Globalisation and the Asia–Pacific Revival

Arne Bigsten

Introduction

There are no significant differences across countries in the innate abilities of their populations. Thus, they are potentially equally productive. This suggests that a reasonable hypothesis about the distribution of world production across countries would be that it is distributed proportionately to population. Since the bulk of world population is found in Asia, one would expect the bulk of production to be located there. Historically that was also the case. Around year 1000 Asia (excluding Japan) produced more that two-thirds of world GDP, while the contribution of Western Europe was about 9% (see Table 1). As late as 1820 Asia’s share was 56%. Figure 1 shows how per capita incomes in different regions have developed during the last millennium.

<table>
<thead>
<tr>
<th>Table 1: Regional percentage shares of world GDP, 1000–1998</th>
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</tr>
<tr>
<td>Western Europe</td>
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<tr>
<td>Western offshoots</td>
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<tr>
<td>Japan</td>
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<td>Asia (excluding Japan)</td>
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<tr>
<td>Latin America</td>
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<td>Eastern Europe and former USSR</td>
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<td>Africa</td>
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<tr>
<td>World</td>
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</table>

Note: Western offshoots are USA, Canada, Australia, and New Zealand.

Arne Bigsten is Professor of Development Economics at Göteborg University, Sweden. The author would like to thank Rick Wicks, Christer Ljungwall, Dick Durevall, Justin Yifu Lin, and Naoyuki Yoshino and other participants in seminars at Göteborg University and Keio University for comments and suggestions.
Until the eighteenth century, Asia was thus the most important part of the world economy, but then it was left behind as the Industrial Revolution took off in Europe. While the UK increased industrial production by a factor of seven from 1750 to 1820, China and India only expanded it by 20%. The nineteenth century and the first half of the twentieth century was a period of increasing dominance by Western Europe and the USA, with a dramatically widening gap between them and Asian countries. In 1950 China’s per capita income was 4.6% of the US level in purchasing power parity (PPP)-adjusted prices, while Japan’s was 20.1%.

During the second half of the twentieth century there was again a dramatic, but this time positive, reversal of fortune for Asia, and in particular for East and South-East Asia. By 1998 the real income levels of China and Japan had increased to 11.4% and 74.7% of the US level respectively (Maddison 2001, pp. 185, 215), and the ‘tiger economies’ had seen vast economic improvements.

This recent period has been characterised by increasing interdependence of national economies and by the international scope of product markets, distribution systems, capital, labour, and technology. This trend

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1 In 1750 more than 50% of world industrial output was produced by China and India.
towards globalisation has been manifested in the sustained growth of world trade as well as flows of investment and technology, and in the convergence of national economic and social systems. We will discuss the importance of this process of globalisation for the revival of the Asia-Pacific region during the last half-century.

Notes on theory

The history of the Asia-Pacific region is one of economic decline followed by revival. There is a range of explanations of the existing international differences in per capita income levels. A straightforward one is that it is due to geography, but then it is hard to explain why income levels were similar earlier on. A more sophisticated version of this explanation is that there was a temperate drift, which means that although climate initially did not lead to income differences, geography became important when it began to interact with certain technologies. Acemoglu, Johnson and Robinson (2002) note, however, that the real reversal of fortunes came in the nineteenth century and was an industry-related phenomenon, and there is no reason to assume that climate is more important for industry than for agriculture. Their explanation of the divergence, backed by a range of econometric tests, is instead that the countries that are rich today are those that had good institutions in place at the time of the industrial revolution, particularly with efficient protection of property rights. Those countries became rich because they had an institutional structure that made it possible for them to take advantage of the newly emerging industrialization opportunities.

Acemoglu, Johnson and Robinson argue that property rights did not matter so much when the major investment opportunities were in agriculture. But when the new technologies required broad-based economic participation for successful implementation, security of property rights, and of institutional structures more generally, became crucially important. They argue that early industrialization was such an instance, where investments from a large number of people who were not part of the old ruling elite mattered, and thus the emergence of new entrepreneurs were required.

So why were the conditions for a successful take-off not present in Asia, while they existed or were created in some other regions outside Europe? This is a huge question. The answer by Acemoglu, Johnson and Robinson
is that it was due to the differential impact of European colonisation. They show that the colonized countries that had been relatively rich, urbanised and densely populated around 1500, are now relatively poor, whereas those that were relatively poor and sparsely populated, such as North America and Australia, are now rich. They argue that these reversed fortunes were due to the fact that Europeans were more likely to introduce institutions encouraging investment in regions that were previously poor, while they were prone to pursue extractive strategies in the densely populated and better-off regions. Large populations and relative prosperity made extractive institutions more profitable for the colonizers. They could choose to force the population to work in mines or plantations, or use other systems to tax the population and extract resources. Their hypothesis is thus not that some former colonies are poor because of plunder or dependency, but because the colonizers set up institutional systems that were stacked against industrialization.

However, not all countries in Asia were colonized. The spread of European institutional structures was in some cases instead hindered by the isolationism imposed by strong Asian domestic governments. From the end of the fifteenth century, China changed to an inward-oriented policy regime, and from the seventeenth century Japan set up systems to isolate the country from the rest of the world. Both the Chinese and Japanese governments actively tried to shut out foreign influence. This meant that new institutions were slow to penetrate into these major countries. The growth acceleration in Japan came after the Meiji restoration in 1868, which led to growth supporting institutional changes.

One type of interpretation of the economic miracle of East Asia thus emphasizes the importance of institutions and incentive structures (North, 1990). So if the institutional structure is the key, one would hypothesize that the recent positive reversal in the Asia–Pacific region (beyond Japan) is due to a transformation of the institutional structures in the direction of those existing in the successful industrial nations.

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2 Entering China, which was not colonized, into the regressions along with countries that were colonized, did not change the results.

3 “By 1500 anyone who built a ship of more than two masts was liable to the death penalty, and in 1525 coastal authorities were enjoined to destroy all ocean-going ships and arrest their owners. Finally in 1551 it became a crime to go to sea on a multimasted ship, even for trade” (Landes, 1998). Similar restrictions were put in place in Japan from the beginning of the Edo period in the seventeenth century.
Economic analyses of the miracle have generally been done within the framework of mainstream neoclassical economics or that plus institutional economics. A standard prediction from neoclassical growth theory is that there will be income convergence or at least conditional convergence. Lucas (2000) believes that per capita income convergence will be one of the major events of the twenty-first century. He predicts that best practice policies and institutions will be imitated in the lagging countries, and that this will be sufficient to bring about faster growth. Institutionalists are generally somewhat more pessimistic, since they believe that the character of institutions and incentives is highly path dependent. Their argument is that network-externalities and vested interests hold back change, as do informal constraints in customs and traditions, which are hard to change through policy reforms.

An abundance of econometric studies show that institutions are significantly related to per capita income levels. In regressions, researchers use proxies for property rights such as protection against expropriation risk or constraints on the executive, which are generally highly significant in growth or income level regressions. But a range of different institutions is highly correlated with security of property rights, so it is not clear what specific institutions we should focus on if we want to improve growth prospects.

The World Bank’s (1993) explanation for the East–Asian miracle is that good institutions and policy paved the way for investment and productivity growth. Development-oriented states managed to create institutions that could lower transaction costs, and they also pursued increasingly outward-oriented policies. That the emergence of a growth-supporting institutional structure is important seems unquestionable. However, we know that there have been many attempts at institutional reform that have not

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4 Sala-i-Martin (2002) summarizes the last fifteen years of intensive research on growth determination in six points: “(1) There is no simple determinant of economic growth. (2) The initial level of income is the most important and robust variable (so conditional convergence is the most robust empirical fact in the data). (3) The size of the government does not appear to matter much. What is important is the “quality” of the government (governments that produce hyperinflation, distortions in foreign exchange markets, extreme deficits, inefficient bureaucracies, etc., are governments that are detrimental to the economy). (4) The relation between most measures of human capital and growth is weak. Some measures of health, however, (such as life expectancy) are robustly correlated with growth. (5) Institutions (such as free markets, property rights, and the rule of law) are important for growth. (6) More open economies tend to grow faster.”

5 Engerman and Sokoloff (2003) agree that institutions matter, but they warn against basing growth theories on exogenous institutional change. They argue that the historical record does not support the notion than any particular institution, narrowly defined, is necessary for growth.
delivered the goods (Easterly, 2001). Why do they work in some instances, and not in others?

Crafts and Venables (2002) argue that the world is not an even playing-field, and that the chances of joining the growth club are unevenly distributed. East and South-East Asia is the most recent major region to make its income level converge towards that of the ‘rich club’. Crafts and Venables argue that most studies so far have underestimated the role of geography. They believe that economic size and distance are important determinants of development, and that agglomeration benefits dominate the process. In their approach the issue of transaction costs across space is crucial. They argue that this is really what should be at the core of globalisation debate. Globalisation is generally about the integration of markets across nations, which is generally assumed to reflect the reduction of international transaction costs. These costs depend on geography, although they may to some extent be altered by technological changes or policy interventions.

The way economists think about international economic interactions used to be governed by Heckscher-Ohlin type models, while the new theories of trade or new economic geography provide another perspective. According to the classical models, resource-allocation and trade are determined by factor-endowments and technology, whereas the latter type of approaches also let comparative advantage be determined by the scale of operations and agglomeration factors. The location of firms still depends on factor endowments, but now also on access to final and intermediate goods markets matters.

Crafts and Venables (2002) argue that Lucas’ view of the world is too simplistic and too optimistic. They emphasize the need for the new economic geography perspective, where one also allows for changes in the cost of transport and for the importance of economies of scale. The theory developed by Krugman and Venables (1995) incorporates these features and shows how concentration of production varies by trade costs. When these are very high, production will tend to be dispersed. When costs are reduced from this high level there is first a tendency towards concentration, while at even lower trade costs there will again be decentralisation.

The theory as set out by Krugman and Venables (1995) aims to explain both agglomeration and dispersion of production. The starting point is that investment in a country is determined by a combination of internal factors
and factors characterising the relationship to other countries. The domestic factors are factor endowments, skills, technology and social infrastructure. The international factors are access to world product markets and to suppliers of intermediate goods, factors or production, and knowledge.

Classical trade theory would suggest that globalisation or reduced transaction costs make it possible for countries to exploit their comparative advantages, which depend on factor availability. The new theory assumes increasing returns to scale and imperfectly competitive markets. Location decisions are assumed to depend on factor supplies and prices, and distance to demand and supply. The theory implies that size of markets matters, that is, manufacturers want to be close to large markets and in these markets they can then also pay higher wages. If labour is mobile, these high wages attract labour from other regions, which enlarges the market in the growing region even further.

The new theory suggests that the level of transport costs affects the pattern of location. At certain levels transport costs will lead to agglomeration and at others to dispersion. Input-output linkages matter, the thickness of the labour market matters, and technological externalities matter. When wage gaps become large enough and transactions costs fall there will be relocation of production from the centre towards parts of the periphery. The main point in Krugman and Venables (1995) model is that convergence will not be uniform. Even if all poor countries were to get their institutions in order, they would still not all take off at the same time. Economic expansion will occur sequentially in different parts of the periphery. Reduction in transaction costs cannot fully compensate for large institutional or other domestic problems, but they do make convergence more likely.

The interpretation of the Asian resurgence within this framework would be that transaction costs eventually became so low that the low cost East Asian countries with improved institutions could profitably exploit increasing world demand and trade among each other.

Globalisation and the Asia–Pacific take-off

During the nineteenth century Asia became a less and less important economic player on the world market, and by 1913 it supplied only a tenth of world exports (see Table 2). Then the world economy had a dismal spell
until about 1950, but from this time onwards the world economy has in the aggregate done exceptionally well. World GDP grew more than sixfold during the second half of the century (Maddison, 2001, p. 125). During this period there was also a large increase in international economic interaction and integration. Exports as a share of world GDP rose from 5.5% in 1950 to 17.2% in 1998. During this period Asia came back on the world market in a big way, doubling its share of world exports.

If we focus more specifically on the Asia–Pacific region (excluding Japan, Singapore and Brunei, which are in the high-income category), we see that it doubled its share of world exports during the last 15 years of the twentieth century (Table 3). The Asia–Pacific region is now a major world economic player.

### Table 2: Regional percentage shares of world exports, 1870–1998

<table>
<thead>
<tr>
<th>Region</th>
<th>1870</th>
<th>1913</th>
<th>1950</th>
<th>1973</th>
<th>1998</th>
</tr>
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<tbody>
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<td>Western Europe</td>
<td>64.4</td>
<td>60.2</td>
<td>41.1</td>
<td>45.8</td>
<td>42.8</td>
</tr>
<tr>
<td>Western offshoots</td>
<td>7.5</td>
<td>12.9</td>
<td>21.3</td>
<td>15.0</td>
<td>18.4</td>
</tr>
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<td>Asia</td>
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<td>10.8</td>
<td>14.1</td>
<td>22.0</td>
<td>27.1</td>
</tr>
<tr>
<td>Latin America</td>
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<td>5.1</td>
<td>8.5</td>
<td>3.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Eastern Europe and former USSR</td>
<td>4.2</td>
<td>4.1</td>
<td>5.0</td>
<td>7.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Africa</td>
<td>4.6</td>
<td>6.9</td>
<td>10.0</td>
<td>5.8</td>
<td>2.7</td>
</tr>
<tr>
<td>World</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


### Table 3: Regional percentage shares of world exports, 1975–2000

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<tbody>
<tr>
<td>High income</td>
<td>74.6</td>
<td>73.3</td>
<td>76.7</td>
<td>80.4</td>
<td>77.7</td>
<td>73.8</td>
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<tr>
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<td>..</td>
<td>..</td>
<td>5.1</td>
<td>5.6</td>
<td>8.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>4.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>..</td>
<td>4.9</td>
<td>5.2</td>
<td>4.0</td>
<td>4.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>..</td>
<td>8.0</td>
<td>4.3</td>
<td>3.1</td>
<td>2.3</td>
<td>2.7</td>
</tr>
<tr>
<td>South Asia</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>0.8</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>..</td>
<td>3.9</td>
<td>2.7</td>
<td>1.9</td>
<td>1.4</td>
<td>1.5</td>
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<td>World</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: Brunei, Japan and Singapore are in the High-income category. Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam are in the East Asia & Pacific category.

Source: WDI 2002
trader, although there is a considerable spread among the countries in the region. While particularly China, South Korea, and Taiwan (the latter is not covered in World Bank statistics) have done exceptionally well, such countries as Cambodia, Laos, and Myanmar still do not matter at all for the global economy.

One may also reverse the perspective and consider how important exports are to the respective countries by looking at shares of exports in GDP. The Asia–Pacific region is now (along with Eastern Europe) the region that is most dependent on foreign trade, as exports make up 42% of GDP (Table 4). It is noteworthy that China is much more dependent on international markets than is Japan, which only exports about 10% of its GDP.

Another aspect of international economic integration is the increase in international capital flows. In 1970 private flows to the Asia–Pacific region were rather small and were dominated by official transfers, but since then official transfers have been dwarfed by the rapidly expanding private flows. By 1995 private flows were about nine times the official flows (Global Development Finance, 2002). The 1997 Asian financial crisis temporarily reduced the flows, but by 2000 they were increasing again. Thus, the Asia–Pacific region is a major arena for foreign investment, which may be an indication that countries in the region provide an economic environment that is sufficiently competitive to attract foreign capital. In South Asia and Sub-Saharan Africa, by contrast, the inflows are tiny. In 1970 the

### Table 4: Regional exports of goods and services as percentage shares of GDP, 1960–2000

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</thead>
<tbody>
<tr>
<td>High income</td>
<td>12.3</td>
<td>12.9</td>
<td>14.5</td>
<td>17.9</td>
<td>20.2</td>
<td>20.9</td>
<td>19.8</td>
<td>20.8</td>
<td>21.9</td>
<td>..</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
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<td>..</td>
<td>10.2</td>
<td>16.3</td>
<td>21.7</td>
<td>21.3</td>
<td>26.0</td>
<td>31.4</td>
<td>38.0</td>
<td>42.2</td>
</tr>
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<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>23.0</td>
<td>31.5</td>
<td>39.8</td>
<td>43.8</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>10.3</td>
<td>9.9</td>
<td>9.5</td>
<td>10.4</td>
<td>12.3</td>
<td>15.6</td>
<td>14.1</td>
<td>15.0</td>
<td>16.5</td>
<td>17.4</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>46.6</td>
<td>42.4</td>
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<td>33.1</td>
<td>31.8</td>
<td>30.3</td>
<td>38.0</td>
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<td>..</td>
<td>5.2</td>
<td>7.1</td>
<td>7.8</td>
<td>7.0</td>
<td>9.0</td>
<td>12.8</td>
<td>13.3</td>
<td>15.1</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>26.0</td>
<td>24.7</td>
<td>22.5</td>
<td>26.0</td>
<td>32.1</td>
<td>28.7</td>
<td>27.2</td>
<td>28.5</td>
<td>28.5</td>
<td>31.9</td>
</tr>
<tr>
<td>World</td>
<td>12.6</td>
<td>13.1</td>
<td>14.0</td>
<td>17.5</td>
<td>19.9</td>
<td>20.5</td>
<td>20.0</td>
<td>21.5</td>
<td>23.2</td>
<td>..</td>
</tr>
</tbody>
</table>

Source: WDI 2002
private flows to Sub-Saharan Africa, and the East Asia and Pacific region were about the same, while the flows to the latter were more than nine times larger in 2000. However, the attractiveness of an Asia–Pacific location may also be due to agglomeration effects (Krugman and Venables, 1995). It is likely that Vietnam has better growth prospects than, for example, Kenya, due to its location, although Vietnam has worse institutions in many respects.

We can also look specifically at foreign direct investment. The East Asia and Pacific share of world foreign direct investment (FDI) increased from 5% to 13% from the 1980s to the 1990s. However, FDI only constituted 2.7% of the region’s GDP (WDI, 2002). The economic take-off was thus essentially built on domestic investors. Foreign aid played some role in the initial stage of the Asia–Pacific growth acceleration, but at its high point in 1970 it was only slightly above 1% of GDP (WDI, 2002). Now it is less than half a percent and it primarily goes to the poorer countries of the region, namely Vietnam, Cambodia, and Laos.

Parts of the world have had problems with a heavy international debt burden, and that has also been discussed in connection with the Asian financial crisis. However, in an international perspective this part of the world is not generally heavily indebted relative to its gross national income (GNI). The largest absolute debtor, Latin America, is deeper in debt at 41% of GNI in 2000 than is the Asia–Pacific region at 31% (Global Development Finance, 2002).

What has happened to per capita incomes in the region during this period of international integration or globalisation? Since the 1970s the region has grown faster than the high-income countries or any other region for that matter (Table 5), although Japan has seen a period of stagnation since the early 1990s. Japan is the major exporter from the region in absolute terms, but at the same time it is the most inward-oriented country in terms of exports to GDP. China has opened up very rapidly and has had the reverse growth pattern, with a dramatic acceleration from 1978 onwards.

So what has been the impact of this dramatic Asia–Pacific growth acceleration on income levels? The East–Asia and Pacific region (excluding Japan, Singapore and Brunei) has a per capita income level which is still way below the world average in dollar terms (Table 6). But if we correct for purchasing power, the estimate for the region is 56% of the world
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average (Table 7)—still less than a sixth of the OECD countries. Although there has been convergence, the bulk of the Asia–Pacific countries has as yet not caught up with the West or Japan.\(^6\)

Most of the Asia–Pacific countries have sustained high growth rates for an extended period of time. It seems safe to say that they have achieved take-off and have moved into a phase of self-sustaining growth.

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**Table 5: Regional annual percentage growth of GNP per capita, 1961–2000**

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<tbody>
<tr>
<td>High income</td>
<td>4.4</td>
<td>2.6</td>
<td>2.4</td>
<td>1.7</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>2.9</td>
<td>4.5</td>
<td>5.9</td>
<td>6.0</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>–1.6</td>
</tr>
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<td>Latin America and Caribbean</td>
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<td>–0.8</td>
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<td>Middle East and North Africa</td>
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<td>..</td>
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<td>1.1</td>
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<td>South Asia</td>
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<td>–1.1</td>
<td>–0.4</td>
</tr>
<tr>
<td>World</td>
<td>3.4</td>
<td>1.8</td>
<td>1.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

*Source: WDI 2002*

**Table 6: Regional GDP per capita (1995 US$), 1980–2000**

<table>
<thead>
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<td>12,452</td>
<td>15,483</td>
<td>17,377</td>
<td>20,000</td>
<td>21,976</td>
<td>25,388</td>
<td>26,887</td>
<td>29,210</td>
<td>30,035</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
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<td>208</td>
<td>256</td>
<td>312</td>
<td>396</td>
<td>520</td>
<td>705</td>
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<tr>
<td>Latin America and Caribbean</td>
<td>1983</td>
<td>2199</td>
<td>2549</td>
<td>3064</td>
<td>3548</td>
<td>3280</td>
<td>3275</td>
<td>3607</td>
<td>3770</td>
<td>3856</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>1753</td>
<td>1926</td>
<td>1827</td>
<td>1774</td>
<td>1853</td>
<td>1943</td>
<td>1983</td>
</tr>
<tr>
<td>South Asia</td>
<td>186</td>
<td>201</td>
<td>221</td>
<td>222</td>
<td>236</td>
<td>277</td>
<td>332</td>
<td>387</td>
<td>446</td>
<td>456</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>473</td>
<td>543</td>
<td>609</td>
<td>668</td>
<td>658</td>
<td>600</td>
<td>587</td>
<td>549</td>
<td>561</td>
<td>564</td>
</tr>
<tr>
<td>World</td>
<td>2613</td>
<td>3101</td>
<td>3661</td>
<td>3971</td>
<td>4391</td>
<td>4583</td>
<td>5019</td>
<td>5170</td>
<td>5491</td>
<td>5631</td>
</tr>
</tbody>
</table>

*Source: WDI 2002*

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\(^6\) There is also an ongoing but not conclusive debate in the literature on growth clubs. Zhang (2003) has undertaken a convergence study for ten East and Southeast Asian countries. His conclusion is that there are two convergence clubs. Five of the countries—Hong Kong, Singapore, Malaysia, Taiwan, and the Philippines—will converge to a high income and eventually catch up with Japan. Four countries—China, Indonesia, Korea and Thailand—will converge to a lower level equilibrium. In panel estimates the Philippines are excluded, and Korea is included, in the high-income club.
Causes of the growth acceleration

What are the factors behind the growth acceleration in Asia–Pacific? Here we discuss how these have changed over time, and how these changes have affected growth prospects. However, within the confines of this paper we can only give some broad indications about the causes of the growth acceleration. We will consider seven aspects.

First, there is a world economy outside Asia that provides trade opportunities, and also provides resources and technology for the East–Asian economies. In terms of economic growth the world economy went through its best spell ever during the second half of the twentieth century. This meant that, relative to the previous half-century, there was increased scope for export growth in the Asia–Pacific region.

Second, East–Asian countries have certain geographical and location characteristics. Basically, geographical conditions are given, but the cost of a peripheral location relative to markets for inputs and outputs may be reduced if transport and other transaction costs are reduced. Ocean freight rates fell markedly during the Industrial Revolution, but during the second half of the twentieth century there was only limited change. Air transport rates, however, fell dramatically, and the advances in information technology made communication fast and efficient (Findlay and O’Rourke, 2001). Since the bulk of world markets has been outside Asia

Table 7: Regional percentage shares of world population, output, and relative per capita income, 2000

<table>
<thead>
<tr>
<th>Region</th>
<th>Population shares (%)</th>
<th>GDP (current US$) shares (%)</th>
<th>GDP PPP shares (%)</th>
<th>$-index</th>
<th>PPP-index</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>14.91</td>
<td>79.15</td>
<td>55.24</td>
<td>531</td>
<td>371</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>30.63</td>
<td>6.54</td>
<td>17.22</td>
<td>21</td>
<td>56</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>7.83</td>
<td>2.99</td>
<td>7.17</td>
<td>38</td>
<td>92</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>8.51</td>
<td>6.35</td>
<td>8.35</td>
<td>75</td>
<td>98</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>4.87</td>
<td>2.09</td>
<td>3.48</td>
<td>43</td>
<td>71</td>
</tr>
<tr>
<td>South Asia</td>
<td>22.37</td>
<td>1.90</td>
<td>6.71</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>10.88</td>
<td>1.02</td>
<td>2.47</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>World</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: WDI 2002
Globalisation and the Asia–Pacific Revival

in Europe and North America, these changes were especially important for the countries in the region. Table 8 shows that export growth of the region has generally been extremely rapid.

Third, each country has specific characteristics of its production factors, labour, capital, and land. In the latter category, we include natural resources like ore or oil that can be the basis for extractive industries. Factor accumulation has been very rapid in Asia–Pacific. The countries also entered a process of demographic transition, which meant that a large fraction of the population was of working age, which helped to accelerate growth. Bloom and Williamson (1997) found that the change in age structure offered East Asia a temporary growth bonus of 1.5 to 1.9 percentage points per year. But most importantly in terms of factors of production, is the fact that the rate of capital formation has been very high, often above 30% (Table 9), unheard of in market economies in other parts of the world. This increase was largely due to the creation of good policies and sound institutions, discussed below.

Fourth, the factors of production may be allocated among firms and sectors in a more, or less, optimal fashion. In general, the East Asian countries have moved in the market-economy direction, with gradually less direct government intervention in resource allocation. In most cases this has helped increase the efficiency of resource allocation, and thus growth.

Fifth, the level of output, given the resource-input, depends on the level of technology or productivity. Technological progress is not unrelated to capital investment. When new machinery is installed, it embodies

<table>
<thead>
<tr>
<th>Table 8: Regional annual export growth, 1961–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
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<td>Middle East and North Africa</td>
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<td>South Asia</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>World</td>
</tr>
</tbody>
</table>

Source: WDI 2002.
newer and more efficient technologies. The levels of productivity actually achieved, of course, also depend a lot on the skills of the labour force.

Sixth, the amount and allocation of factors, as well as their productivity, depends on the transaction environment, institutional structure, and social capital. Here most East–Asian countries have seen large improvements.

Seventh, the policy environment influences points three to six. It is itself determined in a political process. The political economy of policy making is thus of vital importance for policy formulation.\(^7\) The quality of the policy environment depends both on what policies are put in place and on how effectively they are implemented and administered. Here there has been an extensive discussion about the role of the ‘developmental states’ of the region. Some East–Asian countries have certainly adopted more interventionist strategies than the Washington consensus suggests, and they have been able to achieve remarkably high growth rates. Even China, since 1978, has managed to create an environment that has generated rapid growth.

There is considerable agreement that the success of South Korea and Taiwan has been helped by the policy choices of the state, although people disagree on the importance of direct state intervention versus the enforcement of property rights and free markets. Still, the result has been a spectacular economic success. Maybe the choice of developmental policies was influenced by the fact that the two countries were under

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\(^7\) There is a range of different approaches as to how one should model policies, such as lobbying models, voting models, or models of group conflict.
external threat, and continuation of the regime may have depended on the policies pursued. Acemoglu and Robinson (2002) find evidence in cross-country regressions that external threats reduce elite incentives to block reforms. Investments in education and the land reforms may have been undertaken to galvanize public support for the government. There were also links between the political and economic elites, which meant that there was also economic self-interest in economically good policies.

A political process produces the policy environment, and this is a key factor. Acemoglu, Johnson, Robinson and Thaicharoen (2002) show that countries that had inherited bad institutional structures from the past also tended to experience economic volatility and crises. However, once they controlled for the effect of institutions, the macroeconomic policies had only a limited effect on economic outcomes. This indicates that the policies pursued are perhaps better regarded as ‘symptoms’ of the more basic, underlying institutional structures. This does not, of course, imply that bad policies are unrelated to poor economic performance, but it suggests that they are just intermediate variables between core institutional factors and outcomes. To understand how these interactions work is one of the major challenges for future research.

In this quick review of growth determinants we have not attempted to weigh the relative importance of the different factors, but there has been an extensive debate on the relative contributions of factor accumulation versus total factor productivity growth in the growth acceleration in East Asia. Crafts (1999) concludes from his review of the debate that the contribution of factor accumulation has been high, while the contribution of total factor productivity (TFP) growth has been considerable but not as high as it was in Europe during its growth acceleration of 1950 to 1973. He also concludes that there remains a very large gap in productivity even between the successful newly industrialized countries (NICs) and the West. Söderbom and Teal (2003) do a fixed-effect regression over 93 countries for the period 1970 to 2000 and derive time-invariant productivity growth estimates for different regions. They find productivity growth highest in East Asia (about 2% per year), while it was actually close to zero in South-East Asia.\(^8\) Productivity growth is thus not the main factor behind the rapid growth in the region.

\(^8\) Grier (2003) gets similar results using an augmented Solow model. Only Hong Kong and Taiwan are characterized as overachievers.
One might ask whether the countries in the region can sustain the high growth rates once they converge towards high-income levels. That would seem unlikely. It seems possible that the Japanese stagnation is due not only to macro-economic mistakes and a liquidity trap but also to the country’s policy environment. It may well be the case that an environment that was appropriate for an investment-based strategy is not the best one for an innovations-based strategy (Acemoglu, Aghion and Zilibotti, 2002). The new environment may require different institutions and different policies.

**Has the Asia–Pacific region been open?**

Economic policies in East Asia have certainly differed between countries. Through a relatively interventionist policy, Japan achieved extremely rapid growth between 1950 and 1973, when per capita income grew by 8% per year. Then growth slowed to a more modest level, until there was virtual stagnation during the last decade of the twentieth century. Institutional reforms are needed, and are underway. The policies of South Korea and Taiwan have been similar to those of Japan in many respects, whereas the city-states of Hong Kong and Singapore have been extremely market oriented and open, closer to laissez-faire than are western countries. Even the states that have been most interventionist are by now rather similar to Western Europe in terms of economic freedom. They have a smaller public sector, but on the other hand they have more public intervention in other fields (Paldam, 2003).

Although there are variations in the policies pursued, East Asian countries, more or less across the board, have moved in a liberal and outward-oriented direction. There have been both macroeconomic stabilisation and structural policies aimed at liberalising the economies. In terms of external policies, this has meant a move towards market determined exchange rates and a less restrictive trade regime, although tariffs are still generally higher in Asia than in other parts of the world, except for Sub-Saharan Africa (Findlay and O’Rourke, 2001).

Short- to medium-term responses to trade reforms are likely to come in factor allocation and thus in the structure of production, as resources shift from inefficient import substituting industries to export-oriented activities.

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9 Paldam (2003) draws this conclusion on the basis of the economic freedom index from the Fraser Institute.
The medium to long-term impact, on the other hand, is more likely to be more towards capital formation and economic growth. The ultimate impact of reforms will depend on their effect on relative prices and the relative responsiveness of different sectors. It will also depend on what other types of reforms are undertaken at the same time.

It has generally been hard to establish a causal link from openness to growth (Greenaway, Morgan and Wright, 1998). In their review of the openness and growth literature, Rodríguez and Rodrik (2001) show that the main ingredients that did the trick in indices of openness used in studies from the 1990s are the black-market premium (the extra margin you have to pay for foreign exchange in the black market) and the presence of state monopoly in exports, while the more traditional and direct measures of trade restrictiveness showed a smaller effect. The variables that work tend to be highly correlated with macroeconomic imbalances, and thus tend, to some extent, to proxy for other types of policy problems than a restrictive trade policy. It may also be that corruption, or bureaucracies and other institutional problems, cause a high black-market premium, so maybe this is what the trade restrictiveness variable picks up in growth regressions.

Moreover, the black market premium is very sensitive to macroeconomic and political variables. Still, even if underlying social variables cause the black market, it does not mean that black market premia do not affect growth prospects. Rodríguez and Rodrik (2001, p. 63) do not argue that trade liberalisation on balance is not beneficial for growth, but they argue that integration in the world economy cannot be a substitute for development strategy. Trade reform without accompanying domestic policy changes may not do the trick.

We noted in the previous section that in terms of shares of trade in GDP, the Asia–Pacific region is by now much more open than most other regions. But exports to GDP is not the best indicator of openness: it is rather a result of openness. It is more appropriate to investigate to what extent Asia–Pacific markets are integrated with international commodity markets. When a country is open in this sense, international forces rather

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10 Alternative strategies for analyzing openness have been tried, such as the creation of alternative measures of openness (Dollar, 1992; Sachs and Warner, 1995), testing for robustness with a wider range of measures of openness (Edwards, 1998), and the comparison of income convergence experience among groups of liberalizing and non-liberalizing countries (Ben-David, 1993). Rodríguez and Rodrik (2001) did a quality check of those often-quoted papers and noted a range of shortcomings.

11 O’Rourke and Williamson (1999, 2002) argue that globalisation (and by implication openness) should be defined as the integration of international commodity markets.
than domestic conditions determine prices and resource allocation in the
domestic market. Transport costs and tariffs are factors that may isolate the
domestic market from the international one, and create a wedge between
domestic and foreign prices. When we view openness from this angle, we
need to investigate whether the countries have pursued a trade and for-

eign exchange policy that has integrated the countries with the world
economy, making it attractive for them to specialise according to their
comparative advantages.12

Standard measures of openness to trade are the average tariff rate, or the
coverage ratio for non-tariff barriers. Of course, there are problems with
those measures. For example, the tariff average tends to under-weight the
impact of the high tariff rates because the corresponding import levels are
low.13 Still, the level of trade protection gives an indication of the extent to
which a wedge between domestic and international prices is due to policy
choices. From the 1960s onwards, most countries in the region have gradu-
ally reduced both tariff protection and quantitative restrictions on
imports. For example, Taiwan liberalised very strongly on both counts in
the 1980s and 1990s (Liu, 2002). The Asia–Pacific countries also liber-
alised their foreign exchange markets and devalued their currencies,
which has also helped reduce the anti-export bias.

When exports grow, whether because of liberalisation of trade or insti-
tutional reforms or whatever, there seems to be a beneficial effect on
growth. A recent study by Irwin and Terviö (2002) used instrumental vari-
ables to deal with endogeneity of trade in a growth regression, and they
found a significant effect of trade on growth. Söderbom and Teal (2003)
argue that their use of geographical characteristics as instruments is inap-
propriate and instead estimate the effect of openness on productivity
growth using an estimator that combines high and low frequency differ-
ences in the data. Still, also they find that openness has a significant and
positive effect on productivity growth. Greenaway, Morgan and Wright
(2002) found robust results indicating that liberalization had a positive

12 When discussing policy issues relating to openness it is obviously the level of protection that should be
focused upon. Theoretically it is not obvious that openness increases growth. When there are market failures or
endogenous technological change, the reverse might be the case. Free trade might make countries specialize
according to their comparative advantage in sectors that produce traditional goods with little learning and

technological progress, which might reduce long-run growth. This is the old infant-industry argument, and was
also the basis for the old import substitution policy.

13 In the analysis of the impact of openness on growth, the often-used measures of ‘openness’ are highly correlated
with other sources of poor economic growth. This makes it hard to isolate the effects of various factors.
effect on growth with a lag. There was a J-curve, with an initial negative
effect followed by a positive one.

So far we have mainly discussed openness to trade, but we also need to
look at openness to capital flows, which may be either in the form of trans-
fers of real capital or of financial capital. The former are in a way a substi-
tute for trade flows, and we could assume that they generally help increase
the welfare of the recipient country. There is less agreement about the
effects of flows of financial capital. To the extent that they are short-term,
they may destabilise economies. In the recent Asia crisis, international
investors lost faith in the stability of some of the region’s economies and
withdrew their money, which had dire short-term consequences for several
countries in the region. Borrowers defaulted and banks became insolvent.
There was a shortage of credit to finance trade, and there was a recession
in the domestic market with severe consequences for large parts of the
population. The country worst affected by the 1997–98 financial crisis was
Indonesia, which saw its per capita income decline by about a seventh.
This experience showed that there are risks associated with international
economic integration, but it hardly suggests that countries should turn
their backs on the world. It may indicate, though, that a completely open
capital account is not the optimal strategy for the countries in the region.

Japan was the first country in the region that joined the growth club, and
the fact that Japan is located in East Asia then helped the other East Asian
countries. Part of the process was the relocation of production from Japan
in the face of its high domestic costs. Costs of regional transactions also
fell. Overseas Chinese have been an extra help for China in this respect.

The expansion of manufacturing production in the region has been
impressive, and there has been agglomeration of certain types of produc-
tion and production factors in certain locations. This suggests that there
are external agglomeration effects from learning and from labour-market
pooling. Remote management has become easier, and production net-
works have developed. Still, the need to have close access to a pool of
skilled labour is getting more and more important, which may suggest that
we will not see “the death of distance” as some have suggested. The infor-
mation-based economy seems to require more person-to–person contacts
than some thought. Cities will continue to play a major role in reducing
the costs of distance. Agglomeration forces will thus continue to be impor-
tant, although they will be of a different character than before.
Arne Bigsten

In East Asia the opening-up of the economies has generally been associated with high investment levels, rapid export growth, and good growth outcomes. The opening-up has made it possible to exploit scale economies. The region has been an attractive arena for foreign direct investment, with producers able to meet the standards of multinational corporations wanting to outsource production to cheaper locations.

Conclusions

Why did regions that originally were rather equal in standards of living diverge? The main explanation seems to be that in certain parts of the world institutions emerged that were conducive to capitalism and technological progress. On the basis of this technological and organisational superiority, the western powers then colonized and dominated large parts of the world.

In Japan the growth acceleration started after 1868 when market economy reforms were introduced, but for a long time that country was an exception in the region. In the last half-century, however, we have seen East Asia starting to catch up with the West. A major reason for this has been rapid factor accumulation, while the contribution of productivity growth has been more modest. It thus seems as if the policies and institutional structures were well structured to foster accumulation, which generated rapid growth in the early stages of development.

However, what works in early stages of industrialisation may not work in more sophisticated and more service-intensive economies. The Asian financial crises showed that some institutions, in this case mainly the banking system, were not robust. The system that provided good incentives for investment mobilisation is perhaps not as good at allocating funds effectively in the new international economics environment or to manage more complex risks. Allocative efficiency may take centre stage once countries are on the production frontier. The ability of the institutional system to transform itself and to generate appropriate policies for the new situation then becomes crucial. A more open environment will put pressure on countries to develop their institutions, at the same time as

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14 To explain why preconditions for a take-off were created in Japan much earlier than in other countries in the region one needs to undertake comparative historical studies.
openness will make it harder and more costly to pursue counter-productive policies.¹⁵

The interpretation of the Asian resurgence, which has been proposed here, draws on both the new economic geography perspective and institutional explanations. One could argue that international transaction costs eventually became so low that the low cost Asia–Pacific countries with improved institutions could profitably exploit increasing world demand and trade among each other. Their income levels are converging towards those of the Western countries.

Technological and institutional differences between countries have been reduced, which has prepared the ground for convergence. However, according to Krugman and Venables, income levels will not start to converge in all parts of the periphery at the same time. We will instead see regions take off sequentially, and eventually there should also be an African take-off. If this is correct, the distribution of world production will in the long term converge towards the world distribution of population, the dominance of the West being a historical parenthesis. The convergence of Asia has already started, and it seems abundantly clear that Asia will again become the centre of gravity in the world economy.

References


¹⁵ Bigsten and Durevall (2003) discuss this issue for the case of Africa.
Arne Bigsten


