

Globalisation and Economic Growth: A Historical Perspective

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1. INTRODUCTION

THIS paper considers some of the main developments in globalisation and growth during the 20th century in the context of conflicting claims in the economic literature. The objective is to provide a brief survey of historical experience relevant to the following questions:

- Has globalisation promoted ‘divergence big time’?
- Is globalisation conducive to faster economic growth?
- Will international economic inequality decline in the globalised world of the future?

2. WHAT DRIVES GLOBALISATION?

For present purposes globalisation can be thought of as a process of integration of goods and capital markets across the world in which barriers to international trade and foreign investment are reduced. Globalisation can be a result either of technological developments that reduce transport costs, improve information flows etc. or of policy changes that reduce protectionism, liberalise foreign investment rules and make migration easier. Although since the mid-19th century when the steamship, railroad and telegraph arrived, technological change has consistently been pro-globalisation, trends in economic policy have been much more variable.

In particular, the interwar period saw a globalisation backlash characterised by trade wars and capital controls. The reversal of these interventions was quite long drawn out although eventually the GATT played a major role; after

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TABLE 1
World Merchandise Exports/GDP (Per cent)

1820	1.0	1950	5.5
1870	4.6	1973	10.5
1913	7.9	1998	17.2
1929	9.0		

Source: Maddison (2001).

TABLE 2
Foreign Assets/World GDP (Per cent)

1870	6.9	1960	6.4
1913	17.5	1980	17.7
1930	8.4	1995	56.8

Source: Obstfeld and Taylor (2003).

the demise of the Bretton Woods international monetary system macroeconomic policy favoured international capital mobility. In this respect, the role of the macroeconomic policy trilemma deserves to be noted, namely, that it is possible for a country to have at most two of a fixed exchange rate, independent monetary policy and free international movement of capital. Among the world's leading economies the choice of what to give up varied over time; before 1914 typically monetary policy was sacrificed, in the 1950s capital mobility was forgone but since 1971 the fixed exchange rate has been abandoned.

Globalisation is not easy to measure and these issues cannot be addressed here. Tables 1 and 2 do, however, give a useful sense of the historical experience. The interwar setback to globalisation and the lengthy period before this was reversed, show up in the decline of the ratio of foreign assets to world GDP from 17.4 per cent in 1914 to 4.9 per cent at the end of World War II and the fact that the 1914 ratio was not attained again until 1980. The decline in world trade between 1929 and 1950 from 9.0 to 5.5 per cent was somewhat less dramatic and was made good by the late 1960s. But the most striking feature of these tables is the extent to which globalisation in the modern world goes beyond previous peaks.

3. WHAT DOES ECONOMICS PREDICT?

Alternative models of economic growth and development lead to very different predictions about the implications of globalisation for economic growth across the world. In the end the competing claims will have to be resolved by empirical evidence.

A very useful reference point from a neoclassical perspective is provided by Lucas (2000). He argues that while the 20th century was marked by widening

international income inequality, the 21st century will see this reversed. In a pure neoclassical model, in which all countries have access to the same technology and institutions and adopt market-friendly economic policies while capital is fully mobile internationally, international income inequalities should be rapidly reduced as capital flows from rich to poor countries and a process of economic catch-up and convergence ensues which exhibits an inverse correlation between initial income levels and subsequent growth of real income per head.

Lucas argues that in the 21st century in a globalised world economy this vision will start to become more and more relevant as countries increasingly learn the lessons of history and reject failed (non-market-friendly) policies, adopt institutions that underpin efficient markets and avail themselves of elastic supplies of foreign capital and technology that eliminate the domestic savings and knowledge constraints on growth. The 'Lucas Paradox' (Lucas, 1990), that capital generally has not flowed from rich to poor countries, will evaporate. Countries which join the 'catch-up' club will be able to grow at rates way above those attained by the East Asian Tigers. A calibrated version of the model is shown to exhibit rising international inequality of incomes in the 20th followed by a strong turnaround in the 21st century (see Figure 1).

Other theories are less sanguine and would have us believe that in some way the assumptions used by Lucas are mistaken. For example, the new economic geography school sees the process of development not as the steady convergence of the poor to the rich, but rather as a rapid transition of a select few who are favoured by location, most recently the East Asians (Henderson et al., 2001). Except when transport costs become very low their models tend to predict that globalisation tends to centralise rather than disperse economic activity in the world because of the advantages of agglomeration in terms of proximity to markets and suppliers and can be an agent of de-industrialisation for countries that are in the wrong place.

The new institutional economic history view pioneered by North (1990) would stress that institutions (which form the constraints within which society operates) and the associated incentive structures of an economy are crucial in informing decisions to invest and/or to innovate. Containment of moral hazard and reward for successful enterprise are important and permit the development of the deep capital markets required to finance an advanced economy. But this tradition also stresses that bad institutions are frequently persistent and, once in place, can be virtually impossible to reform – in the jargon they exhibit path dependency. In the absence of well-defined property rights, enforceable contracts and government that is credibly committed to non-predatory behaviour, the neoclassical catch-up process will be aborted.

Another tradition in economic history, that of Gerschenkron (1962), maintains that pro-active government may be the solution rather than the problem in the early stages of 'the escape from backwardness' in economies afflicted by market

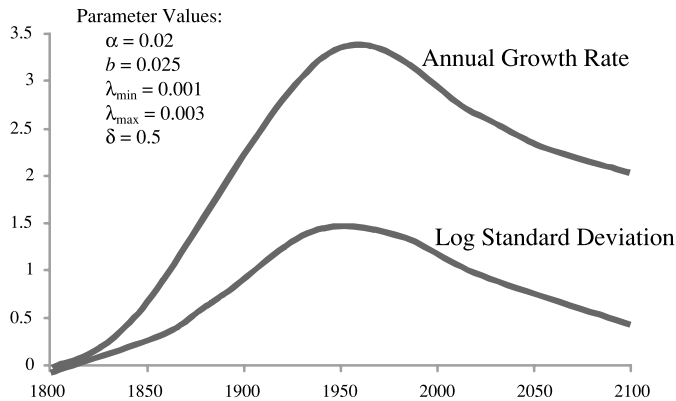
FIGURE 1
The Lucas Model

- Countries that start growing later have faster initial growth and then experience growth proportional to income gap with leader

$$\Delta y/y = \alpha + \beta x$$

where x is the number of 50-year periods since 1800. Hazard rate for beginning modern economic growth (λ) evolves from 0.001 to 0.03

World Growth Rate and
Income Variability



failures. The argument here is partly that when markets are thin and the legal infrastructure is unreliable, the balance of advantage between hierarchy and markets as a means of allocating resources swings towards the former. Government also has a crucial role to play in combatting coordination failures and instability in the financial system, both of which potentially undermine investment. An important implication is that a strong role for government in the allocation of capital and support of infant industries is advantageous initially compared with an alternative of financial liberalisation, free trade and reliance on market forces. This approach argues against a 'one size fits all' view of economic policies and institutional arrangements and might see globalisation as precluding

rapid economic development. Of course, the argument relies on government being able to function efficiently as an antidote to market failure. If take-off has been accomplished, a second problem might be how subsequently to achieve a successful transition to full participation in globalised capital markets.

Finally, the distribution of the gains from international trade deserve some attention. In the mid-20th century a very pessimistic assessment, the so-called Prebisch-Singer thesis, gained a strong following and was highly influential in developing country policymaking in the next decades. Adherents of this view doubted the merits of opening the economy and competing along lines of comparative advantage on the grounds that the terms of trade would persistently move against primary producers.¹ A limiting case would be one of 'immiserising growth' in which increases in productive potential were more than offset by declines in export prices and loss of purchasing power over imports.

4. ECONOMIC GROWTH: WHAT HAPPENED IN THE 20TH CENTURY?

This section of the paper is devoted to basic description of comparative international experience of economic growth and its implications for income inequality. Obviously, most attention will be given to the conventional measures based on the national income accounts and their concept of real GDP per person measured at purchasing power parity reported in the database of Maddison (2001). However, if a broader concept of living standards relevant in particular to the escape from poverty is desired, trends in the widely-used Human Development Index (HDI) also merit some discussion. This is a measure of distance travelled between the minimum and maximum possible level of performance in each of income, literacy and longevity; details of the formula are in UNDP (2001).

Since 1870 world real GDP per person has been growing much more quickly than before. Before 1820 growth was barely positive, from 1820–70 about 0.5 per cent per year rising to 1.3 per cent in 1870–1913, a rate similar to that of the last quarter of the 20th century. In the 'Golden Age' after World War II growth was almost three per cent per year (Maddison, 2001). In this unprecedentedly fast growth environment the variance of growth rates across countries increased dramatically, primarily because some countries grew very fast indeed. The rewards for getting things right (and the penalty in terms of growth forgone for getting things wrong) were now much greater than ever before.

As Pritchett (1997) memorably put it, this experience might be described as 'Divergence Big Time'. Table 3 reports huge increases in the gaps between the incomes of those living in Africa and the USA. And when regressions are run

¹ This claim triggered a long and complicated debate about the empirical evidence; for a review and full citations see Hadass and Williamson (2001).

TABLE 3
Real GDP/Person (1990 Geary-Khamis dollars)

	<i>1870</i>	<i>1913</i>	<i>1950</i>	<i>1998</i>
Africa	444	585	852	1,368
China	530	552	439	3,117
India	533	673	619	1,746
Latin America	698	1,511	2,554	5,795
UK	3,191	4,921	6,907	18,714
USA	2,445	5,301	9,561	27,331

Source: Maddison (2001).

TABLE 4
Human Development Index

	<i>1870</i>	<i>1913</i>	<i>1950</i>	<i>1999</i>
North America	0.504	0.643	0.774	0.934
Western Europe	0.421	0.580	0.707	0.918
Africa			0.271	0.527
China			0.225	0.718
India		0.143	0.247	0.571

Source: Crafts (2002).

there is no sign of the inverse relationship predicted by neoclassical theory (not even in terms of conditional convergence) to be found between initial income level and subsequent growth for the poorest countries in the world.

This is not, however, the whole picture. When the experience of economic development is examined in terms of HDI the outcomes look rather different. As Table 4 reports, although Africa, China and India have not yet attained the HDI levels of the OECD countries, in 1999 the gaps between them and the West are lower than in 1950 and in that time the absolute levels of HDI in poor areas of the world have increased substantially. The divergence claim is weakened when significant weight is given to life expectancy since a major achievement of the 20th century was that life expectancy increased spectacularly everywhere (at least until the AIDS epidemic) such that even the least advantaged countries now have mortality rates similar to the most advanced countries of 1870.² The Gini coefficient for inequality in world life expectancy fell from 0.237 in 1962 to 0.114 in 1997 (Melchior et al., 2000).

Indeed, switching the focus from absolute gaps in income levels to summary inequality statistics implies still further qualification to the assessment of 'divergence big time' and points to an interesting late 20th century turning point which

² However, for the worst affected countries the AIDS epidemic now threatens a massive reduction in economic welfare and with it HDI; see the estimates in Crafts and Haacker (2003).

TABLE 5
Some Indicators of International Inequality, 1870–1999

	<i>20th Percentile</i>	<i>80th Percentile</i>	<i>Ratio</i>	<i>Gap</i>
<i>Real GDP/Person</i>				
1870	1,996	500	4.0	1,496
1913	4,146	552	7.5	3,594
1950	6,338	428	14.8	5,910
1973	12,595	773	16.3	11,822
1998	17,982	1,363	13.2	16,619
<i>HDI</i>				
1913	0.610	0.143	4.3	0.467
1950	0.766	0.220	3.5	0.546
1999	0.898	0.500	1.8	0.398
<i>Gini Coefficient</i>				
1900	0.393		1970	0.539
1950	0.530		1998	0.496

Sources: Crafts (2002) and for Gini coefficient Boltho and Toniolo (1999).

is reminiscent of the Lucas model. Since about the early 1970s the Gini coefficient of international income inequality has been declining slowly (Melchior et al., 2000). Longer run calculations can only be done for a more restricted group of countries but seem to indicate that this represents a notable reversal of a trend toward much greater inequality from 1870 to 1950; see Table 5.

These estimates are undoubtedly crude in that they treat all citizens in a country as having its average income. This probably does not involve a serious distortion, however, since it is common ground among researchers in the area that trends in international income inequality are dominated almost entirely by across- rather than within-country inequality (Lindert and Williamson, 2001; and Sala-i-Martin, 2002). Certainly the recent reversal of the international inequality trend is primarily a consequence of China's remarkable economic growth but even leaving China out of account during the last two decades would still leave intact the recent decline in the 20th percentile/80th percentile ratio shown in Table 5.

5. IS GLOBALISATION GOOD FOR ECONOMIC GROWTH? HISTORICAL EVIDENCE

Although globalisation has been driven forward by falls in transport and communications costs, even at the end of the 20th century distance still mattered. Trade flows, technology flows, financial flows and capital movements are all much reduced the greater is the distance between countries (Venables, 2002). Moreover, distance from markets and sources of supply is highly correlated with income levels (Redding and Venables, 2000). As Tables 6 and 7 report, since

TABLE 6
World Industrial Production (Per cent shares)

	<i>1880</i>	<i>1913</i>	<i>1953</i>	<i>1998</i>
UK	22.9	13.6	8.4	3.5
Rest W. Europe	30.8	27.2	17.7	28.0
North America	14.7	32.0	44.7	24.5
China	12.5	3.6	2.3	6.3
Japan	2.4	2.7	2.9	15.1
'British India'	2.8	1.4	1.7	1.6
Rest East Asia	n.a.	n.a.	0.8	5.6
Rest of World	13.9	19.5	21.5	15.4

Sources: Bairoch (1982), United Nations (1965) and UNIDO (2001).

TABLE 7
World Manufactured Exports (Per cent shares)

	<i>1876/80</i>	<i>1913</i>	<i>1955</i>	<i>1997</i>
UK	37.8	26.9	17.9	5.5
Rest W. Europe	51.3	50.3	36.3	38.3
North America	4.4	11.1	26.1	16.0
Japan	n.a.	2.4	3.9	9.8
Rest Asia	<1.5	3.8		
South & S. East Asia			2.8	18.1
China			0.6	3.3
Rest of World	<6.5	5.5	12.4	9.0

Sources: UNCTAD (1983 and 2000) and Yates (1959).

globalisation began the geography of industrial production and exporting have always been highly concentrated, much more so than GDP or, of course, population (Crafts and Venables, 2001). Thus, it seems that the world economy is not quite the level playing field of neoclassical economics. That said, when geographic variables are introduced into growth regressions they are a much smaller influence on relative performance than policy and institutions (Gallup et al., 1999).

Institutional quality also has a very strong influence on growth and levels of income (Hall and Jones, 1999; and Bleaney and Nishiyama, 2002). Quantification of this effect has used survey data based on risk assessments sold to foreign investors. This is by no means ideal and the results should not be interpreted as identifying an optimal institutional structure. Nevertheless, it seems clear that the quality of the legal infrastructure that underpins capital markets has important impacts on the depth of financial development and on the quality of investment (Levine, 1998; and Crafts and Kaiser, 2004).

If this perspective is correct, it is important to note that there is still a huge variance in institutional quality across the world and, if there are role models to

TABLE 8
Rule of Law Governance Indicator (Range 2.5
to -2.5)

OECD Europe	1.466
Asian Tigers	1.130
Latin America	-0.233
Africa	-0.499

Source: Kaufmann et al. (2002); the range is -2.17 (Afghanistan) to 1.97 (Switzerland).

follow, there is no evidence of a general convergence on good practice. This is illustrated in Table 8 which reports some estimates of adherence to the rule of law across the world. Nor where new institutional arrangements have been established, as in the transition economies, are these always of high quality; for example, Russia scores only -0.87 on this indicator and is described in a recent review as an economy characterised by deep resistance to thorough market reform (Hanson, 2002). Perhaps Douglass North's jocular advice that Russia's best chance of successful economic development was 'to get a new history' has some resonance.

The most remarkable cases of successful catch-up growth are, of course, in Asia: Japan in the Golden Age, the Tigers and then China. In most cases these have not been economies that simply adopted conventional (American) market-economy-based strategies but rather they have operated under the auspices of some kind of 'developmental state' reminiscent of a Gerschenkronian advance to the modern world. This is reflected, for example, in the account by Rodrik (1995) of the approaches of Korea and Taiwan to mobilising investment and the emphasis on 'getting relative prices wrong' and on 'governed markets' in, respectively, the accounts by Amsden (1989) and Wade (1990) of how these countries achieved take-off.

Although East Asian countries were certainly 'outwardly orientated' in their growth strategies in strong contrast to the state-led inward-looking industrialisation common in South Asia or Latin America, they cannot be said to have been full participants in the globalisation process at least until the 1990s in terms either of openness to trade or capital movements. Indeed it seems clear that, had these countries (rather than the Accession Candidates among the transition economies) been hoping to join the EU, they would have been substantially precluded from following the policies that delivered so much growth prior to the mid-1990s.³

³ The EU accession candidates have locked themselves into a reform strategy that has delivered institutional quality well ahead of that in other former communist countries and per se that will be good for growth (Crafts and Kaiser, 2004). On the other hand, they have signed up to constraints that preclude the developmental state approach to rapid catch-up that delivered very rapid growth in countries like Korea and Taiwan.

The Asian Crisis of 1997/8 should not be taken to indicate that the previous achievements of these economies were somehow a mirage. What this episode (along with the collapse of the Japanese bubble) does indicate is that making the transition to financial liberalisation and participation in globalised capital markets proved very difficult. The crisis was much more severe in countries like Korea and Thailand with weak financial market institutions and regulation than in Hong Kong or Singapore which had higher standards of law enforcement and capital adequacy (Crafts, 1999).

Have moves to greater openness typically promoted faster growth? Here it is important to distinguish between liberalisation of trade and capital movements and between different periods. The evidence is not conclusive partly because there are significant difficulties in quantifying the concept of openness.⁴ Nevertheless, for the recent past the balance of the evidence suggests that liberalising trade does have significant positive effects while financial liberalisation is a high-risk strategy that on average has had quite weak impacts on growth.

The most careful study of the effects of trade on growth is that of Frankel and Romer (1999). Their point estimate is that a one percentage point rise in the ratio of trade to GDP raised the level of income and its growth over the sample period (1960–85) by about 1.5 percentage points, although with quite a big confidence interval. However, Clemens and Williamson (2001) stress that, although there has been a positive correlation between trade liberalisation and growth in the recent past, the opposite was the case prior to World War II. This paradox will no doubt attract considerable research effort. In this context, it might also be noted that the USA was a high tariff country throughout its rise to world economic leadership.

Although the suggestion that the results of trade liberalisation may be highly context-specific is valuable, today's policymakers might want to place most weight on recent outcomes. In this context, the results obtained by Dollar and Kraay (2000) are of note. They distinguish between post-1980 'globalisers' and 'non-globalisers' among developing countries on the basis of trade policy and changing ratios of trade to GDP and find that the growth performance of the 'globalisers' is much stronger; see Table 9.⁵ That said, it should be recognised that these countries are typically far from free trade paragons and include countries like China which have pursued outward orientation in the mode of the developmental state rather than the Washington Consensus.

⁴ For recent reviews of the evidence which offer 'optimistic' and 'sceptical' reviews of the evidence see, respectively, Krueger (1997) and Rodriguez and Rodrik (2001). Greenaway et al. (2002) explain where some of the difficulties of interpretation arise and distinguish short and longer run effects of trade liberalisation.

⁵ Using the data in Crafts (2002) the 'globalisers' have also had more success in reducing the gap between their HDI score and a perfect score, by 26.8 per cent compared with 15.2 per cent during 1980–99.

TABLE 9
Growth of Real Income Per Person (Per cent per year)

	<i>Globalisers</i>	<i>Non-globalisers</i>
1960s	1.4	2.4
1970s	2.9	3.3
1980s	3.5	0.8
1990s	5.0	1.1
Rise in Trade/GDP (per cent)	104	-18

Source: Dollar and Kraay (2000).

It is true that the terms of trade tended to move against primary products during the 20th century but the damage was nothing like as severe as followers of Prebisch and Singer might have expected. Bleaney and Greenaway (1993) estimate a trend rate of decline of 0.6 to 0.8 per cent per year for non-fuel primaries relative to manufactures but about one-third of this for the average developing country. Before 1914 the fall in transport costs was so rapid that the terms of trade actually improved for all countries (Hadass and Williamson, 2001).

The evidence with respect to financial liberalisation and growth is less optimistic. Here the experience of the last 25 years suggests that the abolition of capital controls has been associated with an increase in banking crises which were indeed notably absent in the repressive years of the Bretton Woods system (Bordo et al., 2001). The results of a large number of studies of the effects of capital account liberalisation on growth have been very mixed. However, the evidence does seem to suggest that in the presence of strong institutions the consequence for a developing country of moving from fully closed to fully open is a positive effect on growth of about one percentage point (Edison et al., 2002).

6. CONCLUSIONS

This paper has reviewed a number of competing claims concerning the relationship between globalisation and growth in the context of the historical evidence. In the light of this discussion, which in many respects is less than conclusive, I conclude with some thoughts on the questions raised in the Introduction.

a. Has Globalisation Promoted 'Divergence Big Time'?

The answer to this question depends crucially on what is meant by 'divergence'. Perhaps the most interesting finding to emerge from recent research is that on at least some measures world income inequality peaked around 1970 and has declined somewhat in the era of unprecedented globalisation since then. This

outcome has been driven primarily by the much improved growth performance of China and India, two of the 'globalisers' identified by Dollar and Kraay.

b. Is Globalisation Conducive to Faster Growth?

A reasonable response here would be cautious optimism notwithstanding the array of competing theoretical arguments and the somewhat mixed empirical evidence. State-led industrialisation as conceived in the 1950s has been discredited and freer trade is helpful. But the most important message is the importance of institutional quality, particularly with respect to capital markets, both as a key influence on growth performance and in terms of facilitating successful participation in globalised finance. At the same time, there clearly is an important role for institutional diversity in rapid catch-up growth as Gerschenkronian ideas suggest and the East Asian experience confirms.

*c. Will International Economic Inequality Decline in the Globalised World of the Future?*⁶

Lucas (2000) offers a strong prediction that this will be the 21st-century experience when neoclassical convergence forces will come to the fore. There seem quite strong reasons to doubt that the parametrisation of his model (see Figure 1) is appropriate. It looks forward to ferocious growth rates for a steady flow of countries joining the catch-up club and implicitly assumes the death of distance. The new economic geography and the new institutional economic history suggest that the handicaps of distance and the persistence of sub-optimal institutions will act to dilute this process and, in particular, the possibility that Africa will be left out should worry everyone.

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⁶ It is, of course, possible that there will be a repeat of the globalisation backlash of the interwar period; for a judicious review of why this probably will not happen see Wolf (2003).

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