# The Implications of China's Growth for other Asian Countries

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## Summary

China has become the centre of global attention. Thirty years of economic growth at a yearly average of 9% has lifted millions of people out of poverty. China's rise has major external repercussions. The effects are so significant because three things come together: China's size, fast growth and openness. China will soon be the world's largest exporter. Its trade in goods and services (imports plus exports) amount to over 70% of GDP, compared with 25-30% in the cases of USA, Japan or the European Union. China's economic growth has required huge increases in imports and resulted in huge increases in exports. This combination of huge size, rapid growth and openness is historically unprecedented.

There is concern in many parts of the world that China's expansion squeezes them out. In other parts of the world there is hope that China's rise will pull them up. These perceptions of opportunity and threat apply as much, if not more, to China's Asian neighbours as to the rest of the world. Both the threats and opportunities are increasingly visible. But the impact of China's economic growth on the economies of Asia is extremely heterogeneous. Therefore, the analysis has to proceed by major sectors of the economy.

The effects of China's trade in primary products (energy, raw materials and food), intermediate products and finished products on other Asian economies are both direct and indirect. Direct effects arise from bilateral trade and investment between China and other countries. Indirect effects arise from the way in which China's trade and investment (inward and outward) changes the trade and investment conditions faced by other countries. Because the Chinese economy is so big and so open these indirect effects are particularly important.

*Energy.* China's energy consumption more than doubled between 1980 and 2000, and it is projected to double again by 2015, driven by economic growth, industrialisation, urbanisation and increased motorisation. This is one (but only one) of the reasons for the rises in energy prices that have benefited oil and gas exporters in Western and Central Asia and disadvantaged energy importing countries in the region. The current scramble for energy has important consequences not only for energy-importing developing countries, but also for regional and global stability. The major policy challenges arising from the current global energy situation are:

- To reinforce China's search for greater energy efficiency and provide technical assistance as appropriate, while recognising that energy efficiency is an issue that affects all of the developing Asian economies, and in particular India.
- To engage with China on how energy is produced: clean coal technology, renewables, etc., so that pollution on climate change problems are reduced.
- To engage China in regional initiatives around infrastructure development for trade in energy and regional energy security.
- To bring China more effectively into global initiatives on climate change and energy, and to do so on the basis of a partnership that recognises the right of China and other developing countries to sustain growth and poverty reduction.

*Raw materials.* China's rapidly-growing economy is broad-based and therefore requires many different types of raw materials. Imports of these products increase as domestic demand outstrips domestic supply and China's industrial development replaces imports of finished products by imports of raw materials. Some of the biggest impacts of this rising demand have been out outside the region — in Africa and Latin America. But there are specific products for which Asian countries are important suppliers to China. One product which is supplied from Southeast Asian countries to China on a large-scale is timber. The timber trade has significant consequences for the environment and the livelihoods of the poor.

The problems of the largely illegal trade in timber exported to China have been well documented. This trade has a direct impact on the livelihoods of the poor. Timber exports to China seem to have particularly negative effects because (a) the gains are rarely available for enhancing economic development, (b) the wood comes from illegal sources causing deforestation and (c) it induces local furniture producers to compete by using cheaper illegal wood, further undermining the sustainability of the furniture industry.

The sustainable use of natural resources is particularly important if the poorer and less developed Asian economies are to benefit from the rapid growth of the region as a whole. Therefore, it is essential that Chinese and regional initiatives address this problem through:

- Control of trade routes and cooperation with attempts by the exporting countries to crack down on corruption and illegal trade.
- The adoption of legislation to prohibit the import and sale of timber, which has been harvested, transported, bought or sold in violation of national laws.
- Support for multilateral cooperation aimed at combating the illegal trade, both with timber exporting countries and with countries that import products incorporating this timber.
- Promotion of consumer awareness in China and countries importing products from China.

*Food Products.* While China has a substantial impact on trade in energy and raw materials, its trade in food is smaller than might be predicted on the basis of the size of its economy and its comparative advantage in different segments of food production. In part this is because of the Chinese government's policy of self-sufficiency in grains. Without such a policy, China would undoubtedly be a substantial net importer of grains, and this would also encourage expansion of exports of food for which China has a comparative advantage, particularly horticulture, aquatic products and meat. If such a shift occurred, the net direct impact on Asian economies would probably be negative, as the grains would be imported from the Americas, but exports might well target markets in developing Asia directly, or compete in export markets targeted by these countries.

*Intermediate products*. Trade in intermediate products has expanded rapidly in the past two decades as China has become the end-point of a pan-Asian production system. Over the past 20 years, a regional production system has developed in sectors such as electronics, characterised by high levels of trade in parts and components. China imports these parts and components from the more advanced Asian economies

(Japan, Taiwan, Korea and the ASEAN countries) and assembles them predominantly for export to non-Asian markets. In 2001, 26% of East Asia's interregional trade in manufactures was in product categories defined as parts and components. Even this figure is unlikely to reflect the full extent of this trade.

This regional production system has been actively promoted through the trade policies of the Chinese government, giving the Chinese economy a distinctive structure. Duty exemptions for imports that are processed and re-exported have created a dualistic trading structure of 'processing trade' and 'ordinary trade'. Products are imported into the country, processed (mostly assembled) and re-exported. This trade is important in a range of sectors, including machinery, electronics, precision instruments, chemicals, apparel and shoes.

So far, this trade has been based on complementarity between China and the more advanced Asian economies (including Japan). The big question is whether or not this complementarity will continue. As China develops and acquires the capabilities to take on more expensive parts of the manufacturing process rather than specialising in export-oriented assembly, will it compete against the economies it currently depends on for parts and components?

Future research will need to analyse these issues. If China begins to compete with countries that currently supply it with parts and components, will it challenge directly the industries of Korea and Taiwan? If it does so, will it then slowly move out of low-end processing, leaving more space for poorer countries such as Cambodia and Vietnam? In short, the big issue for future research and action is whether China is internalising increasing parts of the value chains it has entered and whether, as a result, other developing countries are driven out of or driven down those value chains.

*Finished manufactures*. China has an impact on other Asian economies through its consumption and production of finished manufactured products. In some cases it is a low-cost supplier to countries that have little or no manufacturing industry. However, it is frequently viewed as a powerful competitor, particularly in export markets. The "China threat" mentality was seen clearly in Asia and across the world following the phase-out of the Multifibre Arrangement in January 2005.

The evidence from Asia is that China has not undermined manufacturing in other parts of the region. It is a net importer of manufactures from many countries in the region, and this is likely to increase if the domestic market replaces export markets as the driver of manufacturing growth.

In spite of China’s own success, other economies in East and Southeast Asia continued to increase manufactured exports in the 1990s. This success even extended to labour-intensive manufactured exports. Some of the clearest cases of declines in manufacturing exports occurred in Korea and Taiwan. Here, the decline was not because they were simply out-competed by China, but because these countries shifted production to China, while retaining control over key aspects of manufacturing. The countries most under threat from China's manufacturing success are mostly in Eastern Europe, Latin America and (for garments) Africa.

Nevertheless, the ability of both China and other Asian economies to benefit from increased manufacturing exports, and also increased FDI, is largely premised on continuing expansion of world trade and investment. If export markets become saturated, direct competition between China and other Asian economies would intensify.

The main overall conclusion from the analysis of trade in intermediate products and finished manufactures is that China imports more from the Asian region than it exports to it. The big questions for the future are whether Asia's poorer countries can connect to this production system and whether China will increase its production of intermediate products.

As regards future research, in order to assess China's direct impact on income opportunities in other Asian countries, it is essential to map more systematically the trade links between China and the poor countries in Asia. This is a huge challenge because casual observation and references in the press indicate that informal trade is taking place on a significant scale. There are likely to be many unrecognised opportunities for removing blockages and improving the terms of trade. Particular attention would need to be paid to the organisation of trade networks and deficiencies in infrastructure.

The broad policy conclusions arising from this analysis are:

- Precisely because China has such a vast and growing market, the most effective way that it can help poorer countries in the region to develop is by facilitating access to the Chinese market and by paying attention to ethical sourcing so that potentially negative effects of increased exports are neutralised.
- Countries in the region need to target the Chinese market more effectively. Exploiting the advantages of Chinese growth requires investment by the governments and enterprises which seek to export to the diverse Chinese regions. The poorer are likely to need assistance from foreign donors in trade capacity building for the Chinese market. Until now, donor agencies involved in trade capacity building have not had sufficient expertise in accessing the Chinese market.
- The full benefits of trade and growth will require further measures for regional integration. The *de facto* economic integration of East Asia needs to be supplemented by increasing regional cooperation. The full benefits of this cooperation will be realised if it extends beyond East and Southeast Asia and into South Asia. This not only offers opportunities for new complementarities and divisions of labour, but also the prospect of the South Asian economies benefiting from the dynamism of East Asia. Although there are many obstacles to be overcome in building this broad regional cooperation, there appears to be increasing political will and interest in this venture.

## 1 Introduction

Success commands attention. China has become the centre of global attention, 'having produced the most successful case of economic development in human history' (*Newsweek,* 6 March 2006, p.34*)*. Thirty years of economic growth at a yearly average of 9% has lifted millions of people out of poverty. Between 1990 and 2000 alone, the number of people living on $1-a-day fell by 170 million.

These achievements were not accomplished overnight. The process of growth and structural transformation has been going on for 30 years. Yet it is only recently that it has taken centre stage in the global debate on economic development. The reason is clear: China's rise has major external repercussions. There is concern in many parts of the world that China's expansion squeezes them out. In other parts of the world there is hope that China's rise pulls them up. Both the threats and opportunities are increasingly visible. Both competition and complementarity with China have significant effects on earning opportunities throughout the world.

The effects are so significant because three things come together: China's size, fast growth and openness. Trade in goods and services (imports plus exports) amount to over 70% of GDP, compared with 25-30% in the cases of USA, Japan or the European Union. China's economic growth has required huge increases in imports and resulted in huge increases in exports. This combination of big size, rapid growth and openness is historically unprecedented.

The resulting 'China effects' are felt throughout the world. *This paper concentrates on the implications of China's growth for other Asian countries, in particular the developing countries in Southeast and South Asia.* Section 2 shows the enormous opportunities that China has provided for others, but it also shows the severe problems it has given rise to. In analysing these complementary and competitive effects, the paper proceeds in stages, analysing first the trade in primary products, second in intermediate products and third in finished products. As far as possible, both direct and indirect effects are traced. Direct effects arise from bilateral trade and investment between China and other countries. Indirect effects arise from the way in which China's expansion (inward and outward) changes trade and investment conditions for other countries, irrespective of whether they interact directly with China. Because the Chinese economy is so big and so open (soon to be the world's largest trading country) these indirect effects are particularly important.

Section 3 then discusses what policy can do to spread the gains from China's growth to other Asian countries. What policy responses are required to increase their benefits from China's growth or avert the dangers that it is causing? Two issues are prioritised in this policy section: enhancing connectivity and improving sustainability. No single actor can bring about the required changes in policy and the launch of new programmes. Action is required within China, within the other Asian countries, and alliances are needed between these countries. Particular attention is paid to the role of China in regional initiatives.

The paper draws together and digests the available evidence. On many issues, however, good information and insights are lacking. The paper makes these

knowledge gaps explicit and sets out the questions which future research needs to address. It is an agenda-setting paper in a double sense: helping to define the agenda for research and the agenda which policy makers need to address.

## 2 The Impact of China's Growth on other Asian Developing Countries

In order to understand how China's growth affects other Asian countries, it is important to disaggregate. Different patterns emerge, depending on whether one examines trade in primary products, intermediate products, and finished products. This determines the organisation of this core section of the paper.

### 2.1 Primary products

The new China is not a self-sufficient economy. On the contrary, it depends heavily on imports of energy, raw materials and food. As the companion papers on the implications of China's growth for Africa and Latin America demonstrate clearly, these imports have been rising rapidly in recent years. This section examines how China's imports of primary products affect other countries in Asia.

*Energy*

China has a substantial impact on the economies of Asia (and the global economy more generally) through its increasing demand for energy. The extent of this increase is shown in Table 1. China's energy consumption more than doubled between 1980 and 2000, rising at a compound annual average growth rate of 4.6% per annum in the 1980s and 3.7% per annum in the 1990s. Energy consumption is being driven by economic growth, industrialisation, urbanisation and increased motorisation. However, China is not the only source of increasing energy consumption as the table shows. The economies of India, Japan and South Korea, taken together, consume roughly equivalent amounts of energy and have also shown substantial increases in energy consumption.

**Table 1: Energy consumption in leading Asian economies (total commercial energy consumption in Quadrillion Btus)**

| | China | | India, Japan and South Korea | |
|---|---|---|---|---|
| | Quadrillion Btus | Index (1980 = 100) | Quadrillion Btus | Index (1980 = 100) |
| 1980 | 17.3 | 100 | 21.1 | 100 |
| 1990 | 27.0 | 156 | 30.2 | 144 |
| 2000 | 38.8 | 225 | 43.7 | 207 |
| 2003 | 42.1 | 243 | 45.1 | 214 |

Source: http://www.eia.doe.gov/emeu/international/energyconsumption.html

China's energy consumption will continue to rise, as can be seen in Table 2. It is projected to double between 2002 and 2015 and continue to rise through to 2025. China's per capita energy consumption remains low by global standards (half the global average in 2003 and only 1/10 of the level of the USA), but it needs to improve its energy efficiency, and has been taking steps to do so.[1]

[1] The extent of energy efficiency in China is open to question. Calculations of energy efficiency can be based on total primary energy consumption per dollar

**Table 2: Delivered energy consumption in China by fuel, 2002-2025 (Quadrillion Btu)**

| | | Projections | | | | |
|---|---|---|---|---|---|---|
| Fuel | 2002 | 2010 | 2015 | 2020 | 2025 | CAGR, 2002-2025 |
| Oil | 10.6 | 18.9 | 21.9 | 25.3 | 29.2 | 4.5 |
| Natural Gas | 1.3 | 3.1 | 4.0 | 4.9 | 7.6 | 7.8 |
| Coal | 27.9 | 45.1 | 53.0 | 59.6 | 63.6 | 3.6 |
| Nuclear | 0.2 | 0.7 | 1.4 | 1.7 | 2.1 | 9.9 |
| Renewables | 3.1 | 5.2 | 5.7 | 6.2 | 6.7 | 3.4 |
| Total | 43.2 | 73.1 | 86.1 | 97.7 | 109.2 | 4.1 |

Source: http://www.eia.doe.gov/oiaf/ieo/ieosector.html

In common with much of South, East and Southeast Asia, China is heavily reliant on oil imports. It already imports 45% of its requirements and this figure is expected to rise to 74% by 2030 (IEA 2004).[2] Similarly, having been an exporter of coal as recently as 2002, China now struggles hard to meet domestic demand. China is, and will be increasingly reliant on imports of energy. This has direct and indirect effects on other Asian economies.

The direct effects arise from energy imports from other parts of Asia. There are substantial energy resources in Asia – notably oil in West Asia and Central Asia, natural gas in these regions and also in Bangladesh, and hydropower in the Himalayan countries. In addition, there are important reserves of oil and natural gas in the Eastern Soviet Union. China will compete for some of these resources, and accessing them may require significant infrastructure investments to link producing and consuming regions. In China's rush to address the energy issue, the energy security of weaker and poorer Asian nations may be put at risk.

However, there are also significant indirect effects of China's expanding demand for energy. These take two forms. First, China is part (but only part) of the reason for the current strength of oil prices. Its demand for oil is a significant portion of the incremental increase in global oil consumption. If oil prices remain high, then some economies will benefit, including Vietnam as well as the West Asian economies, and

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of gross domestic product (GDP), with official exchange rate used to calculate GDP. Such calculations from the Energy Information Administration (2005) show energy efficiency to be much lower in much of Asia, including China and India, than in other parts of the world. However, the Asian Development Bank has recently argued that it would be more appropriate to use purchasing power parity-adjusted GDP figures in these calculations and this gives a truer indication of the level of domestic production. When this is done, energy intensity in China is reduced substantially and falls into line with global figures (Asian Development Bank 2005: 68-69).

[2] East Asia's dependence on imported oil has been growing rapidly, increasing from around 20% of consumption in the mid-1980s to 60% by 2003 (Asian Development Bank 2005: 68).

natural gas exporters will also benefit. Net oil importers will lose out, with the biggest losers in Asia being Nepal and Pakistan.[3]

Second, there are distributional consequences within countries. Oil-based products account for a higher percentage of the spending of the poor, and the health impact on women of a switch from commercial fuels to biomass for heating and cooking is well-known. At the same time, rising fuel costs may make it impossible to sustain the fuel subsidies that are widespread in Asia. This may actually benefit the poor if across-the-board energy subsidies, whose benefits mostly accrue to the non-poor, become unsustainable and are replaced by targeted support for the poor. This has happened in Indonesia (Indrawati 2006).

The second indirect effect of China's increasing consumption of energy relates to climate change. China is already the world's second-largest producer of greenhouse gases, part of which arises from its high-sulphur coal (Umbach 2005: 212). The level of energy that China requires in the future and the way in which this is generated will have substantial impacts on global climate change. The impact on global warming and climate change of the difference between a China that has a US energy profile in 2020, compared to a China with a European energy profile would be massive.

A number of policy implications arise from this, notably the need to: (1) reinforce China's search for greater energy efficiency; (2) engage with China on how energy is produced: clean coal technology, renewables, etc.; (3) bring China more effectively into global initiatives on climate change and energy; and (4) engage China in regional initiatives around energy security and energy infrastructure. These are discussed further in the parallel paper on China's role in Global Governance.

*Raw materials*

There is no overview which captures China's sourcing of raw materials for industrial production from Asian countries and the direct and indirect effects on these countries. However, the key issues can be set out by piecing together fragments of evidence from various sources.

China's industrial development is broad-based and therefore requires many different types of raw materials. Imports of these products increase as rapidly growing domestic demand outstrips domestic supply and China's industrial development replaces imports of finished products by imports of raw materials (for example, steel imports replaced by iron ore for domestic steel production. The rapid growth of China's industry and of its demand for imported raw materials has had a noticeable effect on international commodity prices, which have been rising fast in particular since the year 2000. China's demand has not been the only cause of these high prices but a significant contributor (Gottschalk and Prates 2005).

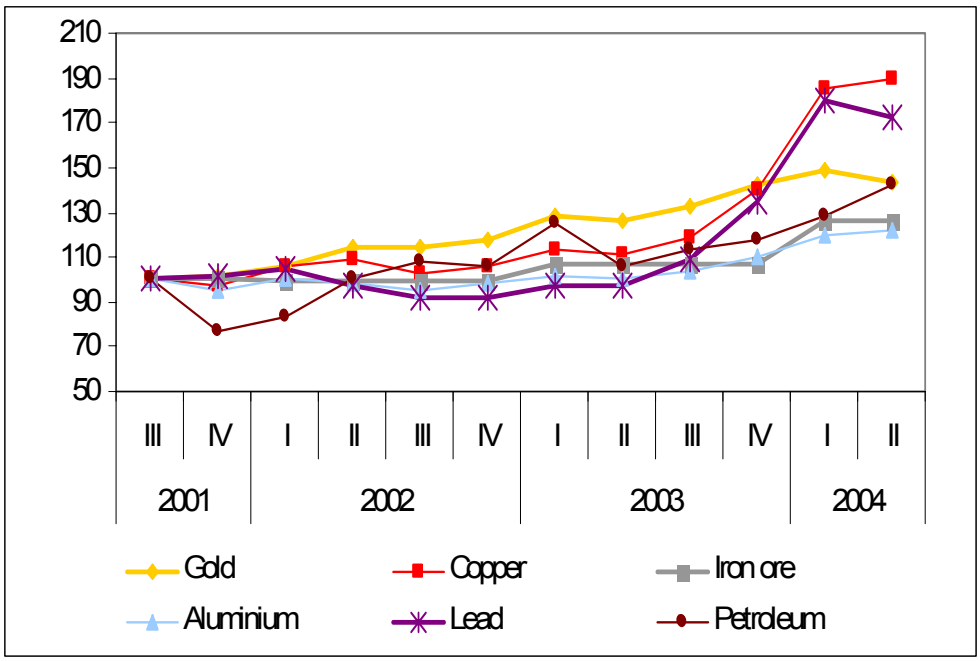
Take the example of metals. China's growth has been particularly fast in sectors that are big users of metal and other industrial commodities, such as automobiles, metallurgy and construction. This has increased demand for metals like steel, copper,

[3] The World Bank's World Development Indicators 2005 calculate the cost to Pakistan of an increase in oil prices of $10 a barrel to be equivalent to 1.38% of GDP.

aluminium and nickel (*The Economist*. The Hungry Dragon, 19 Feb 2004). China has increased its share of world demand for the main base metals from 7-10% in 1993 to 20-25% in 2003. Even allowing for a recent slow down in growth rates, China is likely to account for 30% of world demand by 2010 (Jim Lennon, Macquarie Bank Ltd, presentation at IDS, 1 February 2006). The capacity to supply these raw materials is thought to lag behind demand for the next few years.

As shown in Figure 1, the commodity prices have increased substantially in recent years. This cycle of relatively high prices is expected to continue for the next few years, with new peaks for some products in early 2006.

**Figure 1: Price indices of metal commodities and oil (Index 2001 = 100)**




Source: Derived from UNCTAD Handbook of Statistics 2004 by Gottschalk and Prates (2005)

The benefits derived from the high Chinese demand and the high prices, especially for poverty reduction, depend entirely on who earns the rents, how these rents are utilised (Gottschalk and Prates 2005) and the sustainability and impact of the extraction process. In the Asian case, the policy issues concerning impact can be highlighted by concentrating on the Chinese demand for timber. Whereas Latin America and Africa are the main suppliers of metals, with Asia playing only a minor role as supplier, Asian countries are major suppliers of timber to the world, in particular to China.

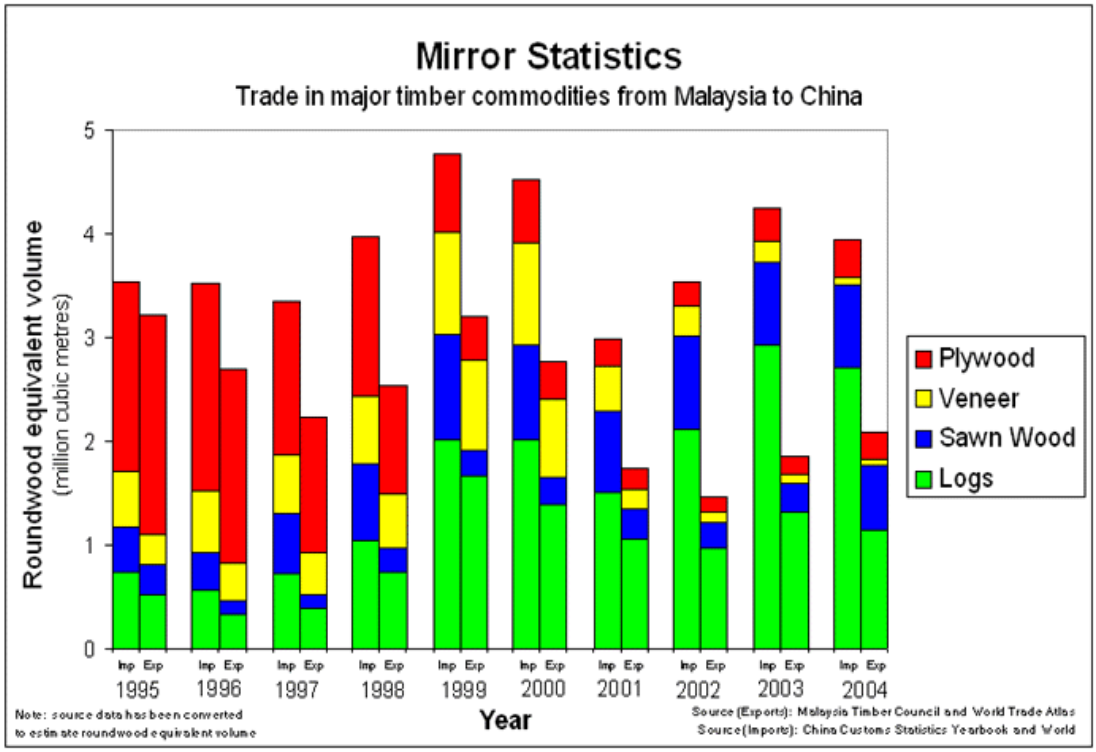
Examining the wood industry is important because China's growth has a dramatic effect on the countries from which it sources. It is not a typical sector but it is a sector for which developmental consequences can be traced and for which policy implications can be spelt out. The key features are as follows:

Chinese import of timber has grown fast, particularly over the last 10 years. This has three reasons:

- The increasing internal consumption of timber, particularly for furniture. This is likely to continue because per capita consumption is still low and incomes are set to rise. At the same time, there are examples of China successfully displacing Asian exports of furniture — by importing the raw material from the former furniture exporting country and out-competing it in the manufacturing process. One example is the displacement by China of exports of rubberwood furniture from Thailand to Japan (Mitsuhashi, 2001).
- Exports to Europe, the Middle East and USA have increased. These exports include logs, sawn wood and furniture.
- The internal capacity to provide raw material is not growing. After the devastating flooding along the Yangtze River in 1998, the Chinese government took drastic measures to protect its own forests.

While Russia is the biggest supplier of timber, South East Asian countries are also major suppliers, notably Malaysia, Indonesia and Myanmar. Quantifying these imports is not easy, because a large share comes from illegal felling in these countries and finds its way into China, often by using false documentation. Mirror statistics contrasting Indonesia's or Malaysia's exports and Chinese imports show substantial difference for trade in logs and sawn wood, but not for plywood or veneer (Chunquan *et al.* 2004). Figure 2 shows this for the trade between China and Malaysia. It is likely that a large part of this difference is due to trade in illegal timber.

**Figure 2**




Source: www.globaltimber.org.uk/MirrorStatistics.htm. See also Chunquan *et al.* (2004).

Myanmar is a particularly severe case both because of the extent of illegal trade and its political significance. Chinese recorded imports were 27 times the size of

Myanmar's declared exports for 2000 (Johnson 2002), and this discrepancy indicates the extent of illegal trade taking place. According to Global Witness (2005), cross border trade increased by 60% between 2001 and 2004 and over 90% of this trade is illegal. Much of the logging taking place in the country is financing the military regime or insurgent groups engaged in conflict. The situation has been compounded by the involvement of Thai and Chinese logging companies, with widespread and destructive logging occurring along the border with China (Chunquan *et al.* 2004: 43).

According to some sources, China is now the world's leading importer of illegal timber, illegality defined as in conflict with either the letter of intent or intent of the law and or otherwise associated with corrupt practice (www.globaltimber.org.uk). While the scale of such imports is hard to quantify, there is little doubt that this trade has major repercussions for the exporting countries of Southeast Asia. While in principle exporting provides an opportunity for raising incomes, the unregulated nature of this trade turns this opportunity into a major problem for the exporting country.

The first problem is that the rents from these illegal sales are rarely available for purposes of economic development. The second problem is environmental: natural forests in Southeast Asia are grossly overexploited. Cambodia, Thailand and Vietnam have been obliged to impose logging bans. Myanmar, Indonesia and Malaysia have regulated logging, but these regulations are not adhered to and deforestation has continued, fuelled in particular by the demand from China. Environmental degradation hits the poor more than the population in general, as the poor are more likely to live on marginal or degraded lands and are more dependent upon use of natural resource for their livelihoods (Bass and Steele, 2006).

The third problem is that this deforestation undermines the earning opportunities for people in the exporting countries. The causal chains vary. In Indonesia for example, export production of teak furniture has contributed substantially to the creation of jobs and incomes. The viability of this industry, however, is under threat because of depletion of the raw material supply. Moreover, Indonesia is competing in international markets with China and Vietnam who offer low prices, not just because of low wages, but because the furniture is made from illegal wood acquired at low prices. This un(der)controlled timber trade thus pulls the Southeast Asian furniture industry into a race to the bottom. Box 1 illustrates how this dynamic affects the earning opportunities in Central Java. It also underlines that avoiding this race to the bottom and making the switch to sustainable income growth requires action from all stakeholders, including the importing countries.

**Box 1: The struggle for sustainable income growth in the furniture industry of Java**

The furniture industry of Central Java has grown rapidly since the financial crisis in 1997. The exporting small and medium enterprises generated substantial employment and income growth. However, this growth is not sustainable because the viability of exports has become dependent on wood which is logged illegally and which risks depletion. An increasing part of the raw material, especially teak, comes from illegal sources. Illegally felled timber tends to be younger thus threatening the sustainability of the forests. Halting this process is difficult because intensifying price competition in the international market makes enterprises prefer the cheaper illegal wood. No single actor and no single measure can reverse this process. Stricter state control of the timber supply is essential but top-down directives are not sufficient. Local communities play an important role in socially responsible use of the forest. Helping furniture enterprises to redirect their competitive strategy also plays a role. The most critical action, however, lies in working with those countries which import illegal timber (notably China) and which import furniture from Indonesia (in particular the EU).
Source: Loebis and Schmitz (2005)

*Food products*

The Chinese food market is undergoing rapid change. On the demand side, these transformations include rising consumer incomes, urbanisation, demographic changes (including an ageing population and increasing female participation rates) and the modernisation of retailing. These trends will shift food demand towards meat, fish (including beef) and horticultural products. On the supply side, there are also significant structural transformations and sources of uncertainty. These include, above all, the food self-sufficiency policies of the Chinese government, and also the changing balance of food production and exports, with increased production and export of high-value and value-added products, including meat, fish and horticultural products.

For over a decade, analysts have been arguing that China's comparative advantage lies in shifting agricultural production from grains, particularly wheat, towards products which are labour-intensive, can be produced on marginal lands, and which require a higher level of processing (Lu 1998; Felloni *et al.* 2003, among many others). These include the meat, fish, and horticultural products whose exports have been increasing. In contrast, there have been increasing concerns about the sustainability of grain production both on environmental grounds (land degradation and water shortages)[4] and economic grounds. International bodies such as the World Bank and OECD have frequently argued in favour of China increasing its grain imports.

In spite of all this, the Chinese government has remained committed to a policy of the its food self-sufficiency, which in practical terms means that domestic production of grain should meet at least 95% of domestic demand (Felloni *et al.* 2003: 174). Since the mid-1990s, this policy has been pursued through a variety of policy measures, and

[4] Some of the biggest problems with respect to water affect wheat production in the north China plain (Lohmar and Wang 2002: 42).

its importance is frequently restated by government sources.[5] This policy effectively limits agricultural trade, and as a result the direct impact of Chinese trade in food products on developing countries in Asia remains very limited. China's overall level of agricultural trade is relatively low. Exports of products for which it has a comparative advantage have tended to increase, while self-sufficiency policies limit imports of products for which China does not have a comparative advantage.

In spite of having 20% of the world's population and 7% of the world's land, China has been, up to now, a net food exporter. The direct impact of this trade on developing Asia seems to be limited. The main markets for Chinese food exports are Japan, the United States and Europe, and only then the richer Asian economies such as Hong Kong and Taiwan. There are some specific exceptions to this rule, such as Chinese garlic exports which have taken significant market shares in countries such as Vietnam and Thailand. One of the 'China effects' is that because of its size, exports which are not significant for total Chinese trade may have significance for importing countries.

Similarly, Asian countries are not the main suppliers of Chinese food imports. As is well-known, China is a major global importer of soya and animal feed more generally, but this is imported mostly from the Americas. Again, there are exceptions to this rule. Along with grains and feed, China also imports large quantities of oilseeds, fats and oils; it is the largest export destination for the palm oil industry of Malaysia and also a major destination for Indonesia. But while various authors have argued that China's rapid urbanisation and industrialisation will turn it into a net food importer, Lu (1998) argues that China can remain competitive in high-value agricultural production. What might happen is that regional trade agreements leading to harmonisation of standards and reductions in tariff and non-tariff barriers could lead to increasing two-way trade between China and its neighbours in such products.

The indirect effects on Asia of China's food trade are harder to gauge. For example, China targeted the Japanese market in the 1990s, moving its market shares of fresh and frozen vegetables from the 5-6% range in the early 1990s to the 35-37% range in the late 1990s (Huang 2004: 3 and 7). However, the main losers were not other Asian countries, but rather the United States. Some Asian countries also export the meat, fish and fruit/vegetables which accounted for more than 75% of all Chinese food exports in 1995 (compared to 50% in 1980) (Lu 1998: 1643). Nevertheless, other Asian countries are exporters of similar products, particularly fish and fruit, and competition the Chinese producers will increase. In particular, if there is a policy change with regard to grain self-sufficiency, Chinese producers could further specialise in these high-value products, competing with other Asian economies.

More research is required on the both the potential of China as a market for food producers in other Asian countries and also as a potential source of imports into these countries.

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[5] See, for example, the discussion of grain self-sufficiency at the 2005 meeting of the Chinese People's Political Consultative Conference.

## 2.2 Intermediate products

In the words of Enright *et al.* (2005: 1) 'China has become the last stop in a pan-Asian production system, in which capital goods and advanced components are imported from Japan, Korea and Taiwan; other inputs are imported from other Asian economies, mostly in South-east Asia; and final assembly takes place in China'. The implication is that the relationships are complementary: there is a synergy between China's globally-oriented assembly industries and suppliers of intermediate products across Asia. This section examines the evidence, confirming China's massive demand for intermediate products from other Asian countries. We will ask whether this is likely to change, and which countries benefit from this synergy. Will Asian countries continue to benefit from the demand for manufactured inputs or will China increasingly produce its own inputs? Will the relationship change from complementarity to competition? The outcome has major repercussions for the creation of wealth and reduction of poverty in the Asian region.

*Deep integration and vertical trade*

Over the last 20 years the importance of the Asian region for Chinese exports has diminished while for imports it has grown substantially (Lall and Albaladejo 2004). This is not just a trade story. A regional production system has emerged. It is seen as an example of 'deep integration' because of the deepening inter-country division of labour and associated productivity increases (Evans *et al.* 2006). The main characteristic of this integration is the increasing trade in parts and components between countries in the region. Economists refer to this as 'vertical trade' (Hummels et al. 1998: 81) —the incorporation of imported parts into products that are then exported.

What evidence is there that this type of regional production system has emerged?

- Intra-regional trade in East and Southeast has been expanding much more rapidly than trade as a whole. The East Asian share of global trade increased threefold from 1975 to 2001, but the share of world trade accounted for by intra-regional trade in East Asia rose six-fold — from 1% of world trade to 6.5% (Ng and Yeats 2003: 3).[6]
- The intensity of trade between countries in the region was much greater than would be predicted on the basis of relative size and distance, and this intensity has been increasing rapidly (Ng and Yeats 2003: 20-23).

The high and rising level of intra-regional trade does not by itself prove that vertical specialisation or deep integration is present. The trade data tell us that:

- The export profiles of some countries increasingly match the import profiles of others. This complementarity is particularly strong for Hong Kong, Indonesia, Malaysia, Philippines, Thailand and Taiwan (Ng and Yeats 2003: 24). This is reflected in the increasing importance of intra-industry trade and the decline of one-way trade in the region. This is noted by Fukao *et al.* (2003: 36) for trade as a whole, and by Ando (2005: 16-17) for machinery trade.

[6] The countries included in this calculation are: Brunei, Cambodia, China, Republic of Korea, Hong Kong, Indonesia, Lao PDR, Malaysia, Mongolia, Philippines, Singapore, Taiwan (China), Thailand, and Vietnam.

- Regional trade in parts and components, a key indicator of vertical trade, has been increasing. In 2001, 26% of East Asian inter-regional trade in manufactures (excluding chemicals) was in the 60 or so SITC Revision 2 categories defined as parts and components (Ng and Yeats 2003: 53). It is widely accepted that even the SITC Revision 2 figures underestimate the true extent of trade in parts and components that are incorporated into other products.

China itself substantially increased regional sourcing (i.e. the share of its total imports that come from within East Asian region), from 23% to 49.8% between 1985 and 2001 (Ng and Yeats 2003: 14). There is agreement that this is primarily due to the sourcing of intermediate products. Regional sourcing of parts and components is particularly evident in the electronics industry. From 1990 to 2000, China increased its imports of electronics products from East and Southeast Asian countries from 12% to 62% of total electronics imports (Lall et al. 2004: 417). All this suggests that countries in the region – with regard to intermediate products – tended to benefit from China's growth and export competitiveness.

This regional production system has been actively promoted through the trade policies of the Chinese government, giving the Chinese economy a distinctive structure. Duty exemptions for imports that are processed and re-exported have created a dualistic trading structure of 'processing trade' and 'ordinary trade', as described by Lemoine and Ünal-Kesenci (2004). The processing trade is an example of vertical trade, insofar as products are imported into the country, processed and re-exported. This trade is important in a range of sectors, including machinery, electronics, precision instruments, chemicals, apparel and shoes.

This trade preference regime is not exceptional in policy terms[7] — many countries have such schemes — but its sheer scale is unique. In the late 1990s, 55% of total exports from China were included in the processing regime, and imports for processing accounted for nearly 50% of total imports (Lemoine and Ünal-Kesenci 2004: 832). This is a high percentage of trade in a very large economy.

Much of the processing trade is carried out through foreign affiliates (wholly owned foreign companies or joint ventures). Foreign affiliates were responsible for 45% of total exports from China in 1999, of which more than 80% were within the processing regime. Lemoine and Ünal-Kesenci conclude that 'A large proportion of China's trade thus corresponds to intrafirm trade between parent firms in Asian countries and their affiliates in the Mainland' (2004: 835). There are however substantial sectoral variations.

*Inclusion and exclusion*

We have shown that China's sourcing of intermediate products from the Asian region has occurred on a significant scale, has been promoted by government policy, and

[7] For some developing countries, export processing zones perform the same function — there are duty exemptions on imports of products that are to be re-exported. For industrialised countries, outward processing schemes operate in an analogous way, reducing import duties on products assembled from previously exported materials.

taken the form – in some sectors more than others – of intra-firm trade. China's own growth has thus spilled over into other Asian countries. The question is which countries are part of this regional production system and have thus been able to take advantage of the opportunities to create jobs and raise productivity?

Scanning the sources referred to above suggests that one can distinguish between three groups of countries (leaving aside Japan):

- Countries which are major suppliers of intermediate products: notably Korea, Taiwan Province and Singapore.
- Countries which are minor suppliers: the five big ASEAN countries: Malaysia, Philippines, Indonesia, Thailand and Vietnam.
- Countries which play little or no role in this regional production system, notably the poorer ASEAN countries such as Laos, Cambodia and Myanmar, and most countries in South Asia and Central Asia.

A number of big questions arise from this analysis, in particular for those countries which are not deeply integrated into this regional production system. In which sectors do they want to connect more closely and how can policy contribute to greater connectivity? The policy side of this question is addressed in Section 3 of this paper. In this section we need to deal with a prior issue: is the existing regional production system, in which China relies heavily on intermediate products from other Asian countries, likely to continue?

*The future of the regional production system*

As set out above, the emerging regional division of labour has established complementarities between China and the more advanced East Asian economies. More than that, the success of China in global markets (particularly for machinery and electronics products) is best interpreted as the success of a broader regional production system. In the words of Lall and Albaladejo : 'China acts *more as an engine of export growth than as a competitive threat to most of its neighbours'* (2004: 1456, stress in original). But they add: 'It is difficult to predict if this will continue'.

Indeed, a big question is how the complementarity will change if Chinese firms move up the value chain and compete with production of parts and components in other Asian countries. Michael Enright raised this question in 2000 when he concluded with regard to the ASEAN countries: 'China is a complementor in a pan-Asian production system in which it imports components, materials, and other inputs from the region, and then assembles them for export. However, the balance is shifting more and more towards China being primarily a competitor rather than a complementor in manufacturing industries' (Enright 2000: 13). By 2005 he concluded that the impact of China's rise was felt differently in different Asian countries.

Future research will need to differentiate between countries and sectors in examining the issue of complementarity versus competition and its change over time. If China begins to compete with countries that currently supply it with parts and components, will it challenge directly the industries of Korea and Taiwan? If it does so, will it then slowly move out of low-end processing, leaving more space for countries such as Cambodia and Vietnam? In conclusion, the big issue for future research and action is whether China is internalising increasing parts of the value chains it has entered and

whether, as a result, other developing countries are driven out of or driven down those value chains.

## 2.3 Finished products

The analysis of trade in intermediate products shows that up to recently, there has been a complementarity between China and the East and Southeast Asian economies. What is the story with respect to finished products, and in particular for manufactures? The rapid growth of Chinese manufactured exports has certainly led to anxieties. As Lall and Albaladejo suggest:

> 'China's export surge has raised grave concerns in the region. While some of the apocalyptic predictions are overdone, it is possible that rapid export growth by such a massive entrant will adversely affect export growth by its neighbors' (Lall and Albaladejo 2004: 1457).

As well as the indirect effects arising from competition in third markets, highlighted here by Lall and Albaladejo, there are also the direct effects that arise from trade between China and other Asian countries. These effects need not be negative. Many consumers in the global economy, including Asia, benefit from access to cheap Chinese manufactures. This benefit is often overlooked, and it is particularly important in countries that have limited manufacturing sectors. In fact, exporters of energy and raw materials may gain a double benefit from China's rise: increasing prices for their exports and decreasing prices for their imports of manufactures.

Given the rise of intra-regional trade, and the rapid growth of China's exports to the rest of the world, a critical question for the Asian economies is the extent to which China is a large potential market for finished goods or a source of competition — in both the domestic markets of Asian countries and in third markets.

*Direct effects*

The first thing to note is that the data do not support the idea that China is a massive net exporter of manufactures to countries in Asia that are potential competitors as producers of manufactures. On the contrary, with the exception of Hong Kong (which is a special case), and Singapore, these countries had trade surpluses with China in manufactures in 2000, as can be seen in Table 3. However, this data has to be treated with great care. The table shows that in 2000 exports to the other seven countries in the table were dwarfed by exports to Hong Kong, although this was not true for imports into China. In 1990, this 'Hong Kong effect' was even greater. Chinese exports to Hong Kong were nine times higher than the seven countries in the table combined, and imports from Hong Kong double the level of the seven countries. The origin and destination of products shipped through Hong Kong is unclear. Data for the other seven countries in the table could be distorted by exports and imports that pass through Hong Kong on their way to these countries. Given the declining importance of Hong Kong as a conduit for Chinese trade between 1990 and 2000, it is also difficult to provide reliable figures on trends trade over this period. With this caveat in mind, it is worth noting that direct trade between China and the countries in the table grew rapidly, increasing at double-digit annual average rates for the period 1990-2000 (with the exception of Hong Kong, for which exports grew slowly and

imports actually fell), and imports into China grew more rapidly than exports from China.

**Table 3: China's trade in manufactures with East Asian economies, 2000 ($ billion)**

| | Exports from China | Imports into China | Balance[(a)] |
|---|---|---|---|
| Korea | 8.54 | 22.03 | -13.48 |
| Taiwan | 4.25 | 23.25 | -19.00 |
| Singapore | 5.35 | 4.86 | 0.49 |
| Hong Kong | 41.51 | 8.92 | 32.58 |
| Indonesia | 2.29 | 2.37 | 0.09 |
| Malaysia | 2.14 | 4.64 | -2.49 |
| Philippines | 1.27 | 1.43 | -0.16 |
| Thailand | 1.93 | 3.40 | -1.47 |

Source: Lall and Albaladejo (2004: 1465).
Note: (a) A negative figure indicates a Chinese trade deficit.

These figures incorporate trade in components, for which it is known that China was a significant net importer. At the sectoral level, data on intra-Asian trade distinguishing between finished products and parts and components is available. In the case of electronics, this shows that most Asian countries were running trade surpluses with China in 2000. Taking the same eight countries listed in Table 3, the total trade surplus with China in finished electronics products totalled $5.8 billion. If Hong Kong is excluded, the trade surplus in the remaining seven countries rises to $8.4 billion. Of the seven countries, only Indonesia had a trade deficit in finished electronics products, and this only amounted to $74 million (Lall and Albaladejo 2003: 50).

In the future, China might become a more significant market for Asian exporters of finished products. This would be particularly the case if domestic savings rates fall in China and the economy becomes less dependent on exports as a driver of economic growth. This would tend to increase demand for imported products. However, any changes will take some time to take effect. As many commentators have noted, high levels of domestic savings in China are partly the result of company saving for capital investment in the absence of an efficient financial system, and partly the result of families saving in order to self-provide safety nets, pensions and education. Therefore, reducing domestic savings in China will depend upon reforms to the financial system and greater state provision of social protection, pensions and education. These will not be achieved in the short-term.

*Indirect effects*

What are the indirect effects of China's manufacturing export boom? China has greatly expanded its share of the global market for manufactured products in the 1990s, when its manufactured exports grew by 17% per annum. More important, its share of total developing country manufactured exports doubled, from approximately 10% to approximately 20%. China's rising share of the world market was particularly pronounced for low technology products, where it grew from 4.9% to 12% (Lall and

Albaladejo 2004: 1450).[8] These are the products that low-income countries in Asia are most likely to export.

Is there any evidence that China's growth was at the expense of other countries in the region? For the 1990s, the answer would have to be 'no'. For manufactures as a whole, the seven countries listed in Table 3 (excluding Hong Kong) all managed to increase their share of global manufactured exports. Without China, their shares might have increased more rapidly, but in this period the dynamism of the Asian economies and their global competitiveness was sufficient for all of these countries to gain ground. If China did take market shares away from these countries in certain product lines, they were able to compensate by expanding exports of other products. The losers were elsewhere in the global economy. China increased its share of total (East) Asian exports, but as total exports also rose, the absolute values of non Chinese exports from East Asia also rose. And this is frequently interpreted as a precursor of a broader Chinese challenge. For example, Wong and Chan (2002: 87-88) emphasise the potential threat from Chinese competition to the ASEAN-4 countries, suggesting that China's WTO accession will exacerbate the problem. The key factors affecting the likely future outcome are: (i) the extent to which global markets for the products in question will continue to expand (sustaining opportunities for all), and (ii) the speed at which China's own rapid growth will undermine its competitiveness in low-skilled manufacturing.

In the case of low technology products in particular, China did not undermine exports from the ASEAN countries. Korea and Taiwan did see their world market shares for low technology manufactures decline in the 1990s. This fall is what one would expect. Not only were these countries moving into more sophisticated sectors of manufacturing where their rising labour costs were less of a handicap, but they were also 'hollowing out' their manufacturing, transferring production to other Asian economies (for example, to China and Indonesia in the case of footwear) but continuing to occupy roles in the industry as marketers, designers and producers of components. This is one of the tendencies that have driven the regional division of labour in Asia and the rapidly rising trade in intermediate goods. Korea and Taiwan are not so much losing out to China as repositioning themselves within global production networks.[9] The manufacturing exporters in the region that might have bee under threat — Malaysia, Thailand, Indonesia and the Philippines — all saw their shares of global low-technology manufactured exports rise. The big losers have been elsewhere in the global economy. In footwear, for example, those big losers so far have been not China's East Asian competitors but countries like Brazil.[10]

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8 The 'low technology manufactures' category includes textile fabrics, clothing, headgear, footwear, leather manufactures, travel goods pottery, simple metal parts/structures, furniture, jewelry, toys and plastic products (Lall and Albaladejo 2003: 57).

9 The rise of these global production networks is now increasingly recognised by mainstream economists, as evidenced by the discussion of global production networks in the Global Economic Prospects 2005 (World Bank 2005).

10 The impact of Chinese competition on Brazilian firms in the footwear industry has been documented by Schmitz (1999).

Nevertheless, the continuing strong growth of Chinese exports after 2000 does raise the prospect of increasing competition for other Asian producers. The clearest example of this concern has been expressed for the textile and garment industries following the January 2005 elimination of the Multifibre Arrangement (see the discussion in the parallel paper on Africa). Lall and Albaladejo conclude their analysis of China's competitive performance with the observation that:

> 'The abolition of the MFA will exacerbate the threat in textiles and apparel and it is not clear that they [the second-generation Asian exporters] can move the quality, design and marketing scale sufficiently to retain a large niche here. The same applies to other LT [low technology] products like footwear, toys and the like' (2004).

So far, pessimistic expectations have proved to be unjustified, on the whole. One of the Asian countries most expected to be at risk from rapidly rising Chinese garment and textile exports was Bangladesh. Contrary to expectations, ready-made garment exports rose by 11% in 2005, with most of the growth coming from the knitwear sector. Textile exports also showed a good performance.[11] Part of this performance may have been caused by temporary restrictions on imports of Chinese garments and textiles to Europe in the second half of 2005.

*Competition for FDI*

These uncertainties about the impact of China on competitor countries in the rest of Asia are also reflected in discussions of competition for foreign direct investment. Various studies have shown that the massive inflows of FDI into China witnessed in the 1990s have not led directly to declines in FDI in other parts of Asia. While China's share of total Asian FDI rose, the absolute levels of FDI going to other Asian countries continue to rise. An econometric analysis by Chantasasawat *et al.* (2004), which covered the period 1985 to 2001, concluded that China has a positive effect on the level of FDI in other Asian economies. It also concluded, importantly, that policy variables such as rates of corporation tax and trade openness were more important determinants of FDI flows than the 'China effect' (Chantasasawat *et al.* 2004: 24-25). This implies that other Asian economies should worry more about the determinants of their competitiveness that are under their own control rather than be focused on potential threats from China. However, the conclusions concerning competition for FDI are contested. For example, Enright (2005: 6) concluded that the rate of growth of FDI into China was negatively correlated with the growth of FDI into other Asian nations, particularly Indonesia and the Philippines.

## 2.4 Overview of impact

Over the last 30 years, changes in the Asian region have been fast and deep. They remind us that the past is not necessarily a good guide to the future. But understanding the past and present is a necessary starting point.

The main overall conclusion from the above account is that China imports more from the Asian region than it exports to the Asian region. This is partly due to the sourcing of intermediate products. The emergence of a regional production system has created

[11] As reported by AFP News, 17 February 2006.

enormous opportunities for China's neighbours. The big questions for the future are whether Asia's poorer countries can connect to this production system and whether China will produce more of the intermediate products itself.

Exports of primary products to China have provided enormous opportunities for supplying countries, but most of these primary products come from Latin America and Africa. Some raw materials come from within Asia but there is no systematic account of these trade links. One sector for which good information is available is the timber trade with China. Timber exports to China seem to have above all negative effects because (a) the gains are rarely available for enhancing economic development, (b) the wood comes from illegal sources causing deforestation and (c) it induces furniture producers to compete by using cheaper illegal wood.

As regards future research, in order to assess China's direct impact on income opportunities in other Asian countries, it is essential to map more systematically the trade links between China and the poor countries in Asia. This is a huge challenge because casual observation and references in the press indicate that informal trade is taking place on a significant scale. There are likely to be many unrecognised opportunities for removing blockages and improving the terms of trade. Particular attention would need to be paid to the organisation of trade networks and deficiencies in infrastructure.

With regard to competition in third markets, the main concern is that China will displace exports of labour intensive products from other Asian developing countries and depress prices leading to deterioration in the terms of trade. Jenkins and Edwards (2004) examined whether this has in fact happened, concentrating on those products which are most likely to affect the Asian poor, namely labour intensive agricultural products and manufactures. They conclude that over the period 1990-2001, competition with other Asian exporters has increased. They emphasise, however, that future analysis needs to be carried out at a more disaggregated level. We indicated above that the pessimistic expectations have not been confirmed so far but endorse the need for more detailed investigation.

The general points emerging from this analysis are that participating in the global economy provides enormous opportunities, that China's growth augments these opportunities, but that China's participation risks pulling other countries into a race to the bottom. This risk can be reduced by working with the Chinese government. The following section indicates what the Chinese government can do to enhance the benefits for other countries in Asia, what these countries need to do themselves, and what issues need to be tackled at a pan-Asian level.

## 3 Policy Implications

China's growth offers many opportunities for other Asian countries to accelerate their growth. Making use of these opportunities for purposes of income generation of poor people requires prioritising two areas in policy and programmes: *connectivity and sustainability*. As set out in the previous section, China is the engine of a regional production system which has brought enormous benefits in terms of jobs and incomes to those countries that are fully integrated. Many parts of Asia, however, are not well connected to this regional production system. Better infrastructure and better trade

links are key to enhancing the growth and incomes in these poorly integrated parts of Asia. This is the first priority for future policy. The second priority is enhancing sustainability. As seen in Section 2, some Asian countries have been able to increase exports and enhance employment and income but this growth is not sustainable. This section indicates how greater connectivity and sustainability can be achieved by national policy in China, in other countries and by pan-Asian initiatives. For initiatives at the global level we refer to the parallel paper on China's role in Global Governance.

### 3.1 Chinese policy

China's growth has been phenomenal and the government is justly proud of the economic achievements. Its legitimacy depends on maintaining rapid growth. It also depends on spreading the gains from the rapid growth. This spreading the gains from growth to the poorer people and regions within China is a huge task (as set out in *The Economist,* March 11-17, 2006, pp 14 and 63). The concern here is with spreading the gains to the poor regions of South and Southeast Asia. What can the Chinese government do about it?

One important contribution which the Chinese government can make is to pay greater attention to ethical sourcing. This is particularly urgent in the case of timber imports. The Chinese government has enforced a logging ban within the country and invested in reforestation in order to reduce the risk of environmental disasters, highlighted by the devastating Yangtze River flooding in 1998.[12] Unfortunately the thinking behind this internal policy was not extended to the sourcing of timber from other countries. On the contrary, China is *de facto* exporting its problems of scarcity and deforestation to other countries. As was mentioned in Section 2, China has become the world's main importer of wood from illegal sources. The switch to wood from well-managed forests cannot be achieved by the Chinese government on its own but it can make a number of critical contributions. These include[13]:

- Inspect the trade routes through which illegally felled timber enters the country. Most of these trade routes are well known; they are controlled by syndicates which pay huge bribes to ensure that the logs can leave the exporting countries.
- Bilateral co-operation with government agencies of exporting countries. Fighting the corruption rackets is not easy, partly because some government agencies or officials benefit from such trade, but it is an essential step in the move to ethical sourcing.[14]
- Adopt legislation to prohibit the import and sale of timber, which has been harvested, transported, bought or sold in violation of national laws. This should include timber imported either directly from the country where the timber was logged or via intermediate countries.

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12 This protection of China's own forests seems to work, so much so that some experts suggest the logging ban can be relaxed in some areas without harm to the environment (Chunquan 2004: 52).

13 These suggestions are informed by: Guizol *et al.* (2004), Chunquan *et al.* (2004), Global Witness (2005).

14 According to a press release of Global Witness of 8 March 2006, the Chinese government has finally pledged to act to address the rampant trade in illegal timber from Myanmar (http://www.globalwitness.org/press_releases).

- Support the introduction of systems to trace wood from its source to final use. Without a wood-tracing system, companies cannot be certain that they are buying wood from well managed forests. Practical and tested systems and technologies are available that can track the origin of the wood and monitor the chain of custody and legal compliance. This would have to be complemented by the promotion of greater consumer awareness of the importance of sustainable production.
- Support multilateral cooperation aimed at combating illegal trade. Play a more active role in the Regional Taskforce on Forest Law Enforcement and Governance (FLEG). Develop mechanisms for the effective exchange of experience relating to forest protection and exchange of data on export/import of timber.

We have given the issue of ethical sourcing particular attention because it is probably one of the most direct and effective ways in which the Chinese government can enhance the earning opportunities of the poorer Asian countries. There are other ways of using foreign trade for poverty reduction, for example granting the least developed countries of Asia preferential access to China's vast market. This will require discussions with the governments of these countries of what the priority products should be and how such market access can be facilitated.

Fostering trade and ethical sourcing is almost certainly more effective than developing a foreign aid programme for poor Asian countries. It is known from the history of Western and Japanese foreign aid, how difficult it is to make such aid work. Aid agencies from these countries have made huge efforts to be innovative in the way they provide aid and seek to reach the poor. Many efforts failed but some have been able to carry out good programmes and projects. However even the better agencies and projects have sometimes had a disabling effect. Donors and projects have proliferated in the poor countries, giving rise to high transactions for the recipient governments. Their best staff spent more time meeting with the donor agencies and their consultants than on developing their own policies and programmes. Designing and executing policies and programmes is a process of personal and organisational learning which tends to get disrupted if the government agencies need to spend most of their time engaging with the agenda of their donor agencies. Even good projects have a problematic effect on state capacity of recipient countries. The government of China, by developing its own aid programme, would risk adding to such problems.

Precisely because China has such a vast and growing market, it has more effective ways of helping poor countries to develop: by facilitating access to the Chinese market and by paying attention to ethical sourcing. The latter would help China to enhance its own reputation in the world. The international press and the media have given extensive coverage to environmental damage caused by Chinese imports. This is highlighted by an article in *The Guardian,* one of the most respected newspapers in the UK, entitled 'China consumes forests of smuggled timber' (22 April 2005).[15] If the Chinese government is concerned with improving its own reputation in the world, concentrating attention and investment on ethical sourcing is probably the most effective way of achieving this objective.

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[15] Or see the lead article 'Black Mark for China' in the *Financial Times* of 31 October 2005.

### 3.2 Policies in other Asian countries

In most poor Asian countries a shift in thinking is required if they want to benefit from the growth of China. There tend to be two problems: first, the fear of China sometimes blocks recognition of opportunities; second, it is not sufficiently recognised that taking these opportunities requires investment.

The appointment of commercial attachés is a symbol of outdated thinking. Most governments have six or more commercial attachés in Europe and only one in China. This is no longer appropriate. Markets in Europe are saturated, while the Chinese market is growing very rapidly. Equally important, there is not one China but many. Demand patterns vary enormously between regions in China. Gale (2002) has stressed this for Chinese food markets. Resources, climate, wealth, tastes and marketing channels vary a great deal between regions in China. Exporting to China requires knowledge of these differences. Government diplomatic missions, trade missions, and exporters need good knowledge of these differences. Acquiring such knowledge is expensive and keeping it up to date is expensive. We come back to the key point that exploiting the advantages of Chinese growth requires investment by the governments and enterprises which seek to export to the diverse Chinese regions.

The problem is that the poorer the country the greater the reliance on foreign donors to help build up this trade capacity. Most of the international agencies and bilateral agencies which have specialised in building such trade capacity tend to rely on consultants from the West or from Japan. These consultants are very knowledgeable about the requirements for penetrating countries they come from but rarely have the expertise to access the differentiated Chinese markets.

The suggestion is not to replace German or Japanese consultants with Chinese consultants. What is needed is not advice of what to do but advice on how to do it. This means building the diagnostic and practical capabilities in mapping value chains which connect poor Asian regions to Chinese markets, identifying bottlenecks in these chains, and identifying and using funnels for technical assistance or leverage points for action. There are organisations which have developed methodologies for acquiring these tasks and can provide the necessary training. Applying these methods will help to show where the bottlenecks are and which specific investments need to be made: for example, improving transport or logistics, supporting participating in trade fairs in China, organising inbound and outbound trade missions to/from China, supporting export consortia that specialise in Chinese markets.

Individual firms find it difficult to cope with the challenges of breaking into new markets. The upfront costs for exploring new markets and marketing channels can be enormous. So this is an area where state support is essential. One imaginative way of improving the connectivity would be to learn from the Chinese themselves. They have used Hong Kong to connect to the world (Enright *et al.* 2005). Hong Kong provides a full range of services which producers need in order to connect with distant markets in all parts of the world. Perhaps the Hong Kong services hub could be used to find a way into the various Chinese markets.

Taking advantage of these opportunities will, however, require significant regional infrastructure investments. Infrastructure is one of the key bottlenecks. The importance of physical infrastructure in fostering economic growth and poverty

reduction is well recognised (Jones 2006). China's own recent history underlines this. East Asian growth underlines this. It is driven by interconnected agglomerations in China's Yangtze River Delta, the Pearl River Delta, Hong Kong, Taiwan, South Korea, Singapore and some parts of Malaysia, Thailand and Vietnam. For the more remote and poorer parts of Southeast Asia to benefit from these growth poles they need to connect to them. Infrastructure has an important role to play in forging connections to these growth poles and accelerating economic development. In this context, the lessons of cooperation around infrastructure and linkages in the Greater Mekong Subregion needs careful assessment (see, for example, Asian Development Bank *et al.* 2005: 83).

### 3.3 Regional initiatives

The benefits from closer connection with China are increasingly recognised in Asian countries. China and some of its neighbours form a regional production system, characterised by 'deep integration' (see Section 2 above). In contrast, integration in South Asia has been shallow — in spite of regional trade agreements fostered by SAARC (the South Asian Association for Regional Cooperation). Trade between South Asian countries remains very limited. Intra-regional division of labour even more so (Chaturvedi *et al.* 2006). South Asian countries have less trade amongst themselves than with East Asian countries. However, there is potential for much more. As stressed by Kumar (2005), there are unexploited complementarities between countries in South, Southeast and East Asia.

The recognition of this potential has spurred new initiatives to deepen integration between these parts of Asia. The boldest initiative is JACIK, a framework for integrating the economies of Japan, ASEAN, China, India and Korea (Kumar 2005). The Indian think tank RIS has calculated that such a scheme, if put in practice, would generate welfare gains for all participating countries (see Table 4). The RIS findings have been corroborated by a recent study conducted by the Asian Development Bank (Brooks *et al.* 2005). 'Greater regional integration will propagate commercial linkages and transfer the stimulus of Asia's rapid growth economies, particularly China and India, to their neighbours' (Kumar 2005: 11).

**Table 4: Welfare gains from Asian economic integration (JACIK)**

| | Estimated welfare gains in US$ million | | |
|---|---|---|---|
| | Scenario I (Trade liberalisation) | Scenario II (Trade and investment liberalisation) | Scenario III (Trade, investment and mobility of skilled workers) |
| Japan | 107626 | 111807 | 150695 |
| Korea | 13043 | 13317 | 14076 |
| China-HK | 6327 | 7100 | 16328 |
| ASEAN (5) | 13451 | 13553 | 19405 |
| India | 6971 | 7379 | 9937 |
| JACIK | 147418 | 153156 | 210441 |
| Rest of the world | -27293 | -45306 | 109916 |
| World | 120125 | 107849 | 320357 |

Source: RIS Simulations. See Mohanty *et al.* (2004) for details.

This is an important initiative. It is clear that it is driven forward by some of the bigger Asian countries. It is not clear which public and private forces within these countries would try to undermine or slow down such integration. Nor is it clear what role the smaller, generally poorer economies in Southeast and South Asia would play in this integration process.

There is no doubt however, there are a number of tasks which cannot be solved by individual governments and require cooperation between Asian governments. Kumar (2005) lists the following:

- Mobilising Asian foreign exchange for Asian economic development: 5% of combined JACIK foreign exchange reserve would amount to US$ 100 billion and would constitute a substantial pool for funding regional public goods.
- Cooperation for energy security: given Asia's dependence on imported energy, in particular petrol, an Asian strategic petroleum reserve would provide a cushion in emergencies and reduce the danger of international conflict.
- Cooperation in development of transport infrastructure and connectivity. Major investments are required in regional infrastructural projects such as Asian railways, highways, IT infrastructure, and satellites.
- Cooperation in core technologies aimed at reducing the digital divide. Pooling Asia's substantial and complementary capacities in hardware and software, could be used to develop low cost solutions for connecting poor and remote areas to agglomerations.

To conclude, this paper has prioritised the issues of connectivity and sustainability, suggesting that policy focused on these two issues is critical for spreading the gains from China's growth to Southeast and South Asia. No single actor can improve connectivity and sustainability; it requires building alliances between public and private sectors and between governments in the region.

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