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**Economic Globalisation:
The Process and its Potential Social, Economic,
and Environmental Impacts¹**

by

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ECONOMIC GLOBALISATION: THE PROCESS AND ITS POTENTIAL SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS

Abstract

After economic globalisation is defined, the factors that have favoured it in recent times are outlined and the process is placed in a historical context. Measures of the recent expansion in economic globalisation are given, such as trends in the proportion of global GDP traded internationally, and the relative size of global FDI. China's comparative economic openness compared to the rest of the world is discussed. Potential positive and negative economic and social impacts of globalisation are explored, taking into account important economic theories. Particular attention is given to globalisation and the evolutionary dynamics of economic growth by considering the economic 'catching up' phase of countries, such as China, and by placing this in a general evolutionary context. The question is also posed of whether economic growth will eventually cease, and whether industrial and social structures could become defective once economic globalisation is well established and enters its mature phase. Economic growth fostered by growing globalisation also raises globally important environmental and natural resource issues of relevance to the sustainability of economic growth and to the fulfilment of human goals. Some of these issues are investigated, taking into account theories that provide an optimistic prognosis, as well as those which warn of dangers and difficulties ahead.

1. Introduction

The process of economic globalisation has accelerated since the early 1970s. China has played a major, and an increasing, role in maintaining the momentum of economic globalisation as a result of its open-door policies and its continuing economic reforms instigated by Deng Xiaoping. As a result, China has become an engine for global economic growth, and a major player in the world economy. As its economy continues to grow, it can be expected to strengthen its position as a global economic 'power house' and to consolidate its status as a world political power. While these trends in China's growth can be expected to continue for much time to come, it seems unrealistic to expect them to continue forever. Eventually, the Chinese economy might be expected to catch up with the higher income economies and experience relatively slower economic growth. Whether or not another nation will eventually replace China's leadership in international economic growth, and when, is uncertain.

It is useful to consider China's global economic situation in relation to the general process of globalisation. This paper provides background on the process of economic globalisation and considers its potential social and environmental consequences, both positive and negative.

2. What is Economic Globalisation? What Factors have Favoured it in Recent Decades?

Economic globalisation involves the geographical extension of economic exchange and economic interdependence beyond national borders in a way that involves all countries (for more discussion see Tisdell and Sen, 2004). In the present economic climate, this is mostly achieved by the geographical extension of markets to encompass all parts of the globe. At the same time, as markets have been extended internationally, the type of international transactions that can be made have widened. For example, not only has international trade in physical commodities risen greatly but so has global exchange in services, in intellectual knowledge, in capital and in finance.

Many factors have helped to foster this process. They include

- (1) Reduced man-made barriers to international trade resulting from the efforts of bodies such as the WTO e.g. reduced tariff barriers, elimination of import quotas
- (2) Reduced natural or physical barriers to international trade due to technological progress in the transport industry

- (3) Improved and reduced communication costs as a result of technical progress in the telecommunication industry e.g. electronic mail
- (4) Improved institutional arrangements within nations to facilitate business, such as harmonization of property rights via legal reforms and greater acceptance of international legal conventions, such as those governing intellectual property rights.

All these factors have reduced the transaction costs involved in doing international business. They have also made it easier to arrange exchanges at a distance; they have reduced the need for buyers and sellers to meet physically to arrange economic exchanges. To a large extent, technological progress in the service industries has helped to propel the expansion of globalisation in recent decades.

3. Is Economic Globalisation a New Phenomenon?

The process of extending the geographical distances over which commodities are exchanged and of increasing the range of commodities involved in such exchange has an ancient history. However, in the modern era, it has reached unprecedented levels, and involves all inhabited areas of the world.

For thousands of years, international trade has taken place in the Mediterranean Sea. Furthermore, the Vikings engaged in considerable international trade. Florence and Venice in Italy achieved their splendour and major cultural achievements as a result of trade involving China via the Silk Route. It seems likely that the wealth of the Tang Dynasty was enhanced by international trade and commercial exchange over considerable distances. Similarly, almost 2400 years ago the Mauryan Empire in India was well aware of the economic importance of commerce and international trade and Kautilya (1961), in his treatise on politics, statescraft and the science of wealth, *Arthashastra* (one of the earliest known books on political economy, written about 2300 years ago), gave considerable attention to international trade. In northern Europe during the Middle Ages, the Hanseatic towns belonging to the Hanseatic League, which depended on international trade for their prosperity, became rich and became centres of cultural creativity. Similar examples can be found in Africa and in the early Americas, e.g. Inca and Maya civilisations. Although the Australian Aborigines never achieved the wealth of these civilisations, it is known that they traded in some valuable commodities involving exchange over many thousands of kilometres. However, none of this early trade was truly global.

Global trade was eventually made possible by the European voyages of discovery beginning around the 1500s with Christopher Columbus and Vasco da Gama. The former opened the way to the Americas and the latter, after rounding the Cape of Good Hope, opened the sea route to Asia. Their discoveries ushered in a period of expanding economic globalisation based on imperialism. This was a pattern that persisted into the 20th century but began to unravel after World War II, although the system persisted in the Soviet Union until the end of the 1980s.

After World War II, it is claimed that the United States was keen not to allow imperial international trading and trade preference schemes of the European powers to be re-established and favoured multilateral free trade to foster its own economic interests (Svizzero et al.; 2004). But soon new trading blocs began to emerge in Europe which were eventually to culminate in the European Union. The United States to some extent countered this development by setting up NAFTA, the North American Free Trade Association. While progress in globalisation has been made via greater free trade (multilateralism), significant expansion in international trade has also occurred in recent years via the formation of larger international trade blocs. Whether such blocs will eventually facilitate greater free trade globally or become political obstacles to it remains to be seen (Svizzero et al., 2004).

4. Indicators of the Recent Expansion in Economic Globalisation

There are many different possible indicators of expansion in globalisation. Because the process is multidimensional, no single measure adequately captures its extent. It must be considered from many different points of view.

One indicator of the extent of economic globalisation is the proportion of global GDP traded internationally. This is graphed in Figure 1. This has trended upwards since the 1950s but shows dramatic acceleration after the 1970s. After World War II, many nations developed inward economic policies but more and more nations began to depart from these policies beginning in the 1970s.

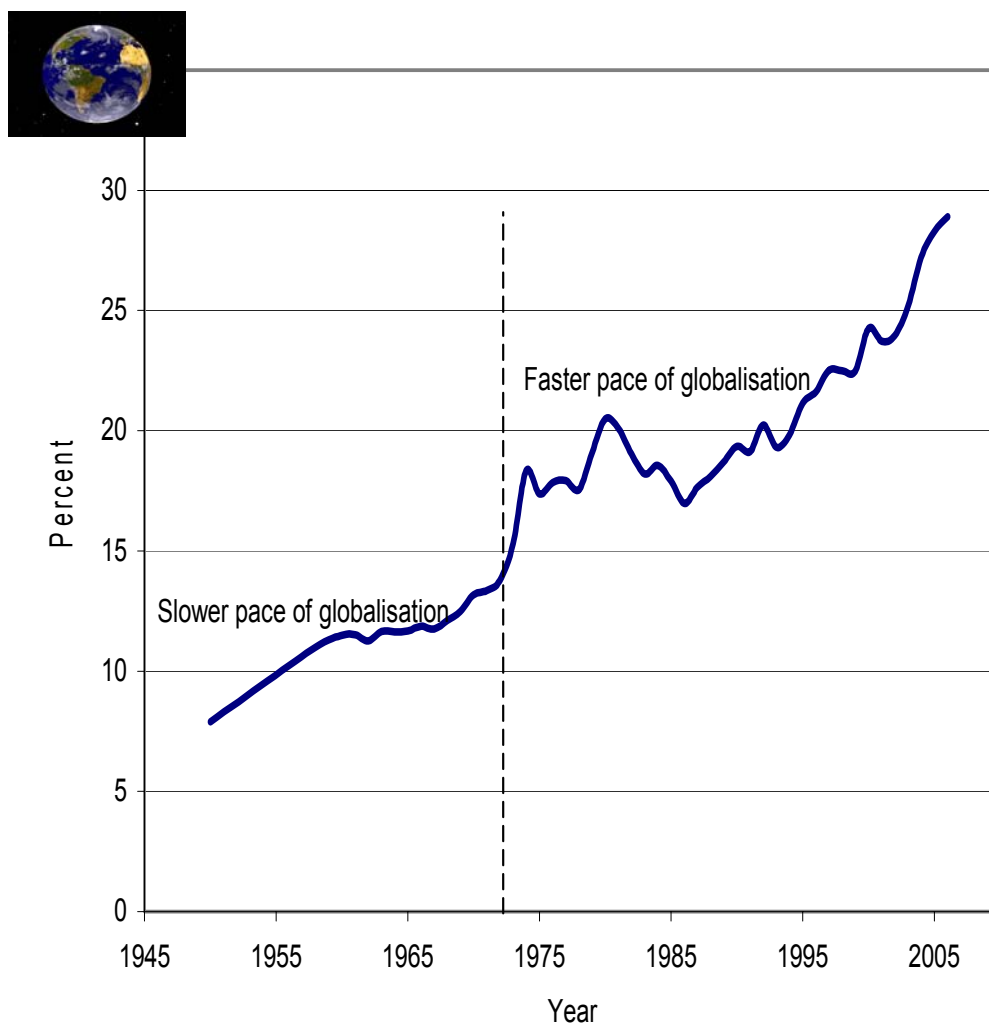


Figure 1 World Exports as a Percentage of Global GDP, 1950 – 2006

Sources: Based on World Bank, 2004, World Development Indicators, online at: <http://devdata.worldbank.org/dataonline/>; IMF World Economic Outlook Database, April 2005; United Nations Statistical Yearbook 1970; Doha WTO Ministerial 2001 Briefing Notes.

Although inward-looking economic policies were the rule, the extent of economic globalisation still rose considerably in the 1950s, and continued to rise in the 1960s but more slowly. However, as Figure 1 illustrates, the pace and extent of globalisation increased decisively and significantly after the early 1970s, even though global exports fluctuated as a percentage of global GDP. The major upward trend in world exports, beginning in the early 1970s, is shown in Figure 2.

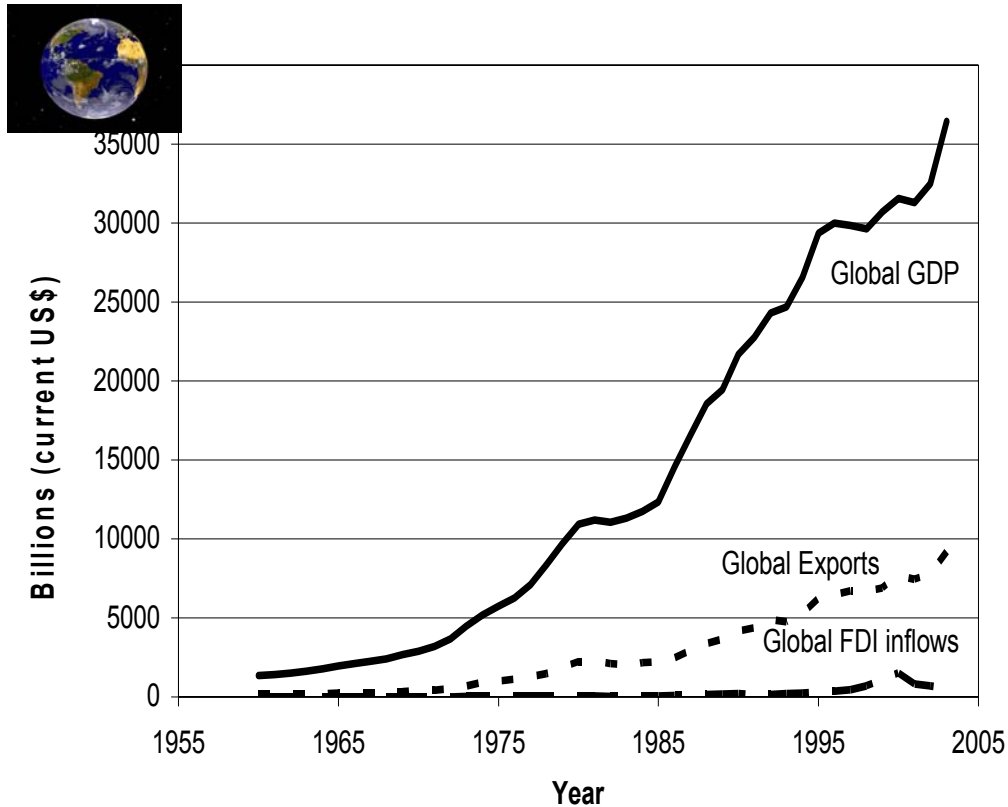


Figure 2 World Economic Indicators, 1960 - 2003 (in current US dollars)

Sources: As for Figure 1

Policies on foreign direct investment began to be relaxed by many nations, including China, in the latter part of the 20th century. However, the process did not progress as quickly as international trade liberalisation. Nevertheless, from 1970 onwards there was a general tendency for global foreign direct investment inflow as a percentage of gross global domestic product to rise, with a spike occurring in 2000 (see Figure 2). Despite the fall in global FDI (as a proportion of global GDP after 2000, there appears to have been a permanent rise in FDI inflows globally.

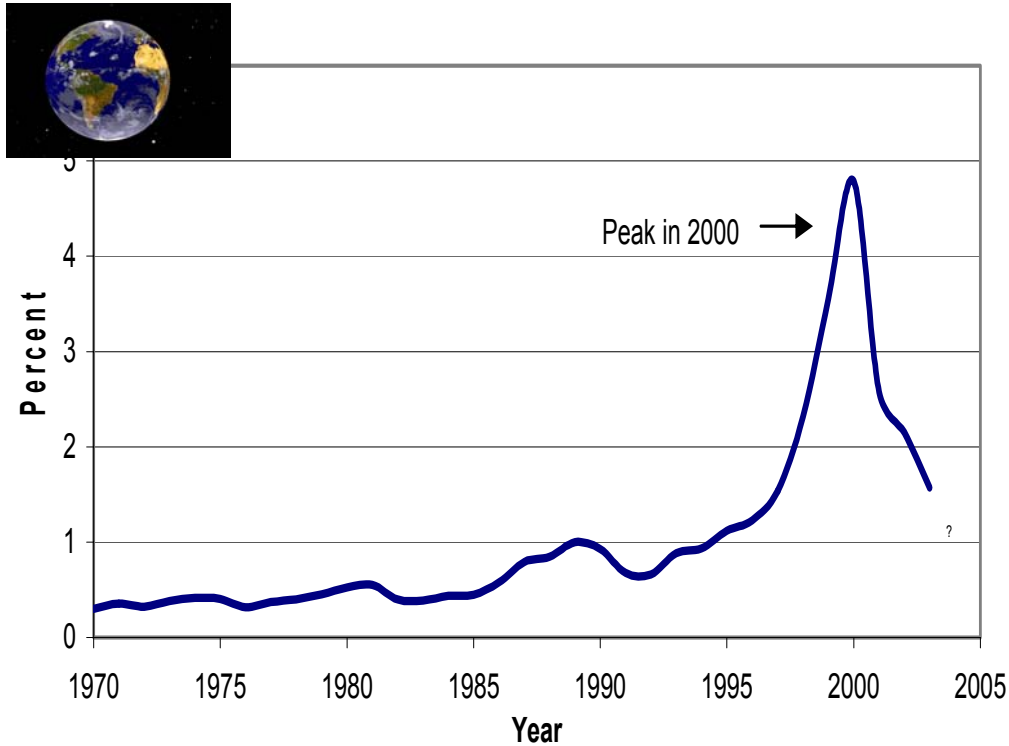


Figure 3 Global FDI Inflow as a Percentage of Global GDP, 1970 – 2003

Source: Based on World Bank, 2004, World Development Indicators, online at: <http://devdata.worldbank.org/dataonline/>

Figure 4 shows China's exports as a percentage of her GDP. These show a massive increase. Prior to China's economic reforms beginning in 1979, China's exports as a percentage of its GDP were of the order of 5% or less but by 2003 had reached almost 35% (see Figure 4). Furthermore, from the late 1970s onwards, the value of China's exports in current US dollars increased at an increasing rate as illustrated in Figure 5.

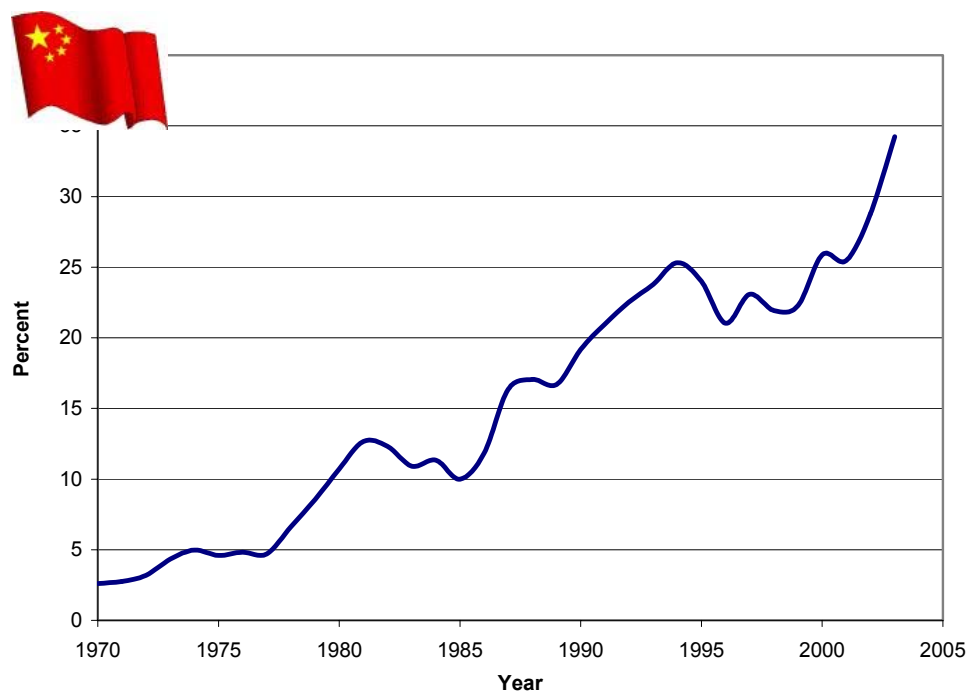


Figure 4 China's Exports as a Percentage of its GDP, 1970 – 2003

Source: As for Figure 3

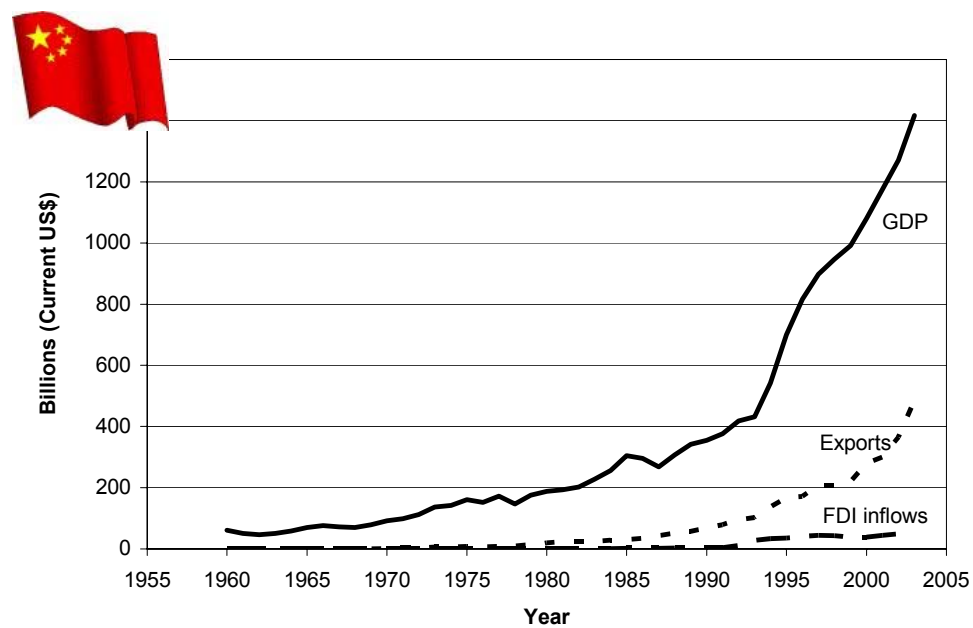


Figure 5 China's Aggregate Economic Indicators (GDP, Exports and FDI Inflows), 1960 - 2003 (in current US dollars)

Source: As for Figure 3

Figure 6 compares China's export to GDP ratio with that for the world as a whole. It shows how this ratio has progressed from being below that for the world as a whole to exceeding it. It indicates that China has increasingly become an export-led economy. The year 1990 marks an important cross-over point for China.

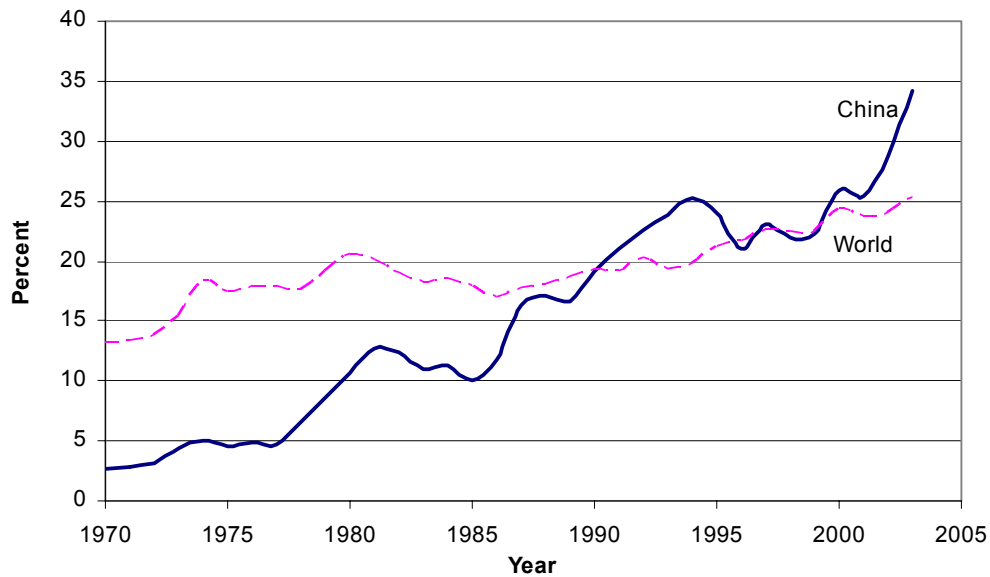


Figure 6 China's Exports as a Percentage of its GDP compared to Global Exports as a Percentage of Global GDP, 1970 – 2003

Source: As for Figure 3

Inflows of FDI to China, after beginning from negligible levels prior to 1979, began to grow. They have followed the pattern shown in Figure 7 as a proportion of China's GDP, and in US current dollars, the pattern illustrated in Figure 4. FDI increased markedly after 1990. Possibly this was a result of the assurance given by Deng Xiaoping that China's economic reforms would continue and because of the concrete steps taken in 1991 in this regard (Tisdell, 1993, p.12).

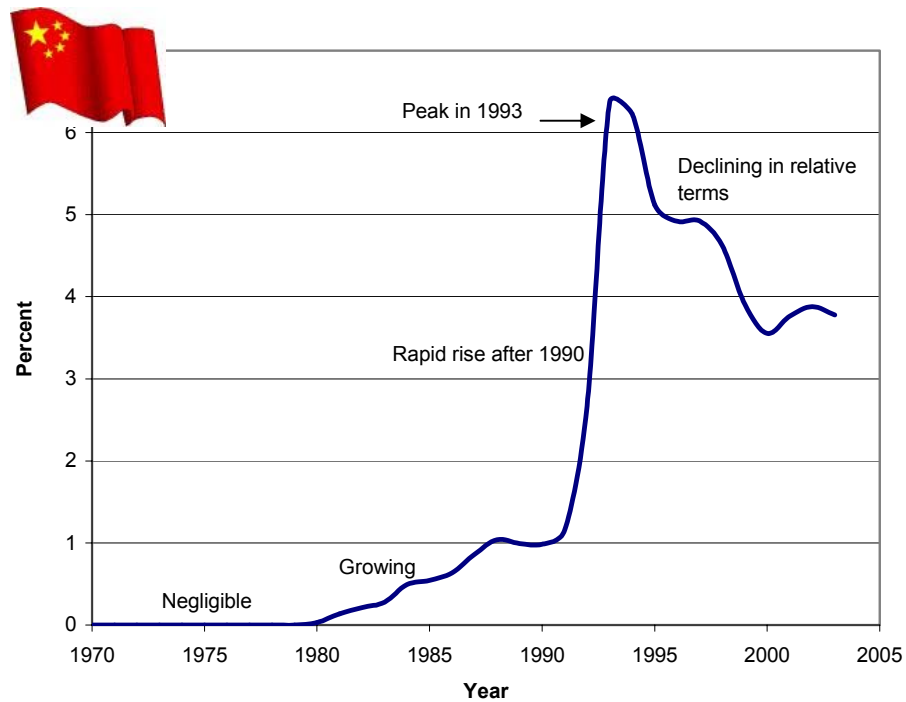


Figure 7 China's FDI Inflow as a Percentage of its GDP, 1970 - 2003

Source: As for Figure 3

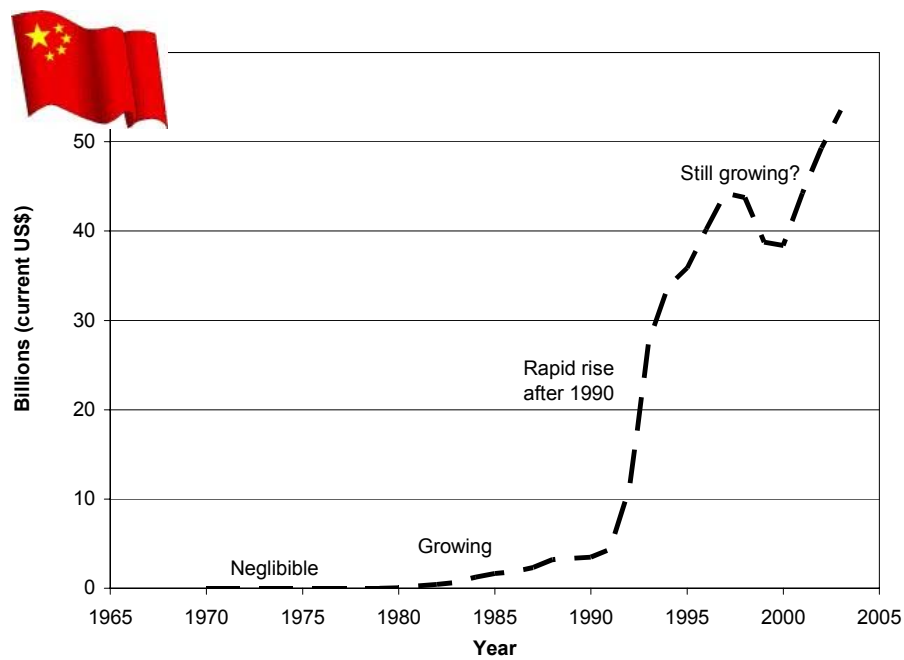


Figure 8 China's FDI Inflow, 1970 – 2003 (in billions of current US\$)

Source: As for Figure 3

Figure 9 compares China's inflow of FDI as a percentage of its GDP with global FDI inflows as a percentage of global GDP. This percentage grew rapidly for China during the 1980s, and since 1984, has exceeded the global percentage in most years, the year 2000 being the exception. This is a further indication of China's increased economic openness and its incorporation into the global economy. It can also be deduced from Figure 9 that FDI inflows to China have also been much more sustained than in the rest of the world.

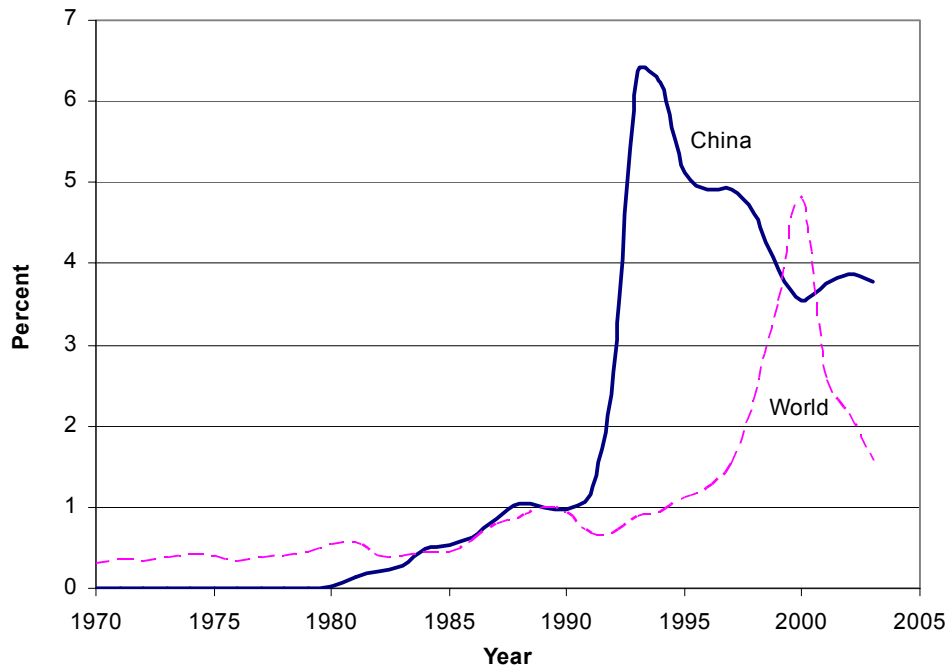


Figure 9 China's Inflow of FDI as a Percentage of its GDP compared to Global FDI Inflows as a Percentage of Global GDP, 1970 - 2003

Source: As for Figure 3

There has also been a massive increase in the amount of short-term international financial flows in recent times. These exceed by many times the amounts needed to finance international commerce. These movements are activated by large banks and financial institutions, and to some extent, are speculative.

Other indicators of the pace of globalisation include the extent of growth in global telecommunications traffic (Tisdell, 2005a, p.9), the growth in international tourist arrivals as a proportion of the world's population (Tisdell, 2005b, p.427), and increased global media

exposure (Tisdell, 2005a). All have accelerated in recent decades, even though terrorist activities have dampened international growth in tourism.

It should, however, be observed that the extent to which different types of economic resources have been able to participate in the globalisation process are uneven. International population and labour movements continue to be restricted but nevertheless considerable international movements of labour and population are occurring in response to economic disparities. While barriers to international movement of skilled labour are less substantial than for unskilled labour, large short-term movements of relatively unskilled labour can also be observed.

5. Positive and Negative Socioeconomic Impacts of Economic Globalisation

Both Western classical economic theory (Adam Smith, 1913, 1st edn. 1776; Ricardo, 1817) and neoclassical economic theory have extolled the economic benefits of international free trade. Adam Smith supported it on the grounds that it would result in reduced production costs by promoting the increased division of labour. The increased division of labour could provide economies of scale in industrial production. David Ricardo argued that international trade would allow countries to specialise in production in accordance with their comparative advantage, thereby adding to their economic abundance. Neoclassical economists refined this theory. For example, the Heckscher-Ohlin theorem supported the proposition that nations are likely to have a comparative economic advantage in producing commodities that use most intensely their relatively most abundant factor of production. It was also shown that countries may gain from international trade even when none has a comparative advantage in production provided that their tastes of their citizens differ. However, the theory was based on static considerations rather than on dynamic analysis.

Schumpeter (1942) pointed out that static analysis does not capture the essence of contemporary corporate capitalism which is better modelled by taking into account dynamic forces motivating innovation in the economy. The dynamics of globalisation require account to be taken of foreign direct investment, technology transfer, R&D and innovation, and the economic motives of multinational enterprises. In the latter respect, neotechnology theories of international trade and investment are particularly relevant (Posner, 1961; Tisdell, 1981; pp.42-46). Companies which develop superior intellectual knowledge compared to others stand to gain considerably from the process of globalisation provided their knowledge can be

legally (or otherwise, such as via secrecy) protected. Both they and countries which purchase their products, or host their subsidiaries, may gain economically from their activities.

To take a simple case, suppose a company develops a unique product for which it is able to obtain a patent and, as a result, a monopoly. Assume that there is sufficient demand in the home market (Market I) to make production of the commodity profitable. Its production for the home market will benefit buyers and add to consumers' surplus at home, and yield a monopoly profit for the company. If this product can be profitably sold abroad, and possibly produced abroad, this will further add to company's profit, assuming that its intellectual property rights can be protected. Consumers abroad will also benefit from the sale of the product. So a win-win situation may occur. On the other hand, such processes in the absence of adequate institutional arrangements in peripheral counties can result in their increasing economic dependence on corporations in centre countries. To avoid this, a degree of economic and scientific self-reliance needs to be maintained by host countries by host countries.

The process of economic globalisation appears to stimulate economic growth, at least in the short- to medium-term. If the Kuznets hypothesis about the relationship between economic development and the distribution of incomes being a reversed U-shape applies (Kuznets, 1963), one might expect that growing globalisation would be associated with reduced inequality of income, at least in more developed countries (Kuznets, 1963). However, in more developed countries growing globalisation has been associated with rising income inequality because the income of the skilled or better educated has risen relative to that of the less skilled or educated. In the United States, for example, income inequality after having fallen from the 1930s through to the 1960s has risen and its income inequality is reported to be as great in 1930s. The pattern that has emerged is like the reclining S pattern shown in Figure 10 (Tisdell and Svizzero, 2004).

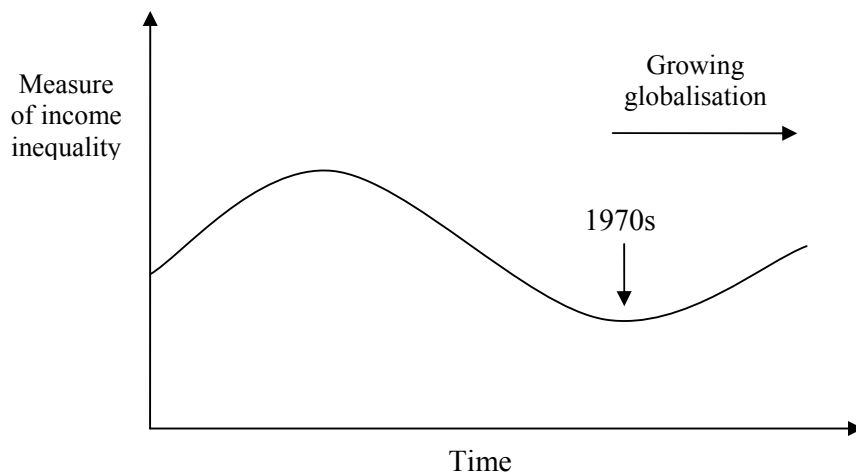


Figure 10 A Kuznets income distribution curve modified to reflect the recent experiences of more developed countries

It has also been observed that while the income of skilled persons has risen relative to the less skilled, so have the hours of work of the skilled. Their higher income has been purchased to some extent by a reduction in their leisure time.

With growing globalisation, income inequality has also risen in less developed countries. It is, however, difficult to disentangle how much of this rising inequality is due to their being in the early phases of economic growth and how much should be attributed to the globalisation effect. Both effects may be present and may reinforce one another.

6. The Catching-Up Phenomena and the Evolutionary Dynamics of Economic Growth

It has been suggested that the normal pattern of development of economies may follow a pattern like that of a logistic growth curve (see Figure 11). Less developed countries that are experiencing economic take-off, such as China, are in the strong growth phase of it, developed or mature economies are in its slow growth phase, whereas stagnant less developed countries show little or no economic growth. Professor Lim Chong Yah (2005) has described the latter as turtle economies, the fast growing economies, such as China, as horse economies, and the mature economies, such as Japan and the US, as elephant economies.

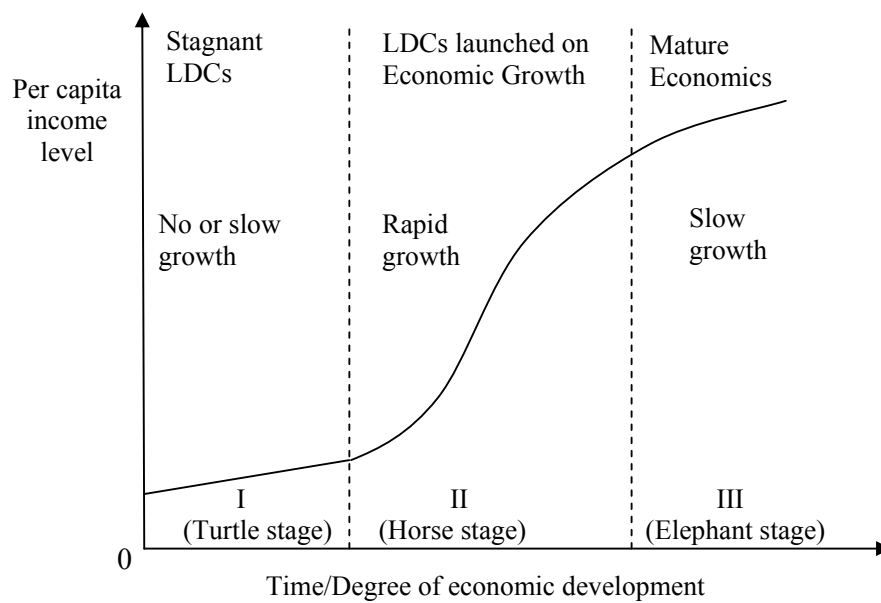


Figure 11 Possible stages in the economic growth of nations.

Not all LDCs are able to escape from economic stagnation but those that do enter a catching up phase (Phase II in Figure 4) in relation to more developed economies, largely adopt and imitate technologies developed in the mature economies, as, for example, Japan did, then Korea did, and as China is doing now. Their technology gap in the beginning is usually large but progressively narrows, and as they approach the global technology frontier, their rate of economic growth slows. Eventually they also become mature economies and their economic growth is then determined, to a large extent, by the global rate of technological progress.

This technology-driven view of LDCs launched on successful economic growth can be illustrated by Figure 11. There, *ABC* represents the global frontier of productivity determined by intellectual knowledge. A nation may follow the logistic type of curve shown by *DEB* in its catching up phase. At first, the economic growth of the nation is not so fast but it accelerates as the country assimilates foreign technologies, before decelerating as the nation approaches the global productivity frontier determined by global technological progress.

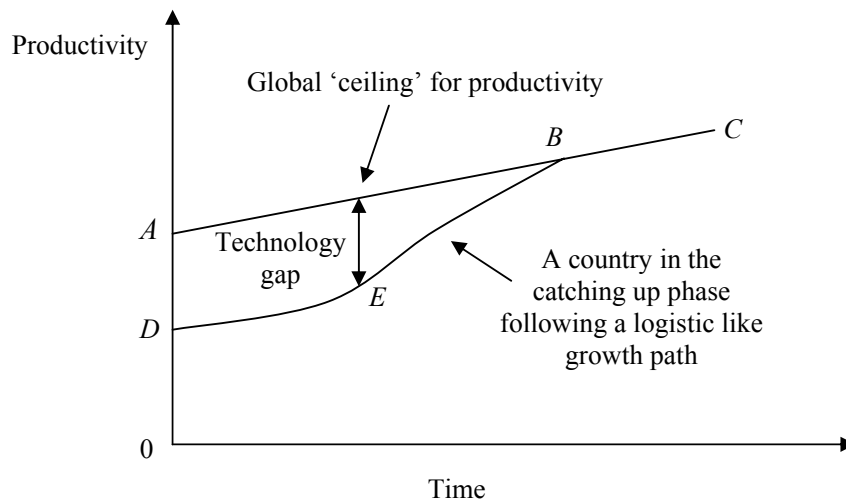


Figure 12 Possible growth path of a nation catching up with mature economies as a result of transfer of technologies in its opening up process. The difference between line *AB* and curve *DEB*, the productivity gap, reflects a technology gap

It is possible that China may catch up more quickly with the mature economies than did countries that began their catching up phase earlier, such as Japan. This may be due to globalisation technology transfer occurring at a faster rate than in previous times (Gao and Tisdell, in press).

Economies in their catching up phase, especially if large or potentially so (such as the economies of China, of India and possibly the combined ones of Eastern Europe and Russia), can add substantially to global economic growth and provide economic benefits to mature economies that otherwise might not be available. However, as the above theory suggests, the rapid economic growth of nations in a catching-up phase is unlikely to last forever. After nations currently catching up complete their catching up, will other LDCs also go through a similar phase and when? Will the whole global economy approach a mature phase? If so, will corporate capitalism in its mature phase then fall into the type of economic stagnation and social deterioration envisaged by Schumpeter (1942)?

7. Could Globalisation Result in Economic Growth that is Unsustainable Because of Adverse Environmental Impacts Generated by It?

Economic growth is heavily dependent on the use of natural resources both as a source of raw materials e.g. for producing energy, and as a sink for wastes from economic production and consumption. While technological progress is often resource-saving and frequently reduces wastes, total resource use has continued to rise with global economic growth. Natural resources are being converted into economic commodities at a growing rate and greenhouse gas emissions continue to rise. There is considerable scientific evidence that the latter is triggering climate change and may generate sea-level rises. There is speculation that changes in the natural environment caused by human economic activity will eventually undermine global economic prosperity.

This is the opposite scenario to that suggested by the environmental Kuznets curve. This type of Kuznets curve is hypothesised to be of a reverse U-shape; the intensity of environmental pollution/degradation is portrayed as first rising with the economic growth of a nation and then declining. The optimistic conclusion may be drawn that economic growth will eventually solve all environmental problems. However, the environmental Kuznets scenario is too simplistic and of doubtful validity when the natural environment is assessed from a global point of view, as is pointed out in Tisdell (2001).

8. Concluding Comments

Naturally, the further into the future we try to predict economic conditions, the more uncertain we must be about our suggestions. This is particularly so when predictions are made about economic globalisation, its economic and social consequences, and the pattern of future global economic development. That is made even more difficult because the operation of natural biophysical systems and levels of economic activity are becoming increasingly interdependent. This means that the future development of the global economy cannot be predicted without taking into account the biophysical consequences of economic growth. It is unlikely that the global economy can continue growing as it has done in modern times without experiencing major biophysical crises.

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