are perpetuated mainly by the movement of poultry and poultry products, rather than by

migrating birds ... In Nigeria there is the suggestion that it was trade, and not migratory birds, that caused the outbreak ... In Nigeria, Egypt and India the virus has been discovered to be widely distributed across the poultry flocks.

(The Economist, 25 February 2006, p. 89)

A definitive report in the 28 January issue of the medical journal *The Lancet* concludes: 'We could find no credible data on the effects [of Tamiflu] on avian influenza ... Over-reliance on a pharmaceutical solution to the ravages of influenza may impede the development and implementation of broader intervention strategies based on public health measures' ... Influenza is naturally an aquatic migratory bird virus that is carried by ducks, geese and a small list of other waterfowl. Influenza infection is usually harmless to these world travellers, but can kill other types of birds, such as chickens, domestic ducks and swans ... For at least a decade H5N1 has circulated among a small pool of migrating birds, mostly inside China, and occasionally broken out in other animals and people. Last May [2005], however, more than 6,000 avian carcasses piled up along the shores of Lake Qinghai in central China, one of the world's most important bird breeding sites. Most of the dead included species that had not previously evidenced influenza infection. The Lake Qinghai moment was the tipping point in the bird flu pandemic. The virus mutated, evidently becoming more contagious and deadly to a broader range of bird species, some of which continued their northern migration to central Siberia. By June [2005] Russia's tundra was, for the fist time, teeming with H5N1-infected birds, intermingling with southern European species that became infected before flying home, via the Black Sea. Not surprisingly, by October countries from Ukraine to Greece were rumoured to have H5N1, but only the Romanian government responded with swift transparency, culling tens of thousands of chickens and ducks. Most of the governments in the region did not confirm their H5N1 contaminations until Turkey, after at least three months of denial, was forced on 6 January [2006] to admit that the virus had infected birds in a third of the country's provinces, and had caused several human infections and deaths. Since then we have learned of confirmed bird and/or human H5N1 cases in Iraq, Azerbaijan, Iran, Greece, Spain, Italy, Croatia, Austria, Hungary, Slovenia, France, Germany, Denmark, Bulgaria and, most disturbingly, Nigeria, Egypt and India. Not a single one of these countries' outbreaks ought to have been surprises. Each of them is located along either the Black Sea/Mediterranean migratory bird flyway, which starts in Siberia and, at its southernmost point, ends in Nigeria and Cameroon, or the European flyway, which overlaps the former, and stretches from northernmost Siberia to Nigeria ... Several countries along the flyway between Saudi Arabia (which has confirmed H5N1 infections in falcons) and Nigeria have not reported H5N1 cases, but much of the region is North Africa's sparsely populated Sahara Desert. Egypt reported widespread bird infection last

week, and it is likely that infected birds have landed along the few waterways in the area, such as the Nile, Lake Chad and the Red Sea.

(Laurie Garrett, *IHT*, 27 February 2006, p. 8)

Experts are realizing that they do not fully understand how migrating birds disseminate the H5N1 virus, leaving the continents vulnerable to unexpected outbreaks. Just after new scientific research clarified the role of wild birds in spreading H5N1 out of its original territory in southern China, the virus promptly moved into dozens of locations in Europe and Africa, following no apparent pattern and underlining how little scientists actually know ... While they [scientists] are convinced that the virus can be carried on trucks, shoes and fertilizer, they are not sure how important that route is ... In February new research provided crucial clues about how the H5N1 virus broke out of its original stalking grounds in South-east Asia, moving to western China and on to the edges of Europe late last year [2005]. Bird flu was discovered in Hong Kong in 1997. The critical viral transfer took place in China's southern Guangdong province, new genetic analysis suggests, when wild ducks or geese acquired the virus from domestic poultry in rice paddies where they co-existed ... From there ... China's remote west and Mongolia ... H5N1 predictably moved to Russia, Ukraine, Turkey, Romania and the Balkans. But the recent pattern of spread, into European and African nations, has been far more confusing ... While ornithologists are convinced that most of Europe's cases are tied to migration, they are also quick to note that wild birds are sometimes unfairly blamed. Officials in Turkey and Nigeria said that migrating birds were responsible for H5N1 outbreaks, though scientists said the distribution made that unlikely ... In Croatia ... the Food and Agriculture Organization in Rome ... fertilizer made of manure from infected poultry probably spread H5N1. Manure from farms is commonly used to fertilize fish ponds, which are frequent stopovers points for migrating birds that probably contracted the virus there ... Nigeria's problem was probably caused by the transport of sick birds or bird products infected with H5N1 from another country or even Asia.

(Elisabeth Rosenthal, IHT, 1 March 2006, pp. 1, 8)

There are many indications that migratory birds are not the only – or even the primary – reason the virus has moved beyond Asia. Experts have noticed that the pattern of infections marching westward follows railway lines more closely than the birds' predominantly north-west flyways. Exported chicken manure, used in everything from fishponds to poultry feed to fertilizer spread on fields, may have contributed to the spread. But the French outbreak provides the strongest suggestion yet that migration is part of the problem and that wild birds carried the virus to this poultry-breeding region . . . The turkeys . . . [had] the same strain of the virus as the wild ducks . . . [according to] the World Organization for Animal Health . . . Investigators have descended on . . . [the French turkey] farm to check

everything from fertilizer to feed, trying to determine how the virus got into the sheds. One theory is that the bales of hay he [the farmer] used were contaminated with the virus, possibly from pigeon droppings. Another theory is that journalists who came to interview . . . [the farmer] after the dead duck was found carried the virus with them from the edge of the pond . . . Poultry have been infected with the virus in Nigeria and Niger, though illegally imported chicks are suspected of being to blame.

(Craig Smith, IHT, 2 March 2006, p. 2)

[On 25 February] the Chinese agriculture minister warned of a possible 'massive bird flu outbreak' as China announced two new human cases of the H5N1 flu strain, raising to fourteen the number of human cases reported in China since October [2005]. China has reported eight deaths among its fourteen human cases . . . Outbreaks in poultry occurred last year [2005] in thirty-two areas throughout China, killing 163,100 chickens, ducks and other fowl, and the authorities destroyed 22.6 million more birds to keep the virus from spreading . . . Outbreaks in China have continued despite a mass inoculation effort. The government says it has vaccinated all of the country's vast flocks of chickens, ducks and other birds. Chinese farmers raised about 15 billion poultry – 21 per cent of the world's total – in 2005 ... China has about 5.2 billion poultry at any one time ... Health officials say the virus is being spread by migratory wild birds ... [In total] the H5N1 virus has devastated poultry stocks and killed at least ninety-two people since 2003, mostly in Asia. Fresh outbreaks have been reported in fourteen countries since early February [2006] ... Most human infections have been linked to direct contact with sick poultry.

(www.iht.com, 26 February 2006; *IHT*, 27 February 2006, p. 8)

'Recent avian influenza outbreaks in Europe, the Middle East and Africa have caused dramatic swings in poultry consumption, increased trade bans and sharp price declines,' the United Nations Food and Agriculture Organization said Tuesday [28 February] in a report ... Bird flu has a devastating effect on the poultry industry because in addition to the birds it kills outright many more must be slaughtered preventively in the surrounding area. More than 200 million birds have been killed or culled as a result of bird flu outbreaks with the variant strain H5N1 in the past seven years. Even as the experts convened in Paris . . . [for] a two-day [27-28 February] conference ... there were new reports of bird flu from Russia, Germany, Sweden, Hungary, Greece and Ethiopia on Tuesday. In addition, the German health authorities confirmed the first report of a death in a mammal, a cat on Rügen Island, where dozens of wild birds have perished from the disease. A number of species - including humans and cats - can in rare cases acquire the bird flu from close contact with sick birds, and it is often deadly. There have been previous reports of cats sickened from H5N1 in Asia.

(IHT, 1 March 2006, p. 8)

'Mammals can contract the disease from eating the raw carcasses of infected birds and studies have shown that cats can transmit the virus to other cats' (*IHT*, 2 March 2006, p. 2).

'Avian flu was yesterday [28 February] discovered in two wild ducks found dead in southern Sweden ... Initial tests suggested the virus could be H5N1' (FT, 1 March 2006, p. 8).

In Geneva the United Nations health agency said Thursday [2 March] that the death of a second person in Iraq has raised to 174 the number of officially confirmed human cases of bird flu and to ninety-four the number of people who have died worldwide from the disease since 2003 ... The man's fifteen-year-old niece, who died earlier, is the only other confirmed human case of H5N1 in Iraq ... The World Organization for Animal Health lists thirty-eight countries and territories from East Asia to Europe and Africa as having confirmed cases of bird flu infections – almost all of the H5N1 – in birds since the strain reemerged in Hong Kong three years ago.

(IHT, 3 March 2006, p. 3)

[It was announced on 5 March that] a thirty-two-year-old man in Guangdong province [in China] is confirmed to have died of the H5N1 strain of bird flu ... The man, who lived in Guangzhou, less than a two-hour train ride from Hong Kong ... died Thursday [2 March] ... [He] had repeatedly visited a local market to carry out a survey and spent a long time near where chickens were slaughtered ... [Previously] mainland China had reported fourteen human bird flu infections since October [2005], including eight deaths ... Hong Kong has not reported any human infections since early 2003 ... The H5N1 virus first appeared in Hong Kong in 1997, when it jumped to humans and killed six people, prompting the government to slaughter the entire poultry population of about 1.5 million birds.

(www.iht.com, 5 March 2006)

'The thirty-two-year-old man was the fifteenth bird flu case in [mainland] China ... [and] the ninth death from the H5N1 virus. He died in Guangdong province, which borders Hong Kong' (*IHT*, 6 March 2006, p. 3).

Indonesia said it believed a three-year-old boy who died this week may have succumbed to bird flu. Local tests suggested the presence of the H5N1 strain ... If confirmed the boy would be Indonesia's twenty-first bird flu death ... Last week China said it feared it could suffer a 'massive' outbreak of bird flu this spring [2006], if wild birds returning from their winter migration infect farm poultry.

(www.bbc.co.uk, 5 March 2006)

A lethal strain of bird flu has spread to a region on France's Mediterranean coast, with confirmation Sunday [5 March] that a [wild] swan had died of

the H5N1 strain of the virus. Earlier all of France's bird flu cases had been confined to the south-east Ain region.

(IHT, 6 March 2006, p. 3)

Two wild swans in Poland have tested positive for the H5N1 strain of bird flu, the first cases to be found in the country, an official said Monday [6 March] ... Samples were being sent to Britain for further tests. The swans were found dead on Thursday [2 March] ... Among the other European countries that have confirmed cases of the deadly H5N1 strain are Poland's western and eastern neighbours, Germany and Ukraine.

(www.iht.com, 6 March 2006)

Three cats from an animal shelter [near Graz] that took in birds infected with bird flu have tested positive for the H5N1 strain of the disease, Austrian state authorities said Monday [6 March], confirming the first case here of the disease's spread to an animal other than birds . . . A pattern of disease transmission [has been] seen in wild cats in Asia, where the WHO said several tigers and snow leopards in a zoo, as well as several house cats, had been infected with H5N1 since 2003 . . . Serbia's health authorities confirmed on Monday the country's first cases of the H5N1 virus in at least two swans found dead in northern and western parts of the country. The H5N1 virus has been detected in a number of countries neighbouring Serbia, including Croatia and Hungary.

(IHT, 7 March 2006, p. 3)

Serbia has confirmed its first case of the deadly H5N1 strain of bird flu, following a UK laboratory test on a swan found dead ... near the Croatian border ... [Serbia] said a second swan was also assumed to be infected with H5N1 ... Albania on Wednesday [8 March] confirmed H5N1 in a domestic chicken.

(FT, 10 March 2006, p. 6)

'The H5N1 bird flu virus has been found in a stone marten ... on the Baltic island of Rügen ... a German laboratory said, indicating the disease has spread to another species of mammal' (*Independent*, 10 March 2006, p. 23).

Cameroon has become the fourth African country to be struck by fatal bird flu. The government announced its first confirmed case on Sunday [12 March]. The bird flu strain H5N1 was detected on a duck on a farm ... near the border with Nigeria ... Experts have expressed concern that bird flu is likely to be spreading undetected in Africa, which is ill prepared to deal with the virus and lacks laboratories to detect it.

(*IHT*, 13 March 2006, p. 5)

Burma has detected the deadly H5N1 strain of bird flu in chickens, pledging to handle the country's first outbreak with vigilance and transparency, while

Afghanistan's discovery of the H5 strain of bird flu could prove to be the deadly H5N1 virus, government officials and the UN said yesterday [13 March].

(FT, 14 March 2006, p. 5)

The WHO announced Tuesday [14 March] that it believed test results showing three young women in Azerbaijan had died of bird flu were reliable, but it was awaiting final confirmation from a British laboratory ... Results were pending on two other suspect deaths.

(IHT, 15 March 2006, p. 8)

'The WHO ... on Tuesday [14 March] confirmed that the deaths in Azerbaijan were caused by bird flu' (*IHT*, 18 March 2006, p 3).

'[It was announced on 15 March that] the EU's reference laboratory in Britain has confirmed Sweden's first cases of the deadly H5N1 strain of bird flu in two wild ducks found dead last month [February]' (*IHT*, 16 March 2006, p. 8).

A dog has died of bird flu in Azerbaijan ... where three people have already died from the virus ... The medical investigation is continuing ... Denmark became the latest European country to report a case of bird flu in wildfowl, although it has yet to confirm that it is the feared H5N1 strain.

(Independent, 16 March 2006, p. 22)

'The European Commission on Friday [17 March] banned poultry imports from Israel . . . The decision came after the Israeli authorities confirmed that the H5N1 strain had been found in thousands of poultry' (*IHT*, 18 March 2006, p. 3).

The bird flu deaths of five people in Azerbaijan have pushed the world total human deaths from H5N1 past 100, the WHO said Tuesday [22 March]. The UN health agency said that seven of the eleven patients from Azerbaijan had tested positive for the deadly strain of bird flu in samples checked at a major laboratory in Britain. Five of the cases were fatal. The new global total of confirmed deaths from H5N1 is 103. There have been a total of 184 confirmed human cases of H5N1 since 2003.

(*IHT*, 22 March 2006, p. 4)

'Humans infected with bird flu [number] 186 in all since 1997 ... Of the world's confirmed human cases ninety-three are from Vietnam' (*IHT*, 28 March 2006, p. 4).

'Two young girls have been infected with bird flu, raising to eight the number of human cases of the virus in Egypt, the health minister said Sunday [2 April]' (*IHT*, 3 April 2006, p. 10).

The bird flu found in domestic fowl in the eastern Germany state of Saxony was the deafly H5N1 strain [it was announced on 5 April] ... The confirmation of bird flu at a large poultry farm was the second instance of H5N1 in domestic fowl in the EU after an outbreak in France in late February.

(IHT, 6 April 2006, p. 4)

Germany's first case of the deadly H5N1 bird flu strain has been confirmed on a poultry farm east of Leipzig. The cull of the farm's flock of 10,000 geese, turkeys and chickens had begun after about twenty birds were found dead earlier this week ... The H5N1 strain has killed at least 107 people worldwide.

(Independent, 6 April 2006, p. 23)

An Egyptian girl died from bird flu on Thursday [6 April], taking to three the country's human death toll from the [H5N1 strain of the] virus ... The government put the number of people who have caught the virus at eleven.

(www.iht.com, 6 April 2006)

The Scottish swan is the first confirmed wild case in Britain of infection with the H5N1 virus that has killed an estimated 200 million birds in forty-five countries, either directly or through preventative culling ... The mute swan was found on 29 March ... Bird flu has killed 109 people.

(FT, 7 April 2006, p. 2)

A swan found dead in eastern Scotland [Fife] has tested positive for the deadly strain of bird flu, making it the first recorded case of the disease in a wild bird in Britain. The bird [is] believed to be a native mute swan . . . Bird flu has been gradually making its way across Europe, striking countries like Germany, France, Denmark, Italy, Poland, Switzerland and Greece.

(*IHT*, 7 April 2006, p. 3)

'DNA tests confirmed a swan found dead of H5N1 in Scotland had been a migrating species ... [It] probably came from Germany' (FT, 12 April 2006, p. 9).

'This week Vietnamese health officials said chickens smuggled over the border from China had reintroduced bird flu into their nation, which had reported no cases for four months' (*IHT*, 14 April 2006, p. 1).

'A twenty-one-year-old migrant worker in Hubei province has died of bird fu . . . It is China's twelfth known human death from bird flu' (*IHT*, 21 April 2006, p. 8).

'The [H5N1] virus has infected 196 people ... and killed 110 of them, according to the WHO. At least thirty-three countries have reported initial outbreaks in animals since February' (*IHT*, 24 April 2006, p. 15).

A dozen human H5N1 cases, four of them fatal, have been confirmed in Egypt, according to the WHO. Since late 2003 204 cases have been reported

worldwide, the WHO said. Outbreaks of bird flu in poultry and fowl in Africa have been found in Burkina Faso, Cameroon, Egypt, Niger, Nigeria and Sudan, according to the World Organization for Animal Health.

(*IHT*, 26 April 2006, p. 13)

The flocks of migratory birds that winged their way south to Africa last autumn [2005] and then back over Europe in recent weeks did not carry the H5N1 flu virus or spread it during their annual journey, scientists have concluded, defying officials' dire predictions ... It is quiet now in terms of cases, which is contrary to what many people had expected . . . In thousands of samples collected in Africa this winter, H5N1 was not detected in a single wild bird, officials and scientists said. In Europe there have been only a handful of cases detected in wild birds since 1 April, at the height of the northward migration. The number of cases in Europe has decreased so dramatically compared to February, when dozens of new cases were found daily, that experts believe the northward spring migration played no role. There was one grebe in Denmark on 28 April – the last case – as well as a falcon in Germany and a few swans in France, according to the World Organization for Animal Health ... The February cases in Europe were attributed to infected wild swans that travelled west to avoid severe cold in Russia and Central Asia but apparently never carried the virus to Africa . . . Worldwide . . . the H5N1 bird virus . . . has killed about 200 humans, almost all people who were in extremely close contact with sick birds ... While avian influenza has become a huge problem in domestic poultry on farms in a few African countries, like Egypt, Nigeria and Sudan, experts increasingly suspect that it was introduced there through imported infected poultry and poultry products . . . Farm-based outbreaks of avian influenza are still occurring constantly in a number of countries, although not in Europe. The Ivory Coast had its first outbreak of bird flu, on a farm, last week.

(www.iht.com, 10 May 2006; *IHT*, 11 May 2006, pp. 1, 7)

Even as it crops up in the far corners of Europe and Africa, the virulent bird flu that raised fears of a human pandemic has been largely snuffed out in the parts of South-east Asia where it claimed its first and most numerous victims. ... 'In Thailand and Vietnam, we have had the most fabulous success,' said David Nabarro, chief pandemic flu co-ordinator for the United Nations. Vietnam, which has had almost half of the human cases of A(H5N1) flu in the world, has not seen a single case in humans or a single outbreak in poultry this year [2006]. Thailand, the second hardest hit nation until Indonesia recently passed it, has not had a human case for five months [correction in *IHT*, 17 May 2006, p. 3] or one in poultry in six months. Encouraging signs have also come from China, though they are harder to interpret ... Confounding expectations, birds making the spring migration north from Africa have not carried the virus into Europe. David Nabarro and other officials warn that it would be highly premature to declare any

sort of victory. The virus has moved rapidly across continents and is still rampaging in Myanmar and other countries nearby. It could still hitchhike back in the illegal trade in chicks, fighting cocks or tropical pets, or in migrating birds ... Very different tactics led to success in ... Thailand and Vietnam ... While Vietnam began vaccinating all its 220 million chickens last summer [2005], Thailand did not because it has a large poultry export industry, and other nations would have banned its birds indefinitely. (Vaccines can mask the virus instead of killing it.) Instead, Thailand culled wide areas around infected flocks, compensated farmers generously and deputized a volunteer in every village to report sick chickens. It vaccinates fighting cocks, which can be worth thousands of dollars, and even issues them passports with their vaccination records so they can travel ... Thailand and Vietnam also delivered the antiviral drug Tamiflu to even the smallest regional hospitals and told doctors to treat all flu patients even before laboratory diagnoses could be made ... Hints suggest that the disease is being beaten back in China, the country where it is assumed to have begun. International officials tend to greet official public health reports from China sceptically, in part because it concealed the outbreak of the SARS virus there for months. It did not officially report any bird cases for years, even though many scientists contend the virus incubated there between its first appearance in humans in Hong Kong in 1997 and the current outbreak, which began in Vietnam in 2003 ... China's reported human cases have remained low: eight last year [2005] and ten this year [2006]. Perhaps more important, its poultry cases ... seem to be dropping ... China said it had outbreaks in sixteen provinces in 2004. In 2005 it reported outbreaks in only twelve provinces, but one in November [2005] was so large that 2.5 million birds were culled to contain it. After that the agriculture minister announced that it would vaccinate every domestic bird in China ... In Cambodia and Laos, which separate Thailand and Vietnam, the situation is vague. Laos has reported no human cases and last reported outbreaks two years ago. Cambodia's reported human cases dropped to two this year [2006], from four last year [2005]. No poultry outbreaks were reported, but surveillance is so spotty that some must have occurred and gone unnoticed ... because the country's six human victims were infected by poultry ... Where the Southeast Asian governments have taken action, however, the risk of the virus returning is ever present, David Nabarro said. For example, he said, it probably exists in Vietnam in Muscovy ducks, which can harbour the virus but do not get sick, and it has turned up in isolated birds in open-air markets near the Chinese border. (Single birds do not constitute an outbreak.) Since Chinese farmers can get three times as much for a chicken in Vietnam as they can at home, the temptation to smuggle persists.

(Donald McNeil, IHT, 15 May 2006, p. 4)

The number of confirmed human deaths from bid flu for 2003, 2004, 2005 and 2006 (as of 12 May), respectively, are as follows: Thailand: zero, twelve, two and zero; Cambodia: zero, zero, four and two; Vietnam: three, twenty, nineteen and zero (*IHT*, 15 May 2006, p. 4).

'A fifth member of an Indonesian family has died of bird flu, according to local tests [it was announced on 14 May] ... Samples from the patients have been sent to the WHO' (*Guardian*, 15 May 2006, p. 22).

WHO officials said Thursday [18 May] that the five avian flu deaths confirmed this week on Sumatra were probably not a result of human-to-human infection and did not suggest that the virus had mutated into a more deadly form. Five family members were confirmed dead from the H5N1 strain of avian influenza by the WHO on Wednesday, the largest such cluster yet recorded. A sixth family member died of flu-like symptoms but was not tested for the virus ... [The WHO said] the number of deaths raised eyebrows but that so far ... the recent cluster ... is similar to other outbreaks in Indonesia, which were caused by close contacts with infected poultry ... Indonesia's toll has now reached thirty, second only to Vietnam, which has recorded forty-two. Indonesia, however, has been recording bird flu deaths at a much higher rate than any other country in recent months ... A woman died of bird flu in Egypt on Thursday, the sixth death from the disease in that country.

(www.iht.com, 18 May 2006; *IHT*, 19 May 2006, p. 5)

Reacting to the death Monday [22 May] of an Indonesian man, the WHO said that the case appeared to be the first example of the avian flu jumping from human to human to human. But the health agency quickly cautioned Tuesday that this did not necessarily mean that the virus had mutated into a strain that could start a pandemic by jumping rapidly between people as ordinary flu does. It is a 'definite possibility' that the virus jumped more than once inside a family said . . . a spokeswoman for [the WHO] . . . In the past there have been at least three cases of suspected human-to-human transmission of the H5N1 strain of bird flu; all were between family members who spent hours in close contact and would have inhaled large amounts of virus-contaminated droplets. The virus is known to attach itself to receptors deep in the lungs, not in the nose and throat as seasonal flu does . . . The man who died was thirty-two and became sick on 15 May. He is believed to have caught the flu while caring for his ten-year-old son, who died of the disease on 13 May.

(www.iht.com, 24 May 2006)

The WHO says it is extremely worried about a cluster of recent human deaths from the virulent H5N1 strain of bird flu. Seven people from the same family in northern Sumatra [Indonesia] died from the disease this month [May] ... [The WHO] said there was no sign of diseased poultry in the immediate area. Investigators are looking into the possibility that the virus spread from human to human ... [but it was] emphasized that there

was no indication the virus had mutated ... The Sumatran cases ... [are] the largest cluster of human cases to date ... All seven who died were members of the same family. An eighth family member is also thought to have the disease ... The initial victim was a woman, who became ill at the end of April. She died in early May and was buried before laboratory tests could be carried out. The subsequent six victims – all of whom were positively identified as having the virus – had close and prolonged exposure to either her or other family members with the disease ... The H5N1 virus has already killed more than 120 people worldwide since 2003.

(www.bbc.co.uk, 24 May 2006)

'To date there have been 218 infections and 124 human deaths from the virus' (FT, 25 May 2006, p. 9).

Preliminary tests have found that bird flu killed two more siblings in Indonesia, officials said Friday [26 May], as the country grappled with a separate outbreak involving the largest cluster ever reported within one family ... International health officials so far have confirmed thirty-three human deaths from bird flu in Indonesia, out of 124 worldwide ... The newest cases came as Indonesia investigated a separate family cluster in northern Sumatra in which six of seven family members died of bird flu, the most recent Monday. An eighth family member who died was buried before tests could be done, but she was also considered to be among those infected ... Similar isolated cases of transmission among humans are believed to have occurred in four or five other family clusters.

(*IHT*, 27 May 2006, p. 2)

'[The brother] has died from bird flu, the thirty-sixth death in Indonesia, according to the WHO' (*The Times*, 30 May 2006, p. 35).

Wild birds carry only part of the blame for spreading the deadly strain of bird flu and experts said Tuesday [30 May] that they should not be killed but rather studied to understand how the virus spreads ... Scientists [were] at an international conference ... organized by the Animal Health Service at the United Nations Food and Agriculture Organization ... and the World Organization for Animal Health ... Migratory birds brought the disease into Russia and Eastern Europe, but in the case of the recent outbreaks in Africa there is little evidence pointing to wild birds ... The H5N1 virus has killed at least 127 people worldwide.

(*IHT*, 31 May 2006, p. 3)

The 300 experts in attendance made little new headway ... concluding that far more basic research was needed to understand basic questions, like which species of wild bird are vulnerable to the virus ... Wild migrating birds could introduce bird flu into a new country, but it was probably human

commerce in poultry that moved it from village to village and from farm to farm. While wild birds have been implicated in spreading the disease to many European nations, their role in Africa has not been established. . . . A number of countries in the throes of serious bird flu outbreaks are underreporting the extent of the problem, generally because they do not have the money, veterinary expertise or health systems to track the disease adequately, international health experts said . . . Countries might be underreporting, but they do not do it deliberately. . . African nations give inadequate reports, as well as China and Indonesia . . . Forty-eight people in Indonesia have now been diagnosed with the disease and thirty-six have died, nearly half of them in the past month – a sign that bird flu is widespread in the country.

(*IHT*, 1 June 2006, p. 8)

In the wake of a cluster of avian flu cases that killed seven members of a rural Indonesian family, it appears likely that there have been many more human-to-human infections than the authorities have previously acknowledged. The numbers are still relatively small and they do not mean that the virus has mutated to pass easily between people – a change that could touch off a worldwide epidemic. All the clusters of cases have been among relatives or in nurses who were in long, close contact with patients. But the clusters - in Indonesia, Thailand, Turkey, Azerbaijan, Iraq and Vietnam - paint a grimmer picture of the virus's potential to pass from human to human than is normally described by public health officials, who usually say such cases are 'rare'. Until recently WHO representatives have said there were only two or three such cases ... [For example] on 30 May Maria Cheng, a spokeswoman for the UN health agency, said there were 'probably about half a dozen'. She added: 'I don't think anybody's got a solid number' ... Most clusters are hard to investigate because they may not even be noticed until a victim is hospitalized and are often in remote villages where people fear talking about it . . . The WHO is generally conservative in its announcements and, as a UN agency, is sometimes limited by member states in what it is permitted to say about them. Still, several scientists have noted that there are many clusters in which human-to-human infection may be a more logical explanation than the idea that relatives who fell sick days apart got the virus from the same dying bird ... Henry Niman, a biochemist in Pittsburgh ... has argued for weeks that there have been twenty to thirty human-to-human infections ... Niman also said that clusters were becoming more frequent, especially in Indonesia. On 2 June two more emerged there, one including a nurse whose infection has not yet been confirmed. With thirty-six deaths Indonesia is expected to eclipse Vietnam soon as the world's worst-hit country.

(www.iht.com, 4 June 2006)

Avian influenza was first identified over 100 years ago; since then the disease has been reported at irregular intervals in all regions of the world In

addition to the current outbreak in Asia, recent epidemics have occurred in Hong Kong in 1997-8 and 2003, in the Netherlands in 2003 and in the Republic of Korea in 2003. Once domestic birds are infected avian influenza outbreaks can be difficult to control and may cause major economic damage to poultry farmers in affected countries, since mortality rates are high and infected fowl generally must be destroyed – the technical term is 'culled' – in order to prevent the spread of the disease. The outbreak is caused by the highly pathogenic H5N1 strain of the virus ... East and South-East Asia has suffered significant human and economic losses owing to the present outbreak. Small and medium-sized farmers, whose stocks are often not insured and who have no alternative sources of income, have been the hardest hit. Overall, 140 million birds have been destroyed so far. Poultry meat imports from affected areas were prohibited in many countries. As the size of the poultry industry ranges from 0.6 per cent of GDP in Thailand and Vietnam to over 2 per cent of GDP in the Philippines, a fall in poultry output by 15 per cent, as has already been the case in Vietnam, can imply a reduction in GDP by up to 0.3 per cent. Across the region the total losses from the damaged poultry sector amounted to about \$10 billion by the end of 2005. The estimates of deaths from a possible global pandemic of highly pathogenic avian influenza depend on several factors ... The economic losses associated with an avian influenza pandemic could well amount to \$200 billion in just one quarter, with the Economic and Social Commission for Asia and the Pacific region bearing most of the brunt. This corresponds to 2 per cent of world GDP. The impact on some specific sectors, however, could be catastrophic. Tourism, one of the industries to be potentially affected by an outbreak, accounts for over 9 per cent of GDP in East Asia and about 11 per cent in South-East Asia.

(United Nations, World Economic Situation and Prospects 2006, p. 113)

Bird flu was found in a north-eastern Ukrainian village ... bordering Russia ... officials said Monday [12 June], the first confirmation of the virus's spread beyond the nation's Black Sea regions ... The news media reported it was the H5N1 strain ..... An outbreak of the H5N1 strain hit Ukraine in December [2005], but the cases were confined to Crimea and other Black Sea regions. No human cases have been recorded in Ukraine.

(*IHT*, 13 June 2006, p. 10)

Confirmation of the thirty-eighth death from avian flu in Indonesia has indicated that the situation in the country is continuing to worsen. Indonesia is now in second place after Vietnam, which has forty-two deaths, but none this year [2006], while Indonesia's caseload is climbing rapidly and includes many family clusters ... [Indonesia] said Thursday [15 June] that the 1 June death of a seven-year-old girl ... was the country's thirty-eighth from avian flu. The girl's ten-year-old brother died on 29 May, but he was buried before specimens were taken, so he was not included in the count.

Chickens in the family's household had died earlier ... The outbreak in Indonesia has a very high death rate: of the fifty known cases thirty-eight have died ... [Indonesia] said Friday [16 June] that a fourteen-year-old had died Wednesday ... Local tests indicated he was infected with the H5N1 strain of the virus but that an international laboratory would confirm the diagnosis. If the case is confirmed it would raise Indonesia's death toll to thirty-nine ... The World Bank said Monday that the country was mounting a disorganized and underfinanced response to the flu.

(www.iht.com, 16 June 2006)

[On 20 June it was announced that WHO] tests confirmed that a fourteen-year-old boy had died from the disease, bringing the death toll [in Indonesia] from the disease to at least thirty-nine people ... An Asian Development Bank report in April said that Indonesia's 2006 budget allocated just \$14 million to combat the disease, despite the government's own estimate that at least thirty times that amount is needed ... At least 120 people have died worldwide since the virus began ravaging Asian poultry in late 2003.

(www.iht.com, 20 June 2006)

An Indonesian man who died after catching the H5N1 bird flu virus from his ten-year-old son represents the first laboratory confirmed case of human-to-human transmission of the disease, a WHO investigation of an unusual family cluster has concluded, the agency said Friday [23 June]. The WHO investigators also discovered that the virus had mutated slightly when the son had the disease, although not in any way that would allow it to pass more readily among people ... In previous cases where human-to-human transmission was suspected, researchers could not test from the patients, or the virus in the patients was the same as that in poultry in the area ... International health officials have been in Indonesia for much of the past month, investigating a family outbreak that affected seven relatives ... Six of the seven died ... The family had no known direct contact with sick birds, although the first death was a woman who sold vegetables in a market that also sold birds.

(www.iht.com, 23 June 2006; *IHT*, 24 June 2006, p. 3)

A Chinese man who died of pneumonia in November 2003 and was at first classified as a SARS victim might have died of avian influenza – two years before Beijing reported any human bird flu infections on the mainland to the WHO, Chinese researchers reported. The case of the death in Beijing raises the possibility that others attributed to SARS may have actually been caused by the deadly H5N1 flu. But in a confusing development at least one of the researchers asked Wednesday [21 June] that the letter reporting the case be withdrawn from publication.

(www.iht.com, 22 June 2006)

Did China have a death from avian flu two years before it admitted having any human cases? The mystery has deepened and the possibility has been raised that someone had tried to block the publication of that event from a prestigious American medical journal. The New England Journal of Medicine on Friday [23 June] reversed an announcement it had made two days before, saying that, in fact, the eight Chinese authors of a letter describing a man's death in 2003 from avian flu had insisted that they really did want it printed. The timing of the death is important because scientists believe that the H5N1 virus had circulated among China's chickens for many years, but it was not until last November [2005] that the government admitted to having a human case. To date it has officially reported nineteen cases and twelve deaths. In 2003 China covered up dozens of cases of SARS deaths for months after the epidemic began there. The journal had gone to press Wednesday [21 June] when the editors received several email messages asking that the letter describing the 2003 death not be printed . . . The letter said that doctors initially thought the twenty-four-year-old man had SARS, but tests on his lung tissue proved negative.

(www.iht.com, 25 June 2006)

Four people have died after catching avian flu from infected swans, in the first confirmed cases of the disease being passed from wild birds ... The victims, from a village in Azerbaijan, are believed to have caught the lethal H5N1 virus earlier this year when they plucked the feathers from dead birds to sell for pillows. Three other people were infected by the swans but survived ... Almost all of the 220 other confirmed human cases of bird flu, including 130 deaths, have been linked to domestic poultry. A handful are believed to have caught the disease directly from humans.

(*Guardian*, 26 June 2006, p. 15)

Spain yesterday [7 July] detected its first case of bird flu after carrying out an autopsy on a dead great crested grebe ... The dead bird was found in northern Spain ... The government said ... there are no poultry farms in the area ... Spain lies on a main migration route for birds flying between Europe and Africa.

(FT, 8 July 2006, p. 7)

Only a fraction of nearly \$1.9 billion pledged by international donors in January to help the developing world prepare for a bird flu pandemic has been paid out so far, the United Nations said Monday [10 July] In a joint report with the World Bank, the UN bird flu co-ordinator, David Nabarro, said donor countries had allocated \$1.5 billion for bird flu aid in their budgets by the end of April, but had transferred just \$331 million to recipients . . . The donor funds were designated for improving veterinary systems, vaccination drives and education about animal hygiene, Nabarro said more money was needed to ensure that poorer countries in Africa, Latin America

and elsewhere were ready for a resurgence of the bird flu threat later this year.

(*IHT*, 11 July 2006, p. 3)

Vietnam has not recorded any new human deaths this year [2006], thanks in part to an aggressive campaign to slaughter all birds in infected areas. Indonesia has been criticized by some for not carrying out widespread culling ... [Indonesia] has an estimated 2 billion chickens and the virus is endemic in twenty-seven of its thirty-three provinces. Culling all the birds would require a huge amount of compensation to farmers and backyard chicken owners ... [Indonesia has] 230 million people spread across 17,000 islands ... [On 17 July Indonesia said] a WHO laboratory had confirmed the bird flu death of a three-year-old girl, bringing the country's total from the virus to at least forty-two, tying it with Vietnam for the most deaths worldwide. The WHO, however, does not recognize one of Indonesia's bird flu deaths because of the testing method used. The agency, which is co-ordinating the world's fight against the virus, still lists forty-one bird flu deaths in Indonesia. Bird flu has killed at least 132 people worldwide since it started ravaging Asian poultry stocks in late 2003, according to the WHO.

(www.iht.com, 17 July 2006)

Indonesia is poised to surpass Vietnam as the country hardest hit by avian flu. And while Vietnam has not had a single human case or poultry outbreak this year [2006], public health officials and experts say the situation in Indonesia is likely to get worse. Indonesia received word from a Hong Kong laboratory that a forty-four-year-old man who died last week near Jakarta had tested positive for the H5N1 virus, the Indonesian health ministry said Thursday [20 July]. That brought the number of confirmed bird flu cases in Indonesia to forty-two since the first human case was confirmed a year ago, equal to the toll in Vietnam. The flu is ubiquitous in thousands of Indonesian backyard flocks, and appears to be killing more birds every month, increasing the likelihood of human cases . . . Although the H5N1 flu came relatively late to Indonesia, it soon spiralled out of control and deaths have mounted quickly. Unlike Thailand, which quenched outbreaks by killing millions of chickens, or Vietnam, which used mandatory vaccination, Indonesia has tried a mix of limited culling and vaccination in rings around the cull - so far with little success ... The biggest obstacle to beating the disease, international flu experts say, is the decentralized Indonesian government ... The country is not only slow to report human cases, but it no longer even reports poultry outbreaks to the World Organization for Animal Health in Paris ... Shortages of trained veterinarians and slow compensation of farmers have also been major obstacles to crushing the outbreak ... Given the huge population ... 245 million Indonesians, living on about 6,000 populated islands [Vietnam has 84 million people] ...

avian flu remains a relatively rare disease ... But Indonesian cases have clustered.

(www.iht.com, 20 July 2006)

Thailand on Wednesday [26 July] confirmed that a sixteen-year-old boy who died this week [on 24 July] was infected with bird flu ... The boy became Thailand's fifteenth bird flu fatality and the country's first confirmed case in humans this year ... Agriculture officials on Tuesday had confirmed the H5N1 bird flu virus in chickens [in a northern province] ... The new cases were the first to be found in Thai poultry in more than eight months . . . The Thai authorities culled millions of chickens and ducks when a wave of bird flu struck Asia in 2004. Thailand, one of the world's biggest chicken exporting countries, has since conducted regular surveys to check for bird flu among poultry. The last bird flu fatality was a five-year-old boy in December [2005].

(www.iht.com, 26 July 2006)

Last week Indonesia announced its forty-third human death from bird flu. It has now recorded more fatalities than any other nation and, in stark contrast to all other countries, its death toll is climbing regularly ... [Among the reasons is the fact that farmers are being compensated ... well below the market price ... per bird ... thereby discouraging farmers from reporting outbreaks ... Pledges to vaccinate hundreds of millions of birds have not been met ... SARS [was a] threat in 2003 that never materialized.

(*The Economist*, 29 July 2006, p. 60)

A bird flu vaccine for humans that uses only a very low dose of its active ingredient has proved effective in clinical tests and could be mass produced in 2007, the drugmaker GlaxoSmithKline said Wednesday [26 July] ... While Glaxo's vaccine offers protection against the H5N1 virus now circulating, its impact on any mutated strain of the virus is not certain.

(www.iht.com, 26 July 2006; *IHT*, 27 July 2006, p. 3)

Vietnam ... is an example of how determined, comprehensive efforts can check the potentially lethal virus. After culling 51 million birds, or more than 17 per cent of the domestic poultry population, and conducting a comprehensive vaccination campaign, Vietnam has not registered any avian influenza cases since mid-November [2005], nor any outbreaks in birds since mid-December ... [Vietnam has used a] combination of aggressive culling, vaccination and intensive surveillance . . . Bird flu spread widely in Vietnam before authorities recognized the threat in early 2004 and moved into battle mode ... When outbreaks persisted through mid-2005 Hanoi raised the compensation for dead and culled birds to 50 per cent of the market value, up from 10 per cent, encouraging more co-operation from farmers. Then in October Vietnam launched an expensive, logistically complicated campaign to vaccinate domestic poultry. The measures appear to have checked the virus ... [But] Vietnam's battle against bird flu is far from over ... Hanoi is worried about bird flu in China and the uncontrolled cross-border poultry trade ... Public complacency poses another risk ... Agricultural experts caution that the lethal H5N1 virus is almost certainly present in migratory birds, waterfowl and ducks ... Small disease outbreaks could be passing unnoticed ... Hanoi has asked the international community for \$266 million in aid to boost veterinary services and disease control, restructure its poultry industry and improve health services.

(FT, 2 August 2006, p. 7)

'A dead swan at a zoo in eastern Germany has tested positive for H5N1... The bird was found in a pond at the Dresden zoo on Monday [31 July]' (*Independent*, 5 August 2006, p. 26).

Beijing confirmed on Tuesday [8 August] that the country's first human case of the H5N1 bird flu virus in 2003 was two years earlier than originally reported . . . The case has spurred questions about whether there might have been other human H5N1 infections in mainland China before what had been its first reported human case, near the end of 2005 ... A spokesman [for China]: 'Although this human infection confirmed in the mainland was two years earlier than previous figures, it has no indication that China had an outbreak of bird flu in 2003' ... Eight Chinese researchers published a letter in the New England Journal of Medicine in June saying a twenty-four-yearold soldier, who was admitted to a hospital in November 2003 for respiratory distress and pneumonia, had been infected with H5N1 ... China's health ministry confirmed the case on Tuesday by 'parallel laboratory tests' carried out in co-operation with the WHO ... [The WHO] said the health ministry had told the WHO that military scientists first tested the man and found he was infected with the H5N1 virus but did not tell the health ministry until much later . . . Experts in Hong Kong have long suspected that the virus has always been present in mainland China, but the Chinese authorities have denied that. Even after several members of a Hong Kong family contracted the virus in Fujian province in southern China, the incident was swept under the carpet.

(www.iht.com, 8 August 2006; *IHT*, 9 August 2006, p. 4)

A new technique for making human vaccines against H5N1 avian influenza produces inoculations that are effective at very low doses, potentially solving the vexing problem of how the world will make adequate numbers of shots in the event of a flu pandemic. In research being published by the journal *The Lancet*, a team of Chinese researchers at the Sinovac Biotech Company in Beijing described how they had made a vaccine using a slightly altered whole bird flu virus, and then enhanced its effect with another chemical, called an adjuvant. The researchers inoculated 120

volunteers and found that nearly 80 per cent given two shots at the optimal dose developed immunity to avian influenza ... The study was small, but the results are more encouraging than with previous attempts to create a vaccine.

(IHT, 1 September 2006, p. 4)

In an emergency enough could be produced for 675 million people. The Chinese vaccine consists of the H5N1 avian flu virus inactivated so that it cannot cause disease, combined with an additive (adjuvant) that enhances the immune response ... The manufacturer is Sinovac Biotech, a Beijingbased pharmaceutical company, which jointly developed it with the Chinese Science and Technology Ministry and the country's Centre for Disease Control and Prevention.

(The Times, 7 September 2006, p. 25)

Avian flu kills in much the same way the 1918 flu did, by drowning victims in fluid produced in their own lungs, a new study has found. The study also suggests that immediate treatment with antiviral drugs is crucial . . . Because the body's own immune response does part of the damage, doctors should consider giving anti-inflammatory drugs along with antivirals like Tamiflu. Although the results of the relatively small study ... eighteen people with the H5N1 avian flu in 2004 and 2005 ... are precisely what flu experts had predicted from laboratory work ... [one expert] called it a major advance because so little clinical information had previously been gleaned from the 241 known cases of the disease.

(*IHT*, 11 September 2006, p. 2)

A fifty-nine-year-old man who bred and raised fighting cocks in northeastern Thailand contracted the H5N1 bird flu virus and has died, bringing the country's death toll from the disease to seventeen, health official said yesterday [26 September] . . . He died on 10 August.

(*FT*, 27 September 2006, p. 8)

An eleven-year-old Indonesian boy has died of bird flu, an official . . . said yesterday [15 October] 'so confirmed cases [in Indonesia] are now seventyone, fifty-three of whom died' [he said]. The boy, from south Jakarta, died on Saturday [14 October].

(*FT*, 16 October 2006, p. 6)

'Vietnam has the highest number of bird flu cases recorded by the WHO since 2003 and the highest number of fatalities after Indonesia' (www.iht.com, 26 October 2006).

The WHO's new plan for ramping up the production of flu vaccine is a measure of how unprepared the world is to cope with an onslaught of pandemic influenza. The plan, conceived by a group of more than 120 experts, lays out a sensible path toward vaccine sufficiency – but it will take years to complete and cost up to \$10 billion . . . So far it has infected only 256 people in ten countries – mostly people in close contact with chickens in Asia – but the highly lethal pathogen has killed some 60 per cent of those.

(editorial, The New York Times, in IHT, 30 October 2006, p. 8)

Margaret Chan, a bird flu expert, won the nomination Wednesday [8 November] to become the world's top health official, a position that would make her the first Chinese national to hold a top United Nations post ... The executive board of the WHO chose Chan to be its next directorgeneral over four other candidates in a tight race to fill the post vacated by the death in May [2006] of Lee Jong Wook ... Anders Nordstrom has been acting director-general ... The board set Chan's term to start on 4 January [2007] and to last until the end of June 2012 ... Chan's nomination must be approved by a two-thirds majority at a special session of the agency's governing World Health Assembly, comprised of all 193 member countries. The World Health Assembly has never rejected a recommendation from the executive board.

(www.iht.com, 8 November 2006)

Margaret Chan of China [is the WHO's] top official on bird flu . . . She is a former director of the department of health in Hong Kong whose career has been focussed on public health . . . She had been the frontrunner to replace Lee Jong Wook of South Korea, who died unexpectedly in May from a blood clot in the brain, three years into his five-year term as director-general . . . Chan stepped aside from her job as the WHO's assistant director-general for communicable diseases to run for the top job in global health . . . China has recently been criticized for dragging its feet in reporting outbreaks of bird flu to the WHO and supplying virus samples to the global health community for analysis.

(*IHT*, 9 November 2006, p. 5)

China agreed Friday [10 November] to share its samples of the bird flu virus ... from 2004 and 2005 ... with international health authorities, after rejecting scientists' findings that a new, vaccine-resistant strain was circulating in the country ... The decision came after China rejected findings in a paper published ... in *The Proceedings of the National Academy of Scientists* ... last week by Hong Kong and US scientists that reported they had detected a new strain of H5N1 in the southern Chinese province of Fujian last year [2005] ... [China said that when it] had co-operated in the past, the samples had been misused and had encroached upon intellectual property rights ... H5N1 has caused twenty-one human infections in China since late 2003, killing fourteen people.

(www.iht.com, 10 November 2006)

Studies published Thursday [23 November] ... [by] a mix of experts from Indonesia, the WHO and the Centers for Disease Control and Prevention in Atlanta . . . were of family clusters of flu cases in Turkey and Indonesia . . . The studies followed clusters in three separate families in Indonesia in 2005 and in what appears to have been one extended family near Dogubayazit, in eastern Turkey, in January [2006]. Case clusters particularly worry public health officials because they raise the possibility that the flu is mutating to spread faster between people. In the Indonesian cases the authors ... concluded that human-to-human transmission had probably taken place in two of the three family clusters. In one case a thirty-eight-year-old government auditor appeared to have caught the flu from his eight-year-old daughter or her one-year-old sister. All three died; his wife and two sons did not become ill. No one in the family had any known contact with poultry, wild birds, animals or sick people, so the source was a mystery . . . 'But you cannot tell what a young child has done', said [one of the authors] ... The Dogubayazit cluster was a cause célèbre for some internet flu-watchers following Turkish media reports in January. They argued that widespread human-to-human transmission seemed to be taking place, and that it may have begun at a banquet in late December [2005] attended by members of two related families ... The Turkish government and the WHO did not link the cases or families and tentatively blamed all transmission on birds ... Only eight were confirmed by a WHO laboratory. All were children; four died and four survived ... The lead author ... said he believed there had been no humanto-human transmission because all the children had been in loose contact with poultry within seven or fewer days before they fell ill and because none of their parents or the hospital staff that treated them had become sick.

(www.iht.com, 24 November 2006; IHT, 25 November 2006, p. 8)

South Korean quarantine officials on Sunday [26 November] began slaughtering ... poultry after an outbreak of the virulent H5N1 form of bird flu at a chicken farm ... The outbreak occurred last week ... South Korea killed 5.3 million birds during the last known outbreak of bird flu in 2003. The H5N1 virus began ravaging Asian poultry stocks in late 2003 and has killed at least 153 people worldwide. So far the disease remains hard for people to catch and most human cases have been traced to contact with birds.

(www.iht.com, 27 November 2006)

Having killed millions of chickens and geese, the bird flu epidemic is now claiming the lives of pet dogs and cats in South Korea ... Confirmed cases of bird flu in humans [number] 258 ... At least 153 people have died of the H5N1 virus in ten countries since [2003] ... Most of those who have died from H5N1 have been in South-east Asia, especially in Indonesia and Vietnam. Nearly all the infections have occurred in people who lived on farms or villages in close daily proximity to chickens or ducks ... A mutation of a virus is believed to have created the Spanish flu, which killed

between 20 million and 100 million people across the world in 1918 and 1919. Human-to-human infections may have occurred during outbreaks of bird flu in Hong Kong and Europe in 1997, which remained under control.

(*The Times*, 28 November 2006, p. 38)

South Korea will cull more than half a million fowl ... having already killed 150,000 chickens ... Last week South Korea confirmed it had its first outbreak of the deadly strain in about three years ... Between December 2003 and March 2004 about 400,000 poultry on South Korean farms were infected. In that outbreak 5.3 million birds were destroyed.

(FT, 1 December 2006, p. 8)

Several cases of avian flu have spread from poultry to humans in the Nile Delta, the Egyptian health authorities said this week as they worked to halt the outbreak among chickens and ducks. A fifteen-year-old girl died Monday [25 December], a day after the death of a woman in her thirties whose family members showed symptoms of infection. Egypt has reported nine confirmed human deaths from H5N1 avian flu since it was first found in birds in February and in a person in March.

(*IHT*, 28 December 2006, p. 3)

# **Postscript**

#### Bird flu

An outbreak of the lethal H5N1 strain was found on a poultry farm [in Vietnam] in December [2006], the first in almost a year. New WHO chief Margaret Chan has warned that bird flu remains a global threat ... [She] said reports of bird flu had started to surface in recent weeks after a lull and that the danger was particularly severe in poor countries.

(www.bbc.co.uk, 5 January 2007)

Indonesia has the world's highest human death toll from the H5N1 virus and registered more bird flu deaths in 2006 than any other nation ... Two women in Indonesia have died after contracting bird flu ... raising the country's total number of human deaths to sixty-one ... The latest deaths are the third and fourth fatalities of 2007 in Indonesia ... Criticism over the country's handling of the disease has led to fresh attempts over the past year to raise awareness.

(www.bbc.co.uk, 13 January 2007)

The deadly H5N1 strain of avian influenza is making a seasonal resurgence in Asia and could easily spread to Europe again this year [2007], the WHO warned yesterday [14 January 2007]. The alarm follows four human deaths in Indonesia in the last five days, the first human case in China for six months (though the infected man has since recovered) and new poultry outbreaks in Vietnam – despite a huge campaign against it – and northern Nigeria . . . [The WHO said it was] convinced that we are in a repeat of last year and the year before when the virus began to get very active again [in the northern hemisphere winter] and spread from Asia into the Middle East and beyond. Indonesia, where sixty-one people have died, remained the 'biggest flashpoint' . . . The strain detected in Asia is a mutation of last year's, but it is not showing any sign of moving to a strain that would be more dangerous to humans or have a great likelihood of human-to-human transmission . . . All four human fatalities in Indonesia contracted the virus from infected birds . . . The latest outbreak in Vietnam, in six southern

provinces, comes despite a widespread poultry cull and tight controls on birds that had resulted in no human cases since 2005.

(*FT*, 15 January 2007, p. 7)

Thailand has suffered an outbreak of the deadly H5N1 strain of bird flu, its first for six months ... Vietnam says bid flu has reached a seventh province in the Mekong Delta region ... Health officials across Asia are on alert as a growing number of countries have reported cases in both birds and humans in recent weeks ... Japan is culling 12,000 birds after an outbreak at a farm south-west of Tokyo at the weekend. It is not clear if the virus is the deadly H5N1 strain ... Bird flu has claimed more than 150 lives since it began ravaging Asian poultry farms in late 2003.

(www.bbc.co.uk, 15 January 2007)

Officials in Japan have confirmed that a recent outbreak of bird flu at a poultry [chicken] farm was the deadly H5N1 strain of the virus ... There were a number of H5N1 outbreaks in Japan in early 2004, but there have been no human deaths from the virus.

(www.bbc.co.uk, 16 January 2007)

History's most virulent influenza strain, the 1918 Spanish flu, killed millions of previously healthy young adults by sending their immune system into fatal overdrive, a study of monkeys infected with the virus shows ... The 1918 virus was reconstructed by genetic engineering from human victims of the great epidemic. All the animals were dead within a week, their lungs overwhelmed by an excessive immune response ... The experiment ... helps explain why so many of the 50 million killed by Spanish flu were healthy men and women in the prime of life ... Many of the 161 human deaths from H5N1 infection since 2003 showed symptoms of an excessive immune reaction similar to that in the monkeys killed by the 1918 virus.

(FT, 18 January 2007, p. 9)

Hungary yesterday [24 January] confirmed that the ... H5 virus killed domestic fowl that died over the weekend, raising the prospect of a new outbreak of bird flu in Europe ... Preliminary laboratory results suggested it was the N1 strain, in what would be the first outbreak of H5N1 since August last year [2006].

(FT, 25 January 2007, p. 9)

The EU has confirmed that the deadly H5N1 strain of bird flu has been found on a farm in Hungary ... A flock of 3,000 geese on the infected farm has been destroyed. It is the EU's first case of bird flu for about six months ... The virus first appeared in the country in February last year [2006] in wild geese, swans and domestic poultry.

(www.bbc.co.uk, 29 January 2007)

So far only 163 people worldwide have died from the virus - mostly in Indonesia, Vietnam, Thailand and China ... In 2006 the virus became deadlier, killing 70 per cent of the people who caught it ... The UN's Food and Agriculture Organization (FAO) reckons H5N1 has cost South-east Asia's poultry farmers \$10 billion since 2003.

(The Economist, 27 January 2007, p. 57)

'The number of cases among humans is also rising – by the end of 2006 the number of human deaths from the disease had more than doubled in a year, with a noticeably higher mortality rate of almost 60 per cent' (www.bbc.co.uk, 26 January 2007).

The World Health Organization (WHO) has provided information on the number of human cases (total 269) and deaths (total 163) as of 22 January 2007. The respective figures for countries (in alphabetical order) are as follows: Azerbaijan, 8 and 5; Cambodia, 6 and 6; China, 22 and 14; Djibouti, 1 and zero; Egypt, 19 and 11; Indonesia, 80 and 62; Iraq, 3 and 2; Thailand, 25 and 17; Turkey, 12 and 4; Vietnam, 93 and 42.

(www.bbc.co.uk, 27 January 2007)

Officials in Japan have confirmed that a recent outbreak of bird flu at a poultry farm was the deadly H5N1 strain of the virus ... The earlier outbreak occurred in mid-January at a farm in the same region ... There have been a number of H5N1 outbreaks in Japan since early 2004.

(www.bbc.co.uk, 27 January 2007)

'Japan has confirmed only one human H5N1 infection and no human deaths' (www.iht.com, 26 January 2007).

#### Economy

President Vladimir Putin played host yesterday [8 December 2006] to Mongolian President Nambaryn Enkhbayar, who is paying an official visit to Russia . . . According to Russian figures, trade between the two countries in 2005 came to \$466 million. That represents a 70 per cent increase over 2000, when the Russian president visited Mongolia. But at the same time it is only half of the figure reached in the late 1980s and early 1990s ... In 2000 Mongolia's trade deficit [with Russia] was \$161.1 million. By 2005 it had risen to almost \$400 million ... A communiqué on finalizing the ... programme to develop Russian-Mongolian trade and economic co-operation ... was signed yesterday ... In a 'Moscow Declaration' the two presidents agreed that the sides should make joint efforts to increase the volume of reciprocal trade and foster conditions for investment. Such conditions are crucial for developing the potential of the Erdenet and Mongolrostsvetmet joint ventures and the Ulan Bator Railroad. The Russian president said that modernizing these entities will cost more than \$2 billion ... President Enkhbayar: 'We agreed that there will be comprehensive investments in deposits, infrastructure and the social realm' ... The heads of state yesterday signed a treaty of Russian-Mongolian border regulations. 'This document is aimed at dismantling barriers to business co-operation to the greatest possible extent', the Russian president stressed.

(CDSP, 2006, vol. 58, no. 50, p. 15)

Banks in Mongolia and Georgia are approaching international bondholders for the first time as yield premiums for emerging-market borrowers fall to a record. Trade and Development Bank of Mongolia on Monday [15 January 2007] raised \$75 million in the country's first sale of bonds, issuing three-year notes to yield 8.75 per cent, or 3.94 percentage points more than three-year US Treasury securities ... Trade and Development Bank, based in Ulan Bator, was formed in 1990 to offer local and foreign currency financing ... Mongolia's government, which has the same credit rating as Trade and Development Bank, also plans bonds to raise as much as \$500 million, the governor of the central bank, O. Chuluunbat, said in September [2006].

(*IHT*, 17 January 2007, p. 21)

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CDSP Current Digest of the Soviet Press (since 5 February 1992 Post-Soviet)

EEN Eastern Europe (formerly Eastern Europe Newsletter)
EBRD European Bank for Reconstruction and Development

EIU Economist Intelligence Unit FEER Far Eastern Economic Review

FT Financial Times

IHT International Herald Tribune

Note the following changes of title: Soviet Economy to Post-Soviet Studies; Soviet Studies to Europe-Asia Studies

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