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Trade as a Key to Economic Growth and Development

Peter Drysdale
The Australian National University
Canberra, Australia

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Background

Let me first say what an immense pleasure it is to be able to join this Forum to discuss some of the issues that are critical to realising the potential for international trade to promote national growth and economic development.

This is my third visit to Pyongyang over the last six years. Each visit has provided an opportunity to learn more about your country's economy and its potential as well as to enjoy the kind and generous hospitality of its people. I am particularly delighted that you have invited me to speak on this subject today because I cannot imagine a subject that is more important to understand at this time than the nature of the relationship between trade and national growth and development.

Trade is a key engine of economic growth and development.

There is a vast amount of evidence over the long sweep of world economic history to support this assertion. There is also a huge and rich scientific literature in economic analysis that makes clear why the relationship between trade and economic growth is so powerful.

No country has developed successfully by retreating from international trade and integration into the international economy. And few have enjoyed sustained long-term growth without an increase in the share of international trade in their national product.[1]

But the relationship between trade and economic growth and development is not simple.

[1] As Lindert and Williamson (2001, p.252) observe: 'Even though no one study can establish that trade openness has unambiguously helped the representative third world economy, the preponderance of evidence does seem to support this conclusion. One way to see the whole forest more clearly is to consider two sets, one almost empty and one completely empty. The almost empty set consists of all statistical studies showing that protection helps third world economic growth, or that liberalisation harms it.….The second, and this time empty, set contains those countries that chose to be less open to trade and factor flows….. and rose in global living-standard ranks at the same time.

Clearly there have been times in the economic history of countries in which there has been significant growth when openness to trade has been limited. And there are economies that appear to be relatively open to trade that have achieved only modest rates of economic growth and development. Some of the papers that we shall discuss in the course of this Forum focus on these empirical realities and serve to confirm that the relationship between trade and growth is indeed complex although at the same time that it is positive and very powerful.

No economy in the modern world can aspire to achieve development and welfare levels for its people that approximate, say, those among OECD economies without being substantially open to international trade and international investment.

Even large and rich economies like Europe, the United States and Japan are critically dependent on openness to the international economy for sustaining high levels of income. Certainly smaller economies, like that of my own country, Australia, which has a population around the same size as DPR Korea, would be much poorer without deep specialisation in the international economy.

In this presentation, I shall first try to explain briefly why these propositions are true analytically. I shall then look at the evidence of an association between trade and economic growth before examining the role of trade in the economic growth of East Asia, especially over the last half-century or so. And finally I shall outline some of the conditions that are necessary in domestic economic management for trade to fulfill its potential as an engine of economic growth.

Gains from trade

From Smith, Ricardo and Mill, in the days of the English industrial revolution, economists have analysed the channels through which international trade might have long-lasting effects on economic development. The insights of the classical economists

into the gains from trade and their role in raising human welfare in the long-term remain the basis of formal analysis of the links between trade and growth today (Wilson, 2000).

In theory trade yields gains for growth, via at least three main channels.

The first channel of growth through trade derives from the opportunity that trade specialisation offers to exploit comparative advantage. An economy that is largely closed to international trade and commerce like, for example, was Japan's during the Tokugawa period, cuts itself off from the chance to lift incomes through re-allocating resources in response to the differences between domestic relative prices and world relative prices. The resource re-allocation that comes with increased trade specialisation in response to differences in international relative prices lifts productivity and increases the range of choice in consumption. The more skewed the resource base of an economy that is opening up to foreign trade and the greater its initial isolation from the world economy, the larger are the potential gains from its opening up to trade and the impact on its incomes and welfare.

The theory of comparative advantage elaborates what determines these differences in pre-trade relative prices among countries and the structure of trade specialisation among trading partners. Relative price differences originate both from influences on the capacity to supply different kinds of goods and on the intensity of demand for different types of goods and they obviously change over time as these influences change over time. But one of the most pervasive sets of influences on comparative advantage and trade structure is that of relative factor endowments (the ratio of labour to capital and to land and natural resources). This is the Heckscher-Ohlin theory of comparative advantage (Samuelson, 1948).

We observe in the real world how countries' trade specialisation changes over time as these ratios, or relative factor endowments, change. For example, as economies accumulate capital, their specialisation is transformed from the production and export of labour-intensive goods into the production and export of capital-intensive goods in the

course of successful industrialisation. Policy regimes that encourage conformity with specialisation according to comparative advantage are likely to promote economic efficiency, economic growth and higher standards of living.

I shall return to these propositions when we look at the nature of East Asian integration into the international economy over the last half century so.

Opening an economy to foreign trade, then, can lift income to higher levels via these static gains from trade (Winters, 2004). If economic opening is significant, the income gains can be very large. The measured effect of Japan's opening in the Meiji Restoration in the 1860s, or China's opening in the 1980s, was of a very large order. These *transition dynamics* seem to be important over quite long periods of time (Hall and Jones, 1997, p.173 and Solow, 2001). But these static gains from trade, that result from the improvements in the efficiency of resource allocation which they occasion, are not the only way in which open trade policies affect growth and welfare.

A second channel of growth from trade is via its impact on the flow of ideas, knowledge and technologies. Trade itself is linked with the discovery of new ways of doing things, in both production and consumption. These are sometimes called the 'dynamic gains from trade' and they were originally emphasised by John Stuart Mill in *The Principles of Political Economy* (1848).

> Setting aside [trade's] enabling countries to obtain commodities which they could not themselves produce at all; its advantage consists in a more efficient employment of the productive forces of the world. If two countries which trade together attempted, as far as was physically possible, to produce for themselves what they now import from one another, the labour and capital of the two countries would not be so productive, the two would not obtain from their industry so great a quantity of commodities, as when each employs itself in producing, both for itself and for the other, the things in which its labour is relatively most efficient. The addition thus made constitutes the advantage of trade……There is another consideration, principally applicable to an early stage of industrial advancement. A people may be in a quiescent, indolent, uncultivated state, with all their tastes either fully satisfied or entirely undeveloped, and they may fail to put forth the whole of their productive energies for want of any sufficient object of desire. The opening of foreign trade, by making them

> acquainted with new objects, or tempting them by the easier acquisition of things which they had not previously thought attainable, sometimes works a sort of industrial revolution in a country whose resources were previously undeveloped for want of energy and ambition in the people…..It is hardly possible to overrate the value, in the present low state of human improvement, of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar (Mill, 1848).

These dynamic gains from trade are in general quite different from those which emphasise the role of factor endowments, comparative advantage and the importance of relative prices (Grossman and Helpman, 1991;Wilson, 2000, p. 35).

A third channel of growth from trade, of special importance to economies at the early stages of industrialisation fostered by the accumulation of capital, is via the delivery of lower cost capital goods embodying best practice technologies from international suppliers.

The effect of trade restrictions in raising the relative prices of intermediate and capital goods is likely to be particularly deleterious to the pace of growth and economic development. Capital accumulation is central to transitional growth. Industrialising economies have a comparative disadvantage in the production of intermediate and capital goods. Obtaining them more cheaply from abroad is a huge benefit for growth.

Access to cheap and sophisticated capital goods through international trade allows spectacular gains in productivity. The associated rapid structural change and movement up the 'ladder of development' adds to the complexity of the links between trade and growth, but helps to account for the kind of 'miracle' growth performance we have witnessed in East Asia and most recently in China.

As Wilson (2000, p.48) observes:

> The dynamic benefits of trade stem from the same two fundamental advantages that generate the static gains from trade. The first is that trade reduces the cost of goods that a country has a comparative disadvantage in producing. The second is that trading nations need not produce what they want to consume.

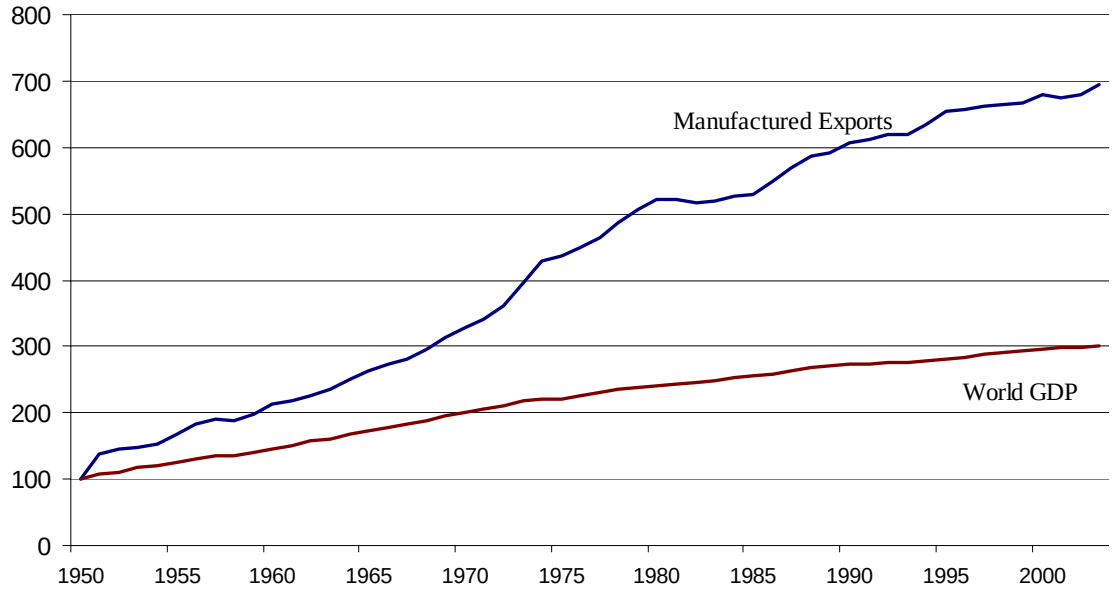
Openness to foreign investment, of course, can further serve to accelerate the process of capital accumulation and growth through efficient trade specialisation.

Evidence

One of the most notable features of the world economy over the last half century and more is the liberalisation of international trade and payments under the auspices of the GATT (now the WTO), the IMF, and the World Bank (under its structural adjustment programmes). Change in trade policy strategies and the trade policy environment are among the reasons why trade has grown nearly five times faster than world output and why real GDP growth has been impressive by historical standards. Chart 1 shows the extraordinarily strong growth of world exports of manufactured goods through the postwar period.

Chart 1 Growth of World Exports of Manufactures and GDP, 1950 -2003

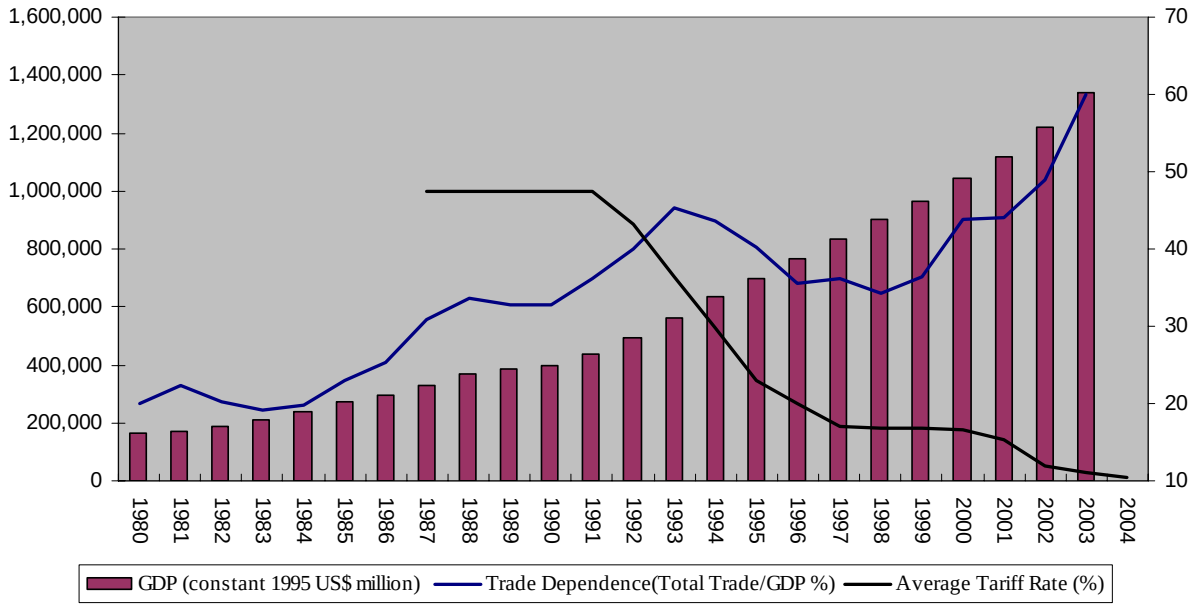
(1950=100)



Source: World Trade Organisation

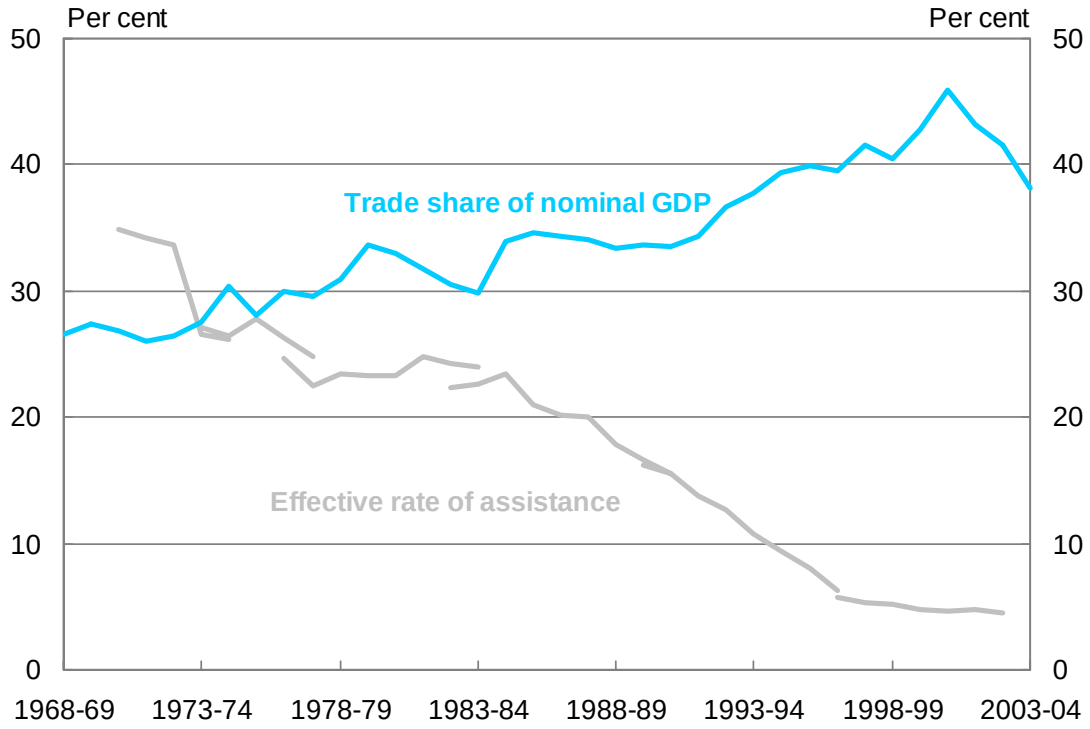
Chart 2 and Chart 3 show the experience of two very different economies, China and Australia, as they moved to more open trade regimes. While average tariff rates are an imperfect measure of levels of protection in the Chinese case, they are unlikely to depict wrongly the main trends in levels of protection. Increased openness in China has lifted trade share (with some hesitation during the East Asian financial crisis period) and been associated with exceptionally strong income growth. Reductions of levels of assistance to Australian industry, saw a significant rise in trade share and a boost to income growth which saw Australia become one of the fastest growing OECD countries in the world in the 1990s.

Chart 2 China's GDP Average Tariffs and Trade Dependence, 1980 - 2004



Source: ANU, International Economic Databank

Chart 3 Australia's Trade Dependence and Effective Rate of Assistance, 1968 - 2004



Source: ABS and Productivity Commission.

A large number of econometric studies find a positive association between openness, however it is measured, and economic growth. Among the most influential have been studies by Sachs and Warner (1995), Frankel and Romer (1999) and Dollar and Kraay (2003, 2004).

Sachs and Warner (1995) find that open economies experienced faster growth in real GDP per capita over the period 1970 to 1989. The estimated annual growth premium was very high (nearly two and a half percentage points) and it was estimated to be higher for poorer countries, implying that openness promoted a narrowing of income gaps (Dowrick and Golley, 2004). As others have observed, their measure of openness may be affected by factors other than trade policy but the findings are nonetheless impressive.

Frankel and Romer (1999) examine differences in levels of development across 150 countries, measured by real GDP per capita in 1985, and use geographical variables as exogenous variables to control for the potential endogeneity of trade. They find that a 10-percentage point increase in trade integration is associated with a 20-percentage point increase in per capita income. Dollar and Kraay (2003) use the Frankel-Romer measure of openness to analyse growth of per capita GDP and conclude that doubling trade integration raises annual growth by 2.5 percentage points annually. Dollar and Kraay (2004), apply two measures of openness, namely how fast the share of trade in GDP has risen and how deep cuts in tariffs have been, to examine the growth performance of, and inequality within, two sets of countries. They find that countries that doubled their share of trade to GDP and cut tariffs by 22 percentage points accelerated growth without adversely affecting income inequality, while growth fell in the remaining countries. They also note the close association between changes in trade shares in GDP and policy variables like changes in tariff rates and other trade policies.

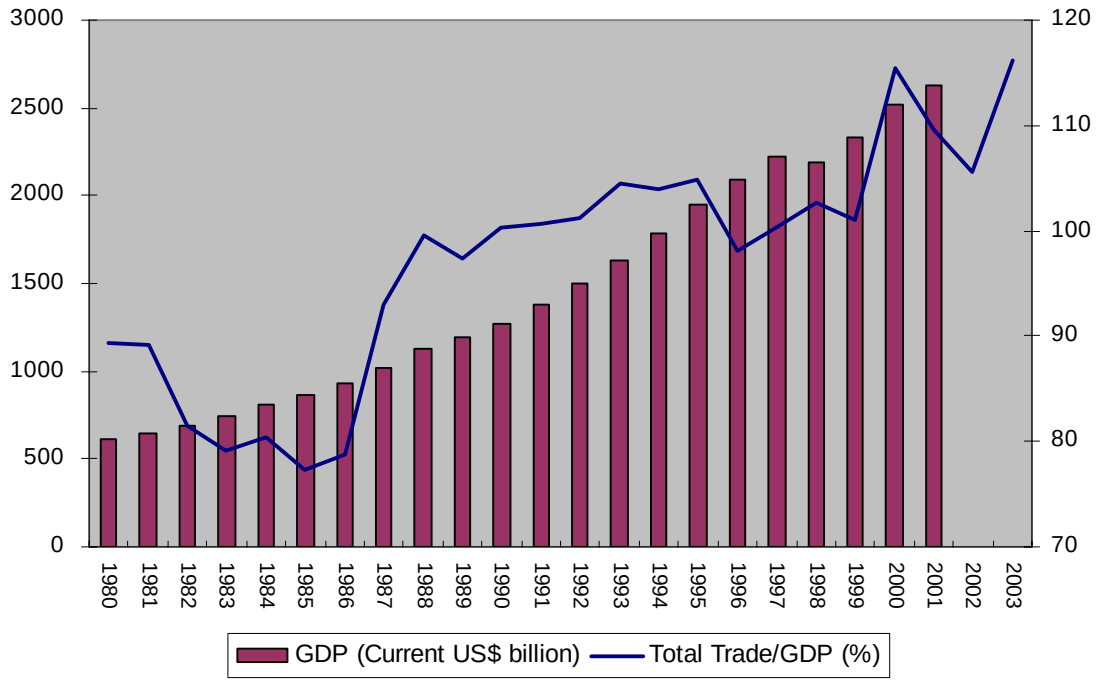
Rodriguez and Rodrik (2001), among others, note that these studies have conceptual and methodological problems and recommend caution in evaluating claims that open trade policy will yield strong trade benefits. More recent studies have addressed the methodological problems to a significant extent (Dollar and Kraay, 2004, Dowrick and Golley, 2003). Yet these cautions are wise, not because evidence of a strongly positive association between trade openness and economic growth is not convincing but because the association is complex, not simple and depends on other important conditions being met (Winters, 2004). I shall return to these caveats to the main proposition in the last part of my presentation.

In the last 30 years or so, East Asia stood out as an exemplar of successful trade-oriented economic growth. The East Asian example has received much attention, both because of the spectacular, if varied, success of East Asian industrialisation built on increased integration into the world economy, but also because East Asian experience with open growth is often promoted as a model development strategy (World Bank, 1994). While this interpretation of East Asia development strategy is the subject of controversy

(Amsden, 1994 ; Wade, 1996; Redding, 1996) because there were state interventions that ran counter to open trade strategies in many East Asian economies, the characterisation of the East Asian industrialisation process as one in which the trend towards economic openness and deeper integration into the world economy was accompanied highly successful economic growth is largely and significantly correct.

Chart 4 shows the growth of East Asian industrialising economies overall trade dependence and East Asian real income growth over the last thirty years. Chart 5 shows the reduction in average tariff levels in East Asia and other regions over the last 30 years.

Chart 4 GDP and Trade Dependence for East Asian Economies, 1980 - 2003



Source: ANU, International Economic Databank

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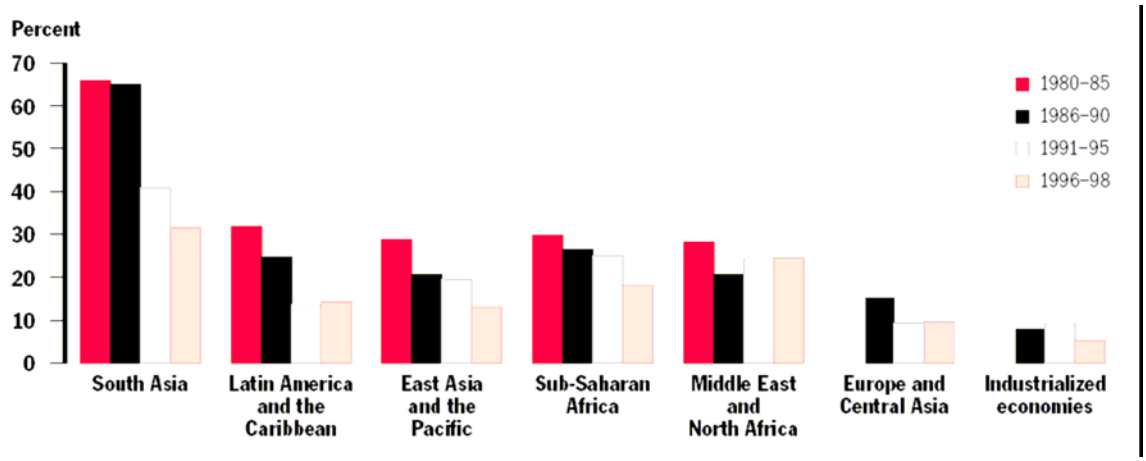


Source: World Bank (2001)

East Asian experience

What does the theory and the empirical evidence tell us about the pattern of trade specialisation that was associated with rapid industrialisation and income growth in East Asian economies?

Garnaut (1980) early predicted the relationship between East Asian trade and industrial transformation from the theory of comparative advantage outlined above and the circumstances in which East Asian economies committed to trade-oriented development strategies in the course of *catching-up* industrially. Given East Asian economies' initial resource endowments, with their low capital-to-labour ratios and agricultural production base, he foresaw the way in which early, truncated specialisation in the export of agricultural and natural resource-intensive commodities would soon give way to strong export growth of labour-intensive manufactures, such as textiles and clothing. With the accumulation of physical and human capital and skills over time, higher capital-to-labour ratios provided the platform for efficient specialisation in the export of capital and, later, technology intensive goods.

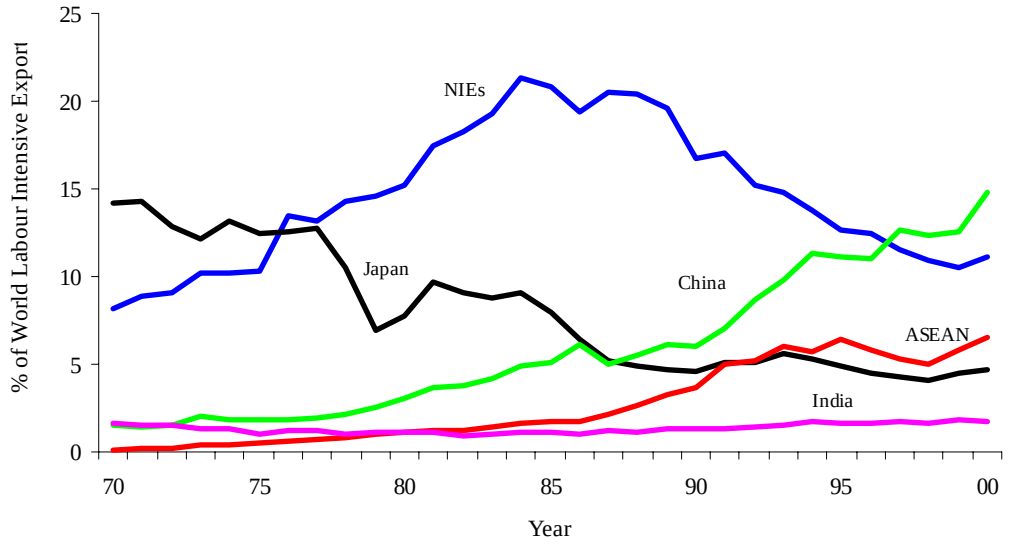
When I joined the first major international conference between leading Chinese economic policymakers and international economists in Hangzhou in 1980, I argued that, alongside initial exports of natural resource-intensive goods, the coming decade would feature China's emergence as a major exporter of labour-intensive goods, especially clothing textiles and footwear. This was counter-intuitive to most Chinese policymakers who, at that time, saw the immediate future of exports to be in machinery and equipment. But, as one would expect from the theory of comparative advantage, Chinese exports of machinery and equipment were largely uncompetitive in an open international market. Indeed, successful industrial growth over the years ahead came to rely on benefiting substantially from that comparative disadvantage through importing lower cost, quality machinery and equipment from abroad. If today you visit the huge Boashan iron and steel works which were then about to be built near Shanghai, their productivity and international competitiveness are built around imported equipment from Japan and other parts of the industrial world.

There are many important implications from these observations.

One is that the most efficient export specialisation for *catching-up* industrialising economies is in labour-intensive exports of goods such as textiles and clothing, the aggregate international demand for which is growing only slowly. Export growth must largely be won by taking over the market share of established suppliers to world markets. This is the process trade and industrial transformation that saw the emergence and growth of incomes in the newly industrialising economies of East Asia over the last thirty years or more.

Chart 6 shows the way in which first the newly industrialising economies of East Asia initially took over market share in labour-intensive exports from Japan. They then lost market share to the ASEAN economies and to China. Now India is beginning to emerge as a supplier of these goods to world markets.

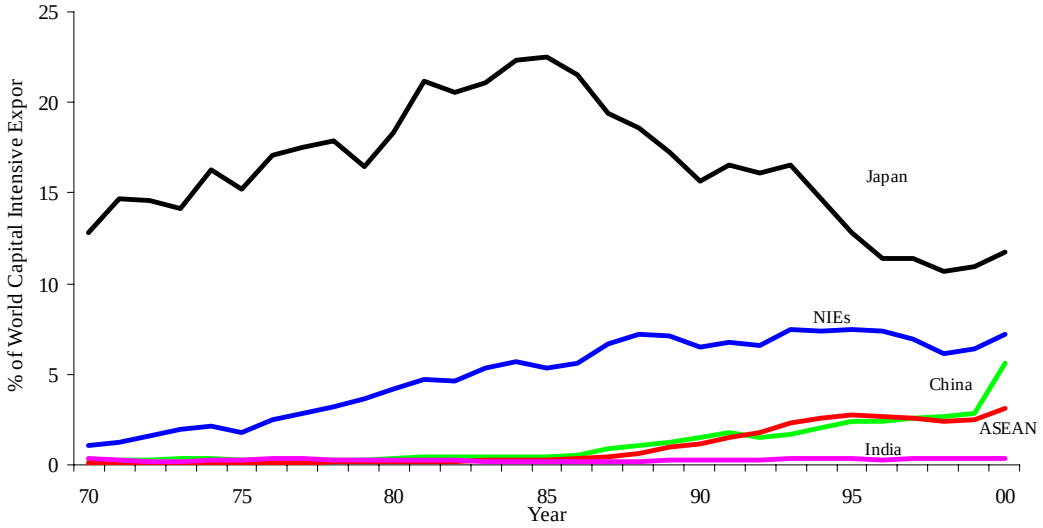
Chart 6 Asia's Share in Labour Intensive Exports 1970-2000



Source: ANU, International Economic Databank

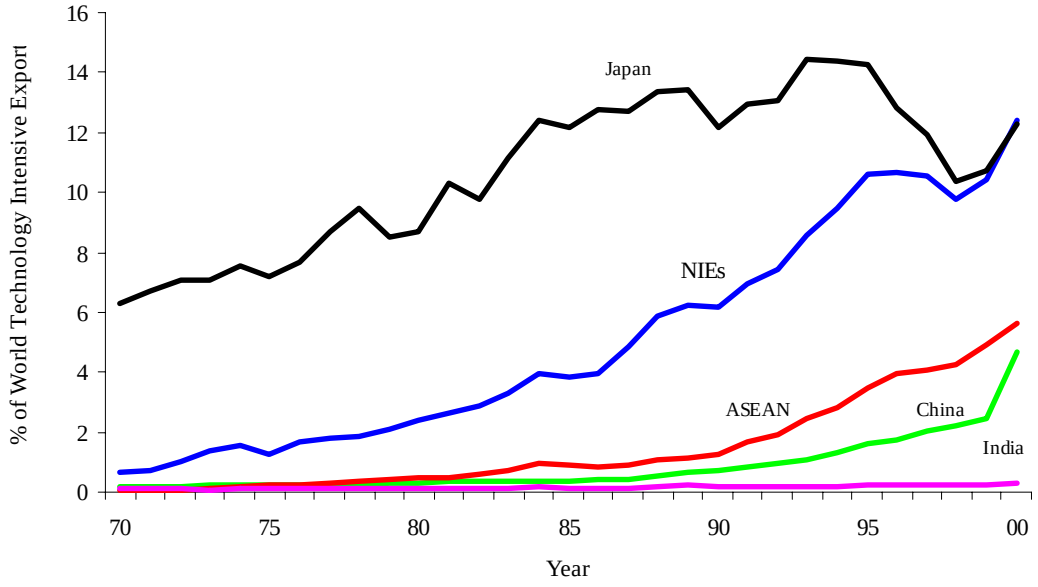
Chart 7 and Chart 8 show the flip side of these developments in East Asia's share of world markets for capital-intensive and technology-intensive manufactures.

Chart 7 Asia's Share in Capital Intensive Exports 1970-2000



Source: ANU, International Economic Databank

Chart 8 Asia's Share in Labour Intensive Exports 1970-2000



Source: ANU, International Economic Databank

Foreign direct investment can play an important role in establishing export competitiveness in the early phases of industrial growth, through the introduction of new technology and capital to combine with low cost labour in the export of labour-intensive components and assembled goods for industrial country markets (Marwah and Tavakoli, 2004). Trade growth from driven by the role of foreign direct investment in re-location industrial capacity to East Asia has played an increasingly important role in economic growth, including in China.

Establishing the policy conditions and policy environment necessary to exploit the income gains from openness to both foreign direct investment and trade is another matter.

Other policies and institutions

An implicit requirement for effective exploitation of the all the gains from trade for economic growth is commitment to the development of a market economy. A market

economy is distinguished by the use of the price mechanism to coordinate resource use a and value output. The effective operation of a market economy is premised upon an array of institutions and laws which, among other things, secure title over property for individuals, enterprises and the state and protect the enforcement of all sorts of contracts North, 1990; Olson, 1996; Rodrik, 2000). An efficient market economy typically involves the resolution of prices, production and consumption decisions through the market. It requires strong state regulation, including through a judicial system that protects property, enforces contracts over time and promotes law and order both nationally and in relation to the nationals of foreign countries. These conditions are necessary to the promotion of confidence in trade with people from other nations.

Market institutions are important to realising the gains from trade for growth because they allow the revelation of the real comparative advantage of an economy and help to ensure efficient specialisation in trade.

Hence, commonly a first step in emergence from economic closure is institutional change that entrenches the operation of a market economy domestically. There has to be strong government support, encouragement and action in achieving this objective. In the early phases of development more than a century ago in Japan, in China a quarter of a century ago, and in Vietnam or India in recent times, one observes the importance of different kinds of domestic institutional reform to the launch of successful growth.

Institutions and policies which foster low degrees of corruption and promote good governance are therefore important to making an open economy achieve its objective of living standards for everyone (Ades and Di Tella, 1999; Wei, 2000; Winter, 2004, p.11).

Policy institutions that allow stable macro-economic management, without excessive inflation (Romer, 1993), and a sound and well operating financial system for mobilising and allocating saving for investment are also crucial to realising the benefits of openness (Rodrik, 1995, 1997; Srinivasan and Bhagwati, 2001).

An asset of critical importance to mobilising the gains from trade for growth is education. Education has strong pay-offs in the development of sound market institutions and policies, but it is also crucially important to facilitating the absorption of know-how and technologies, as Mill observed long ago.

In almost all respects the opening of an economy is likely mutually to reinforce the improvement of institutions and the policy regimes necessary to support it. This is in part because the adaptation and absorption of foreign institutional best practice can provide a low cost and speedy way of national advancement (Winters, 2004 pp. 10-18). Given evidence that openness makes possible the introduction of institutional and policy best practice, even if it does not guarantee it, the case for trade liberalisation as a central part of a pro-growth policy package is fairly clear.

Conclusion

The argument above re-affirms the case for trade and economic openness as a central feature of a policy package to promote economic growth and higher living standards. This case is widely accepted around the world. Each country faces its own circumstance and has to make its own choices in respect of economic policy strategy. But the principles and analysis that I have tried to set out, I hope, are relevant to the circumstances in almost all countries, including those that we can observe in the DPR Korea.

In this presentation, I have only had time to set out the main reasons why the objective of opening to free trade is good for economic growth and standards of living. There is much more that needs to be discussed about where to begin the journey of economic opening, what preparations need to be made before beginning, how fast to travel and how to manage the trip. These are among the many practical considerations that need to be dealt with, and they need to be informed closely by the particular situation in any economy that commits to undertake the journey. But these are considerations for another occasion and, though they are important to practical policy implementation, they do not qualify the objective of opening the economy in the pursuit of economic growth and development.

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