Making Sense of Globalization

A Guide to the Economic Issues

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François Bourguignon, *DELTA, Paris*

Diane Coyle, *Enlightenment Economics*

Raquel Fernández, *New York University and CEPR*

Francesco Giavazzi, *IGIER, Università Bocconi, Milano and CEPR*

Dalia Marin, *Universität München and CEPR*

Kevin O'Rourke, *Trinity College, Dublin and CEPR*

Richard Portes, *London Business School and CEPR*

Paul Seabright, *Université des Sciences Sociales de Toulouse and CEPR*

Anthony Venables, *London School of Economics and CEPR*

Thierry Verdier, *DELTA, Paris and CEPR*

L. Alan Winters, *University of Sussex and CEPR*

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Centre for Economic Policy Research
90-98 Goswell Road
London EC1V 7RR
UK
Tel: (44 20) 7878 2900 Fax: (44 20) 7878 2999
Email: cepr@cepr.org Website: www.cepr.org

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Foreword

In the light of the on-going debate on globalization, the events surrounding the European Council of Göteborg and the meeting of the G8 in Genoa in 2001 as well as the forthcoming UN conference in Johannesburg, the European Commission considered that public discussion of these issues should be able to draw on as wide a factual base as possible established by acknowledged specialists of irreproachable standing. To this effect, it commissioned from CEPR a review of the existing literature and research on globalization to make available the most up-to-date findings to a wide audience in an easily accessible format presented in non-technical language.

In its mandate, the Commission decided to concentrate the treatment of globalization on economic issues in order to make the task manageable. As a result, other important dimensions to the process have had to be left out. The report does not attempt to provide a comprehensive treatment of all possible issues but an in-depth treatment of those that appear significant in the elected field. Within these self-imposed limitations, it succeeds in providing the comprehensive and timely discussion of globalization that the Commission requested.

Since the report has been written by the independent experts of CEPR and under their authority, it does not represent an official position of the European Commission on the question of globalization. In many respects the findings will prove controversial, at least to those outside the circle of professional economists, contradicting as they do certain deeply held beliefs about the negative consequences of globalization. Equally, they point to the very real difficulties that certain parts of the world have experienced in trying to integrate with the world economy and to draw positive benefits from the process of globalization. Nor do they neglect the crucial issue of equity, in particular with regard to income inequality and its possible causes. Indeed, the message that governments of both developed and developing countries need to play an active role by putting in place policies which can both enable a successful transition towards open markets and the necessary support for those affected by this transition is well made and one that the Commission would certainly support. Nevertheless, while endorsing broadly the conclusions reached and appreciating the high quality of analysis that has gone into producing the report, the Commission cannot concur with all of its analysis. Since this is an independent report, such a result can be considered as normal.

The Commission will use the report along with other contributions, the on-going dialogue with civil society and the work of Commission departments to maintain its efforts to ensure that Europe contributes forcefully to the development of a more humane and more just world order with the instruments at the disposal of the European Union and respecting the rights and individual charteristics of nations large and small.

Romano Prodi
President of the European Commission
June 2002

Globalization is, in some respects, a centuries-old phenomenon. Only now, however, are we examining which aspects of the current wave are old and which are new and the effects of these on poverty and inequality in the world. Furthermore, it is difficult to be sure whether the poor economic performance of some countries (notably in sub-Saharan Africa) is due to their having been insufficiently open to the world economy, or whether they lacked the institutions and capacities (such as in human capital) that would have enabled them to embrace globalization successfully. This report analyses how various institutions, including corporations, national governments and the many institutions of civil society, have responded or potentially could respond to these developments. The authors consider the scope for more effective cooperation between national governments, devoting particular attention to the appropriate response of the European Union. They conclude by summarizing what economic research has to say about the concerns of the anti-globalization campaigners, how the potentially significant costs of globalization can be mitigated, and how a failure to address them would risk provoking a backlash that could destroy many of the real gains that globalization has achieved.

The opinions expressed in this report are those of the authors and not those of the Centre for Economic Policy Research, which takes no institutional positions. The study was commissioned by the Group of Policy Advisors to the President of the European Commission, whose Foreword puts it in context. The report also does not represent the views of the Commission, which takes no responsibilty for any use of this material.

Hilary Beech
Chief Executive Officer
CEPR
24 June 2002

Executive Summary

This study surveys recent research about the economic effects of globalization. In some respects globalization is a centuries-old phenomenon, so we begin by asking what is old and what is new about the current wave, drawing particular comparisons with the late nineteenth century. We then go on to ask what is known about how globalization expands the reach of markets, including the markets for goods and services, as well as the markets for capital and labour. We summarize what have been the effects on poverty and inequality in the world, and assess the risks to future generations. World inequality in incomes has increased dramatically over the last two centuries. But much of this increase took place before 1950, and the proportion of the world's population in absolute poverty is now lower than it has ever been, although continued population growth means that the total numbers of those in destitution remain disturbingly high.

It is difficult to be sure whether the poor economic performance of some countries (notably in sub-Saharan Africa) is due to their having been insufficiently open to the world economy, or whether they lacked the institutions and capacities (such as in human capital) that would have enabled them to benefit from the opportunities such openness might in principle provide. At all events, the presence of complementary institutions does appear to make an important difference to whether countries are able to embrace globalization successfully. The report therefore turns to how various institutions have responded and potentially could respond to these developments, including corporations, national governments and the many institutions of civil society. We consider the scope for more effective cooperation between national governments, devoting particular attention to the appropriate response of the European Union.

We conclude by summarizing what economic research has to say about the concerns of the anti-globalization campaigners. Although many campaigners are poorly informed about the historical record, and appear not to be aware of the important contribution played by globalization in the struggle against poverty, we argue that there are potentially significant costs to the process. There is an important role for policy in mitigating these costs, and a failure to address them would risk provoking a backlash that could destroy many of the real gains that globalization has achieved.

1. Globalization and its discontents: a response

1.1 Introduction

‘Globalization’ means many things to many people. There is no commonly accepted definition, yet globalization is at the centre of a starkly polarized debate over the major policy issues in the world today. Attempts to define globalization usually seem clumsy. Our working definition is ‘an increase in the extent to which individuals and institutions transact or exchange with others based in nation states other than their own, or otherwise influence them through their economic and social behaviour’. Globalization has opponents, often highly vocal, and supporters, sometimes hesitant, sometimes unattractively brash. Little wonder, then, that popular coverage of globalization focuses on its costs, real and imagined.

Its critics say globalization increases inequality, pollutes the environment, causes economic instability, exploits workers and undermines the ability of governments to raise the taxes that finance public spending and welfare. Such strong claims are clearly affecting the political climate. Public opinion reveals a deep scepticism about trade, financial flows and migration.

Yet there is a wealth of economic evidence demonstrating that globalization brings great benefits as well as imposing costs. It offers the opportunity for a higher rate of sustainable growth - growth that translates into longer, healthier lives and improved living standards. These gains must be weighed against the adverse effects of globalization. While the effects of international liberalization on the world’s poorest countries and people must be the greatest concern, this report concludes that the true benefits strongly outweigh the costs. What is more, the evidence also shows that many of the charges against globalization are misguided. It does not, for example, inevitably increase the inequality of incomes. Indeed, trends in income distribution have not been as negative as they are usually portrayed - the nineteenth century saw an explosion of inequality, but by around the middle of the twentieth century it had stopped rising. And the proportion of the world’s population in absolute poverty is almost certainly lower than it has ever been. The effects of increasing economic openness depend critically on the circumstances of individual countries and the policies they follow. There is similarly little evidence that governments are losing power to multinational corporations or other agents of globalization, or that there is a ‘race to the bottom’ in environmental or labour standards or taxation.

The chasm between the economic evidence and the popular view has emerged for two main reasons. One is that global flows, of goods, capital or people, can indeed have adverse results when there are domestic market failures or regulatory weaknesses. Many of the policy recommendations in this report are proposals for dealing with these directly. This will help limit or reduce the costs of globalization. The second reason is that improved communications (including broadcasting) have made the world much more aware of differences between rich and poor, differences that have always been present but of which in the past many of the poor themselves were much less aware.

Both the presence of real dangers from globalization, and the greater awareness of such dangers, make it vital to implement policies to deal with them. The alternative is a backlash that would reverse some forms of international economic integration and could undermine some of the great progress that has already occurred.

Already, 11 September and its aftermath, together with the slowdown in world growth, have exercised a more effective brake on globalization than all the preceding protests. To compound this with well-intentioned but misguided ‘anti-globalization’ policies would harm poor countries and poor people throughout the world.

1.2 What is new about this wave of globalization?

Globalization in the general sense of the term is not new. All innovative and dynamic societies in history have been in some way cosmopolitan. Nor is it irreversible. The last episode of globalization from 1870-1913 fell victim to a backlash following the First World War. Much of the concern about the current era of globalization has arisen out of the responses of different institutions - corporations, governments and civil society - to different aspects of closer international integration. It is hardly surprising that there should be new tensions in times of great change. It is natural to worry about how well our societies are responding.

There are useful lessons from the wave of globalization a century ago, although there are important differences between the two eras. While migration flows are lower now, economic openness has been rising during the past half century. Transport costs have declined, and tariffs have fallen substantially. The increase in intra-industry trade and outsourcing has been significant, as have increased foreign direct investment and financial capital flows. These point to qualitative changes in the nature of international integration that are probably more important than the quantitative measures of the degree of globalization. Even so, at the beginning of the twenty-first century distance and national borders are still powerful barriers to economic interaction. International migration is significantly lower than in the 1870-1913 period. By some measures net capital flows are no bigger now than then, although they are broader in the sense that there is investment in a wider range of sectors. And trade between countries, taking account of their economic mass, falls off steeply with distance - trade in capital and ideas no less than trade in goods and services.

But perhaps the most important lesson concerns the shape of the backlash against the globalization of 1870-1913. This was motivated in part by its distributional consequences, and it generated protectionist responses - protection against agricultural imports in continental Europe and against manufactured imports and immigration in the New World. To understand the present risks we need therefore to look at the distributional consequences of the current wave of globalization - to see who the gainers and the losers have been and how great, objectively, have been the costs of the process. It is also important to consider who is being blamed for these costs, and to see where the costs might be avoided by acting differently.

1.3 Gainers and losers from globalization

Globalization is widely believed to be increasing the gap between rich and poor, even impoverishing those who are already poor. To see whether this is true we need to look, first, at what has actually happened to the incomes of rich and poor, and next, to understand what role globalization has played in this process.

So what has been happening to this gap? Four kinds of evidence stand out. First, there is evidence about the overall level of inequality in the incomes of world citizens. This rose tremendously in the nineteenth century and continued to increase in the first half of the twentieth, but it has not worsened significantly since 1950. Inequality is now as great as it has ever been, but there has certainly been no recent dramatic increase.

Second, there is evidence about the proportion of the world's population living in absolute poverty, as measured by daily income below that required to buy a certain minimal package of basic necessities. Here the picture is very encouraging. The proportion of the world's population living in extreme poverty on less than $1 a day (in terms of constant - inflation-adjusted - 1990 dollars) declined from almost half in 1950 to less than a quarter in 1992. Over the longer term, the decline has been spectacular: in 1820 probably well over 80% of the world's population lived in such extreme poverty. The proportion of the world's population living in absolute poverty is lower now than it has ever been.

Third, there is evidence about the absolute numbers living in absolute poverty. Here, the picture is more disturbing. The world's population has been growing fast, so even a falling proportion of those in absolute poverty means that the total number living under the $1 per day poverty line has been constant and the total number living under the $2 line has risen. This is disturbing both in itself and because of what it may indicate about likely future developments. If we could be confident that global population growth will soon stabilize, this would be a temporary problem. But in fact the principal brake on population growth in the past has been income growth, so the presence of a large sub-group whose incomes are not growing and whose numbers are not falling represents a major challenge for the future.

Fourth, there is evidence from indicators of welfare other than incomes. Life expectancy has improved at a faster rate than would have been expected from increases in income alone, and has done so particularly among the poor. The upshot is that there has been sharp decline in inequality of life expectancy since 1930.

Which of these measures gives the best overall picture? Inequality matters, and it matters independently of poverty. But when the world's poorest people are going hungry, dying young and losing too many children in infancy, reducing absolute poverty is of real importance too. There has been remarkable success in reducing absolute poverty, as a proportion of the world's population, in recent decades. But it is a success clouded by the growing population that condemns increasing numbers of people to abject misery. And when broadcasting and communications make us more than ever aware of developments on the other side of the world, the poor that remain, though a shrinking proportion of the whole population, are more than ever aware of their relative deprivation.

What part has globalization played in these long-term developments? In particular, has the failure to reduce inequality been due to an inherently unequalizing impact of globalization itself, or to the fact that many parts of the world (in sub-Saharan Africa, for instance) have been more or less left out of the globalization process? Is it the result of too much exposure to globalization or too little? Both accounts appear to have elements of truth. Those of the world's poor countries that have been able to take advantage of the opportunities of integration into the world economy (China since the late 1970s and India in more recent years, for instance) have seen significant benefits, notably incomes that have grown much faster than the average of the rest of the world. The world's very poorest countries, by contrast, do not show many signs of globalization - whether measured by their limited foreign trade statistics, by their weak financial integration or by their comparative inability to attract foreign direct investment.

So, on the face of it, the persistence of inequality seems to be due to insufficient globalization rather than too much. It is not an accident, however, that some countries have been left out, nor just the result of a misguided failure to seize the opportunities of integration into the world economy. Rather, it seems to be due to their lack of certain basic institutional features - a skilled work-force, a coherent and representative government, a developed civil society - that are necessary to make globalization work.

1.4 How are our institutions responding?

1.4.1 Corporations

Whatever the truth about overall income distribution, some of society's most visible institutions have been subjected to major pressures, and there have been highly visible beneficiaries and casualties. Multinational corporations have been conspicuous, sometimes as casualties but more often as beneficiaries, and have provoked the understandable suspicion that they are manipulating the process to privately profitable but socially undesirable ends. In particular they have been accused of becoming more powerful than governments and of living beyond the reach of the law.

The behaviour of companies of all sizes, and especially of the world's leading corporations, has certainly changed radically in response to globalization. The production of many goods (and some services) is being organized increasingly on a global basis. This is reflected in the growth in trade in intermediate goods, the goods that are inputs or components in the production process, and in the significant expansion of outsourcing. Components now account for nearly a third of world trade in manufactures.

Corporate ownership, too, has become more international. The clearest reflection of this is in the increased stock of foreign direct investment (FDI). There have been surges in FDI in the last two decades, in 1983-9 and again since 1993. This is mainly a phenomenon that has taken place within the OECD, with more than 60% of the world stock of FDI in 1997 located in North America or the European Union, but flows of foreign direct investment to developing countries have also increased. This increase occurred during the 1990s, and it slowed down at the end of the decade. Greater macroeconomic stability compared with the 1980s helps explain why some developing countries started to capture a bigger share of the investment flows. There is also evidence that middle-income countries were increasingly able to offer potential investors a pool of skilled labour. Multinationals are not drawn only by low wages, but also by labour skills and the presence of other firms in the same business generating the know-how that allows clusters of similar businesses to flourish. If low wages alone were enough of an attraction, more FDI would have flowed to the poorest countries in Africa, rather than predominantly to a small number of middle-income countries in Asia and Latin America. But the beneficiaries have been Malaysia rather than Malawi, Singapore not Senegal.

In response to the growth in FDI, activist opponents of globalization have drawn attention to the low pay and working conditions of workers employed by multinational corporations. Compared to the comfortable living standards of the countries from which most activists come, these conditions are indeed shockingly poor; many workers receive less than $5 a day. Even more shocking, however, are the pay and conditions that prevail elsewhere in poor countries - in the domestic manufacturing sector, for instance, and even more so in the rural agricultural areas where labourers often receive less than $1 a day. The evidence strongly suggests that workers in export sectors usually have better wages and conditions than their compatriots in other types of work, which is the relevant standard of comparison. Workers in developing countries would almost certainly be made worse off by the imposition of industrialized country labour standards, which would make them uncompetitive and force them back to the abject poverty they have fought so hard to escape.

Better labour standards could help poor countries, and the poor within them, particularly by ensuring that workers are not lured into jobs that are more difficult or dangerous than they seem to the job-seeker. But standards must be set at appropriate levels and command wide support. Although one might reasonably fear a ‘race to the bottom’ in labour standards, triggered by competition for foreign investment, in practice there is no sign that this has happened overall. If anything, the reverse may be true. The things that attract FDI include some of the very characteristics - an educated, productive work-force and a predictable business environment - that are in the interests of workers themselves.

In addition to reorganizing their production globally, companies are also changing their business methods and organizational structures. Brands and business models have become more international. Internal structures are changing to reflect the internationalization of the business. Cross-border mergers and acquisitions have grown dramatically in number and scale, although this is closely linked to the business cycle and is therefore currently in a slow period. These widespread changes have given rise to various claims about the increased, and by implication unchecked, power of multinational corporations. One response is the greater prominence of questions of corporate governance, whether this takes the form of codes of conduct (mainly in Europe) or shareholder activism (mainly in the United States).

There is nothing in economic theory to say that one form of corporate governance is always better than another. It depends on the circumstances. Indeed, the competing models - broadly, the Anglo-American market-based system and the German or Japanese alternative based on long-term relationships - have been in and out of favour at different times. The latter was more highly regarded in the 1980s but fell out of fashion in the 1990s. Each enjoyed its period of acclaim depending on when companies operating in the competing framework could raise capital more cheaply. But the cost of capital seems to have depended more on asset price bubbles, such as the Japanese real estate bubble in the 1980s and the Nasdaq bubble in the 1990s. Now that has burst, the intellectual pendulum seems to be swinging away from the Anglo-American corporate governance framework.

There is still widespread concern, however, that the international integration of capital markets is forcing more and more companies to conform to the Anglo-American framework. This dismays those who see value in the long-term relationships fostered by the alternative framework. There are few hard facts backing up these corporate governance concerns. Although there have been a few high profile takeover bids in Continental Europe, hostile takeovers are few and far between. Most US companies are no longer vulnerable to hostile bids. The United Kingdon is the only country with an active and open ‘market for corporate control’. While shareholders’ rights have been strengthened in some other countries, it is only in the United States and United Kingdon that the rules promote shareholder value above all else. Besides, an increased interest in shareholder value could well be the result of the growth in private savings invested in pension funds in the developed countries, rather than being due to globalization.

The main evidence that global integration is enforcing any degree of greater conformity is in the increase in the number of companies seeking cross-listings on overseas stock exchanges, mainly in the United States. And the main impact is on accounting standards, disclosure requirements and minority shareholder protection, rather than the structures of corporate governance. This raises the question whether the governments that set and enforce these standards are up to the job. Or have corporations now become so powerful that they are beyond the reach of government accountability? The recent collapse of Enron has increased these fears.

1.4.2 Governments

Governments set the framework for corporate activity. This includes taxation and public spending; regulation and competition policy; education and physical infrastructure. These are some of the areas where public concerns about globalization in the developed countries are most pronounced. Can governments manage the process of change, or are they helpless victims of events and of corporate lobbying power?

Take taxation, for example. It has become a commonplace among critics of globalization to say that the increasing freedom of capital to cross national borders is undermining the ability of governments to raise the taxes they need to finance their basic functions, especially the provision of social insurance and basic welfare. Multinational companies weighing up their foreign direct investment decisions do indeed explicitly compare the tax rates and the public services offered in a range of competing host countries. The pressure of competition means companies are usually seeking to contain or cut their costs. Meanwhile governments are increasingly competing with each other as well, in order to attract capital and retain skilled labour; low taxation is one area of competition. Pessimists foresee three possible outcomes.

First, general levels of taxation and public expenditure could end up lower than citizens would wish. This could undermine the viability of the 'European social model'. Second, governments might distort the pattern of expenditure systematically towards the kind of public goods and services that are valued by highly mobile firms and individuals, while ignoring those that are valued by the less internationally mobile. Third, tax rates could end up higher for the immobile factors such as unskilled labour than is either efficient or fair, undermining the progressivity of the income tax system and under-taxing capital.

These are the fears. What about the evidence? It does not offer much support for the pessimists' case. Although the 1980s are widely thought of as a tax-cutting period, in the industrialized countries the tax burden actually continued to rise steadily, as it had risen in the 1970s. Still, the share of business taxes in that burden fell in a number of countries. What took the strain in some countries were taxes on employment, which rose in Canada, Germany and Japan. In the United Kingdom, by contrast, the share of revenues from taxes on goods and services increased. Overall, there is only weak evidence that greater mobility of capital has resulted in systematic changes in the tax structure, and no evidence at all that it has resulted in a fall in overall revenues compared to earlier periods. If anything, the continuing upward drift in the share of taxes in GDP suggests a strong underlying tendency for government to grow. If so, forces for reductions in some taxes due to globalization could be a helpful corrective.

Taxation is not the only contentious area. Some critics allege a similar 'race to the bottom' in environmental standards as a result of governments competing for foreign investment. But, just as in the case of taxation, the evidence does not back up the claim of declining standards. In fact, internationally mobile firms tend to use cleaner technology than others, if only because they are subject to stricter regulation in their home markets and because they tend to use reasonably standardized methods around the globe.

There are of course serious environmental externalities. For instance, energy and forests do seem to be systematically underpriced by developing countries that specialize in exporting them. Even if trade is not the culprit, it exacerbates the problem and can therefore have damaging environmental effects. There are other environmental costs, too, such as the heavy use of pesticides in export-oriented agriculture, although in manufacturing it is production for domestic consumption that tends to be more polluting than production for export. Even so, restricting trade will never be a better solution than domestic policies that tackle the underlying environmental externality. These can be very difficult to implement, though, often falling foul of powerful domestic vested interests. Some environmental problems also fall mainly on other countries, so there is little incentive to resolve them. Depending on the circumstances, the difficulty of adopting the better policies could be an argument for proceeding cautiously on trade liberalization. But there are better ways of inducing developing countries to improve environmental standards than by tying these to trade liberalization. For example, official development aid could be used to help poor countries afford higher standards in specific industries.

A third contentious area is the protection of intellectual property in global markets. Here, there is a more legitimate cause for concern. But the ground for this concern is not that powerful companies could play poor country governments off against each other. Instead it is that governments of rich countries are protecting their own corporations, the owners of a vast amount of intellectual property, against the interests of the citizens of the poorer countries. They are doing so to try to claim a large proportion of the benefits of globalization for themselves. Intellectual property needs protection, and there are sound reasons for ensuring that those who innovate to the benefit of society should be rewarded. But the design of an appropriate intellectual property regime requires a trade-off: enough protection to stimulate innovation, but not so much as to stifle diffusion of the knowledge created. Globalization makes this trade-off easier because it extends the markets for products that embody intellectual property. It thereby increases the potential rewards to any innovator, whether or not those new markets offer the same degree of intellectual property protection as the home market. When markets are expanding, therefore, there is less reason to worry that innovation will be inadequately rewarded; we can afford to give a higher priority to encouraging diffusion.

Industrialized country governments should not insist that all these new benefits from globalization should accrue to the existing patent holders. On the contrary, the benefits should be shared. There is, for example, no reason why companies making AIDS drugs should expect to be able to charge as high a price as they might like in developing countries. But globalization also makes it easier for imitators to compete with the innovating company in its existing markets. It is valid for industrialized country governments to be concerned about the effect of reimports of pirated software or CDs; but in practice such fears may be overdone. Consumers very often prefer to buy authentic products rather than pirate copies. Moreover, many industries demonstrate vigorous innovation despite frequent imitation - financial services is one example.

Finding the right balance is inevitably an empirical matter. There is no reason to believe that point has been reached, but the ongoing negotiations between governments over the appropriate global intellectual property regime should recognize the legitimate countervailing interests.

These issues all illustrate the point that governments both can and should regulate the activities of corporations, and that globalization changes some of the trade-offs involved in important ways. Episodes such as the Enron collapse indicate that regulation will often prove inadequate, and the highest vigilance is needed to ensure that governments do not become captured by special interests. But such problems have been with us for a long time, and there is no evidence that globalization is making them worse. On the contrary, globalization increasingly subjects corporations to the constraints of competition with each other, constraints that in some respects make the task of government easier.

1.4.3 Civil society

Linked to fears about the scope for governments to shape society in a globalized world is the claim that globalization may be undermining our societies directly - that it is undermining 'social capital'.

Citizens have many forms of association with each other that do not take place in markets and are not mediated by states and corporations. Civil society consists of many diverse institutions - clubs, churches, political parties, trade unions, charities, non-governmental organizations, neighbourhood groups, lobbies, self-help organizations, sporting bodies - that allow people to associate with each other for their mutual benefit. There is growing evidence that these networks help the rest of society and the economy. They provide checks and balances to the power of the state (and the corporation). They foster the cooperative habits and mutual support that can encourage social cohesion and contribute to economic growth. This can occur in various ways, from promoting greater political cooperation to improving the performance of financial systems and increasing the chances of success of development projects. The positive role of social capital, at least at the microeconomic level, has been documented in a growing number of studies.

Increased mobility and decreasing social homogeneity are the mechanisms through which globalization could potentially undermine social capital. Some studies link greater income inequality and increased migration to declines in measures of social capital. On the other hand, investment in social capital increases with education levels, so that any adverse effects of higher mobility by itself could be more than offset by the educational investments that tend to accompany mobility.

Of course, the impact of globalization on social capital need not be confined to the local. Many commentators have pointed out the paradox that the organizations that have protested most vigorously and effectively against globalization have also benefited hugely from the improved communications and transportation technologies that have enabled them to coordinate their protest actions. In other words, active citizenship is globalizing too. This does not mean that there is no reason to be concerned about the implications of globalization for civil society. On the contrary, there are all too many pockets of deprivation, and we are all more aware of them because of the mass media. This greater visibility is two-way, making those in deprived communities far more aware of what they lack.

But there are no reasons either for thinking that globalization limits the tendency of citizens in general to form voluntary associations with one another: it is just that these associations are less predictable in scope, geographical location and general character. Like many of the effects of globalization, therefore, the impact on civil society is likely to increase the overall diversity of outcome, to the benefit of those who prosper and the increasing bewilderment of those - an important minority - who lose out.

1.5 How can policy help?

There is a huge amount of research into the complicated links between the policy actions of governments and both the extent and the effects of globalization. Some of this has proved difficult to interpret, beginning with evidence on the most direct of policies, namely those that increase openness to trade. The empirical evidence on the relationship between openness and growth is ambiguous - inevitably so, as it is hard to single out the effects of the different aspects of openness as opposed to the vast array of other circumstances and policies that affect economic outcomes. Most of the empirical evidence is drawn from cross-country regressions whose results are hard to compare because they use different measures of openness and different specifications. The results from these studies are not robust, although for the most part they suggest the impact of trade on income inequality is modest. But although they do not provide much help in fine-tuning the ‘right’ degree of openness to trade, or in deciding how great a priority trade liberalization should be for any given country, they do suggest the dangers implicit in certain extreme responses. As Dani Rodrik, who has cast doubt on some of the optimistic empirical findings, comments: ‘No country has developed successfully by turning its back on international trade.’

On average, economic growth is good for the poor, and trade is good for growth. Trade also tends to be associated with lower inflation and with less corruption, both beneficial for growth and especially helpful to the poor. The weight of direct and indirect evidence suggests that a significant degree of openness to trade is at least a necessary condition for sustained economic growth. Financial liberalization and global financial integration also contribute positively to economic growth, through greater access to foreign savings, to foreign direct investment, and through the deepening of domestic financial markets. Although openness to foreign capital also raises countries’ vulnerability to financial crises, reversing financial integration with capital controls does not reduce the frequency of crises. For developing countries to capture the growth benefits of trade and of financial openness, however, they will need to build complementary institutions, such as sound capital and insurance markets, and implement complementary policies such as investment in education. Depending on the institutional context and other policies, the effects of trade in boosting growth and reducing poverty will vary country by country.

The effects of openness on both poverty and inequality depend strongly on context and policies - there is no inevitability about the outcome. The mixed record of globalization in recent years, and particularly the way the poorest countries have been left so far behind, makes it essential to develop a strong policy response.

1.6 Shaping globalization in future

While there is little evidence to back some of the stronger claims made by critics, there is nevertheless a substantial policy action list to limit the costs of globalization and bring all countries to share in its benefits. The body of our report goes into full details, but these are priority areas.

1.6.1 Education

Global integration is likely to increase the return to education, but most people in developing countries and low-income groups in the developed countries may be unable to afford to invest in education because of their low savings and lack of access to credit. Education, the formation of appropriate skills, is an increasingly valuable government response to globalization. Countries will be unable to benefit from globalization without an adequate skill base. But while developing country governments might have every incentive to invest in public provision of education, most are operating under tight budget constraints.

If the rich countries are serious about ensuring that globalization benefits the world's poor countries and regions, they will need not only to target aid flows towards education and the building of skills, but also to recognize that an immigration policy aimed at selective poaching of scarce skills can undermine the beneficial effects of their aid. In many developing countries, development aid is now focused much more on the importance of primary/secondary education (especially of girls) than the tertiary level. This could tend to reduce inequality in future.

But education policies may prove to be ultimately unsustainable if other domestic policies do not generate enough jobs. In North Africa, for example, education policies often simply serve to add to the pool of skilled unemployed and increase migration pressures. The role of governance and institutions in creating sustainable development is likely to be fundamental here. Moreover, as suggested by the fact that the perpetrators of 11 September were educated, middle-class men from societies in which these individuals are to a large part shut out of political and economic participation, changing the character of governance has more than purely domestic consequences.

In some developed countries there has been a substantial increase in inequality, largely as a result of an increase in the income premium to higher skills. Education and redistributional policies are key to reducing inequality. Globalization can make this more difficult because increased mobility means that some of the benefits of greater access to education in one country can go to other countries. Could countries be sure of reaping the benefits of a generous education policy? Can taxes be instituted so as to make sure this happens? Better policy coordination could be extremely useful, so that the benefits of a generous education policy accrue to the citizens of the country that are being taxed to provide it.

1.6.2 Regulation

While there is no evidence of a race to the bottom in environmental standards or taxation, increased trade might exacerbate the social costs of existing market failures such as the underpricing of environmental resources. Domestic policies to tackle such externalities are therefore becoming more important than ever.

In other areas of policy greater international cooperation is needed. Countries can have a collective interest in an order of law that restricts their freedom to pursue policies that may be individually rational but collectively damaging. For instance, competition policy is progressively being coordinated internationally, most notably for cartels. There is no reason to think there are more international cartels operating, but more of them are being investigated and prosecuted, including recently the Lysine and vitamin cartels. So far these have involved cartels with strong and damaging effects within the territory of rich economies. Developing countries could be persuaded that they too have a stake in the international rule of competition law by a high-profile prosecution of a cartel whose price-fixing has taken place primarily outside Europe, the United States or Japan. Such cartels certainly exist.

For an international legal or regulatory regime to attain legitimacy it is important that it yield visible benefits to all those who sign up to it, benefits that outweigh the visible costs of abiding by its precepts at all times. In some areas of regulation, international cooperation will be complicated by spillovers of policies across borders. There are also free-rider problems that tempt governments to go their own way because cooperation is hard to achieve, monitor and enforce - environmental policy offers one example. In such areas, stronger international institutions are needed to encourage governments to opt for the cooperative policies that will in the end benefit everybody more. Also, in many areas of regulatory policy, a stronger institutional framework placing greater emphasis on the needs of poor countries is needed. Without this, developing countries will never be able to deal with difficult issues such as intellectual property rights, competition policy, environmental standards, disease and terrorism. In this institution-building task there is a role for non-governmental organizations as well as nation states and inter-governmental bodies. There is also a major role here for aid: development resources should be channelled less towards traditional infrastructure projects and more directly focused on poverty, governance and the building of civil society.

1.6.3 Financial integration

Financial integration brings benefits but can expose countries to the risk of financial crises. To the extent that currency crises or banking crises have simple causes, such as unsustainable domestic policies or the expectation that the government will always bail out the banking system, the solutions are straightforward. More careful opening up of the financial markets, stronger financial supervision, and possibly the regulation of inflows of capital are all appropriate.

Despite preventive measures, a country's currency may be 'attacked' or it may suffer a 'run' on its international debts simply through a contagion effect - because it is geographically close or otherwise similar to another country undergoing a crisis. Domestic policies might not always be enough to avert a financial crisis. Some frequently proposed solutions would not work. There is no evidence that capital controls reduce the frequency of financial crises. A 'Tobin Tax' is unlikely to reduce exchange rate volatility, and could very possibly increase it through reducing liquidity in foreign exchange markets. The problem is fundamentally that there is no way to tax those transactions that tend to increase asset market fluctuations without also taxing those that tend to dampen them.

A better way to deal with contagion is the international provision of liquidity to countries suffering a speculative attack, provided their fundamentals are sound. This is easier said than done, because apparently unlimited bailouts can create 'moral hazard', encouraging too much risky investment in the first place. So the provision of liquidity needs to be limited to genuine cases of contagion. But these are difficult to detect: the soundness of 'fundamentals' is a matter of judgement, often exercised with some political discretion.

There remains a need for further reforms of the international economic architecture, including the orderly resolution of debt crises. In some cases countries may need a breathing space to restructure their debts; in others, the debts may be unsustainable and debt relief may be necessary. There has been some progress in elaborating proposals for new internationally agreed procedures and for improvements in the working of the IMF and other international financial institutions. Here the EU could take a major role in achieving a better global 'financial architecture', by pushing for implementation of an agreed position.

1.6.4 Trade and aid

When it comes to ensuring that the benefits of globalization are shared widely, and particularly with the countries left behind so far, there is no better way than for developed countries to open their own markets further and to increase the amount they give in development aid.

On trade liberalization, the key areas are agriculture and textiles, in both of which developed countries should go much further in opening their markets. This is not only for the sake of developing country exporters; some estimates suggest free trade would reduce each EU citizen's food bill by about 300 euros a year.

The EU's resistance to agricultural trade liberalization has had other costs. For instance, it has undermined the credibility of European attempts to raise concerns about the safety of hormones in beef imports or genetically modified organisms, which end up looking like new disguises for old-fashioned protectionism. Agricultural protection is often justified in terms of other objectives apart from boosting farm output and incomes — for example, protecting rural societies or safeguarding the environment. Like any domestic objectives, however, these are best tackled through domestic policies, not trade policy.

Overall, a 40% trade liberalization in agriculture would generate the same gains as a 40% liberalization in the much bigger manufacturing sector, or about $70bn a year. Most of the gains would accrue to developed countries, but big agricultural exporters such as Argentina and Brazil and other developing countries including Sub-Saharan Africa and India would also enjoy a significant share. Increasing agricultural incomes has particularly strong benefits in terms of reducing poverty.

Developed countries should also raise their aid steadily to the 0.7% of GDP target and improve its effectiveness. Without such progress any claims they make about the benefits of globalization will always lack true credibility. More aid should be directed to institution building and technical assistance instead of the high profile infrastructure projects of the past.

1.7 Conclusions

The benefits of globalization cannot be realized without the kind of complementary institutions and policies discussed in this report. They are necessary to tackle three main problems. One is that some countries have been left out of globalization, whether because of protectionism or because of their inadequate levels of physical and human capital. A second set of difficulties is caused by the uneven distributional consequences of globalization; whether inequality is rising or falling — and it is not clear which is a better description of the reality — it is certainly more visible now, because of mass media. Third, there are international externalities that already existed but are made more costly by globalization. Resolving these involves difficult tasks of coordination and institution building.

Of course, there are many other aspects of globalization not addressed by economic analysis and evidence. This report does not touch on cultural questions and other areas such as disease or the arms trade. We do conclude without reserve, however, that the evidence weighs strongly in favour of the benefits of globalization. What is more, there are feasible policies that will limit the costs. There is no excuse for developed and developing country governments not to address themselves to these policies to make globalization work. The alternative of regressing into global disintegration would be far worse.

Outline and scope of the report

Section 2 of the report presents some historical background, which makes it clear that globalization is not so new, in some dimensions, as is commonly thought. In Section 3, we examine what is known about how globalization expands the reach of markets, including the markets for goods and services as well as the markets for capital and labour. Section 4 investigates what have been the effects on poverty and inequality in the world. Section 5 considers whether globalization will pay adequate attention to the interests of future generations. Section 6 examines how various institutions have responded, and potentially could respond, to these developments, including corporations, national governments and the many institutions of civil society. Section 7 looks at the appropriate response of the European Union. Section 8 concludes by summarizing what economic research has to say about the concerns of the anti-globalization campaigners.

2. What is old and what is new about the current wave of globalization? an historical perspective

There is a profound disconnection between academic and popular opinions concerning the benefits of globalization. While many economists and policy-makers are convinced of the benefits of liberalizing markets internationally, the broader public is not so sure. Recent street demonstrations may not be representative of mass opinion regarding the market, but nonetheless there is deep scepticism regarding trade, migration and capital flows in many countries.

Figure 1: Attitude towards trade and immigrants

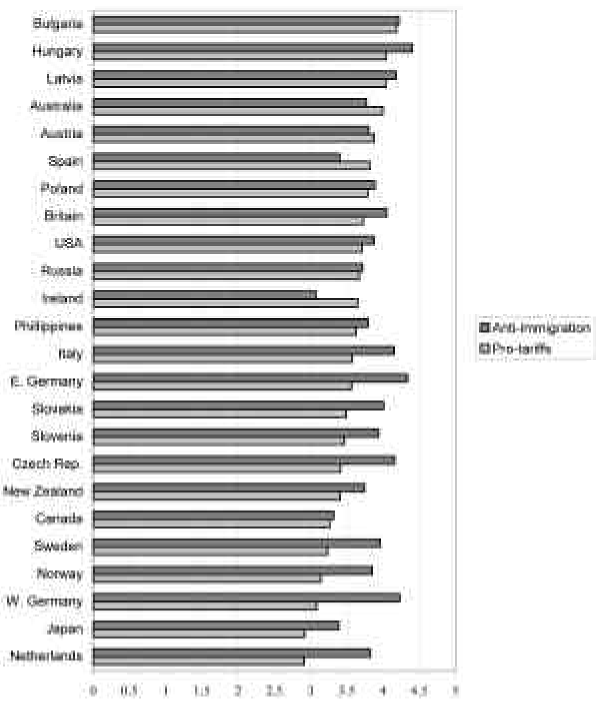


Figure 1 reports some results of an international survey carried out in 24 countries (in the OECD, central and eastern Europe, and the Philippines) in 1995 (see O'Rourke and Sinnott, forthcoming). Two questions bear directly on attitudes towards globalization. The first asked to what extent respondents agreed with the statement that their country 'should limit the import of foreign products in order to protect its national economy'; responses are here re-ordered from 1 (strongly disagree) to 5 (strongly agree). In addition, respondents were asked if the number of immigrants to their economy should be increased a lot (1), a little (2), remain the same (3), be reduced a little (4) or reduced a lot (5). Figure 1 reports the mean response to these questions in each country: a score greater than 3 indicates that on average respondents were leaning towards greater restriction, rather than freer trade or immigration. In every country in the sample, respondents on average favoured lowering the number of immigrants; in every country in the sample bar two (the Netherlands and Japan) respondents on average favoured limiting imports.

Popular opinion may therefore present an obstacle to the further integration of the international economy. A wide variety of ills are ascribed to globalization. It is said to increase inequality, lower labour standards, pollute the environment, and increase macroeconomic instability. It is also commonly claimed that all of this is new: that globalization and its associated problems are a defining feature of our age and present policy-makers with a range of unprecedented challenges. But is any of this true?

Any assessment is bound to be complicated. There are many different dimensions to globalization, even as it applies to the strictly economic sphere. One task is to assess the effects of globalization on markets. These market interactions take place through flows of commodities, skilled labour, unskilled labour, capital and technology. They may have very different effects on national economies. Some may increase inequality in a given country, and others reduce it. Thus unskilled labour immigration into a rich country could be expected to increase inequality there, while skilled immigration could be expected to have the opposite effect. The impact of commodity trade on inequality will vary across countries, depending on whether they are exporters of unskilled-labour or skilled-labour-intensive goods; the impact of capital flows may depend on patterns of complementarity or substitutability with other factors of production; and so on. It therefore makes little sense to speak of the overall impact of 'globalization' on an economy (since commodity, factor and technology flows may be having opposite effects); and even less sense to speak of 'globalization' having a particular effect on the economies of the world as a whole (since any given dimension of 'globalization' may be having opposite effects in different countries). It simply is not possible to generalize to such a degree.

Furthermore, there is no reason why trends in different types of market, for commodities and capital, say, should always move in parallel. For example, the post-1945 settlement involved the setting up of the GATT and a commitment on the part of major participants to the gradual liberalization of trade; but the same Bretton Woods settlement also institutionalized capital controls, in order to fix exchange rates and run Keynesian macroeconomic policies.

Although 'globalization' became a buzzword during the 1990s and is seen as a defining characteristic of our time, international economic integration is hardly a new phenomenon. And globalization has not been an irreversible process: rather, it has periodically been supplanted by the forces of disintegration. Sometimes these forces have been unleashed by war; at other times, by world depression; and sometimes they have arisen as a political response to the distributional consequences of globalization itself. In this section we outline the evolution of international economic integration over the past 150 years, beginning with commodity markets.

2.1 International commodity market integration

The nineteenth century saw a series of dramatic technological developments (chiefly the steamship and railroad), which were to have a profound impact on international trade. The impact on transport costs was substantial: British ocean freight rates were relatively constant between 1740 and 1840, before dropping by about 70% between 1840 and 1910. Until the 1870s, trade policy reinforced these trends. Britain liberalized from 1815 to 1846, when it took the decisive step towards free trade. The years after 1860 saw significant European tariff cutting: for example, by 1877 Germany 'had virtually become a free trade country' (Bairoch, 1989, p. 41). In the late 1870s, however, cheap New World and Russian grain began depressing European land values, sparking a powerful continental protectionist response. In the United States, Northern victory in the Civil War ensured high levels of protection for the rest of the century. On the other hand, in Asia declining transport costs did not have to contend with rising tariffs: China, Japan, Korea, Thailand, India and Indonesia all moved towards free trade, most forced to do so by colonial dominance or gunboat diplomacy.

The net result was substantial, world-wide commodity market integration. For example, Liverpool wheat prices exceeded Chicago prices by 58% in 1870, but by only 18% in 1895; the cotton price spread between London and Bombay fell from 57% in 1873 to 20% in 1913; while the jute price spread between London and Calcutta fell from 35% to 4%, and the rice price spread between London and Rangoon fell from 93% to 26% (Collins, 1996).

Figure 2: Unweighted world average own tariff, 35 countries
(%)

Transport costs continued to fall during the twentieth century, but at a slower rate. British tramp freight rates increased sharply during the war, remaining abnormally high until 1920, then fell somewhat and stayed broadly flat to 1936 at a level substantially above the 1914 level (Findlay and O'Rourke, forthcoming). Ocean freight rates actually increased between the late 1950s and early 1980s, and then fell sharply thereafter (Hummels, 1999a); on the other hand, air freight rates have declined dramatically from 1950 onwards, with only some reversal in the 1970s. The result has been a more than ten-fold increase in the ratio of air to ocean shipments in the years since 1962. The rise of air freight, containerisation, and faster ocean shipping has brought savings in time in transit, which have (for the United States) been estimated to be equivalent to a 12 percentage point reduction in tariff barriers (Hummels, 2000).

Tariffs have moved quite differently. There was a rise in inter-war tariffs and a decline since 1950, with tariffs much lower today than in 1913. The estimate of the unweighted world average tariff rate given by Clemens and Williamson (2001) and illustrated in Figure 2 rises from about 12% in 1865 to 17% in 1910. In the inter-war period trade wars pushed the tariff rate up to 25% at its 1930s peak and, in addition, quantitative trade restrictions proliferated, affecting perhaps 50% of world trade (Gordon, 1941). After the Second World War this average tariff rate stood in the range of 12-15%, where it remained until the 1970s, falling to 7-8% in the late 1990s.

For the industrial countries, the post-war decline in tariffs has been steeper. Among industrial countries tariffs on manufactures have fallen from around 40% in the latter part of the inter-war period to around 4% now (Table 1). Furthermore, since the Kennedy Round, GATT/WTO negotiations have included agreements on non-tariff barriers and trade in agriculture. The quantitative restrictions of the 1930s and 1940s among the OECD countries have mainly disappeared (Daly and Kuwahara, 1998). Tariff rates on agricultural goods remain high, in 1999 averaging 17.3% in the EU and 11% in the United States. In the Uruguay Round, developed countries agreed to an average reduction of 36% and developing countries to a 24% cut over a ten-year period (WTO, 2001). Since the formation of the WTO in 1995, negotiations have been further expanded to incorporate trade in services.

Alongside multilateral reductions in tariffs, there has been a move towards increased regionalization (see section 7.1). This trend has been especially pronounced in the past decade or so, with developments in Europe (EU enlargement and bilateral agreements), the Americas (NAFTA, MERCOSUR), Asia (ASEAN, the South Asian free trade area, and APEC), and Africa. As of mid-2000, 114 regional integration agreements had been notified to the WTO. More than a third of world trade now takes place within such agreements - almost 60% of world trade if the Asia Pacific Economic Cooperation (APEC) is included (World Bank, 2000).

Not all countries today have lower tariffs than in 1913, notable exceptions being the United Kingdom, China and India. Tariffs are much higher now in developing countries than in rich countries, while the opposite was true of the late nineteenth century. In addition, rich countries restrict agricultural imports more today than one hundred years ago, and non-tariff barriers are probably more important today as well. For all these

Table 1 Average tariffs on manufacturers, selected countries, 1913-98

	1913	1931	1950	1980	1998/99
Austria	18	24	18	14.6	NA
Belgium	9	14	11	NA	NA
Denmark	14	-	3	NA	NA
France	20	30	18	NA	NA
Germany	13	21	26	NA	NA
Italy	18	46	25	NA	NA
Netherlands	4	--	11	NA	NA
Spain	41	63	--	8.3	NA
Sweden	20	21	9	6.2	NA
UK	0	--	23	NA	NA
EU	NA	NA	NA	8.3	4.1
Russia	84	**	**	**	13.4a
Switzerland	9	19	--	3.3	3.2b
Australia	16	--	--	--	6
Canada	26	--	--	--	4.9
Japan	25-30	--	--	9.9	5.5
New Zealand	15-20	--	--	--	4.4
US	44	48	14	7	4.5
Argentina	28	--	--	--	14
Brazil	50-70	--	--	--	15.2
Colombia	40-60	--	--	--	11.4
Mexico	40-50	--	--	--	12.6
China	4-5	--	--	--	17.4
India	Approx. 5	--	--	--	34.2
Iran	3-4	--	--	--	--
Thailand	2-3	--	--	--	47.2c
Turkey	5-10	--	--	--	0.25

Sources: Bairoch (1989; 1993), World Development Indicators 2000

Note: NA = not applicable, -- = not available, ** refers to the fact that the USSR ran such a restrictive trade policy that average tariffs were irrelevant, a = 1997, b = 1996, c = 1993.

reasons, one cannot automatically assume that average, world-wide protection is lower now than then, although it clearly is for certain economies, such as the United States.

Despite these transport cost and trade policy developments, there is no discernible general trend towards commodity price convergence during the past four decades (Findlay and O'Rourke, forthcoming). Nevertheless, the ratio of foreign trade to world GDP has expanded. The upward trend of this measure of 'openness' during the century up to the First World War was reversed sharply in the war and then the 1930s. Table 2 shows that merchandise exports accounted for a smaller share of world GDP in 1950 than they had done in 1913; and that the 1913 levels of openness had not been recouped as late as 1973 in many countries. Indeed, consistent with the average tariff

Table 2 Merchandise exports as a share of GDP (%)

Country	1820	1870	1913	1929	1950	1973	1992	1998
France	1.3	4.9	7.8	8.6	7.6	15.2	22.9	28.7
Germany	NA	9.5	16.1	12.8	6.2	23.8	32.6	38.9
Netherlands	NA	17.4	17.3	17.2	12.2	40.7	55.3	61.2
UK	3.1	12.2	17.5	13.3	11.3	14.0	21.4	25.0
Western Europe	NA	10.0	16.3	13.3	9.4	20.9	29.7	NA
Spain	1.1	3.8	8.1	5.0	3.0	5.0	13.4	23.5
USSR/Russia	NA	NA	2.9	1.6	1.3	3.8	5.1	10.6
Australia	NA	7.1	12.3	11.2	8.8	11.0	16.9	18.1
Canada	NA	12.0	12.2	15.8	13.0	19.9	27.2	NA
USA	2.0	2.5	3.7	3.6	3.0	4.9	8.2	10.1
Argentina	NA	9.4	6.8	6.1	2.4	2.1	4.3	7.0
Brazil	NA	12.2	9.8	6.9	3.9	2.5	4.7	5.4
Mexico	NA	3.9	9.1	12.5	3.0	1.9	6.4	10.7
Latin America	NA	9.0	9.5	9.7	6.2	4.6	6.2	NA
China	NA	0.7	1.7	1.8	2.6	1.5	2.3	4.9
India	NA	2.6	4.6	3.7	2.9	2.0	1.7	2.4
Indonesia	NA	0.9	2.2	3.6	3.4	5.1	7.4	9.0
Japan	NA	0.2	2.4	3.5	2.2	7.7	12.4	13.4
Korea	0.0	0.0	1.2	4.5	0.7	8.2	17.8	36.3
Taiwan	--	--	2.5	5.2	2.5	10.2	34.4	NA
Thailand	NA	2.2	6.8	6.6	7.0	4.1	11.4	13.1
Asia	NA	1.3	2.6	2.8	2.3	4.4	7.2	NA
World	1.0	4.6	7.9	9.0	5.5	10.5	13.5	17.2

Source: Maddison (1995, p. 38). These have been updated for some countries using Maddison (2001, p.363); and for other countries using the raw export and GDP data given in Maddison (2001), where these produced results consistent with the earlier data series. na = not available.

data in Table 1, they had not been recouped as late as 1992 in much of the developing world, and in particular in Latin America and India (not even by 1998).

The rising importance of service sector activities means that the merchandise share of GDP has been shrinking, this tending to pull down the share of merchandise exports in GDP, irrespective of true globalization trends. The growth in merchandise trade has been far stronger relative to merchandise value added than relative to GDP, as Robert Feenstra (1998) has pointed out. The ratio of merchandise trade to merchandise value-added is given in Table 3 and we see that it increased from 13.2% in 1913 to 35.8% in 1990 for the United States, although the United Kingdom only regained its 1913 level in the 1990s.

Other, more qualitative, criteria clearly demarcate the present era as more open than the period before the First World War. First, there are higher levels of 'intra-industry' trade today, relative to 'inter-industry' trade. Prior to 1913 the bulk of trade was inter-industry, as countries exchanged the products of one industry for those of another - often manufactured goods for primary goods. For the last 50 years there has been a

Table 3 Merchandise exports as a share of merchandise value added (%)

Country	1890	1913	1960	1970	1980	1990	1999*
France	18.5	23.3	16.8	25.7	44.0	53.5	64.9
Germany	22.7	29.2	24.6	31.3	48.5	57.8	94.3
UK	61.5	76.3	33.8	40.7	52.6	62.8	64.0
US	14.3	13.2	9.6	13.7	30.9	35.8	47.2

Source: Feenstra (1998) and * updated from OECD Stan 2000 database.

steady increase in intra-industry trade, as countries both import and export products from the same industry - for example, the exchange of one model of car for another model.

Second, over the last 20 years or so there has been rapid growth of trade in parts and components as firms increase their outsourcing and become involved in international production networks (see section 3.3). Yeats (1998) estimates that 30% of world trade in manufactures is trade in components rather than final products. Hummels, Ishii and Yi (2001) find that for ten OECD countries, the share of imported value-added in exports rose by a third between 1970 and 1990, reaching 21% of export value.

These data reflect an increasing 'fragmentation' of firms' production processes. Fragmentation has been partly organizational (sub-contracting within a country) and partly geographical (purchasing from or producing in multiple locations). This global organization of production has been described as 'slicing the value chain' (Krugman, 1995), 'delocalization' (Leamer, 1998) and 'outsourcing' (Feenstra and Hanson, 1996) in the trade literature. Outsourcing of production occurs as firms undertake different stages of production in different countries to benefit from factor price differences. It results in component parts crossing borders multiple times, embodied in various stages of the final product. This increase in outsourcing and the explosion of foreign direct investment and multinational activity since the mid-1980s are an expression of the new way firms organize their production. The process has been greatly assisted by developments in information and communication technologies (ICT), which have reduced the cost of managing and monitoring supply chains.

The third qualitative change is that ICT has made a class of activities 'weightless' - they can be digitized and shipped at essentially zero cost. These include software and media products, and 'IT-enabled services' such as call centres, some accounting services, medical transcription, and so on. Although these activities have expanded rapidly, they still represent a very small share of world GDP. The OECD estimates that all software and computer-related services accounted for 2.7% of US GDP in 1996 and half that figure in other OECD countries. Software products and computer services combined accounted for just 0.8% of US exports in 1996 (OECD, 1999). Even in such a fundamentally weightless activity as banking, it is estimated that only some 17-24% of the cost base of banks can be outsourced (*Economist*, 5 May 2001).

As activities are codified and digitized, not only can they be moved costlessly through space, but also they are typically subject to very large productivity increases and price reductions. Thus, the effect of ICT on airline ticketing (for example) has been primarily to replace labour with computer equipment, and only secondarily to allow remaining workers to be employed in India rather than the United States or Europe. Many of these activities are vulnerable to further technological progress: for example, technology that can capture voice or handwriting may make the booming Indian medical transcription business obsolete.

The consequences of commodity market integration are changing patterns of international division of labour. Figure 3 shows the shares of world GDP attributable to major regions of the world economy at selected dates from 1820 onwards, and Figure 4 gives shares of industrial production for the same regions from 1750 on. Three main phases are apparent in both figures, although more pronounced for industrial production than for GDP as a whole. The first phase is the rise of the United Kingdom and Western Europe as a whole and the dramatic collapse of China and India from these start dates through to the latter part of the nineteenth century. The second phase is the rise of North America. Its share of world GDP and industrial output increased most rapidly from the American Civil War to the start of the Great Depression, peaking shortly after the Second World War. The third phase has its origins in the post-war ‘Golden Age’ of growth, with a large and rapid increase in the shares of Japan, China and other East Asian countries in world GDP and industrial output.

Figure 3: Regions’ share of world GDP

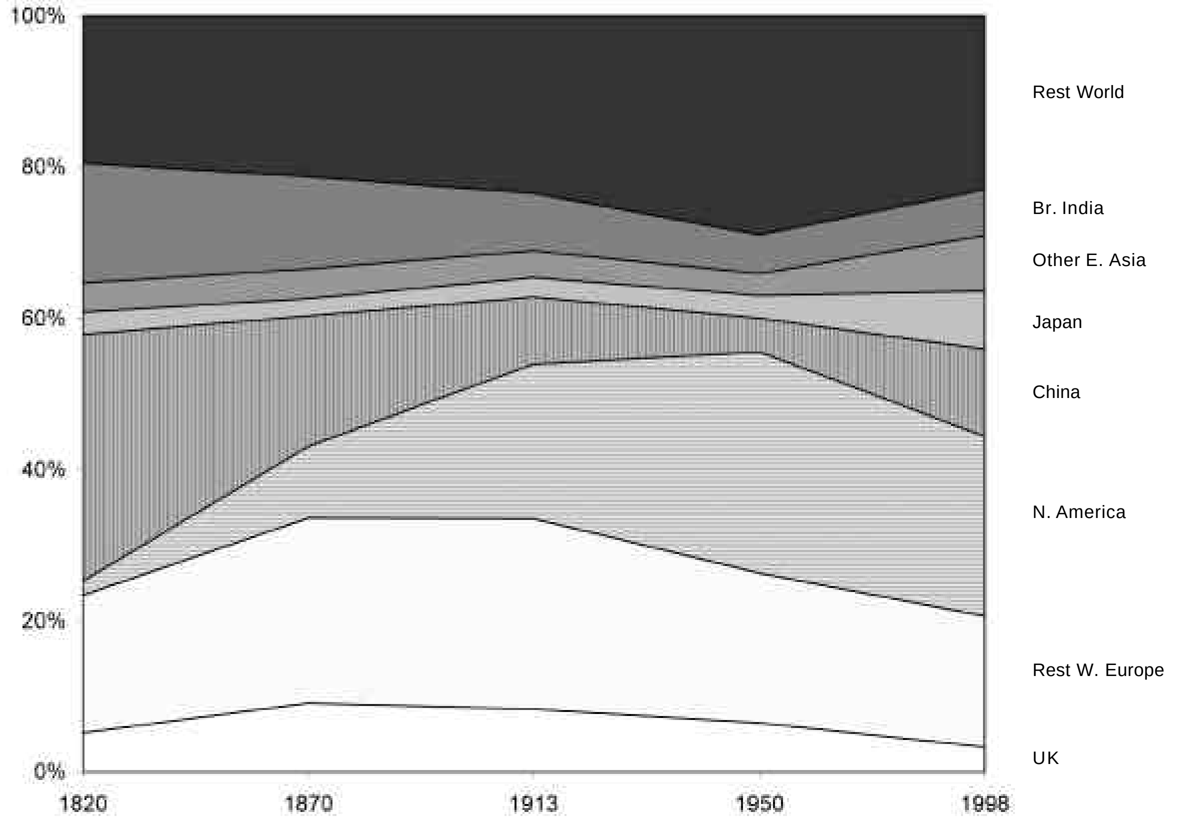


Figure 4 Regions' share in world industrial production

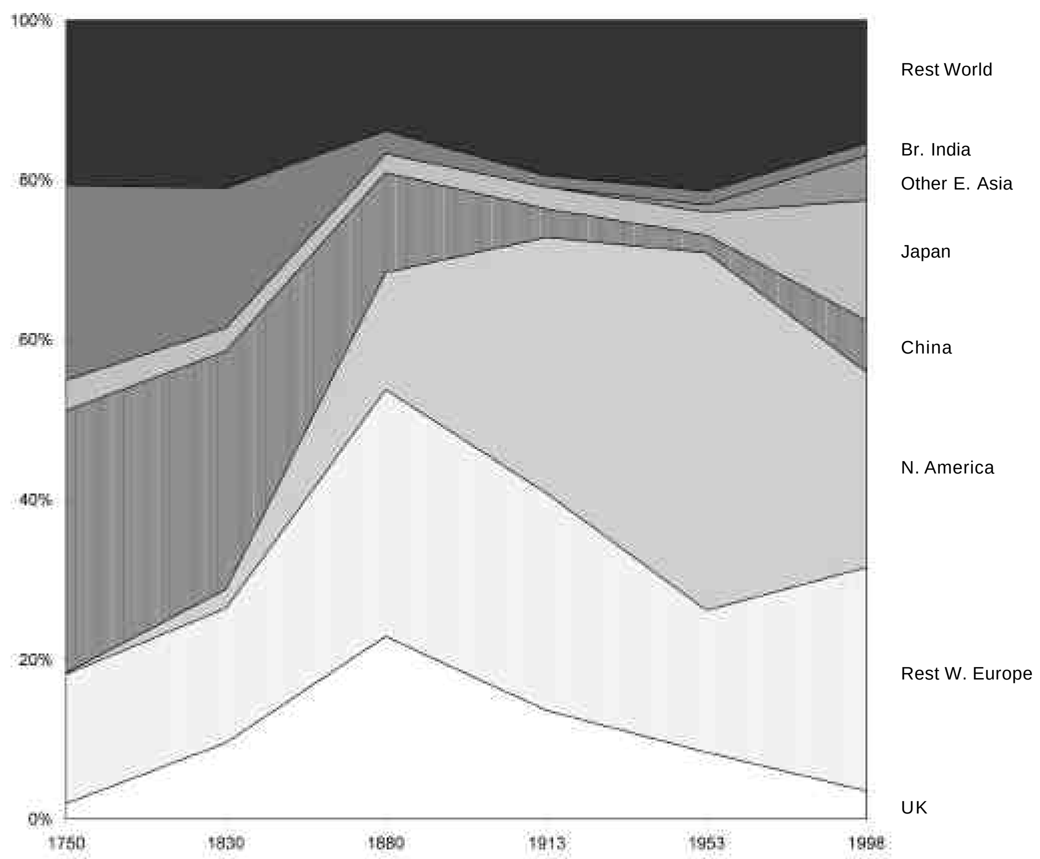


Figure 5 Regions' share in world manufactured exports

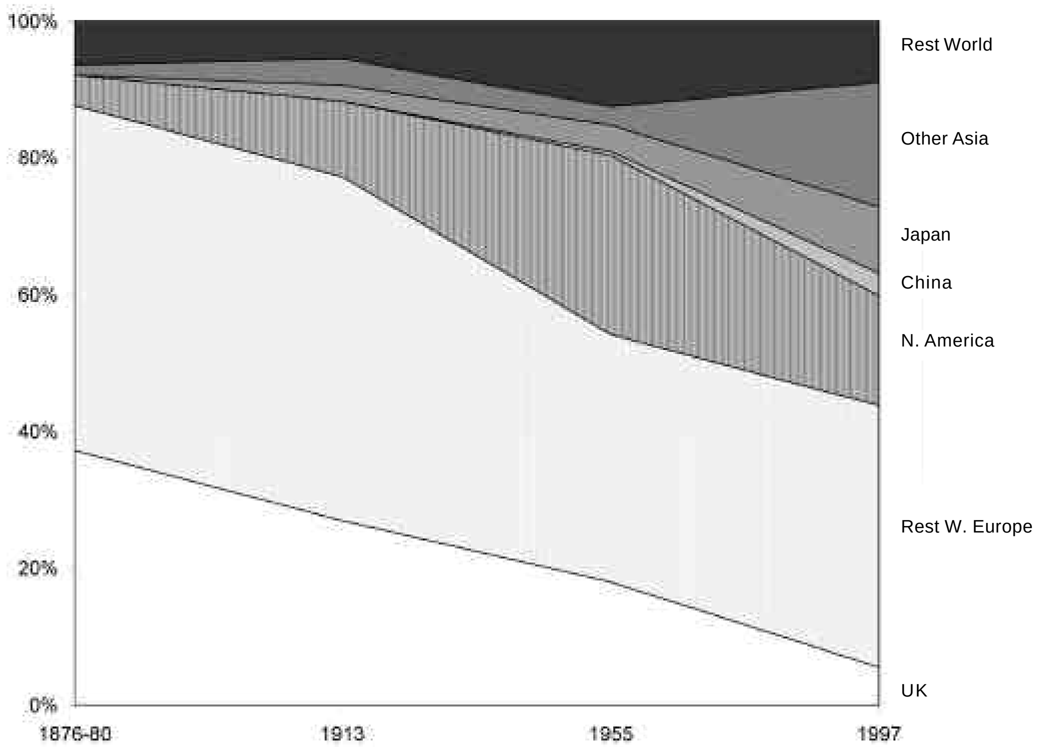


Figure 5 reports manufacturing exports (from 1876-80 onwards). Here, there is evidence of even more concentrated activity. In the late nineteenth century the United Kingdom represented over a third of all exports, even though it had only about 2.5% of world population. It then gave way to North America, which accounted for over a quarter of manufactured exports in 1955 with only about 6% of world population. (Europe looks large in the figure relative to the United States essentially because intra-European trade is reported, in contrast to intra-US trade). The remarkable feature of the last decades of the twentieth century was the rise of Chinese, Japanese and other East Asian manufactured exports, representing a real breakthrough for these newly industrializing countries.

Overall, what can we conclude about commodity market integration over the past 150 years? First, the late nineteenth century probably saw more dramatic progress towards integration than did the late twentieth century. Second, commodity markets are probably even better integrated today (according to price-based criteria), but we do not have the empirical evidence to document this. There are, though, important qualitative differences between international commodity markets today and those in the past.

Nonetheless, at the beginning of the twenty-first century distance and national borders are still powerful barriers to economic interaction. Shipping costs remain important for many commodities, and geographical proximity matters for ‘just-in-time’ production methods and cutting time taken in production. Some information can be transmitted digitally, but for many activities effective information transmission still requires face-to-face contact (Leamer and Storper, 2001), and the difficulties of writing and enforcing fully specified contracts restrict the fragmentation of production. Digitized information has proved less of a substitute for, and more of a complement to, other analogue forms of communication than many people expected - just as computers have not brought us the ‘paperless office’ but seem to have surrounded us with more paper than ever before.

Table 4 Economic interactions and distances
(flows relative to their magnitude at 1000km)

	Trade	Equity flows	FDI	Technology
1000km	1.00	1.00	1.00	1.00
2000km	0.42	0.55	0.75	0.65
4000km	0.18	0.31	0.56	0.28
8000km	0.07	0.17	0.42	0.05

Sources: see text

Controlling for the economic mass of the countries concerned, trade falls off steeply with distance. The elasticity of trade flows with respect to distance is typically estimated to be between -0.9 and -1.5, and the implications of this for trade volumes are given in the first column of Table 4, which expresses trade volumes at different distances relative to their value at 1000km. With an elasticity of -1.25, trade volumes at 4000km are down by 82%, and at 8000km they are down by 93%. Similar results for other sorts of economic interaction are summarized in the remaining columns of Table 4. Portes and Rey (1999) study cross-border equity transactions, and their baseline specification gives an elasticity of transactions with respect to distance of -0.85, so that flows at 8000km are less than one-fifth of those at 1000km. Foreign direct investment (FDI) flows are studied by Di Mauro (2000), who finds an elasticity with respect to distance of -0.42. Keller (2001) looks at the dependence of total factor productivity on R&D stocks for 12 industries in the G-7 countries, 1971-95. Both own and foreign country stocks are significant determinants of each country's productivity, and so too is the distance effect, with R&D stocks in distant economies having much weaker effects than do R&D stocks in closer economies: the effect at 8000km is only 5% of that at 1000km.

2.2. International capital market integration

The figures tell a clear story about capital markets: they were highly integrated in the late nineteenth century, disintegrated during the inter-war period, and are only now recovering the levels of integration experienced in 1913. This U-shaped pattern is apparent in data on current account-to-GDP ratios; on real and nominal interest-rate differentials (Obstfeld and Taylor, 1998); and on the relation between domestic savings and domestic investment in long-run data (Taylor, 1996).

The causes for this pattern have been located in governments' attempts to wrestle with the famous macroeconomic policy trilemma: you cannot have fixed exchange rates, capital mobility and an independent monetary policy simultaneously (Obstfeld and Taylor, forthcoming). This trilemma was resolved in the late nineteenth century by abandoning interventionist monetary policy in favour of the gold standard, which promoted capital flows. Faced with increasingly rigid labour markets, democratization, and eventually the Great Depression, inter-war governments abandoned fixed exchange rates and capital mobility in order to concentrate on internal macroeconomic management. The Bretton Woods settlement opted for fixed exchange rates and monetary independence at the expense of capital mobility. It was only with the abandonment of fixed exchange rates in the early 1970s that international capital markets began to recover, to the point where they have now become as integrated as they had been in 1913 (Obstfeld and Taylor, forthcoming).

This 'back to the future' scenario over-simplifies in several respects, however. Net long-run capital flows may be no greater now than in 1913, but there are important differences between now and then. The sectoral composition of capital flows has broadened, with far more going into industry and finance in the late twentieth century than was true of the earlier period. (Baldwin and Martin, 1999, p. 19; Bordo *et al.*, 1999; Dunning , 1993, p. 116). Such FDI can serve as a vehicle for technological transfer and thus hasten international convergence, as it did in Ireland during the 1990s.

Furthermore, the composition of portfolio flows has changed substantially. In the late nineteenth century and in the 1920s, international financing was done with bonds.

During the 1970s, by contrast, bank lending accounted for almost two-thirds of the total flow, with both bond issues and portfolio equity flows being minimal. During the 1990s, the composition of flows became far more balanced, with an almost equal split between direct and portfolio flows, and a fairly equal division within portfolio flows between bank lending, bond issues and equity finance (World Bank, 2000, p. 126).

Other differences, highlighted by Bordo *et al*. (1998), include the huge volume of gross capital flows today. Although clear evidence on the late nineteenth century is lacking, it seems certain that the ratio of gross to net capital flows is much greater now than then, reflecting greater volumes of short run capital flows. But net long run flows matter more than gross short run flows for growth and income distribution. Finally, while much late nineteenth century FDI was undertaken by ‘free-standing companies’, incorporated in the core in order to carry on business within the periphery, FDI today occurs overwhelmingly within multinational corporations which do business in both home and host countries.

2.3. International migration

It is in the area of migration that the late nineteenth century seems clearly to have been more globalized than today. Although barriers to immigration were being erected by the end of the period, falling transport costs led to huge migration flows. Roughly 60 million Europeans emigrated to the New World between 1820 and 1914. Some of the country-specific migration rates were enormous: during the 1880s, the emigration rate per thousand was 141.7 in Ireland and 95.2 in Norway, while the immigration rate per thousand was 85.8 in the United States and 221.7 in Argentina. In the first decade of the twentieth century, emigration rates of 107.7 per thousand were recorded in Italy, while immigration rates per thousand were 167.6 in Canada, 102 in the United States and 291.8 in Argentina. There were also significant migrations within Europe and the New World and emigration from Asia.

The world stock of migrants was 2.3% of the total world population in both 1965 and 1990. Within Western Europe, the share of migrants in the total population increased from 3.6% to 6.1% over the same period; while within North America, the migrant share increased from 6% to 8.6%. This is substantially lower than at the beginning of the century: in 1911 the foreign born had accounted for 14.7% of the population of the United States and 22% of the Canadian population (Zlotnik, 1999).

Mass migration will have the greatest impact on inequality between countries if it transfers population from poor to rich countries. In the late nineteenth century, migration was clearly of this form, since Europe was significantly poorer than the New World; however, emigration was initially higher from the richer European regions, with the poorer southern and eastern regions only becoming involved with a lag. Something similar appears to have taken place in the late twentieth century. For example, the share of developing country migrants in total US immigration rose from 50% in the 1960s to 63% in the 1970s, 86% in the 1980s and 80% in the early 1990s. Similar trends are apparent in Canada, Australia and Europe (Zlotnik, 1999, Table 3). Thus, in both periods mass migration was progressively involving poorer countries and thus potentially making a bigger contribution to convergence; the big question for the twenty-first century is to what extent Africa will begin participating in mass, inter-continental migration (Hatton and Williamson, 2001).

The impact of migration on inequality within countries largely depends on the skill mix. In the late nineteenth century, migration predominantly involved young, unskilled adults, with very high labour-force participation rates; it thus had a large potential impact on inequality, lowering it in Europe and raising it in the New World. As the late twentieth century progressed, the picture became increasingly similar, at least for the United States: the skill profile of immigrants, relative to the native born, has declined dramatically since the mid-1960s (Borjas, 1999, Chapter 2). In several countries, however, policy has responded by encouraging more skilled immigration, often via temporary work permit programmes. In principle, this could lead to greater inequality in emigrant economies, and greater equality in immigrant countries: the opposite of what occurred in the late nineteenth century.

2.4. Globalization and inequality during the late nineteenth century

There were two dimensions of globalization that had important effects on within-country income distribution during the late nineteenth century. The first was commodity trade, largely involving Europe exporting manufactured goods in exchange for the food and agricultural raw materials of the land-abundant but labour-scarce New World. As economic theory would predict, this led to convergence of factor prices. The ratio of wages to land rents in the New World was initially high, so could be expected to decline; whereas it could be expected to increase in Europe, where it was initially low. This is precisely what happened: between 1870 and 1910, the wage-rental ratio fell by roughly three-quarters in Australia, and by a half in the United States; while it rose by a factor of 2.7 over its 1870 level in Britain, by a factor of 5.6 in Ireland, 2.6 in Sweden and 3.1 in Denmark. These increases were smaller in European countries that tried to insulate themselves from the world economy by erecting agricultural tariff barriers: the wage-rental ratio rose by a factor of 2.0 in France, 1.4 in Germany and not at all in Spain. Moreover, these trends were not confined to the present-day OECD. The wage-rental ratio also increased substantially in land-scarce economies such as Japan, Korea and Taiwan, while it fell substantially in land-abundant regions such as Argentina, Uruguay, Burma, Siam, Egypt and the Punjab (Williamson, 2000).

O'Rourke, Taylor and Williamson (1996) show that these movements in relative factor prices were indeed linked to changing commodity prices. Trade, it seems, was at least partially responsible for these trends. But what were the implications for inequality? Typically, landowners were relatively well off, so the falling wage-rental ratios in the affluent New World should have led to greater inequality there, particularly in areas where land holdings were more highly concentrated, such as Latin America. On the other hand, rising wage-rental ratios in Europe and other land-scarce regions should have implied falling inequality: thus, it appears that commodity trade had very different effects on inequality in different parts of the world, making Europe more equal but the Americas less so.

The other dimension of globalization that mattered for within-country inequality was migration, which was predominantly of low-skilled workers moving to richer countries. In principle we would expect this migration to have lowered unskilled wages in the affluent societies of the New World and increased inequality there, while raising the wages of the unskilled in Europe, lowering inequality there. Again, this is indeed what appears to have happened (Hatton and Williamson, 1998; Williamson, 1997). Thus, both international trade and labour migration were working in the same direction, lowering inequality in Europe and raising it in its affluent offshoots overseas.

The final major dimension of late nineteenth century globalization - capital flows - probably worked in the opposite direction. Capital flowed from the low-wage but resource-scarce Old World to the high-wage frontiers of the New. This probably raised the wage-rental ratio (and reduced inequality) in the Americas and lowered it in Europe.

What about inequality between countries? Just as in the late twentieth century (as we discuss below), the late nineteenth century appears to have seen convergence among a relatively small group of affluent countries, but divergence overall. What role, if any, did globalization play in either of these processes? There was in fact huge variation around the European periphery in terms of how quickly countries converged on core economies such as the United Kingdom. Some, like Ireland and Italy, converged at about the expected rate; others, like the Scandinavians, converged much faster; and still others, such as the Iberians, failed to converge at all.

O'Rourke and Williamson (1997) quantify the trade, migration and capital flow shocks that hit these economies during the late nineteenth century, and calculate the contribution of each of these forces to the patterns of convergence and divergence which the data reveal. Mass migration and international capital flows explained between a third and a half of the Scandinavian catch-up on Britain, and between 48% and 88% of Scandinavia's catch-up on the United States; they explained over two-thirds of the Irish and Italian catch-up on Britain, and all of those countries' catch-up on the United States. Moreover, the Iberian failure to converge on the leaders can in large part be attributed to their failure to import enough capital and export enough people.

Globalization thus helped several peripheral European countries converge on the core, while insufficient globalization helps to explain Iberia's failure to converge. The crucial factor was migration, which accounted for some 70% of the total convergence experienced in the Atlantic economy during the period (Taylor and Williamson, 1997). Trade may have been important for income distribution within individual countries, but it played a lesser role for between-country distribution. The rising between-country inequality of the late nineteenth century was *not* owing to globalization: the uneven spread of the Industrial Revolution across the globe seems the obvious alternative explanation.

2.5 The late nineteenth century anti-globalization backlash

Three key factors contributed to a backlash against globalization in the late nineteenth century: cheaper grain in Europe, which threatened to cut European land rents; European mass migration to the New World, which threatened to lower New World wages; and competition from European manufacturers, which threatened the New World's infant industries and profit rates. Political responses to these changes took several forms. Continental Europe typically imposed tariffs on imports of grain. The United Kingdom and Denmark, by contrast, held firm to agricultural free trade. Within the New World, tariff barriers were erected to protect manufacturing, and New World governments also gradually tightened immigration restrictions.

These policy changes can be seen, in part at least, as political responses to the distributional implications of globalization. O'Rourke (1997) shows that the 'grain invasion' (imports from the New World) caused different price shocks in different countries, and that, since countries had different economic structures, even identical price shocks would have had different distributional implications in each. Thus the contrast in policies between France and Germany, on the one hand, and Britain and Denmark, on the other, can be convincingly explained by the size of the price shocks each country faced. Grain prices declined only 10% in Denmark, a traditional grain exporter, while they would have declined by 34% in France and Germany had those countries not imposed tariffs. Furthermore, the price shocks had different distributional consequences - for example, cheap grain boosted British real wages, but lowered French real wages.

What about New World immigration restrictions, which had been on the increase for several decades prior to the the First World War? Timmer and Williamson (1998) develop an index of immigration restrictions for Argentina, Australia, Brazil, Canada and the United States between 1860 and 1930. The most consistently significant influence on this index is the distribution of income: the higher the ratio of unskilled wages to GDP *per capita*, the more open were a nation's frontiers. Rising inequality through downward pressure on these wages explains a significant share of the trend towards tighter immigration restrictions over the period; and that rising inequality was itself largely a consequence of mass immigration (O'Rourke and Williamson, 1999, Chapter 9; Williamson, 1997).

Other explanations of these policy changes have been suggested, based on different political or intellectual environments. The contrast between UK and Danish free trade policies and Franco-German protectionism may be partly due to the greater adherence to liberal economic doctrine in the homeland of Ricardo than in that of Friedrich List. US immigration restrictions could also have been due to rising racism, or widening ethnicity gaps between current and previous immigrants. The experience of the First World War was clearly important in destroying the liberal economy of the pre-1914 era. The late nineteenth century record does clearly show, however, that left to its own devices, globalization can undermine itself politically. Distribution matters, not just for its own sake, but also because of the political responses it provokes.

2.6. Summary

The globalization episodes of the late nineteenth and late twentieth centuries differ in several key respects. In particular, the late twentieth century has seen much larger short-term capital flows, a much greater involvement of multinationals in manufacturing activities, and greater emphasis on trade in ideas. On the other hand, the late nineteenth century saw much higher rates of migration, which predominantly involved unskilled workers moving from poorer to richer countries. The effects of nineteenth century globalization on income distribution seem to have played an important part in provoking the anti-globalization backlash that succeeded. This suggests that we need to understand current trends in income distribution if a new backlash is to be avoided. We need to consider carefully the effects of some policies that are politically tempting but may have adverse distributional implications — such as the current trend in developed countries towards policies restricting immigration from developing countries to skilled labour alone.

3. Globalization and markets: what have been the effects?

The most visible impact of globalization has been the spread of market transactions across the globe. Whether we think of a nineteenth century industrial worker from Dublin seeking to join the labour market in Detroit, or a twenty-first century citizen of Beijing trading UK stocks using software designed in Bangalore, the reach of markets — their ability to facilitate exchanges between individuals vastly separated in space — has been dramatic and historically unprecedented. In this section we look at the consequences of this spread of markets for the overall economic strength of the societies that are touched by it. We look at markets for goods and services, at capital markets and at labour markets. Our focus is on the component parts of the globalization process, leaving until Section 4 the question of what the overall impact of globalization has been on the welfare of countries and people in the world as a whole. Here we emphasize a key policy question, which appears repeatedly in many different contexts: to what extent does the ability to enjoy the opportunities of globalization depend on the presence of supportive domestic policies and institutions? Are the costs of globalization attributable to the process itself, or to the failure of domestic policies and institutions, or to both together?

Economic analysis of globalization can be structured by thinking of three main channels through which effects occur. The first is that globalization creates new opportunities for individual economic agents (producers, workers and consumers) and for countries. Imports of goods, capital and ideas are facilitated, and new opportunities for production and export are created. These increased opportunities increase the ‘consumption set’ available to countries, and are the fundamental source of the gains from trade (in goods, capital and labour). Of course, the extent to which opportunities are increased and potential gains created depends on the world environment; opportunities for developing country agricultural exports are greater the more open are developing country markets, for instance. This environment will also affect the distribution of new opportunities across the world: even if everyone’s opportunities increase, those of the rich may increase by more than those of the poor, or those of the poor by more than those of the rich. The mere fact that globalization increases opportunities says nothing about how those opportunities are shared, a fact which should be borne in mind in interpreting the evidence that follows.

The second channel is the response of economic agents to these opportunities. What is the change in quantities (investment, production and employment) that follows? In some countries response has been highly effective, with dramatic production and export growth, while other countries have seen little response at all. We have to ask why this is. We shall see that it is a combination of endowments, external circumstances and institutional preparedness that differentiates between these outcomes.

Quantity responses to new economic opportunities generally raise income — which is why the quantity changes are made. These changes may be economically damaging and reduce real income, however, if they take place where there are market and regulatory failures. Increased timber exports raise real income if all the environmental inputs are properly priced into the timber, but not if these inputs are underpriced. Increased capital flows are a source of gain if the domestic banking system can manage the additional risks that are created, but may not be if the system is unprepared. Outward migration can improve the welfare both of individual migrants and of those at home to whom they send remittances and to whom they may eventually return, but not if migrants take with them scarce skills that domestic citizens have been paying taxes to help create.

In these instances it is not globalization *per se* that creates the problem, but globalization can exacerbate existing domestic market and regulatory failures. Underpricing environmental inputs is damaging if timber is felled just for the domestic market, but is much more so if felling expands for export. The appropriate policy response is to improve the functioning of domestic markets and institutions, and globalization can prove to be the spur that induces countries to make these changes. But in their absence, the quantity changes that occur in response to the opportunities created by globalization can be damaging.

The third broad economic effect occurs as globalization *changes prices* within countries. This includes goods prices, but most importantly, the price of labour. The aggregate gains that openness creates for each country lead to wage changes and create gainers and losers as some sectors of the economy contract and others expand. We pay a good deal of attention in what follows to drawing out the implications of globalization for the distribution of income within as well as between countries.

3.1 Markets for goods and services

As we outlined in Section 2, recent decades have seen falling trade barriers and growing volumes of trade relative to income. This creates new opportunities for specialization according to comparative advantage and for firms to expand and reap the benefits of economies of scale in both the use and development of production technologies. It also increases the variety of goods available to consumers and can bring benefits of more competitive markets. Countries' responses to these opportunities have varied widely, however, and concerns have been voiced about effects on income distribution.

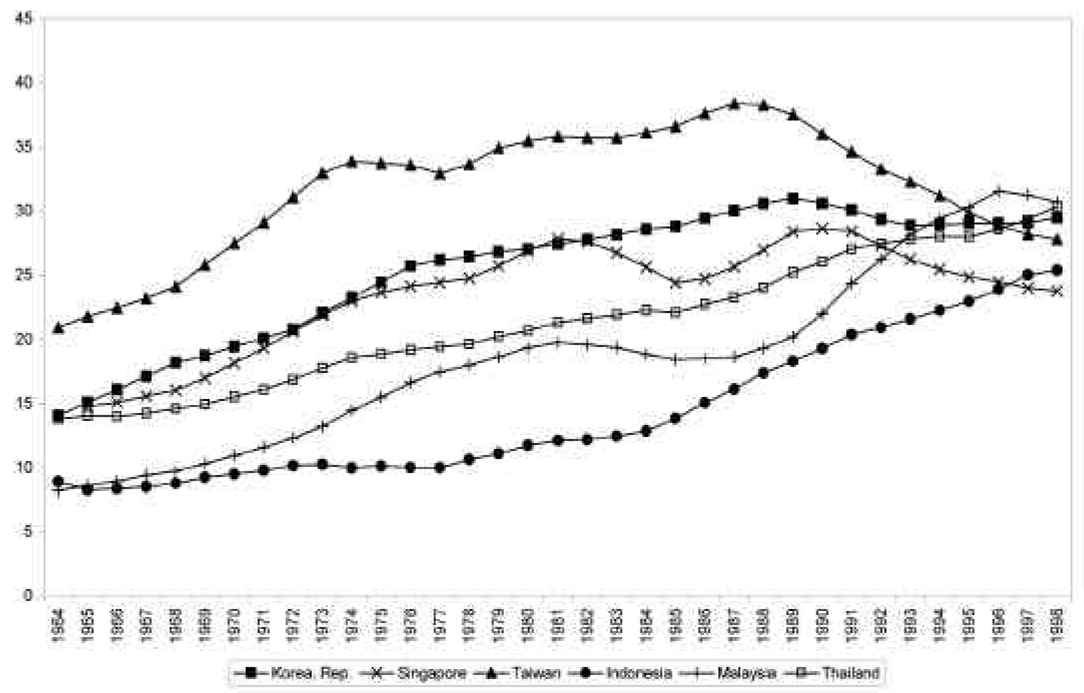
3.1.1 Specialization and comparative advantage

We saw in Section 2 (Figures 3-5) the broad historical evolution of changes in the international division of labour, including the post-war growth of the share of Asian economies in world manufacturing (from 6.7% to 28.6% between 1953 and 1998) and in manufacturing exports (from 7.3% to 32.2% over the same period). The impact of increasing openness on the structure of these economies is vividly demonstrated in

Figure 6, showing how successive Asian economies have had economic development driven by a growing — and largely export-oriented — manufacturing sector.

In Europe, too, growing trade volumes have facilitated a change in the structure of

Figure 6 Manufacturing value-added share of GDP (5-year moving average)



production. This has occurred across broad sectors, but more importantly within sectors. The increasing 'fragmentation' of production means that comparative advantage is now exploited within the vertical chain of production of a particular good, instead of just between different final goods.

Trade-induced changes in the structure of production are the source of the classical gains from trade. Economists working with computer-based trade models have frequently made estimates of these gains; for example, estimating that the world-wide gains from the Uruguay round were of the order of 0.5-1% of world GDP (Martin and Winters, 1996). While the methodology underlying these estimates is easy to criticize, most economists would take them as lower bounds. They do not take into account all the possible dynamic effects of trade (section 3.2.2), nor the full extent to which trade might allow better use of increasing returns to scale, both internal and external to firms. For example, specialization in Europe has facilitated the development of highly productive clusters of manufacturing and service activity, many of which rely on world markets for their success.

3.1.2 Competition and variety

In addition to trade that is driven by comparative advantage, much trade (particularly between high-income countries) is 'intra-industry trade' — two-way trade between broadly similar producers. This trade often seems rather wasteful — why should different types of mineral water be shipped to and fro across Europe? One reason is that it typically increases the intensity of competition in the market. In the absence of such trade, local suppliers would have a higher degree of monopoly power over their local markets, and trade (or sometimes the mere threat of potential trade) reduces this power. This brings benefits to consumers. It can also lead to increases in producer efficiency as firms eliminate internal inefficiencies, and as less efficient firms are taken over or driven out of business. Those remaining are able to expand and exploit economies of scale in production.

Does this mean that globalization will be accompanied by rising industrial concentration and an increase in the dominance of a few global brands? The standard economic analysis says no (Krugman, 1980; Smith and Venables, 1988); while the total number of suppliers in the world as a whole will decrease (and their size increase), the number supplying each country and the intensity of competition in each market will increase. Trade brings *both* larger firm scale *and* an increase in the intensity of competition in each market. The best empirical studies of this hypothesis come from analysis of the effects of integration in the EU. They generally confirm the hypothesis that trade and market integration can bring the efficiencies of industrial rationalization and an increase in effective competition.

As trade changes supply to each market, so it also changes the number and mix of product varieties that are on offer. Usually these variety effects are beneficial. While some varieties are lost, the number of different varieties supplied to each market will increase, and it is clear that access to new and imported product varieties can enhance consumer choice. But loss of local varieties can be welfare reducing. If there are increasing returns to scale in production, and if different product varieties bring consumers different amount of benefit (consumer surplus) per unit expenditure, then there is no presumption that the free market brings the right mix of product varieties. Furthermore, free trade does not necessarily improve the mix. In particular, varieties that bring a lot of benefit (consumer surplus) per unit of expenditure will tend to be under-supplied by the free market, compared to products that can attract a lot of expenditure while bringing little consumer surplus (Dixit and Stiglitz, 1977; Spence, 1976).

Arguments of this type have sometimes been used in support of public expenditure on the arts. They are relevant to trade if imported varieties are likely to drive out local varieties which yield more consumer surplus per unit expenditure (Dixit and Norman, 1980; Venables, 1982). Cultural products (such as films) may provide a good example — though establishing the case empirically is not easy, and the argument can be hijacked by producer groups seeking to protect sectional interests.

3.1.3 Does openness to trade promote economic growth?

The arguments of the previous section are essentially static: they suggest reasons why trade may raise income levels. Other arguments, however, suggest the possibility of genuinely dynamic benefits, whereby openness induces higher rates of long-run economic growth. Alternatively, it could be that trade nudges an economy's production structure towards less dynamic sectors with less scope for innovation. Ultimately, therefore, it is an empirical matter whether or not openness to trade increases growth rates in the long run.

Two kinds of study have looked at this question. The first kind tries to find direct statistical evidence of links between measures of trade openness and measures of economic growth. Some cross-country studies (Dollar, 1992; Edwards, 1998; Sachs and Warner, 1995) have regressed the growth rates of many countries against variables such as investment, human capital, location, debt and initial income, including also various measures of openness to trade with the rest of the world. The coefficients on the latter variables suggested strong and significant benefits to openness — such as an increment to the *growth rate* of 2% *per annum* in Sachs and Warner. Rodriguez and Rodrik (2001), however, argue that these results are not robust, their measures of openness are flawed and their econometrics inappropriate. Moreover, open trade is usually only one of several indicators of openness used, and one which often seems to weigh rather lightly in the overall result (Harrison, 1996).

The difficulty of establishing an empirical link between liberal trade policies and growth is two-fold (Winters, 2000). First, measuring trade regimes is difficult: tariffs need to be aggregated, quantitative restrictions assessed and then aggregated, and the degree of credibility and level of enforcement measured. In 1996, Brazil and Chile had approximately equal tariff averages, but government intervention and (endogenously) selective trade barriers made Brazil effectively far less open than Chile with its uniform and unvarying tariff.

Second, the direction of causation is difficult to establish. Does trade liberalization cause economic growth or is it one of the results of growth? Recently, Frankel and Romer (1999) and Irwin (2000) have tried to address this problem by examining the effects of the component of openness that is independent of economic growth. This is the part of bilateral trade flows that is explained by populations, land areas, borders and distances. This component explains a significant proportion of the differences in income levels and growth performance between countries, and from this we might infer a general relationship running from increased trade to increased growth. The effect is not very precisely defined statistically, but it is quite significant economically: a one percentage point increase in the openness ratio increases both the level of income and the subsequent growth rate by at least half of one percent per annum (Frankel and Romer, 1999, Table 4).[1]

[1] Rodriguez and Rodrik (2001) also challenge their result, however, criticizing their choice of instrumental variables.

Vamvakidis (1999) uses panel data for over one hundred countries to conclude that multilateral liberalizations over the period 1950-89 were associated with increases in rates of growth, while regional (discriminatory) ones were not.[2]

Other approaches provide detailed case studies of particular countries (such as those summarized in Krueger, 1978), and Srinivasan and Bhagwati (1999) chide the economics profession for forgetting these in their enthusiasm for cross-country studies.[3] There is controversy over the soundness of case study methods for establishing complex causal hypotheses. Nevertheless, despite the methodological difficulties of establishing directly that openness enhances growth, the weight of the evidence lies in that direction. As even Rodriguez and Rodrik agree, there is certainly no coherent body of evidence that openness is *bad* for growth.

A second approach to the question avoids linking openness and growth directly, but instead examines individual steps in the causal relationship between the two. The main issue is the productivity effect. Tybout (2000) offers a good account of the productivity effects of openness on manufacturing industry in developing countries. The evidence suggests that openness effects operate more through imports (e.g. Esfahani, 1991; Feenstra *et al*., 1997) than through exports. Exports and productivity are closely linked, but productivity leads exports, not vice versa. Many country studies of productivity find strong links with openness — e.g. recently Kim and Kim (2000) on Korea and Jonsson and Subramanian (2000) on South Africa. Similarly, results for OECD countries suggest that trade is important to productivity growth (e.g. Griffith, Redding and van Reenen, 2000), although given their greater openness and levels of sophistication, the trade effects in these countries are smaller than those of indigenous R&D activity.

Coe and Helpman (1995) and Coe *et al*. (1997) suggest that import links to major OECD countries are a key determinant of both developed and developing countries' productivity growth. Though plausible, these studies are not definitive. The authors hypothesize that trade in capital goods[4] provides the link between the major OECD countries' R&D and other countries' total factor productivity, but they cannot test it formally against alternative causal links. Lumenga-Neso *et al*. (2001) point out that imports from third countries can also incorporate the technology of countries from which they in turn import, and suggest that allowing for such indirect effects does improve the model's empirical performance.

A more subtle set of issues concerns the possibility that openness has a beneficial effect on other dimensions of economic policy-making, as argued a decade ago by Krueger (1990). Empirical work on this is very much in its infancy. Perhaps the most

[2]Vamvakidis considers only liberalizations up to 1989 in order to leave enough post-reform data to identify growth effect.

[3]They argue that Rodriguez and Rodrik's strictures on the cross-country studies should not undermine one's confidence that openness enhances growth, because that view should never have been based on those studies in the first place.

[4]In Coe and Helpman (1995), total trade.

important dimension is corruption: recent evidence from Ades and Di Tella (1997; 1999) shows a clear cross-country connection between higher rents, stemming from things such as active industrial policy or low degrees of openness, and higher corruption. The latter, in turn, reduces investment and hence growth.

Investment is a plausible route through which corruption and inflation reduce growth, but it also has other determinants. These lie at the centre of Rodrik's (1995; 1997) view of the Asian miracle: it was due, he argues, to strong incentives to invest, increasing both imports of capital goods and the supply of exports with which to pay for them. It would not be correct, however, to infer from this that openness did not matter. Srinivasan and Bhagwati (1999) note that openness (i.e. decent export incentives) is the essential requirement of investment, because firms need to sell their output on large markets where they will not drive prices down. And, similarly, if markets for imported capital equipment had not been open the whole process would never have got under way. This is a more nuanced view of openness and growth than many, but not a fundamentally antipathetic one.

None of this argues that openness is sufficient for economic growth — there are many ways of hobbling an economy. But it does appear to be a strong contributor. Recalling that in the last half century no economy has prospered without interacting strongly with the rest of the world, we conclude that a significant degree of openness is probably a necessary condition for growth. It does not follow, of course, that the more openness, the better. Indeed, the uncertainty surrounding the empirical evidence makes it impossible to establish whether there are growth benefits of further openness for countries that already engage in significant trade. But there is good *prima facie* evidence that policies restricting openness at the behest of one interest group or another may carry with them significant long-run risks.

3.1.4 Does trade liberalization help or harm the poor?

Whether or not trade promotes average income levels or average income growth, an important and distinct question is whether it has a particular tendency to help or harm the poor. In principle, and over the long run, average growth must be at least a necessary condition for improvement in the incomes of the poor. So although growth can be associated with increases in inequality, it is less likely to cause an increase in absolute poverty. Dollar and Kraay (2001) suggest strongly that there is no such tendency. Similarly, neither is there reason to suppose that growth induced by freer trade will fall systematically into the 'anti-poor' class, as, for example, Lundberg and Squire (2000) and White and Anderson (2000) confirm.

Nevertheless, policy *changes* associated with a move towards greater openness to trade will cause changes in distribution, some of which may fall particularly hard either on the poor in general or on some identifiable sub-group of poor people. This is an empirical issue, not a theoretical one, and it is subject to many of the same difficulties as the study of links between trade and growth. Although there are many dimensions to poverty (see, for example, World Bank, 2000), we confine our attention here to poverty as measured in terms of income or consumption levels.

The best way of thinking about the world's poor and their relation to markets is in terms of the notion of a household which produces goods or services as well as sells its labour and consumes goods and services (Singh, Squire and Strauss, 1986). An increase in the price of something the household sells (labour, a good, a service) increases its real income, while a decrease reduces it. Obviously the household's ability to adjust to such shocks affects the size of any impact it suffers, but it does not generally affect whether the impact is positive or negative. Shocks to households can impinge differently on different family members. Women may fare better than men if 'female' jobs are created by trade liberalization, or worse if they bear the brunt of cuts in consumption as income falls. Similarly, one needs to pay special attention to the impact of shocks on investments in child welfare, such as basic education and health.

Once we have a view of how the poor earn and spend their incomes, the first question to ask is how a trade liberalization affects the prices faced by the poor. The answer obviously depends on what the original policy was achieving. In Mexico, for example, unskilled workers probably lost from trade liberalization because they were the beneficiaries of protection in the first place (Harrison and Hanson, 1999). The answer will also depend on whether the sectors favoured by the liberalization are intensive users of the skills and resources of the poor. For instance, if the unskilled (illiterate) are primarily employed in non-traded sectors, while exports draw mainly on the semi-skilled (literate) labour-force, the net effects on employment may favour the latter. Models of outsourcing to the Mexican maquiladora suggest that it is the semi-skilled who benefited following NAFTA (Feenstra and Hanson, 1995). Moreover, not all developing countries are actually unskilled labour abundant. For example, many Latin American and some African countries have very strong endowments of mineral and agricultural resources, so liberalization will stimulate these sectors rather than those that are labour intensive.

Knowing the immediate impact of trade liberalization on border prices is not enough, however, especially if we want to know the effect on the poor rather than the aggregate gains to the economy as a whole. An x% change in the border price of a good typically translates into a significantly smaller change for the farmer or consumer because the costs of distribution remain unchanged. It can get lost completely if distribution is monopolized. Worse, if marketing relies on official purchasing boards it can tax farmers as well as block price signals. However, just abolishing the purchasing board is not sufficient; one needs to ensure that private monopolies do not replace the official one (see Winters, 2000b). These market imperfections can distort the influence of globalization.

More important is whether markets exist at all: trade reform can both create and destroy markets. Extreme adverse poverty shocks are mostly associated with the disappearance of a market, while a strong poverty alleviation impact can arise when markets are created for previously untraded or unavailable goods. An important complementary policy to globalization is therefore to ensure, through suitable intervention, that functioning markets exist — by, for example, assisting small farmers to create the institutions to aggregate their sales or purchases into viable lot sizes.

The effects of liberalization also depend on spillovers from one market to another. As households adjust to a shock in one market they shift its effect to others. For example, a major attraction of liberalizing agriculture is that the direct beneficiaries — farmers — appear to spend much of their extra income on goods and services provided by the poor, such as construction, personal services and simple manufactures.

A further channel is through government revenue. Trade reform can affect government revenue, but much less frequently and adversely than is popularly imagined (Hood, 1998; Pritchett and Sethi, 1994). Often, simultaneously reducing tariff rates and removing tariff exemptions actually increases revenue. Even where it does not, it is ultimately a political decision whether the new taxes necessary to make up the shortfall or the cuts in government expenditure that result from falling revenue hit the poor. In recent years some East Asian countries have protected pro-poor expenditures in the face of far greater shocks than any trade reform would produce.

Finally, a common worry is that opening up the economy will expose it to increased risk. Certainly, it will expose it to new risks, but often the net effect will be to reduce overall risk because world markets (which have many players) are more stable than domestic ones, and trade allows domestic actors to mix foreign and domestic risks more efficiently. Sometimes, however, openness will increase risk because effective stabilization is undermined. For example, in a closed economy the effects of supply shocks on producer incomes are damped because as quantities fall, prices rise. A small open economy, however, has exogenous prices so that supply shocks transmit directly into income shocks (Newbery and Stiglitz, 1984). Alternatively, residents may switch completely from one activity to another that offers higher average rewards but greater variability. In return for better average incomes, people may be prepared to run a higher risk of very bad outcomes, which may then occur.

The poor are poorly placed to bear risk. Thus they may forgo opportunities to raise average incomes precisely because they cannot bear the higher risk of failure that goes with them. If so, they might suffer the adverse effects of a reform — such as higher consumption prices — without the compensating benefits of higher average earnings, and hence be losers overall. Often these problems are associated with failures in capital or insurance markets. Curing such market failures and establishing safety nets to assure the poor that there really is a minimum below which they will not be allowed to fall are important concomitant policies.

Some of the effects of trade liberalization may be temporary, but nevertheless important both for economic welfare and for the political impact of the policies concerned. This is particularly true of workers who suffer spells of unemployment. The initially non-poor can generally tide themselves over these periods, so public policy should focus on whether the poor suffer such temporary setbacks, and on policies to help them get out of trouble as soon as possible. The non-poor (middle classes) are, however, frequently far better at articulating their concerns than the poor: the volume of complaint is not, by itself, a good indicator of policy failure. Also, it is far from inevitable that liberalizations increase unemployment. Excluding transition economies, where so much else was happening at the same time, Harrison and Revenga (1998) find rising manufacturing employment in most of the cases of trade reform that they examine.

The world's poorest people of all work not in manufacturing but in agriculture in the developing world. The barriers to trade for the fruit of their labour typically come, however, not from policies adopted by their own governments but from policies of the industrialized countries, such as the export subsidies of the EU's Common Agricultural Policy. This makes it important to consider the issue of agricultural protection in some detail.

3.1.5 Agricultural markets

Agriculture is special. The resistance to globalization in this sector — that is, to the integration of world markets — is based on a wide range of arguments. Often in the past, it was 'security of food supplies'. Now agricultural trade policy is justified in terms of 'multifunctionality'. This is the claim that support for agriculture aims not merely at 'economic' variables such as boosting farm incomes and outputs, but at social and environmental objectives such as protecting rural societies and providing environmental benefits such as soil protection, reducing pollution and visual amenities.

These are all domestic objectives and, as such, they will be most efficiently addressed by domestic policies aimed directly at them rather than indirect policies that raise the prices of agricultural output. Thus, for example, the EU Common Agricultural Policy (CAP) does little to support rural communities or family farming, since 80% of the support goes to the 20% largest farmers. In much of Europe rural societies depend more on tourism and other services than on farming, and these receive no support at all. High farm prices increase, not reduce, environmental damage. They encourage pesticide and fertilizer use, the destruction of hedgerows and over-exploitation of the land. Neither the basic idea of multifunctionality nor the economic analysis of it is new (see Winters, 1989). That it reappeared, relabelled but basically unchanged, in 2001 suggests that its intention is protective: that it is consciously intended to maintain farm output and incomes.

Protecting agriculture undermines Europe's efforts to address the real issues in globalization, even including some in the agricultural sector. Recent concerns over hormones in beef imports and genetically modified organisms (GMOs) are formally quite separate from agricultural support policies. European resistance to imports of these goods lies in fears about their safety. These fears have not been scientifically substantiated, but given the long time scales over which problems could arise there is clearly some residual danger.[5] The United States in particular has been prepared to bear these risks, Europe not. But Europe's efforts to stimulate a meaningful global debate in this area — which one would value even if one did not initially accept the

[5]Genetically modified foods raise important economic issues that are quite separate from the CAP (see Harhoff *et al.*, 2001).

European resistance — have been undermined by the perception that the European position is primarily just old-fashioned protectionism (Messerlin, 2001). Hormones and GMOs both ‘threaten’ large increases in yields, immediately and directly in the case of beef hormones. If EU farmers were permitted to adopt them, their extra output would bankrupt the CAP even before any issues of enlargement arose.

Similarly, the EU resistance to agricultural liberalization in the forthcoming WTO round almost blocked its launch. The EU eventually conceded that export subsidies should be examined ‘with a view to phasing out’, but only at the expense of huge negotiating effort and by inserting the phrase ‘without prejudging the outcome of the negotiations’ into the launch document. The former clearly prevented the EU from pursuing other goals as vigorously. The latter phrase is always implicit in any WTO negotiation — nothing is agreed until everything is agreed, and no launch agenda prevents parties from negotiating a different, but acceptable, outcome. But by making it explicit, the EU weakens its ability to hold its partners to serious negotiation of the other issues included on the agenda. Besides, the real test is at the end not the beginning of the negotiation, and the EU performance in Doha did not suggest readiness to reach agreement on agriculture.

Recent analysis estimates that although agriculture is much smaller than manufacturing, a 40% trade liberalization of agriculture would generate about the same world gains as a 40% liberalization of manufacturing — about $70 billion p.a. (Hertel *et al*., 2001). It is true that most of this accrues to the developed countries, which have the higher barriers to liberalize, but a significant share accrues to developing countries, including not only the major exporters but also Sub-Saharan Africa and India. The amounts concerned could be significant in poverty terms, since boosting agricultural income appears generally to translate into strong anti-poverty effects. Developing countries have argued particularly that the deleterious effects on local farmers of OECD export subsidies (most of which are European) undermine their local farmers and severely discourage their efforts to open their economies to world commerce.

3.2 Capital markets

In this section we examine the effects of financial market integration on developing countries. This discussion will provide the necessary background for evaluating proposals designed to limit financial market integration, such as the Tobin tax, or administrative controls to reduce capital mobility across countries.

3.2.1 What has happened to financial flows to developing countries?

Financial integration, measured by the rapid increase in international capital flows, has been an important part of the recent globalization of the world economy. Some of the key features of the flow of resources to developing countries in the past decade are documented in Tables 5 and 6.

The data in the tables highlight a few important facts:

- The total flow of resources to developing countries has nearly tripled in less than ten years, reaching US$300 billion, with private capital flows more than compensating the reduction in official flows, which fell to almost one-half.

- Private flows have proved, however, to be quite volatile. Following the outbreak of the South East Asian crisis, private flows fell by almost one-third and were not compensated by a corresponding increase in official flows.

- Private capital flows, which reached a yearly volume of almost US$300 billion by the late 1990s, have two components: one-third are capital market flows (bank loans, bonds and equity financing), two-thirds are foreign direct investment (FDI). The latter have been surprisingly resilient, increasing steadily even after the crisis. The main source of volatility is bank lending, which represents one-half of total capital market flows: around the crisis lending shifted from a yearly inflow of US$50 billion to an outflow of US$25 billion.

- The crisis of the late 1990s appears to have slowed down significantly the involvement of developing countries in the globalization of world capital markets. As shown in Table 6, the share of developing countries in global private capital flows has fallen by almost one-half. This seems to have happened also for FDI, notwithstanding the steady increase in FDI flows toward developing countries noted above. This, however, should not be taken as evidence that developing countries have been cut off by global private capital flows, as the doubling of such flows in the late 1990s is mostly due to the increase in flows toward the United States associated with 'new economy' investments.

- Finally, as shown in Figure 7, spreads on debt instruments have remained high and volatile.

Table 5 Net long-term resource flows to developing countries, 1991-2000
(billions of dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000a
Total	123.0	155.8	220.4	223.7	261.2	311.2	342.6	334.9	264.5	295.8
Official flowsb	60.9	56.5	53.6	48.0	55.1	31.9	42.8	54.6	45.3	38.6
Private flows	62.1	99.3	166.8	175.7	206.1	279.3	299.8	280.3	219.2	257.2
Capital markets	26.3	52.2	100.2	85.6	99.1	147.8	127.2	103.5	33.8	79.2
Debt flows	18.8	38.1	49.2	50.5	63.0	98.7	97.0	87.9	-0.6	31.3
Bank lending	5.0	16.2	3.4	8.7	30.5	33.7	45.2	50.0	-24.6	0.7
Bond financing	10.9	11.1	36.6	38.2	30.8	62.5	49.0	40.9	25.4	30.3
Other	2.8	10.8	9.2	3.6	1.7	2.4	2.7	-3.0	-1.6	0.3
Equity flows	7.6	14.1	51.0	35.2	36.1	49.2	30.2	15.6	34.5	47.9
Foreign direct investment	35.7	47.1	66.6	90.0	107.0	131.5	172.6	176.8	185.4	178.0

Source: World Bank, 2001, Global Development Finance: Country Tables and sources cited therein, various years; OECD DAC's Geographic Distribution of Flows; and World Bank staff estimates for 2000.
Note: Inflows of debt are net of amortization payments, and FDI is net of disinvestment. For this reason, these flows are sometimes referred to as 'net' resource flows. a = Estimated, b = based on OECD DAC's Geographic Distribution of Flows.

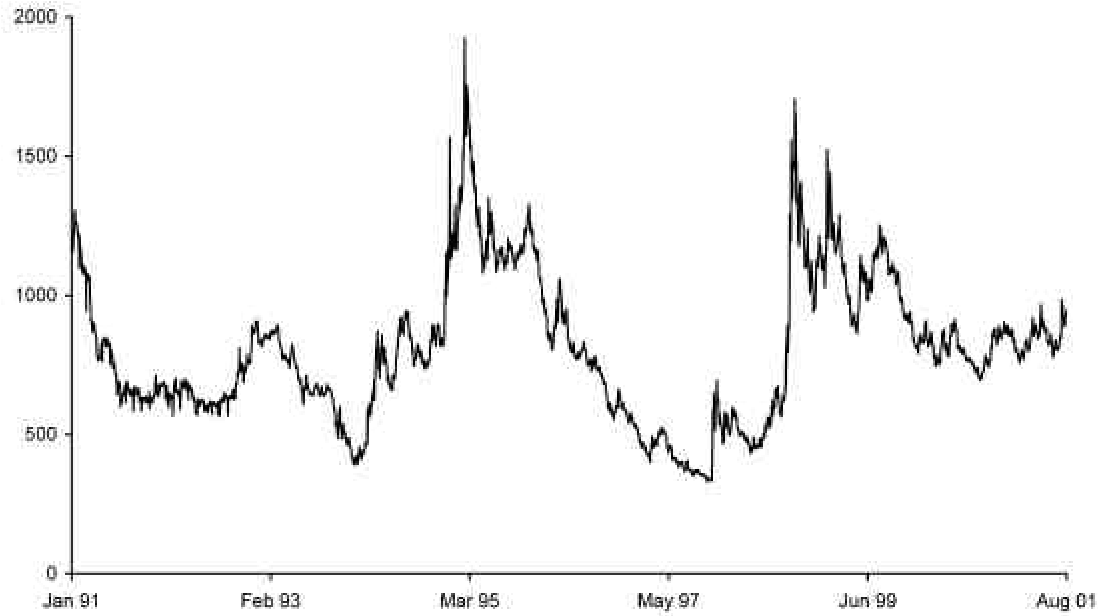
Table 6 Developing country shares
(% except where otherwise stated)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000[a]
In global total private capital flows	11.8	12.4	12.6	12.8	12.4	13.2	14.4	9.9	7.6	7.6
In global capital market flows	9.7	9.4	9.4	9.0	9.0	9.8	10.8	6.2	4.7	5.5
In global FDI flows	22.3	27.4	29.5	35.2	32.3	34.9	36.5	25.9	18.9	15.9
In global output	19.8	19.2	19.7	20.0	20.7	22.1	23.2	21.6	21.7	22.5
In global trade	26.5	28.3	28.3	28.4	29.5	31.3	32.4	30.7	30.7	33.4
In global population	84.1	84.3	84.4	84.5	84.6	84.7	84.9	85.0	85.1	85.2
Memo items (billions of dollars):										
Global capital market flows	794	850	1,226	1,501	1,928	2,403	2,929	3,033	3,910	4,324
Global FDI	160	172	226	256	331	377	473	683	982	1,118

Sources: World Bank (2001) Global Development Finance: Country Tables and sources contained therein, various years; Capital DATA Bondware and Loanware; Word Bank Statistical Information Management and Analysis System; and World Bank staff estimates for 2000.

Note: Private capital flows are defined as the sum of gross capital market commitments plus FDI.
a = estimated.

Figure 7 EMBI 1991-2001 global sovereign spread



Note: The EMBI Global tracks total return for US dollar denominated debt instruments issued by emerging market soverign and quasi-sovereign entities; Brady bonds, loans, Eurobonds and local market instruments. Countries covered are Algeria, Argentina, Brazil, Bulgaria, Chile, China, Columbia, Cote d'Ivoire, Croatia, Ecuador, Greece, Hungary, Lebanon, Malaysia, Mexico, Morocco, Nigeria, Panama, Peru, the Philippines, Poland, Russia, South Africa, South Korea, Thailand, Turkey and Venezuela.

Figure 8 takes a longer-term perspective and looks at international capital flows over the past three decades. The figure provides no evidence of a slowdown in financial integration, but confirms the high degree of volatility of the capital market component of financial flows — a phenomenon, as noticed above, that is mostly related to the volatility of bank lending.

3.2.2 Does financial integration promote growth?

The benefits of financial integration come under three main headings:

- Well-functioning financial markets allow the transfer of value over time (borrowing and lending which, importantly, weaken liquidity constraints), across borders and industries; they facilitate payments and allow large-size investment projects to be fragmented, thus making risk diversification possible.

- They also allow the transfer or allocation of risk among different economic agents: young people tend to be better equipped in taking on risk than old people; some institutions, like pension funds, are willing to take on much less risk than institutions like venture capital funds.

- Foreign direct investment may create positive spillovers on domestic human capital and via the introduction of superior technologies.

In principle, the first two of these functions do not require international financial integration: what is needed is simply well-functioning domestic financial markets. In reality this does not work. Size matters along two dimensions: diversification and economies of scale. Countries that are financially closed typically run into two problems:

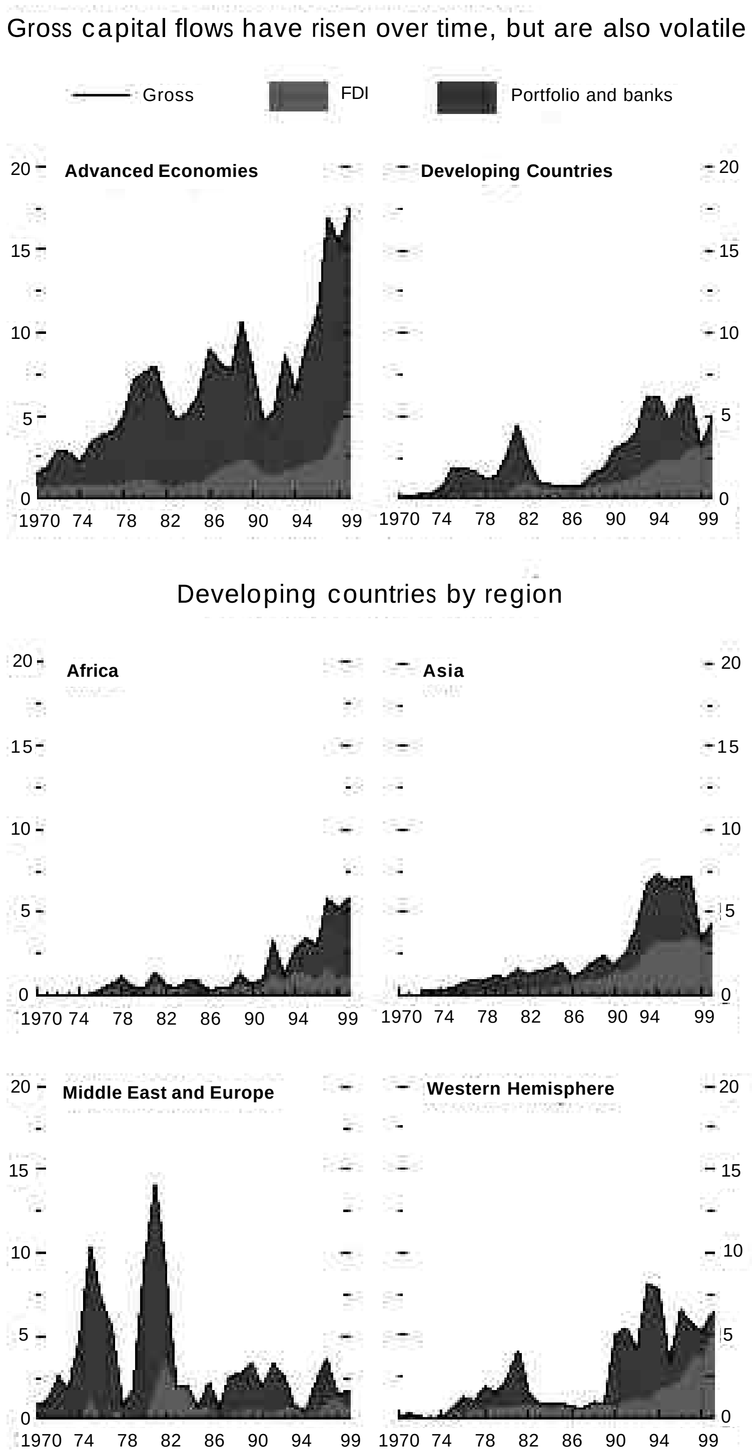
- The economy is too small to allow for enough diversification of risk across individuals and institutions.

- Small countries cannot exploit the scale economies that characterize the financial industry — for instance, they are too small for a domestic venture capital industry to develop.

Thin markets also do not allow the provision of financial services at sufficiently low cost: bid-ask spreads, for instance, are a function of the depth of the market. But there is a third important reason why one rarely observes efficient capital markets in financially closed economies. By limiting the ability of domestic residents to invest their savings abroad, capital controls — the instrument typically used to keep a country financially segregated — provide the government with a very attractive tax base. The incentive to tax savings (with the inflation tax, with high reserve requirements on banks, or by subjecting holdings of foreign assets to unremunerated deposits) is often too strong for a government to resist. The cost is the distortion of financial markets.

If financial integration is so important, does the evidence confirm that countries that

Figure 8 Gross capital flows
(% of GDP)



Source: IMF, *International Financial Statistics* and IMF staff estimates have opened up their capital account show better economic performance? The empirical evidence documents a positive, but rather weak effect of financial openness on growth. Out of ten recent empirical studies on the experience in developing countries (surveyed in the IMF *World Economic Outlook*, September 2001), four fail to find a significant effect of financial openness on growth, five find a positive effect and one reports mixed evidence. The IMF summarizes its review of the empirical evidence as follows:

> 'Increased international financial integration is generally associated with an economically meaningful rise in growth in developing countries, although these effects are generally not statistically significant. The growth effects come through both FDI and portfolio investment.'

The evidence is mixed because financial integration also raises a country's exposure to financial crises. The periodic occurrence of such crises, which entail temporary, though often very large, losses in output, blurs the empirical correlation between financial openness and growth.

In a study of the financial crises which have occurred since the late nineteenth century, Bordo *et al.* (2001) provide an account of their effects, distinguishing between crises that are limited to the exchange rate (a forced devaluation) and crises that affect the banking system through widespread insolvencies. The output cost of a banking crisis is typically large: a cumulated loss in excess of 6% of GDP in a sample of crises in 56 countries between 1973 and 1997; the cost of currency crises is slightly lower. What is very different is the effect of 'twin crises': here, the average cumulated output loss exceeds 18% of GDP.

Once again, as in the previous section, bank lending stands out as the most dangerous component of capital flows. This is because the traditional fragility of a bank (induced by the maturity mismatch between assets and liabilities) is enhanced when capital flows are large and take the form of international credit lines among banks. Developing countries' banks typically accumulate large short-term liabilities denominated in foreign currency: thus they add, to the traditional maturity mismatch, a currency mismatch. Capital flow reversals — typical of bank lending, as discussed above — then open up large holes in the balance sheets of developing countries' banks. When this happens the government steps in to save the financial system, and the hole is the budget.

Can we conclude that financial integration makes crises more frequent and more costly? The relationship between financial integration and financial crises is complex. For instance, there is little support for the view that capital controls protect a country from financial crises. Bordo *et al.* (2001) found that currency crises are more likely to occur in countries which impose capital controls. But the incidence of banking crises is negatively correlated with capital controls. The positive association of controls with currency crises is consistent with the observation that the defences apparently provided by capital controls encourage riskier policies, which eventually result in current account crises.

In the case of banking crises, instead, it is the *absence* of controls, particularly on capital inflows, and also the expectation of ex-post bail-outs, that encourages excessive borrowing by domestic banks, thus introducing large risks in their balance sheets.

The conclusion is that in order to reap the benefits of financial integration, while limiting the risks, policies should be devised that enhance FDI flows and portfolio investment, while limiting bank lending, or at least avoiding the build-up in the balance sheets of developing country banks of large maturity and currency mismatch.

3.2.3 Foreign direct investment

In the last two decades the world economy has gone through a dramatic process of reorganization: integration through international trade and the disintegration of production. The disintegration of production shows itself in a new way firms organize across borders, outsourcing some of their activities and participating in global supply chains.

International outsourcing implies the geographic separation of activities involved in producing a good (WTO, 1998). Outsourcing can occur in two forms: through foreign direct investment (FDI) as multinationals move production of parts and components or of final assembly abroad, or through a shift in contracting practices in which firms replace domestic production of intermediate inputs with imports purchased from arms-length suppliers located abroad. The global firm produces one input in one location and exports it for refinement to another location, and so on. During this refinement process intermediate goods are traded from one location to the next. Thus outsourcing, an increase in trade in intermediate goods, and an increase in foreign direct investment all indicate the new way firms organize their production.

In Section 6 we shall explore in more detail some of the reasons that lead firms to choose either outsourcing or foreign direct investment as means of spreading out the production chain across international borders. For the time being it is enough to note that an alternative to buying foreign-produced inputs to a manufacturing process (a goods-market transaction) is to buy a foreign input-producer (a capital market transaction). Here we document the dramatic increase in such capital market transactions in the last two decades.

The United Nations Centre on Transnational Corporations (UNCTC) estimates that in 1983-9, world FDI flows grew at an annual rate of 28.9%. Starting with 1993, there was a second surge of FDI (see Figures 9 and 10). In the two years between 1997 and 1999 alone, investment flows in the world economy doubled (expressed in US$ at current prices). The surge in FDI after 1985 was largely among industrialized countries. The UNCTC data show that the G5 nations (France, West Germany, Japan, the United Kingdom and the United States) were the home (source) nations of almost 70% of FDI flows during this time and host (recipient) nations to 57%. In contrast, one of the distinctive features of the FDI surge during the 1990s is that investment flows were

Figure 9 Sources of outward FDI
(% of GDP)

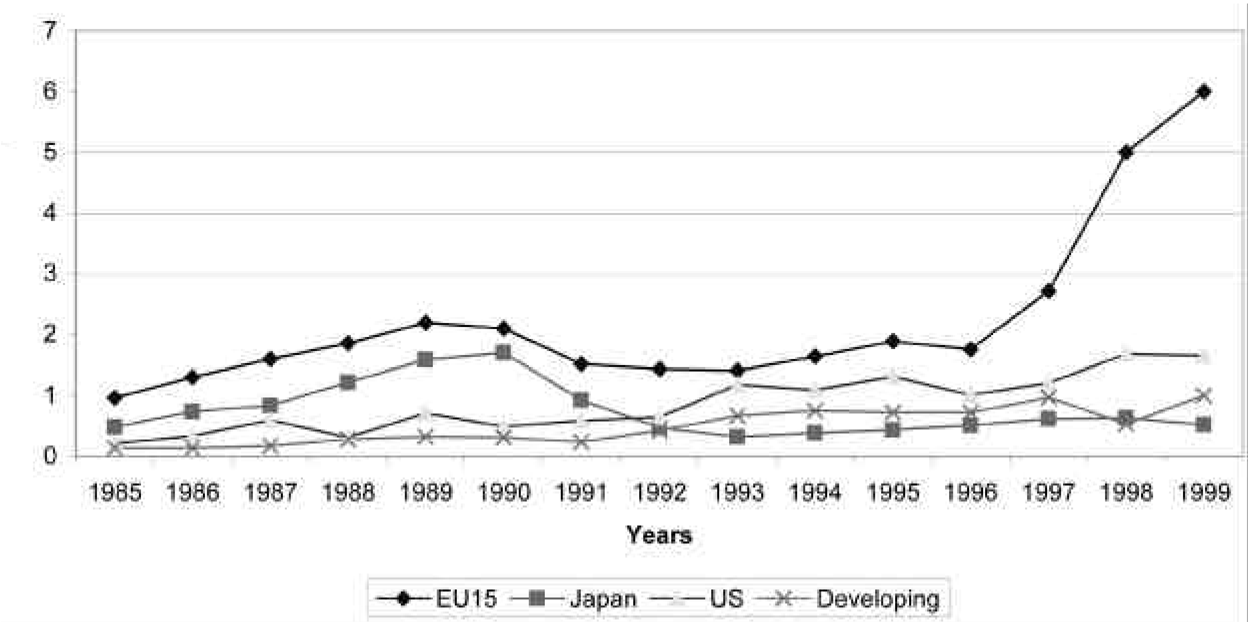
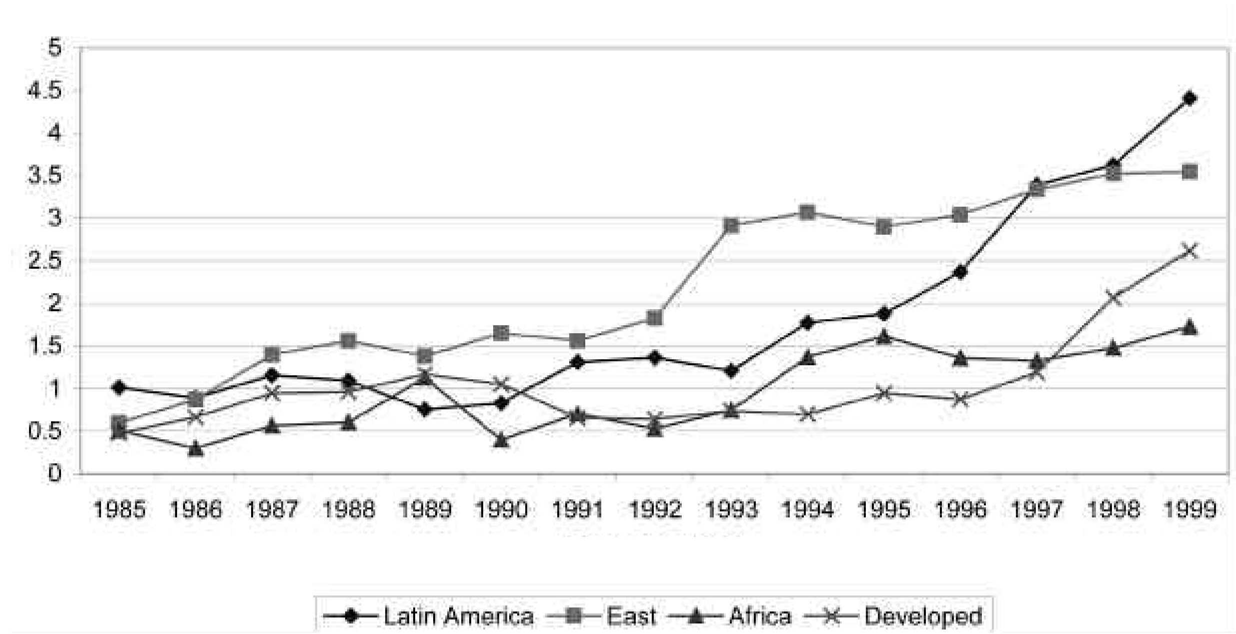


Figure 10 Hosts of inward FDI
(% of GDP)



Source: UNCTAD FDI/TNC Database and World Bank

MEMORANDA

% of World Outflows, 1999		% of World Inflows (1999)	
EU15	63.73	Latin America	10.45
Japan	2.84	East	11.14
US	18.86	Africa	1.03
Developing	8.21	Developed	73.54

directed also to developing countries, for which FDI is now the largest type of capital inflow, although their share in the global total is still less than 10%.

Not only has the amount of FDI grown in recent years but its characteristics have changed. Until the 1990s most FDI was ‘horizontal’, involving the duplication of production plants in a number of countries (see Brainard, 1997; Markusen and Maskus, 1999). This seems to have been related to the fact that FDI flowed from large rich countries to other large, rich countries, and was motivated mainly by considerations of market access in the face of tariff and non-tariff barriers to trade.

New studies now point to increased importance of ‘vertical’ FDI, which occurs when firms locate different activities in different countries, vertically fragmenting or ‘disintegrating’ their production, often to take advantage of factor price differentials. Hanson et al. (2001) and Yeaple (1999) find strong evidence of vertical FDI. US parent firms outsource a small but growing share of production to their foreign affiliates, in terms of exporting intermediate goods to affiliates for further processing. They find this share to be substantial in specific regions and industries. Imported inputs for further processing account for over 30% of affiliate sales for affiliates in Canada and Mexico.

The countries that have benefited from the increase of FDI inflows outside the OECD include those whose domestic economies recovered in the 1990s from the turmoil of the 1980s (particularly in Latin America). FDI flows are, however, still highly selective — in particular, they have been concentrated on middle-income countries that have a growing supply of skilled labour. Braunerhjelm *et al*. (2000, Chapter 3) provide evidence that Swedish multinationals are drawn not merely by low wages but by labour skills and the presence of knowledge spillovers from other firms in the same industry. Indeed, it is evident that completely unskilled labour is unlikely to be able to help the parent firm locate efficiently in the host country, a fact that explains why low wages are not enough to attract FDI on their own. FDI outside the OECD countries flows to Malaysia, not Malawi, and to Chile rather than Chad; middle-income countries get over 90% of the total FDI flows going to developing countries (World Bank, 2001, Table 2.4).

An important determinant of whether FDI will act as a force for convergence in the world economy is whether the countries that are currently left out succeed in building a skilled work-force. In principle, developing country governments have every incentive to invest in the quality of their work-force, particularly when they begin to appreciate the benefits that FDI can bring. In practice, though, there are many difficulties, including the severe fiscal constraints under which many governments in poor countries operate, the long time period before educational investments affect productivity, and also the brain drain that results when education enhances individual mobility but there are not enough educated people in the home country to act as a magnet for migrants. Sometimes this brain drain can be reversed with striking results, as has happened in Ireland in the 1990s and as may be starting to occur with the spectacular growth of India’s information technology sector. Nevertheless, if rich countries are serious about ensuring that globalization benefits the world’s poor countries and regions, they will need not only to target aid flows towards education and the building of skills, but also to recognize that an immigration policy aimed at selective poaching of scarce skills can undermine much of the beneficial effects of their aid.

3.3 Labour markets

The changes in product markets and capital markets that we have outlined in the preceding sub-sections all have impacts on the labour market, shifting demand for different types of labour and changing wage rates. In addition, labour mobility itself is an aspect of globalization. In this section we review the effects of globalization on wages and on investment in education, and discuss the impact of migration.

3.3.1 Trade, outsourcing and wages

As well as their aggregate effects, trade, outsourcing, and investment flows typically change the relative demands for different types of labour, and hence change the distribution of income within countries. To the extent that trade and investment flows are responding to differences in factor endowments and factor prices, they should bring a convergence of relative factor prices. Thus, the relative wage gap between skilled labour and unskilled labour should be reduced after trade liberalization in poor countries that have relatively little skilled labour. New export-oriented activities will demand unskilled labour and bid up its wage. Higher income countries, with greater relative endowments of skilled labour, should see a widening of the gap, as their unskilled labour faces greater competition from unskilled labour abundant countries. So trade should reduce inequality in poor countries while increasing it in rich ones.

There is a substantial empirical literature attempting to document the effect of trade on wages in developed countries, and in particular seeking to distinguish between the effect of trade and that of technological change in widening wage differentials. This literature is substantially Anglo-American in character — not surprisingly, because, as we discuss in Section 4, widening wage differentials have been much less characteristic of continental European countries. Consensus estimates have assigned to international trade about 10-20% and technology about 80-90% of the increase in the wage gap. Recent estimates by Feenstra and Hanson (2001) take into account the effects of outsourcing in a way that previous estimates did not. Even so, they suggest that international trade accounts for at most 30% of the shift in wage inequality.

In developing countries there are several reasons why trade may not always reduce the gap between skilled and unskilled wages. First of all, it is often not the least skilled who are likely to experience an increase in labour demand. There is plenty of evidence (from Asia, for example) that at least primary level skills are at a premium in modern sector manufacturing export activities, so it is these workers (rather than the lowest skilled) whose wages will be bid up. The export sector of a developing country, while intensive in unskilled labour relative to developed countries, may be relatively intensive in skilled labour relative to the country’s non-tradable sector. In this case, expansion of the tradable sector may increase the wage gap between skilled and unskilled labour. This argument may be particularly important when it comes to outsourcing by firms. Feenstra and Hanson (1996) show that the shift in Mexican manufacturing towards foreign-owned plants was accompanied by an increase in the relative demand for skilled labour, and can account for nearly half of the increase in Mexico's non-production wage share.

Trade liberalization might also be associated with movement of some factor (or knowledge) that is complementary to skilled labour. Tang and Wood (2000) suppose that globalization allows 'knowledge workers' to gain better access to cheap Southern unskilled labour. If knowledge workers combine with relatively skilled labour in the South, then the effect will be to raise wages of skilled workers in the South.

The same argument can be made for the movement of capital, for the package of activities embodied in FDI, and for transfer of new technologies. If financial liberalization induces a capital inflow into a country, then the demand for skilled and unskilled labour will increase, implying an increase in both skilled and unskilled wages. Effects on the wage gap between skilled and unskilled labour depend on the technology, namely on the relative degree of complementarity between capital, skilled labour and unskilled labour. When capital is strongly complementary to skilled labour, and less so to unskilled labour, as commonly assumed, then capital inflows raise the wage gap between skilled and unskilled workers, raising inequality and at the same time stimulating domestic incentives to invest in human capital. The reverse is obviously true for capital outflows. The endogenous change in factor endowments will mitigate the initial positive impact of international capital mobility on wage inequality.

Concerning technology transfers, again what is important for our purpose is whether or not they increase the return to education in the country. In the long run, when skilled and unskilled labour are mobile across sectors, what matters for the return to education is the sectoral bias of the technology transfer.[6] If technology transfers fall mainly on the skill-intensive sector, the wage gap between skilled and unskilled labour increases, raising inequality and triggering a mitigating positive endogenous educational response in the local economy.

What can we say, therefore, about the impact of globalization on the education and the acquisition of skills?

3.3.2 Effects of globalization on human capital accumulation

What are the effects of openness on the supply of skills? The acquisition of skills is an investment decision (Cartiglia, 1997; Findlay-Kierszkowski, 1983; Stokey, 1991a; 1991b). Globalization may affect the incentives to invest in human capital as it changes returns to skilled and unskilled labour, and may also change the costs of acquiring skills.

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[6]In the small open economy context, when the economy is unspecialized, factor prices depend only on international goods prices and not on local factor endowments. Any factor-augmenting technical change (technical change biased towards skilled or unskilled labour) has therefore no impact on these factor prices. Things are obviously different when the economy is large enough to affect international goods prices (Krugman, 2000; Leamer, 1998, 2000).

Access to education may also be impeded for many individuals who do not have good access to credit markets on which they can borrow to finance these investments. Educational responses therefore depend on credit markets, and outcomes may exacerbate or mitigate the initial impact of international integration on the distribution of income.

In an economy without important credit market imperfections, the main economic determinant of skill accumulation would be the relative return to education. This reflects the wage rates of skilled and unskilled workers. Thus, if globalization raised the gap between skilled and unskilled wage rates (as we suggested above that it might do), it would cause a positive educational response, which in turn would dampen the overall impact of globalization on inequality.

Credit and asset market imperfections may, however, significantly alter decisions to invest in education even when the wage gap between skilled and unskilled labour has increased. Indeed, several studies have suggested that credit rationing could well be the main obstacle to human capital accumulation (Cameron and Heckman, 1990; Psacharopoulos and Woodhall, 1985). Liquidity constraints modify the conclusions above because they imply that educational investments are not determined solely by how globalization affects the wage gap or the return to education. They also depend on how changes in domestic prices, induced by external openness, will affect the probability that people are liquidity constrained.

When credit markets for education are imperfect, poor individuals may not be able to finance up front the fixed cost of education. The pattern of skills is then determined by the shape of distribution of initial endowments in the economy and the cost of education (Cartiglia, 1997). Trade opening then has two further effects. First, income effects associated with trade will change liquidity constraints and hence the ability of individuals to invest in education. Second, by affecting skilled labour wages, openness has also an impact on the real cost of education, especially when the education system is skill intensive. For instance, trade inducing a rise in the relative wage of skilled labour also increases the real cost of investing in human capital. This in turn increases the severity of the liquidity constraint faced by individuals who want to go to school, reducing the educational response.

Incompleteness in insurance markets may also greatly affect the pattern of educational responses to globalization. Various aspects of human capital are specific to firms and sectors and can increase a worker's productivity only in that context. Workers undertaking sector-specific human capital investments may face important adjustment costs if they have to move from one sector to another, once the uncertainty is resolved. This may affect their incentives to invest in specific education. To the extent that trade and financial integration introduce unpredictable external shocks, they may increase the uncertainty borne by local workers. And higher international mobility of capital and skilled labour increases the demand elasticity for immobile unskilled labour, again making that factor bear more income volatility (Rodrik, 1998).

Without adequate insurance, these aspects of openness may discourage specific human capital investment. An alternative for workers may be to invest in general education, helping them adapt more quickly to changes in the economic environment. Indeed, by reducing the adjustment costs of inter-sector or inter-firm mobility, general education can be viewed as a partial insurance mechanism. By increasing individual uncertainty, openness is therefore likely to trigger a higher demand for general education rather than specific human capital (Kim and Kim, 2000).

3.3.3 Globalization and migration

The substantial increase in migration in the last two decades parallels the increase in trade and capital flows. Globalization reduces the costs of migration and hence may increase the incentive to migrate, especially if the large disparities in living conditions persist across countries. Incentives to migrate are likely to be further increased by demographic trends: low fertility in developed countries, especially the EU and Japan, will increase their demand for migrant workers; while high fertility in developing countries will increase supply.

Although the vast majority of migrants are ‘economic’ (for example, of the 400-500,000 people who migrate to the United Kingdom each year, fewer than 20,000 are granted political asylum), there is a clear relation between political instability in developing countries and migration pressures. The largest source countries for asylum seekers in the EU are Afghanistan, Somalia, Sri Lanka, Iraq, the former Yugoslavia and Iran.

Policy liberalization in this area has been haphazard, largely determined unilaterally by individual destination developed countries. The major exception to this is free movement of labour within the EEA; this will eventually be extended to much of Eastern Europe with enlargement, but some EU countries are seeking to ensure extremely long transition periods (Boeri *et al.*, 2002). The United States has adopted more liberal policies over the past decade, largely as a result of very strong economic growth. Overall, there is no clear direction or framework for policy in developed countries: the intellectual and political case for liberal migration policies is much less generally accepted than for trade.

The effects of migration have received relatively little study. Within developed countries, relatively liberal migration policies are generally thought to have positive effects. But migration from developing to developed countries raises a number of possible negative effects. As with trade, if unskilled workers migrate, there may be downward pressure on unskilled wages in developed countries. But there is a considerable body of economic evidence (Borjas, 1999) that this effect is marginal at most. Politically, an important factor appears to be fears that migrants require disproportionate expenditure on public goods (education, welfare). Since most migrants are young adults, however, this is likely to be outweighed by pension expenditures, which migrants help finance. The evidence suggests that migrants have a fiscally neutral or beneficial effect. If skilled workers migrate, there may be a ‘brain drain’ from developing countries. On the other hand, there may be contrasting pro-development network effects (Rauch, 2001): as among overseas Chinese in SE Asia; or in the development of the Indian software industry, which has benefited from Indian migration to the United States; and through remittances. Brain drain effects appear to be most damaging when the relevant human capital accumulation is government financed (such as in the South African health and education sectors).

3.4 Overview

This section has examined the effects of the increasing global reach of markets on the economic conditions of both rich and poor countries. In principle, increasing market opportunities, whether in goods, capital or labour markets, should improve the incomes of both rich and poor. But by changing the relative scarcity of the skills and resources owned by different groups of people, globalization will also change their market value, and will thus redistribute incomes in ways that may increase inequality, or provoke political opposition, or both. We have identified a number of circumstances in which such changes may harm particularly vulnerable groups such as the rural poor or urban unskilled workers. We emphasize that whether these circumstances are likely to obtain is an empirical question whose answer varies from country to country and from one time to another. Sometimes these empirical circumstances can be influenced by appropriate policy intervention, so as to give globalization a better chance of producing more acceptable outcomes. We shall consider appropriate policy responses in Sections 5 and 6. But now it is time to look at the evidence about overall trends in poverty and inequality in the world and consider how far globalization may be responsible for these.

4. The effects of globalization on world poverty and inequality

Has the acceleration of globalization been accompanied by an increase in inequality or in absolute poverty, either in the world as a whole or within individual countries? If so, we must ask whether these developments are a consequence of globalization or might have other causes. In this section, we consider primarily the first question, although the ambiguity of the data requires some initial conjectures about the role played by globalization.

Table 8 World distribution of income and life expectancy - inequality and poverty indices for selected years

Year	1820	1870	1910	1929	1950	1970	1992
Mean world income							
(PPP $ 1990)	658.7	890.0	1459.9	1817.1	2145.5	3773.8	4962.0
World population (millions)	1057.0	1266.0	1719.0	2042.1	2511.3	3664.5	5459.1
Income shares							
Top 10%	42.8	47.6	50.9	49.8	51.3	50.8	53.4
Bottom 20%	4.7	3.8	3.0	2.9	2.4	2.2	2.2
Share of top 10%/bottom 20%	9.1	12.4	16.8	17.2	21.2	23.4	23.8
Summary inequality measures							
Coefficient of Gini	0.500	0.560	0.610	0.616	0.640	0.650	0.657
Standard deviation of logarithm	0.826	0.919	1.027	1.064	1.154	1.210	1.184
Poverty headcount (%)							
Poverty							
($2 per day, inflation-adjusted)	94.4	89.6	82.4	75.9	71.9	60.1	51.3
Extreme poverty ($1 per day)	83.9	75.4	65.6	56.3	54.8	35.6	23.7
Poverty headcount (Millions)							
Poverty ($2 per day)	997.8	1134.3	1416.5	1550.5	1805.6	2200.7	2800.5
Extreme poverty ($1 per day)	886.8	954.0	1127.7	1149.7	1376.2	1304.7	1293.8
Life expectancy							
Mean	26.5		32.8	38.5	50.1	59.4	61.1
Theil index (between countries)	0.012		0.045	0.046	0.025	0.012	0.013

Source: Bourguignon and Morrisson (2001), Table 1

We begin by examining evidence on the overall distribution of income between individuals in the world as a whole, before going on to break it down into the contribution of a changing distribution between countries and changing distributions within countries. It turns out that the changing distribution between countries has been by far the more important influence on developments in the world as a whole.

We confine our attention initially to income-based measures of inequality and poverty,[7] but consider also whether other measures based on 'quality of life' indicators give a different picture.

4.1 The changing world distribution of income

Table 8 is drawn from Bourguignon and Morrisson (2001) and gives a striking picture of the evolution of world income in the nearly two centuries from 1820 to 1992. In summary:

- World inequality increased dramatically in the nineteenth century, and kept increasing, although at a slower pace, during the first half of the twentieth century. At the beginning of the nineteenth century, world inequality was comparable to the degree of inequality observed today in countries like Mexico or Colombia, which are among the most unequal nations. The Gini coefficient was slightly above 0.5, and the share of the bottom 20% in world income was a little under 5%. Yet by 1950, world inequality had gone beyond levels ever observed in a single country, even the most inegalitarian ones in the world. The Gini coefficient was around 0.64, whereas it very rarely exceeds 0.60 today even in highly unequal countries like Brazil or South Africa. The share of the bottom 20% in world income had fallen to less than 3%. Thus the top 10%, who were receiving nine times as much income in 1820 as the bottom 20%, were receiving 21 times as much in 1950.

- After 1950 this trend seems to have slowed, if not quite to a halt. World inequality is probably slightly greater at the beginning of the twenty-first century than it was in 1950, although total world income has increased by a factor of more than five during this period. By some measures (e.g. the standard deviation of logarithms, Table 4.1), inequality fell from 1970-92. This finding is confirmed in recent work by Sala-I-Martin (2002), who finds inequality peaking in the late 1970s and falling through to 1997 (the last year available). Although this conclusion runs counter to the popular view, these observations command general agreement (see O'Rourke and

[7] Data for this analysis of the evolution of inequality in the world come from two sources. Across countries, these are aggregates like real (PPP-corrected) GDP per capita and other aggregate indicators of welfare. Within countries, data generally come from household surveys and refer to household disposable income or consumption expenditure *per capita*, households being weighted by their size. For consistency, a proportional correction of the latter is performed when the two sets of data are combined in order to estimate the global distribution of income among world citizens.

Williamson, 2000; Pritchett, 1997).[8]

- The picture looks more positive when we consider absolute poverty, as measured by the ability to consume a minimum set of basic necessities, defined in constant (inflation-adjusted) dollars. The proportion of the world's population living below a poverty line set at $1 per day fell from a startling 84% in 1820 to 24% in 1992, and the proportion living below a $2 per day poverty line fell from 94% to 51%. In proportionate terms, therefore, absolute poverty is lower now than it has ever been in history.

- Population growth means, however, that the absolute number of people in this condition of absolute poverty has also been growing. Different measures tell somewhat different stories: the numbers of people in extreme ($1 per day) poverty have stabilized since 1950 in spite of world population growth, but numbers in $2 per day poverty have risen by more than half (actually 55%).

- If we broaden our measures beyond indices of current income or consumption to include life expectancy, the picture is more encouraging than that given by income alone. In particular, it is remarkable that if income inequality across countries might have somewhat *increased* over the last 20 to 50 years, the *inequality of life expectancy* fell substantially.[9]

The sheer diversity of these conclusions may seem somewhat bewildering. Are the developments reported in Table 8 good news or bad news, or both? The reduction in the proportion of the world's population in absolute poverty is clearly very good news, but the fact that the number of people in poverty is still increasing is not. It is bad news not only in itself but for what it implies for the future, given that population growth is difficult to halt without significant improvements in living standards.

In addition, absolute poverty clearly does not capture everything that matters. Inequality matters, both intrinsically according to some people, and because it is an indicator of non-monetary aspects of the lives of the poor: it may be much harder to tolerate poverty when signs of the affluence of others are all around. There can be no doubt that the increase in communications, especially via broadcasting, that has taken place in the world in the last half century has enormously increased the visibility of affluence to those who are excluded from it. Even if the poor are becoming a

[8]There has been some debate on the evolution of the world distribution of income after 1992. Using a collection of comparable household surveys, Milanovic (2002) finds unambiguous signs of the worsening of the world income distribution. But his evidence differs from the results reached by simply considering changes in the GDP *per capita* figures and in demographic weights during the same period. Viewed in a longer perspective, however, this debate about very recent changes in the world distribution does not modify the general assessment. First, inequality does not seem to be unambiguously declining now despite the extremely high current level, as high as it has ever been. But second, even if inequality is still increasing, the rate is vastly slower than that of the last two centuries.

[9]This calculation ignores the present and future effects of the HIV epidemic in Africa.

smaller and smaller proportion of the world's total population, and even if improvements in life expectancy mean that the objective condition of the poor is somewhat less terrible than it was for their predecessors a century or more ago, their awareness of their deprivation relative to the rest of the world is growing rapidly.

What is driving the changes documented in Table 8? Changes in inequality among world citizens result from changes in inequality between countries (or possibly regions of the world like North and South or East and West) and within countries, or again within regions of the world. These various evolutions may go in different directions. It turns out that the between-country component is the dominant one, as correctly emphasized by the recent literature on convergence. It is a decline in between-country inequality that has brought about the recent slow down or reversal of overall inequality. Weighting countries by their populations, between country-inequality is similar at the end of the twentieth century to its level in 1950, and has been falling from the late 1970s onwards (Bourguignon and Morrisson, 2001, Table 2; Sala-I-Martin, 2002). This is due in part to the very satisfactory performances of big countries like China since 1978 and India since 1993, while there have been dismal performances of a large number of small African countries during the same period. If countries are all given equal weights (not population weighted), then cross-country inequalities continue to widen to the end of the twentieth century.

We consider explanations for the between-country and within-country developments in the next two sections.

4.2 What is driving the evolution of between-country inequality?

A remarkable feature of the second half of the twentieth century is the fact that the 'big time' divergence between countries noted by Pritchett (1997) for the nineteenth century and the beginning of the twentieth century seems to have slowed considerably or been reversed.

It is mostly the dramatic success of economic reforms in China, partly a consequence of opening to trade and FDI, that slowed or halted world inequality in the last part of the twentieth century, a success which is thus partly a result of the globalization process. At the same time, one may also see the poor performances of African countries as a failure of globalization to integrate that part of the world. Whether the failure of globalization to integrate Africa is the result of insufficient exposure to the world economy, or a sign that African economies were not ready to take advantage of the opportunities of globalization, is a much harder question to answer. A neoclassical view of the world would suggest that reductions in trade barriers and trade costs should promote convergence of factor prices and income levels, occurring through specialization and factor accumulation, and that this would be beneficial regardless of the initial condition of the economy concerned. A variant on the neoclassical perspective is provided in Lucas (2000). He argues that the divergence of the twentieth century will be reversed, as sooner or later every country will join the industrial revolution. Best practice policies and institutions will be imitated in hitherto unsuccessful countries, and 'the restoration of inter-society income equality will be one of the major economic events of the century to come' (Lucas, 2000, p. 166). He bases his prediction on a simple model in which new entrants to the growth process start at a growth rate of (2 + 2.5n)% per year, where n is the number of 50-year periods to have elapsed since 1800; thus a country experiencing take-off in the early twenty-first century will grow initially at 12% per year compared with 7% for the 1900 entrant. He makes the controversial assumption that all countries have an equal chance of joining the growth club with a hazard rate evolving from 0.01 to 0.03 over time.

Alternative views place more weight on institutions and on the geography of remaining barriers. The institutional school (North, 1990) sees institutions as the key stumbling block. In this view there is no presumption that bad institutions are replaced. The world then exhibits strong path dependency, where vested interests spawned by the existing arrangements and informal constraints, embodied in customs, traditions and codes of conduct which are impervious to deliberate policy reform, hold sway (Acemoglu, *et al.*, 2001). The geography approach emphasizes the importance of underlying geographical characteristics (for example, proximity to the equator and propensity to diseases such as malaria; see Sachs *et al.*, 1999), and also the costs of remoteness from existing markets and sources of supply (Redding and Venables, 2000).

Both the institutional and the geographical approach suggest that the future will not see the relatively smooth convergence predicted by neoclassical theory. Economic performance is path dependent, and societies can become locked in low-level equilibria. For example, in the geography approach increasing returns cause agglomeration of activity in economic centres. Globalization facilitates the spread of activity out of these centres to new countries, but as activity spreads out it remains prone to cluster. Thus development is an inherently 'lumpy' phenomenon. Some countries will acquire clusters of activity and make a relatively rapid transition from low- to higher-income status. Others remain 'peripheral' and fail to attract significant levels of industrial activity. This view fits well with the divergent performance of regions of the world during the post-war period, and with the observation that the world has increasingly polarized into a group of high-income and a group of low-income countries (the pattern of 'twin peaks' highlighted by Quah (1997) or 'divergence big time' (Pritchett, 1997)).

Although these alternative views suggest that globalization (and open trade policies by a particular country) is not sufficient for development, they also imply that development is very likely, sooner or later, to involve responding positively to globalization. Openness allows specialization and the development of clusters of specialized activity, which in turn bring the benefits of scale effects and consequent increases in demand for labour and in labour productivity. Where the views differ is in how easy they think it will be for different countries to achieve the degree of integration that makes these developments possible.

This position is consistent with the evidence. For example, Dollar and Kraay (2000) identify a set of developing countries they term the 'globalizers'. They rank developing countries according to the decline in their tariff rates between the 1980s and the late 1990s, and the increase in their trade to GDP ratio, and select countries that are in the

Table 9 Growth and trade performance of the globalizers

	% fall in tariffs, 1980- late 90s	% increase / in trade/GDP, 1980- late 90s	Annual growth % income 1960s	Annual growth % income 1970s	Annual growth % income 1980s	Annual growth % income 1990s
Globalizers	64	92	1	1.7	2.6	5.3
Non-Globalizers	29	1	2.2	2.8	0.2	-0.8
High Income		50	4.5	3.4	2.5	1.9

Source: Dollar and Kray (2000)

top 40 of both lists. There were 16 such countries, and the two African countries that came closest to the criterion were added, giving: Argentina, Bangladesh, Bolivia, Brazil, China, Costa Rica, Ghana, India, Malaysia, Mexico, Nepal, Philippines, Poland, El Salvador, Thailand, Uganda, Uruguay, Vietnam. (The early trade liberalizers — Chile, Turkey, Hong Kong, Singapore, South Korea and Taiwan — are in the rich country group, not in this list of globalizers). Table 9 (first two columns) indicates how very much more open these countries became relative to the non-globalizers (all other developing countries), and it gives *per capita* growth rates for the last four decades. The striking point is that while these countries fared worse than others in the 1960s and 1970s, their performance was dramatically better during the 1980s and 1990s, with *per capita* growth of 5.3% p.a. compared to -0.8% pa for the non-globalizers. It is also noteworthy that the share of these countries' exports going to a given set of high-income countries rose from 69% in 1980 to 78% in 1997. Non-globalizing middle- and low-income countries actually started off with a higher share going to high-income countries, but the share fell from 76% in 1980 to 72% in 1997.

These findings do not establish a causal relationship between openness and growth. They leave open the question of what other circumstances, policies and institutions are necessary for a country to benefit from the opportunities offered by trade. Indeed, it is quite possible that the comparison between these groups involves what econometricians call 'selection bias' — perhaps the countries that chose to become globalizers were precisely the countries for whom this promised the best opportunities, a fact that would tell us nothing about what would have happened to other countries that chose to follow this route. This might be called the 'opera singer problem': opera singers are usually better off than taxi drivers, but this does not mean that taxi drivers would be better off if they tried to become opera singers.

Still less do these findings identify particular trade policy instruments as determinants for causing growth — the countries that liberalized trade also reformed many other domestic policies. They do, however, make a convincing case that full participation in the world economy is an inherent part of modern economic growth. The point is made by Lindert and Williamson (2001) in the following terms:

> '[…] The empty set contains those countries that chose to be less open to trade and factor flows in the 1990s than in the 1960s and rose in the global living-standard ranks at the same time. As far as we can tell there are no anti-global victories to report for the postwar Third World.'

4.3 The evolution of within-country inequality

Not much is known of the evolution of the distribution of income over long periods of time within individual developing countries. This is especially true of Africa, where few surveys are available that are fully comparable over time. In other regions, the experience since the 1980s is mixed. Several cases of increasing inequality are well documented in Asia (China, Malaysia, Thailand) and Latin America (Chile, Colombia, Mexico). But the distribution seems to have remained rather stable in several other countries including Brazil (except for the hyperinflation period at the beginning of the 1990s), Indonesia (prior to the 1997 crisis) or Taiwan. We discuss below whether this stability of within-country inequality in some cases, and increasing inequality in others, is related to globalization. Whether they are or not, these changes in within-country inequality are unlikely to have changed the evolution of world inequality which is dominated by international differences in GDP growth rates.

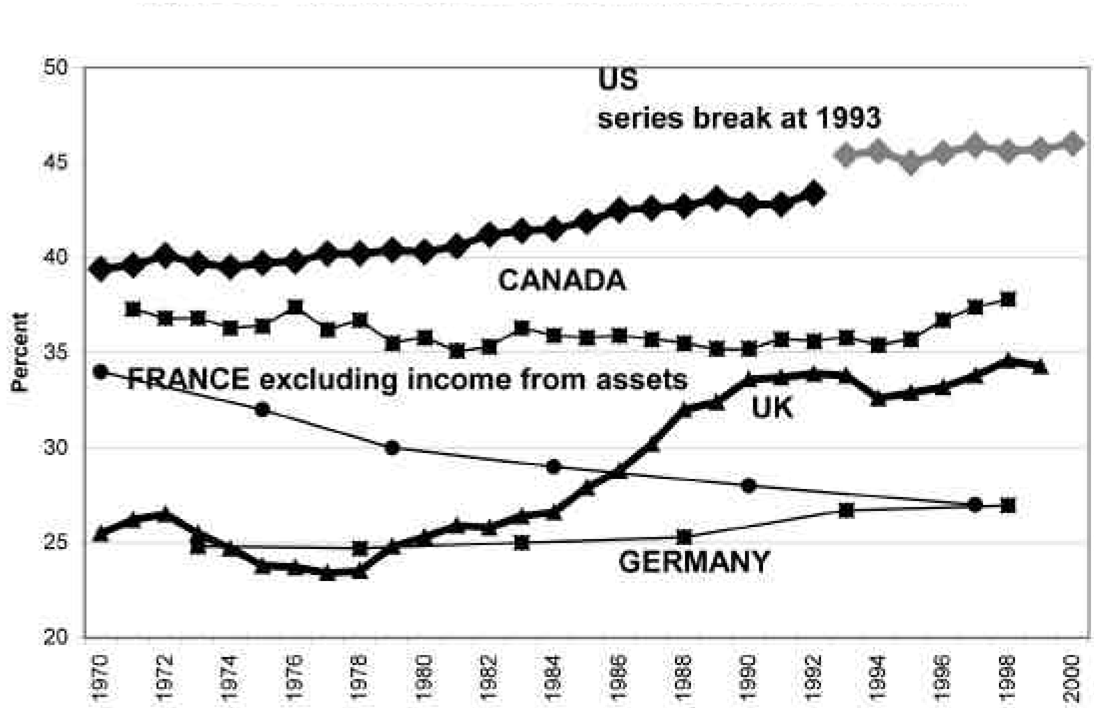
The highly visible surge in earnings and income inequality observed in the United States and in the United Kingdom from the end of the 1970s to the beginning of the 1990s caused controversy among academics and policy-makers. In particular, it raised the question of whether it was the result of enhanced competition with manufactured products originating in low-wage developing countries (e.g. Wood, 1994). This increase in inequality was indeed substantial and somewhat unexpected, after decades during which it stayed more or less constant. The Gini coefficient for household income rose from 0.43 to 0.47 in the United States between 1979 and 1992, and from 0.26 to 0.34 in the United Kingdom. Comparable orders of magnitude were observed for the change in the inequality of individual earnings.

Some argued that the observed increase in wage inequality was the result of increased imports from emerging countries. Even though their share of the domestic market was limited, in the basic model of international trade without full specialization, even a limited presence of foreign competition could generate sizable changes in factor prices. Others queried the relevance of the simple trade model, insisting that the absence of significant changes in the structure of prices attributable to developing country competition was a sign of its limited potential effects on the domestic economy. Other factors, not directly related to trade, could be invoked to explain an increase in the advanced country wage gap between skilled and unskilled workers: biased technological progress (although technological change could itself be the result of trade competition); a decline in the relative growth rate of skilled labour supply during the 1980s; increased competition among firms and with other Northern countries; the individualization of labour contracts; and other institutional changes in the labour market. Moreover the skilled/unskilled wage gap explained only a limited part of the actual increase in wage inequality.

The tentative conclusion is that, although not negligible, the effect of competition from South-East Asia, and to a lesser extent Latin America, on domestic inequality in the United States and in the United Kingdom could have been responsible for approximately 20% of the drop in the relative wage of unskilled workers in the United States (see the summary of the debate on trade and wage inequality by Katz and

Autor, 1999). It also transpired that this process came to a halt in the mid-1990s and that the lowest segment of wage workers was even able to recover part of its previous relative loss (see Atkinson (2001), who also criticizes the trade/technology explanation of the surge in wage inequality).

Figure 11 Changes in income inequality: gini coefficient



Another reason for doubting that competition with emerging countries could explain the surge in inequality observed in the United States and in the United Kingdom is the fact that wage inequality changed little during the same period in other industrial countries, which should have been subject to the same trade shock (Katz and Autor, 1999, Table 10). Prasad (2000) refers to the 'unbearable stability of the German wage distribution'. Figure 11 drawn from Atkinson (2001), illustrates with comparisons of the evolution of income inequality in the United States and the United Kingdom, on the one hand, and in Canada, France and Germany, on the other. It is possible that this asymmetry was due to the effect of binding minimum wage legislation and that trade competition in continental Europe resulted in more unemployment rather than lower wages of unskilled workers. But the same kind of quantitative argument about the number of jobs possibly displaced by imports from the South led to the same conclusion that the effect on unemployment was very limited. As noted by Atkinson (2001), moreover, this asymmetry in the functioning of the labour market between the two sets of industrial countries and the fact that little change had been observed in the structure of trade between them was somewhat inconsistent with a big shock in the terms of trade common to them all — the same being true of a common skill-biased technological change.

Overall, the *direct distributional effects of globalization within industrial countries thus appear to be limited*. They may have been responsible for some increase in inequality in the United States and in the United Kingdom and in unemployment in other industrial countries. In the latter case, however, the absence of any substantial change in the distribution of disposable household income suggests that the *redistribution system has been effective in cushioning populations from possible effects of increasing openness.* And even in the United States, unskilled workers' wages seem to have recovered in the 1990s part of what they had lost in the previous decade; inequality was maintained because of increased disparities at the very top of the distribution. This is not directly consistent with the hypothesis that increased trade with emerging countries is responsible for a permanent change in inequality.

There is little to say about the effects on inequality of other dimensions of globalization in developed countries. To the extent that FDI is responsible for changes in trade flows, the same conclusions as for trade probably apply to them. Its effect on distribution in source countries is most probably very limited. As for migrations of labour, the situation is different again in the United States and in other countries. Immigration of unskilled workers through the US Southern border has traditionally been substantial, and it may have contributed to lowering the relative wage of unskilled labour. In other industrial countries, net immigration flows have considerably diminished since the end of the 1970s, whereas immigration was becoming more and more selective in terms of education and skill. If they had any significant effect on the distribution of income in host countries, this effect should therefore be equalizing, by checking somewhat the growth of skilled wages.

Evidence on the distribution within developing countries is equally ambiguous. The distribution did tend to worsen in several developing countries during the last one or two decades.[10] Inequality is known to have increased significantly in countries like China, Malaysia or Thailand in Asia between the mid-1980s and the mid-1990s.[11] Likewise, it rose in Chile, Colombia or Mexico. It remained, however, approximately constant in Indonesia between 1980 and 1996, although that country shares many features of the outward-oriented mode of Asian development. Likewise, the distribution remained extremely stable in Brazil since the early 1980s except for an episode of hyper-inflation. In several of the countries in the former group, the ascending trend of inequality has recently stopped — e.g. in Malaysia and in Thailand, some time before the 1997 Asian crisis.

The forces responsible for changes in the distribution of income or earnings in a small sample of developing countries were very diverse, and they tended to compensate

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[10] That inequality tended to increase in a majority of countries since 1993 is an implicit conclusion of Chen and Ravallion (2001), as well as of Milanovic (1999) over a slightly longer period. Most of the following information on the evolution of inequality in specific countries is taken from country studies in the MIDD project (Bourguignon, Ferreira and Lustig, 2001).

[11] But not urban-rural inequality (see Wei and Wu (2001), who show that cities in China that have experienced greater openness in trade show a greater decline in urban-rural inequality).

each other in some cases or resulted in a clear ascending or descending inequality trend in others (Bourguignon, Ferreira and Lustig, 2001). Many of these forces have little to do with globalization. For instance, progress made in the educational level of the working population had equalizing effects in some cases and inegalitarian effects in others. Changes in labour supply also had sizable effects on the distribution of earnings in some cases. The increase in inequality in China may be due more to the transition from a socialist to a market economy than to trade liberalization. Other forces are directly or indirectly related to structural economic changes, which may themselves be linked, however, to trade opening or international factor movements. For example, returns to schooling tended to increase in several countries, thus contributing to an increase in the inequality of the distribution of earnings and *per capita* household income.

The problem is then to identify the economic, or social, forces responsible for that evolution. There seems to be some contradiction between standard trade theory and the North-South argument used above. If indeed increased North-South trade and competition means unskilled labour is less well remunerated in the North, the opposite should be observed in the South. But this is not systematically the case, so forces other than standard trade mechanisms may be at work (Robbins, 1999). The same skill-biased technical progress that affects industrial countries might have been imported in developing countries. Another interesting hypothesis is that the market for highly skilled labour tends to become more integrated world-wide, and the cross-country equalization of the real remuneration of people at the top of the educational scale is responsible for the observed increased return to schooling in developing countries.[12] Of course, if this hypothesis were validated, it could be directly related to globalization, but not by the standard pure trade argument.

Formal empirical tests of whether trade openness may have some impact on the level of inequality have been performed by Dollar and Kraay (2000) on cross-country data with some panel dimension.[13] The variable being explained is inequality, as measured by the relative difference between the income of the poorest 20% of the population and mean income. Explanatory variables include all variables traditionally used in growth regression analysis, including openness. No significant result shows up, suggesting that the phenomena behind differences across countries and over time in the degree of openness of an economy do not influence the distribution of income.

Both for developed and developing countries, therefore, we simply cannot say that globalization-related variables have been major determinants of the evolution of the distribution of income in recent decades. In both cases, distribution seems to be affected by a host of factors, which in some cases reinforce each other to move the distribution in one direction or another and in others compensate for each other.

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[12] Whereas immigration of highly skilled workers from developing countries in developed countries would be consistent with an increasing demand for that type of labour.

[13] The same authors recently studied more specifically the effect of trade openness on growth and the relative income of the poor (Dollar and Kraay, 2001).

Phenomena related to globalization may be part of these factors, but it is not always easy to identify this relationship. For instance, the increase in wage disparities in developing countries may well be due, as has been hypothesized, to the integration of the world labour market for highly skilled individuals. But it may also result from technological progress being highly demanding in labour skills. In turn, both the pace of technological progress and its factor bias may well be affected by the enhanced competition that accompanies the process of globalization. *There is no strong evidence that globalization-related phenomena observed during the last two decades or so have contributed to increasing within-country inequality.*

4.4 Conclusions

Analysing the effects of globalization, we have seen that the between-country component of world inequality is much more important than the within-country component. This is because the latter is affected by many domestic forces that may be independent from the relationship between a country and the rest of the world. Historically, gaps in the growth rates of nations over some extended periods of time have been more important in shaping the evolution of world inequality. The problem is to identify what part of these gaps may be due to international factors, themselves resulting from the globalization process. In other words, does globalization benefit mostly the rich countries or the intermediate ‘emerging’ countries? And is it in the nature of the globalization process to leave aside large regions of the world?

In the absence of a comprehensive model to answer these questions, the evidence suggests that globalization had positive effects on the world distribution through pushing up Asian growth. At the same time, it is its inability to integrate Africa that is responsible for the most worrying aspect of the recent evolution of the distribution. But this raises an important question: should ‘globalization’ be seen purely as the reflection of market forces becoming global? Or should it include global public policy about development aid and trade liberalization in favour of the poorest countries? In the same way that redistribution mechanisms in some countries may have prevented globalization forces from affecting the domestic distribution of income, redistribution mechanisms might be designed at the global level that would prevent global market forces from increasing world inequality, and might even contribute to reducing it.

This section has confined its attention to the evolving distribution of income among people currently alive. But some of the fiercest critics of globalization have claimed that its greatest costs will be borne by future generations. We explore this issue in Section 5.

5. Globalization and future generations

The pattern of economic development in any society influences not just the lives of its current citizens but also those of future generations. But future generations are not alive to make their voice heard and their interests known at the time crucial decisions affecting their future wellbeing are taken. They must rely on the intelligence and the concern of those who are alive today. How are they affected by globalization? And in particular, are there reasons to think that future generations will bear costs much larger than those apparent in the statistics on income distribution in Section 4?

Economists usually look at two main channels by which the future depends on the present. The first is investment, which affects the stock of productive assets available to our successors. The second is saving, which affects the distribution of entitlements to the use of those productive assets. At the level of the world as a whole, saving and investment are equal, necessarily: the entitlements to use productive assets must add up to the total of the assets there are to use. But at the level of individual households, regions and nation states, saving and investment may differ, and it is globalization that allows them to do so. In principle, this is a good thing: markets are globally integrated when the return on the savings of a French citizen depends not on the return to investment in France but the best return to investment available anywhere in the world. In principle, integrated global markets increase the opportunities available to those who would otherwise be stuck in regions where investment returns are low, and strengthen their capacity to ensure that their descendants do not inherit their predicament. This is good for efficiency, because it directs savings towards their most productive uses. Often it is also good for equity, because poverty often creates obstacles to efficient investment more than to saving as such (De Soto, 2000).

In practice matters are more complicated, for two reasons. First, even if capital market integration were complete (and it is not), the welfare of future generations of French will depend on more than just the financial capital they inherit. It will depend also on their inheritance of physical and social capital, some aspects of which cannot easily be made good simply by substitution with financial savings. If their ancestors bequeath run-down infrastructure, poorly functioning political institutions, a dangerous or unhealthy environment, or a culture of social antagonism, then assets yielding the very best rates of return available internationally may be an inadequate consolation. Second, globalization might harm investment opportunities at the level of the world as a whole, and by enough to offset the more efficient allocation of savings to investment that integrated markets make possible.

Is either of these a realistic possibility? If some inputs are incorrectly priced at less than their true shadow value, trade may reduce welfare, since the additional output produced as a result of trade may be worth less than the true cost to the economy of the inputs that are used up in its production. Here, the interests of future generations are particularly at risk, since existing systems of property rights may fail to protect their assets — particularly scarce environmental resources. For instance, market prices may fail to reflect the costs of pollution, particularly of the build-up of stock pollutants that cause little damage today but store up damage for the long term (such as carbon dioxide or CFCs). Alternatively, resources may be subject to common pool problems, as in fisheries or forests. These resources are in principle renewable, but the incentives to harvest in a sustainable way (and to invest in renewal) may be undermined by the fact that individuals cannot count on benefiting from their own restraint. What these examples have in common is that the theoretical possibility of underpricing of domestic inputs used up in trade becomes systematically more likely as a result of systems of property rights that fail to take the interests of future generations into account. Trade itself is not the primary culprit, but trade may raise the cost to society of an already existing domestic market failure.

In these circumstances, *if there were no way to tackle the domestic market failure directly*, taxing or otherwise discouraging trade could be a second-best policy *provided* production of tradables is more intensive in these natural resources than that of non-tradables (if this is not the case, then discriminating between tradable and non-tradable production will be useless even as a second-best response). Conversely, for a country that is already failing to account adequately for its environmental resources, trade liberalization could increase output of tradables and thereby lower welfare, if no other instruments are adopted to cope with the domestic market failure.

What are the policy implications? The underpriced natural resources in which tradables production is particularly intensive are likely to be fairly country-specific. But energy and forests are two kinds of resource that appear to be systematically underpriced by exporters. Sometimes this underpricing is inadvertent, sometimes deliberate (Binswanger (1992) documented how deforestation in the Brazilian Amazon basin is systematically promoted by domestic policies pursued in the name of development). In the presence of such policies, trade liberalization may indeed have damaging environmental effects. Some other underpriced resources (such as clean air), however, are used as intensively in non-tradable as in tradable production: Hettige *et al.* (1992) found that the toxic intensity of manufacturing increased more rapidly in inward-oriented than in outward-oriented developing countries, because the capital-intensive activities favoured by protectionist regimes were more polluting than the relatively labour-intensive activities encouraged by more open trade regimes. Effects are sector- as well as country-specific. Dasgupta *et al*. (2001) present evidence from Brazil suggesting that export-orientation in agriculture is associated with significantly increased pesticide use (and associated pollution); but as Barrett *et al*. (2001) point out, the agro-industrial sector is among the dirtiest of all in developing countries, and other sectors have a significantly better record. Pollution is also heavily concentrated among a small number of crops and activities, so regulatory measures could reduce overall pollution levels relatively easily through affecting the output mix.

Trade restriction is clearly inferior to tackling the domestic policy failure directly. Finding suitable domestic solutions to the underpricing and weak property rights that cause environmental resources to be overused in tradable production is a key priority for ensuring the sustainability of globalization. But such policies are often difficult to implement, or unpopular with powerful domestic interest groups (especially since future generations neither vote nor lobby). Moreover, where the costs are imposed in part on other countries (as with global warming or ozone depletion), there may be little domestic interest in resolving the market failure. Grossman (1994) provides evidence of an important difference between pollutants whose costs fall primarily on the country in which production takes place and those whose costs fall primarily abroad. In the former case, the intensity of production shows a clear tendency to decline as economic growth proceeds, suggesting that purely domestic political failures are often eventually resolved. But the intensity of production in trans-frontier pollution shows no such tendency to diminish with development. Indeed, foreign trade may permit substituting away from activities that impose pollution costs at home towards those that impose pollution costs on distant foreigners.

Thus globalization increases the urgency of appropriate policy responses: the interests of future generations need to be properly accounted for in systems of prices and property rights that affect the use different countries make of their environmental capital. Failure to do so may have very serious consequences: Dasgupta (2001, pp. 159-161) argues that if we take into account the erosion of their natural resource base, a number of countries that appear to have made significant progress in terms of income per capita in recent years (including the whole Indian sub-continent) have done so only by running down their natural resource assets at an unsustainable rate. This failure may not in itself be due to globalization, but globalization may make the consequences of failure more serious and more immediate. If we cannot ensure adequate policy responses, we must be cautious about the speed of openness. Nevertheless, restrictions on trade are a highly indirect and inefficient way to deal with such domestic market failures, an unnecessary sacrifice of the benefits of globalization.

When we turn to capital market liberalization, a new concern arises: it is said that governments might deliberately and endogenously underprice their environmental resources — for instance, through systematically weak regulation — in order to capture mobile capital, on which they receive a rent (sometimes a private rent accruing to politicians). This is sometimes known as the 'race to the bottom' hypothesis. Kanbur *et al*. (1994) develop a model of such behaviour. They emphasize that the appropriate policy response is typically not to attempt to harmonize environmental standards between countries, though agreement on certain minimum standards may well be desirable.

While this is certainly a coherent view in principle, there is scant empirical evidence that underpricing of environmental resources is likely in general to be an attractive instrument for governments to use (Tobey, 1990). Some firms lose rather than gain from weak environmental regulation, and these may include many of the most internationally footloose firms. Moreover, internationally mobile firms often use cleaner technologies than others (Birdsall and Wheeler, 1992), and while in theory they might like to use more polluting methods in their foreign direct investments than they are allowed to use in their home countries, the costs of adapting technology often outweigh any such gains. Panayotou (2000) surveys the evidence and concludes that there are no grounds for thinking that the lure of foreign direct investment systematically leads to a ‘race to the bottom’.

Finally, a different issue altogether concerns whether trade liberalization should be used as a bargaining counter to persuade other countries to adopt environmental policies that their negotiating partners want. Here, again, there are often much better alternative policies for achieving the same end, such as the use of official development assistance (ODA). Bhagwati (2000) discusses specific alternatives — for example, paying the fishing community in South-East Asia to adopt turtle-friendly fishing nets would cost much less than threatening them with trade sanctions if they do not. Yet, in spite of the wastefulness of trade sanctions as a bargaining counter they are frequently invoked: Subramanian (1992) reports that ‘of the 48 bills on environmental matters introduced in the 101st Congress of the United States, 33 included provisions affecting international trade, of which 31 took the form of restrictive trade measures’. It seems that although trade sanctions are economically costly to the country imposing them, they are nevertheless perceived as cheap in political terms by the interest groups that lobby for them.

The fact that political perceptions may sometimes diverge from economists’ measures of costs and benefits is an important reminder that the sense in which development strategies need to be sustainable is not just with respect to their environmental effects. Development strategies, whether based on international market integration or not, need to command sufficient assent to avoid provoking a political backlash and subsequent policy reversal. Even if continuing international integration remains a desirable long-run goal, the speed of integration may depend fundamentally on political as well as economic factors. These include the political reasons why the interests of future generations get inadequate weight in public policy, and the extent to which public opinion can identify with international integration as something that is in the interests both of today’s citizens and of their descendants.

6. The institutional responses to globalization

Previous chapters have shown how, even if globalization expands the range of opportunities available to people, to countries and to regions of the world, their ability to make the most of these opportunities typically depends on their capacities and their institutions, both large and small. In this section we discuss evidence about the way in which institutions themselves have been shaped by the globalization process. We begin by looking at the way in which corporations have responded to globalization, and at the evolving ways in which governments interact with corporations. We conclude by considering the ways in which globalization influences civil society.

6.1 Globalization, governments and corporations

As Ronald Coase (1937) pointed out many years ago, although market transactions do an important part of the work of allocating resources in a modern economy, administrative hierarchies of one kind or another play a large role as well: in particular, modern business corporations and governments. The latter affect resource allocation through production of goods and provision of services; and also by influencing firms, households and markets through the tax and regulatory systems. Indeed, governments and corporations are the two main rivals to the market mechanism, and it is therefore natural to see them as rivals to each other. Yet while markets go back thousands of years, the nation state and the business corporation are much more modern inventions.

Although the current wave of globalization has seen rapid growth in cross-border transactions of various kinds, not all of these are mediated by markets. UNCTAD (1998) estimates that around one-third of all cross-border transactions in goods and services take place between units of the same corporation (see sections 3.2.3 and 3.3.1 above). At the same time, the direct involvement of governments in international transactions has declined since the nineteenth century, for many reasons including the disbandment of most of the old colonial empires. Some argue that corporations have usurped power that should properly belong to governments. Klein (2000) is a good example of such arguments, claiming that 'corporations are much more than purveyors of the products we all want; they are also the most powerful political forces of our time. By now, we've all heard the statistics: how corporations like Shell and Wal-Mart bask in budgets bigger than the gross domestic product of most nations; how of the top hundred economies, fifty-one are multinationals and only forty-nine are countries' (pp. 339-340).[14] So, is it true that growing corporate power is a negative

[14] This comparison is misleadingly based on comparing corporate sales with countries' GDP (which is a value-added measure). Nevertheless, Klein is right that many corporations are big.

consequence of globalization, and if so, what if anything can be done about it?

Evidence that corporations engage in a fast-growing number and value of international transactions, and a growing share compared to that of governments, tells us on its own very little about corporate power. First, corporations do not speak with one voice — they compete against each other as well as (in a less direct sense) against governments. To the extent that *globalization increases the competitive constraints on individual corporations,* either through entry into domestic markets by international firms or through technologies such as the internet that increase the power of buyers, it actually reduces their discretion (the range of options they can follow consistently while remaining solvent). Second, corporations operate within a framework of fiscal, regulatory and other constraints. The share of transactions undertaken by corporations may tell us little about their overall power unless we know how the constraints on them have changed.

One common cause for concern is that firms' new international mobility may make it intrinsically difficult to regulate them. They may operate outside national legal jurisdictions, their assets may be impossible to seize in case of violations, transfer pricing may make their activities less transparent than those of purely national firms, and the fear of their moving offshore — taking their tax contributions with them — may discourage governments from even seeking to subject them to adequately stringent rules. Governments, it might be said, drive forklifts while corporations drive Ferraris.

But there are countervailing considerations. First, the larger corporations become, the more visible they are, and therefore the harder it is for them to evade regulation of a reasonably standard and non-discretionary type, such as VAT compliance, health and safety legislation and so on. Size may, however, confer advantages when it comes to tailoring *discretionary* regulation to their own benefit. Second, international cooperation on regulatory matters has grown in recent years, although not all of this is designed to increase regulatory stringency. Indeed, some forms of cooperation, as in merger control (Neven *et al*., 1993, especially Chapter 6), have been intended precisely to reduce the constraints on firms due to their being subject to multiple jurisdictions — which is itself evidence that operating internationally does not always lighten a firm's regulatory load. Other instances of cooperation to reduce the constraints on firms have taken place in the field of intellectual property rights (as in the establishment of the European Patent Office). The ill-fated Multilateral Agreement on Investment negotiated by the OECD attracted considerable hostility precisely because it was perceived as reducing constraints on firms that some interest groups wanted to strengthen.

Still, a wide range of international regulatory cooperation (from European directives on such matters as air pollution and the storage of toxic and explosive substances to world-wide initiatives aimed at controlling money-laundering) has indeed sought to ensure that firms do not slip through the net of multiple national systems. Below we look at a number of fields of regulation: labour standards, capital taxation and competition policy. Our aim is to see to what extent the combined influences of growing internationalization of corporate activity, and growing international cooperation by governments, have changed the nature of regulation and in the process altered the power that corporations enjoy. First, however, we consider corporate government itself: how does the large firm set its policies, what interests are represented, and what are the implications for their global role?

6.2 Corporations

6.2.1 Corporate governance[15]

Corporate governance has climbed the global policy agenda and has achieved unprecedented prominence in the academic, public policy and corporate and financial communities alike. A visible manifestation of the growing interest is the explosion in the number of Corporate Governance Codes, particularly in Europe,[16] corporate governance statements issued by the world's major corporations and investors and numerous policy initiatives led by the OECD and the World Bank.

Further evidence is the increase in global 'shareholder activism'. Institutional investors, particularly those from the United States, have started to vote the shares in their global portfolios, issue 'voting guidelines', channel their money into 'activist funds' and support global corporate governance clubs, like the International Corporate Governance Network (www.icgn.org). This global interest in corporate governance issues is driven by a number of developments and factors:

- *Crises*: Recent financial crises, like Russia/Asia/Brazil, have been blamed on structural problems, in particular transparency, accountability and corporate governance. Through financial contagion these local crises affect the global economic system, and in 1998 Heads of State added corporate reform to the work programme of international organizations like the OECD.

- *Scandals*: Most countries have had scandals related to corporate governance, often with dire consequences for shareholders and employees. Prominent European examples include Polly Peck and Maxwell in the United Kingdom, Holzmann in Germany, and Enron in the United States. Corporate Governance reviews, for example the Cadbury Committee (1990) in the United Kingdom and the Baums Commission in Germany (2001), were often a direct consequence of such extreme events.

- *Cross-border mergers and takeovers*: Major cross-border mergers (Daimler-Chrysler) and takeovers (Vodafone-Mannesmann) make corporate governance systems at times meet head-on and raise the question of which institutions are 'superior'.

[15]This section draws on Marco Becht, Patrick Bolton and Ailsa Röell (2002), Corporate Governance and Control, a literature survey prepared for the Handbook of the Economics of Finance, edited by George Constantinides, Milton Harris and René Stulz, North-Holland. We are grateful to Marco Becht for his help.
[16]The European Corporate Governance Institute (www.ecgi.org) maintains a large online collection of such codes.

- *Relative growth of investment funds*: Fund investment has grown significantly faster than GDP in most OECD countries and much of it in the form of equity investment. Within the OECD most of the funds are under management with US-based institutions, and these are increasingly making their views felt, also abroad. These efforts are endorsed by European institutions, such as pension funds from the United Kingdom and the Netherlands.

- *Privatization and transition*: Many of Europe's largest listed companies were not listed on a stock exchange ten years ago. Through the privatization process, shares were sold more broadly than before and government officials were directly confronted, often for the first time, with capital market and corporate governance issues. In transition economies, which could not rely on a long-standing stock exchange and market-orientated legal tradition, privatization issues were even more challenging.

- *Deregulation and freedom of movement of capital*: Financial liberalization and integration has led to a rising trend in cross-border investments, including equity investment. The shareholder structure of many companies is becoming increasingly international.

- *Cross-listing*: Corporations have increasingly sought foreign listings, particularly in the United States. These corporations become subject to foreign regulation, raising questions about the relative merits of the regulatory systems at home and abroad, with several authors arguing that companies are opting into superior governance systems through the cross-listings mechanism.

There is no clear consensus in the economics, corporate finance and legal literature on most corporate governance issues, and hard evidence on systems other than those of the United States is scarce (Becht, Bolton and Roell, 2002). In contrast, the practical reality of corporate governance is one of great diversity across countries and corporations, with sentiment swinging for and against different arrangements as the business cycle and crises evolve. Broadly speaking, Japanese and German corporate governance looked good in the 1980s when Japan and Germany were growing faster than the United States. In contrast, in the late 1990s, following nearly a decade of economic recession in Japan, a decade of costly post-unification economic adjustments in Germany, and an unprecedented economic and stock market boom in the United States, the US corporate governance model was hailed as the model for all to follow. Now there are signs that sentiment is turning again in light of the stock market excesses on Nasdaq and the Neuer Markt, the resulting over-investment in technology, and the Enron and other scandals.

During the 1980s Japanese and German corporations were able to raise capital more cheaply than their US and UK counterparts. In the subsequent decade the equity bull market made the cost of capital lower for US companies — suggesting that the advantage enjoyed by their Japanese counterparts in the previous decade might in turn have been due more to the 1980s asset price bubble than to the corporate governance framework. What is more, in both cases the low cost of capital came to be seen with the benefit of hindsight as a drawback, having perhaps led to too much investment or investment of the wrong kind.

The contrasts between the two models can be exaggerated. For example, it has long been argued that the long-term relationship model has allowed companies to involve their employees and suppliers closely in the operation of the business, facilitating the adoption of high-trust business models such as just-in-time production. In contrast, the Anglo-American model is seen as too focussed on short-term quarterly performance measures, as corporate managers are vulnerable to hostile takeovers.

In fact, US corporations are now extremely well protected against hostile takeovers. Only in the United Kingdom is there still an open and active market for corporate control. Hostile takeovers are far rarer events than their prominence in debate would suggest. At the height of the 1980s takeover boom in the United States, the takeover rate among listed companies never exceeded 1.5%, and of those never more than 30% were hostile bids. The evidence on hostile bids suggests that, contrary to theory, they are not more likely to affect badly performing companies and are therefore not really a device for disciplining bad managers. While shareholders in the target company often earn a substantial premium, there is no evidence that the return to shareholders in the bidding company is different from zero. It is possible, however, that the surge in takeovers in Continental Europe since 1999 has brought about more management discipline, reflecting as it does the waning of governments' interest in protecting national champions.

Hence the answers to the main issues in the policy debate today look less certain than ever. What has not changed is their relevance for growth, competitiveness and institutional design, particularly in the cross-border context. The main policy issues specifically relevant to the globalization debate are:

- *Harmonization versus competition*. How much harmonization of regulation is needed (regional, global)? Can regulatory competition bring about the optimal result? Are there any externalities?

- *Convergence*. Are corporate governance systems formally converging to one global standard, as some legal scholars have suggested? Is this convergence taking place in form or only in function? Should policy act as a catalyst for promoting convergence?

- *Purpose of a company*. Is the sole purpose of a company to generate cash-flows for its owners (maximize shareholder value), or has the company other purposes? Do directors have fiduciary duties towards shareholders, the controlling shareholders or 'the company', in some wider sense? There is fundamental disagreement on this issue across countries.

- *Disclosure*. Does the principle that 'light is the best of disinfectants' (Brandeis, 1913) apply to corporate governance? High quality companies should have an interest in disclosing information voluntarily because it lowers their cost of capital. Why is this not happening in practice?

In view of this remarkably wide range of highly controversial questions, it is difficult to accept the common assertion that globalization is imposing an alien, ‘one-size-fits-all’ Anglo-American model of corporate governance on companies and societies around the world. There is still much to play for and much room for individual national solutions to these questions.

6.2.2 Corporate re-organization

The re-organization of the world economy goes hand in hand with the reorganization of the corporate sector in industrialized countries. It has gone through two merger waves, in the 1980s (predominantly national mergers in the United States) and in the 1990s (predominantly international mergers in OECD countries). These mergers fostered the break up of conglomerates and the sell-off of divisions to buyers in the same industry. These changes in corporate organization have led to a stronger focus on ‘core competences’ and a ‘downsizing’ of firms. The corporate sector sold unrelated businesses and expanded into related businesses. This trend towards increased specialization has been a response to the apparent failure of conglomerates.

To understand this feature of globalization in the 1990s, we need to analyse the factors that lead corporations to change their organization. What accounts for these changes in the organization of the world economy, on the one hand, and of the corporate sector in industrialized countries, on the other? How are these changes of corporate organization related to international competition, on the one hand, and to information technology, on the other? Are these changes desirable for society as a whole? Is there a role for competition and trade policy? Have these changes in the organization of the world economy and of the corporate sector in particular contributed to the shift in income distribution between skilled and unskilled workers?

We begin with the largest and most visible corporations — the multinationals. The first question to ask is what leads firms to become multinational in the first place. Dunning (1977) has developed a useful organizational device to address this question. His approach is often referred to as the OLI-framework, where the capital letters stand for the main forces underlying the internationalization of production. In understanding why a parent firm needs a foreign subsidiary there are three things to explain: what the parent can offer to the subsidiary; what the subsidiary can offer to the parent; and, finally, why the link between the two needs to be through being part of the same firm rather than through market-based transactions.

- **O** stands for ‘ownership advantage’, referring to some kind of knowledge capital associated with the parent firm, which it offers to the subsidiary. This could be a research and development capacity, but also an advanced organization of production, marketing or a brand name.

- **L** stands for ‘location’ and reflects the advantage associated with locating production abroad. The firm always has an option to produce at home and export, rather than to produce in foreign affiliates. Such locational advantages can be attributed to many factors — trade barriers, the importance of proximity to large local markets, pecuniary and non-pecuniary externalities, taxes, and access to immobile production factors. They explain what the subsidiary has to offer to the parent.

- Finally, the **I** stands for 'internalization' of transactions within the firm. Instead of contracting production to a licensee, or purchasing inputs directly from the market, firms choose to organize production within their own affiliates. This has to do with the particular character of their knowledge capital (contained in the 'O' above), which often requires investments that are specific to the production activity. For reasons familiar from the Coasian literature on transaction costs, it is sometimes efficient to retain production in the firm even when the location advantages are sufficiently great to ensure that these are conducted at a large distance from the firm's headquarters.

This framework helps us to understand why some countries are notably more successful than others in attracting foreign direct investment. Those that succeed need to have location advantages that are compatible with the parent's ownership advantages and the continued internalization of transactions within the firm. Two kinds of location advantage in particular have been investigated in the literature to date: access to host country markets, which tends to motivate horizontal FDI (Markusen and Venables, 1998; 2000), and international factor-price differences, which tend to motivate vertical FDI (Helpman, 1984; Helpman and Krugman, 1985). As documented in Section 3, the majority of FDI prior to the 1990s was horizontal, but vertical FDI has been growing in importance as more FDI flows outside the OECD.

How have the factors influencing the decision to internalize the transaction within the firm been changing in recent years? In spite of the growth of FDI it is clear that many firms have chosen to extend their production chain across national borders without engaging in vertical integration. Several authors have argued recently that the growth of international competition tends to favour outsourcing and specialization as against vertical integration. The reason is that vertical integration is often a response to the costly and inefficient bargaining that would otherwise occur between suppliers and customers when each of them holds a degree of bargaining power owing to the absence of alternative trading partners. Increasing international competition, according to this view, means that firms can turn more easily to alternative trading partners in the event of dissatisfaction with their existing partners, and have therefore less need to integrate vertically in order to ensure a smooth and reliable production relationship. Recent contributions to this literature include McLaren (2000), Grossman and Helpman (2001) and Marin and Verdier (2001). The latter in particular predict waves of outsourcing or merger waves when countries open up to trade, as the corporate sector re-organizes in response to an increase in international competition.

6.3 Governments, corporations and national policies

In this section we summarize what is known about the evolving interaction of governments and corporations. How are governments regulating the behaviour of corporations in the areas of employment, education, taxation, competitive behaviour and the establishment of intellectual property rights?

6.3.1 Labour standards

Labour standards have been a particularly sensitive issue in the globalization debate. There are at least three concerns:

- Does ‘social dumping’ by developing countries harm workers in developed countries?
- Does trade harm workers in developing countries by encouraging their exploitation?
- Does trade undermine attempts in both developed and developing countries to improve standards for their workers?

The first is just an aspect of the general argument that international trade with developing countries injures import-competing industries and, through them, less skilled workers. And it is subject to the exactly the same analysis as in Section 3 above. Indeed, some workers may suffer from imports, but reaping the aggregate gains from trade coupled with sensitive and sensible policies to aid adjustment among affected workers represents a far more constructive response than does closing down trade. Western workers losing their jobs are affected just as much whether the workers in the developing country are exploited or merely efficient or poor for some other reason. Other than a wish to discourage ‘exploitation’, which we consider below, there is no reason to single out for action trade due to alleged ‘social dumping’, but not other trade flows (Bhagwati and Srinivasan, 1996).

The second aspect — fears of ‘exploitation’ itself — could in principle be justified. But there is evidence that developing country workers in export sectors fare better than fellow workers in non-tradable sectors, with higher wages and better conditions (see Rama, 2001; Romero, 1995). Trade improves their lot, not the opposite. They do not achieve the same standards as industrial country workers, but that is the wrong comparison. Their alternative is even grimmer jobs elsewhere in their own economies. We should beware of trying to raise standards abroad by rejecting goods produced under ‘inadequate’ standards. The workers displaced will almost certainly end up worse off.[17]

The third aspect is the international spillover, whereby countries competing with each other may be tempted to keep standards lower than they would otherwise wish in order to steal a competitive lead — another ‘race to the bottom’. This is certainly possible in theory; in practice, however, it is exceptionally difficult to find cases where standards

[17]It is also important to note that in the sectors where most concern is expressed about labour standards - e.g. child labour in sewing footballs - there is no directly competing employment in industrial countries. Trade sanctions against a 'low standard' country will transfer the employment to another developing country.

have plausibly been lowered for competitive reasons. One reason for this is that exploiting workers can be bad for competitiveness — it reduces the labour supply to a firm, and at the level of an industry or economy it discourages investment in human capital (Maskus and Martin, 2001).

Labour standards can be strongly beneficial for developing countries and the poor within them, because they can help to enhance the living conditions of the relatively weak and increase overall economic efficiency. In particular, they can ensure that workers accepting jobs are not misled about the conditions they can expect to face. But seeking global standards to fight the supposedly harmful effects of globalization is the wrong approach. Standards need to be set at levels appropriate to a country's stage of development, and they must command widespread support within the society. If they do not, their coverage will almost certainly be partial, with the result that the poor suffer. As standards are raised in one part of the economy, labour demand will contract and more workers will end up in the other, uncontrolled, sectors. Standards or wages or both will fall there, harming incumbents. Almost inevitably the poor will be found not in the favoured sectors but in the others, so partial coverage of standards is likely to exacerbate poverty. The same argument applies to trade sanctions. If export sectors are constrained by western trade restrictions, workers will flow out of them into the non-traded sectors, which is exactly where one expects to find the poor.

Most *de facto* labour standards increase strongly with levels of development.[18] Thus trying to impose them on developing countries by means of trade sanctions is not only likely to misfire for the reasons just discussed, but will undermine their most constructive ally — namely economic growth. Non-trade measures will usually provide far more efficient ways of improving labour conditions in developing countries than will trade sanctions. We should look to education and the promotion of civil society institutions, including the monitoring and reporting processes undertaken by the ILO. These address the needs of exploited workers much more directly than do trade measures — yet a further instance of the general argument that trade restrictions are second-best tools for addressing non-trade problems. Developed countries genuinely concerned about foreign workers should consider these alternatives seriously, recognizing that they may require the developed countries to provide financial resources and technical assistance.

6.3.2 Education

Whatever the success of labour standards regulation, policies to improve worker productivity are central to raising living standards in the medium and long run. There are many reasons, rooted particularly in the failures of credit markets, to think that individuals will be unable to pay for education to the extent that might be warranted

[18]This is arguably not true of so-called 'core' standards, which are held to be independent of development. These include freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the abolition of exploitative child labour; and the elimination of discrimination in respect of employment and occupation.

by its likely effect on their productivity. These reasons provide a well-established case for public funding for education, as well as for regulation of the content and curriculum of educational institutions. How might globalization affect the tendency of governments to provide such funding?

Globalization affects public educational policies partly through the way increased factor mobility affects the taxing power of nation states, an issue we discuss in the next section. Most OECD countries exhibit a high marginal tax burden on human capital returns and a large share of government budgets allocated to public provision of education. The two are probably related. Governments tax human capital investments heavily because this tax base is relatively inelastic at the time the tax rate is chosen. The result would be too little investment in human capital, a problem to which public funding of education is part of the answer (see Boadway *et al*., 1996). This implies in turn that anything which increases the mobility of skilled labour will tend to reduce the incentive of governments to impose high marginal tax rates, and consequently diminish the need for educational subsidies at the same time (see Andersson and Konrad, 2000).

In practice, much depends on the political economy of educational policy, in ways that can be significantly changed by globalization. If those who influence national policy perceive an interest in the creation of a skilled work-force, then public funding is likely to be forthcoming. This will be more likely if globalization increases the possibility of inbound FDI, or inward technology transfer through other means, both of which would be complementary to the presence of skilled labour. On the other hand, if globalization primarily means that those who influence national policy can more easily make high returns abroad, and as a result are less dependent on the presence of skilled labour at home, the result may well be less public funding for education as globalization develops.

Education also affects the structure of political power and degree of political participation within a country (Brady *et al*., 1995; Fraser, 1972; Frey, 1972; Verba *et al*., 1978). Public policy in education not only has economic effects on the allocation of resources, but also political consequences. This may be particularly important in many developing countries where a small elite holds political power. Globalization, by its differential impacts on private and social incentives to accumulate human capital, could then affect the evolution of domestic political structures (Bourguignon and Verdier, 2000b; Robinson, 1999).

In short, if the politically powerful have a stake in the education of the poor, they will be likely to pay for it, while they will not do so if they perceive the education of the poor as a threat. Differences between countries in political institutions, as well as in the basis of comparative advantage and in the skill intensity of their production technologies, could therefore make a considerable difference to whether globalization reinforces or undermines the education process.

There are some encouraging signs. In many countries, bilateral development aid now emphasizes primary and secondary education (especially of girls). This could contribute significantly to the reduction of overall inequality across developed and developing countries and also within developing countries. Greater labour mobility, however, might frustrate these policies. And they may prove to be ultimately unsustainable if domestic policies do not generate sufficient jobs (for instance, in North Africa education policies often simply serve to add to the pool of skilled unemployed and increase migration pressures).

The role of governance and institutions in creating sustainable development is crucial here. These factors suggest that it is important that the development process be re-orientated to channel resources less towards traditional infrastructure projects and more towards alleviating poverty, improving governance and building civil society.

6.3.3 Tax competition

The more open are national borders to the movement of economic activity, and particularly to the movement of capital, the more there is concern that nation states will have difficulty raising the tax resources to carry out some of the basic functions of government. These include the provision of social insurance for the casualties of globalization and the funding of the education that we have argued to be a key contributor towards raising the living standards of the poor.

Why might this happen? Following Tiebout (1956), some have drawn an analogy between governments and private firms, with governments competing to attract factors of production (labour and capital) by offering public goods and services. In particular, multinational firms seeking to locate facilities through foreign direct investment often consciously compare the tax rates and the public services offered in a range of competing host countries. As competition between firms intensifies, they find it increasingly hard to charge prices above the marginal cost of production. Similarly, as competition between governments intensifies, owing to the increasing mobility of labour and especially of capital, they will find it increasingly hard to tax these factors above the marginal cost of providing them with public goods and services. Some public goods have very low marginal costs indeed, while others (such as health care or social insurance) may not be able to recover their marginal costs from the poorest citizens; this means that these costs have to be recovered from the better off. Three possible consequences might follow:

- First, general levels of taxation and public expenditure might be lower than citizens would collectively wish. For instance, the ‘European social model’ might no longer be financially viable. Rodrik (1997) expresses this concern.

- Second, governments might distort the pattern of expenditure systematically towards the kinds of public goods and services that are valued by highly mobile firms and individuals, while ignoring those that are valued by the less internationally mobile.

- Third, tax rates may be systematically higher for immobile factors than is either efficient or equitable. This will result in particular in low rates of taxation of capital and a low progressivity of the income tax structure.

Such conclusions depend on a number of strong assumptions, of which three deserve particular scrutiny (see Braunerhjelm *et al.*, 2000, Chapter 6). First, they assume that there is only one main source of externality between countries as a result of tax competition — the reduced tax base in rival countries. In practice, however, there may be multiple sources of externalities. Suppose an investment project planned by a multinational firm would be more productive in country A than in country B, and also that the countries trade with each other so that rising income in A increases the demand for exports from B. Then the direct loss of income and tax revenue to B when the investor chooses A may be partly offset by the fact that more income and tax revenue is generated in A than would have been generated in B, and some of this spills over to B anyway. For adjacent localities this is often true: a village can benefit more from a factory's location in a nearby town than if it were located in the village itself. But something similar may sometimes be true of regions and even countries. Furthermore, competition between the localities may be the only way to ensure that investments locate where the local benefits are highest.

Second, it may not be reasonable to assume that governments would set taxes at an appropriate level in the absence of competition. Indeed, the argument above also supposes that firms *should* be charged more than the marginal cost of the goods and services they consume, in order to fund general activities such as redistribution. But some argue (like Brennan and Buchanan, 1985) that the normal processes of modern politics are biased towards excessive taxation and the growth of a 'Leviathan' state. On this view, competition between jurisdictions is welcome, because it bids down overall taxation to more acceptable levels (Dye, 1990).

Third, the negative assessment of tax competition ignores the forces drawing firms to locate in areas characterized by knowledge spillovers and other agglomeration externalities. These forces mean that firms are often far from indifferent between locations, and so countries that enjoy the benefit of these externalities may obtain a certain rent from them. Baldwin and Krugman (2000) develop a model of this process

Table 10 Tax levels and composition for various OECD countries, 1970, 1980 and 1997/8

	Tax burden (% GDP)			of which: Profit taxes		Employment taxes		Sales/ VAT	
Country	1970	1980	1998	1980	1997	1980	1997	1980	1997
Canada	31.3	30.3	43.4	11.6	10.3	44.6	51.4	32.6	24.4
France	37.4	43.6	50.9	5.1	5.8	55.6	54.6	30.4	27.8
Germany	37.2	43.9	44.8	5.5	4.0	64.2	65.5	27.1	27.7
Italy	27.9	32.4	46.4	7.8	9.5	61.1	58.8	26.5	25.9
Japan	19.7	25.6	30.8	21.8	15.0	53.4	57.4	16.3	16.5
UK	35.6	35.3	40.6	8.3	12.1	46.6	42.0	29.2	35.0
USA	28.9	30.0	34.4	10.8	9.4	65.3	63.2	16.6	16.7

Source: Statistical Abstract of the United States, Comparative International Statistics, various years.

Note: Employment taxes include individual income taxes and social security contributions and show that ‘integration need not lead to falling tax rates, and might well be consistent with the maintenance of large welfare states’.

What does the evidence show? Table 10 compares, for a range of OECD countries, both overall tax burdens between 1970 and 1998, and the share of profit and other taxes in overall tax revenue between 1980 and 1997. Although the 1980s were widely thought of as a tax-cutting period, the table clearly shows that in the main industrialized countries the tax burden continued to rise steadily, as it had in the 1970s (and in the rest of the OECD as well). The share of business taxes in that burden fell in some countries, while taxes on employment rose in Canada, Germany and Japan.[19] Overall, there is only weak evidence that greater mobility of capital has resulted in systematic changes in the tax structure, and none that it has resulted in a fall in overall revenues.

Reductions in taxes on capital have some merits as well. They encourage saving (which normally suffers because saved income is taxed twice, once when it is first earned and again when it yields interest). Taxes on capital are often a very ineffective way to redistribute income, both because the rich are better at legal tax avoidance than the poor and because ownership of capital is increasingly widespread in society through the medium of pension funds and other financial intermediaries. The effect of tax competition between governments on the *composition* of taxes has been ambiguous to date, and its effect on the overall *level* of tax and expenditure has been negligible. If anything, the continuing upward drift in the share of taxes in GDP suggests there may be something in the Leviathan view after all. If the European social model comes under serious threat in the next decade, this is much more likely to be from internal strains, due to aging populations and the non-viability of pay-as-you-go pension systems. Once again, closer examination of a perceived threat from globalization reveals risks that have principally domestic origins and will require domestic solutions.

6.3.4 Competition policy

Competition authorities traditionally investigate three main kinds of corporate activity:

- *Structural changes:* mergers, acquisitions and joint ventures.
- *Anti-competitive actions*: cartels and predatory behaviour.
- *Regulatory actions of governments with anti-competitive consequences*: in the EU this category comprises particularly state aids to firms.

The first kind, merger control, has the greatest direct influence on the evolution of the economy. Mergers and acquisitions are highly cyclical in character. The number of

[19] Devereux *et al*. (2002) show that although effective marginal corporate tax rates for OECD countries have changed very little since the mid-1980s, effective average corporate tax rates have fallen over the past 15 years.

transactions world-wide appears to have been substantially higher in 1998 than in 1990, though changes in data coverage make this conclusion somewhat tentative. What is indisputable is an increase in transaction values, particularly in the late 1990s: Seabright (2001) reports KPMG data indicating an increase in total world cross-border M&A from $237bn in 1995 to $797bn in 1999, and a four-fold increase in average deal size over the same period. Nevertheless, cross-border transactions were around 33% of all transactions by value, up from 24% in 1995.[20] Still, the rise in cross-border activity is more a consequence of a general rise in M&A activity than an autonomous phenomenon.

Not only cross-border transactions have cross-border consequences: a merger between two firms from the same country may have effects in their export markets, and the authorities for these markets may claim jurisdiction. Indeed, the two mergers that have created the greatest tension between US and European authorities in recent years (Boeing-McDonnell Douglas in 1997 and GE-Honeywell in 2001) were not cross-border transactions at all; each concerned two US firms.

Whether increased international trade itself justifies more stringent competition policy is much debated but unresolved (see Horn, 2001; Neven and Seabright, 1997). While the European Commission has long held that its Single Market Programme required increased vigilance from competition authorities (Emerson *et al*., 1988), others have argued that increased openness to international trade can substitute for competition policy at home. In one important respect that has nothing to do with any deliberate policy, firms do face merger policy that is *de facto* more restrictive than it once was. More and more transactions are potentially subject to multiple filings, not principally because they have greater international effects, but because more competition authorities now claim jurisdiction. Pressure to coordinate competition policy internationally is therefore primarily a response to the international spread of activist competition policy itself, not to the internationalization of M&A.

The EU Merger Regulation of December 1989 was welcomed by businesses who sought a 'one-stop shop' to reduce the cost of multiple filings, as well by those who wanted a truly European perspective on merger control. What this meant remained creatively vague, some hoping for a stricter, some for a more permissive regime (see Neven *et al.*, 1993). Merger control is a necessarily blunt instrument (the authorities' final sanction is to block the transaction, and a transaction blocked in one market is necessarily blocked in all others). Since the EU merger regulation does not allow for explicit trading-off of costs and benefits of a transaction that 'creates or strengthens a dominant position' in one or more relevant markets, this institutional change has only partly managed to avoid conflicts. For instance, mergers can still be blocked because of claimed anti-competitive effects in some national markets (as in the proposed Volvo-Scania merger of 2000). In response, the European authorities have become significantly more interventionist, seeking to amend transactions through the enforced

[20]This is less surprising than it might seem, since many high-value mergers in recent years have been in relatively non-traded sectors - banking, energy and telecommunications.

divestiture of subsidiaries or the imposition of behavioural conditions. Seabright (2001) reports that the proportion of notified transactions directly influenced by the European Commission through a blocking decision or (more commonly) the imposition of conditions rose to nearly 15% in 1997-2000 compared to an average of just over 10% during the preceding seven years. Given the increasing number of notifiable transactions over this period, it seems safe to conclude that merger control is posing significantly tighter constraints on corporate behaviour in the EU now than it did a decade ago.

Though the EU Merger Regulation reduced temporarily the need for multiple filings, they have continued to grow in number, both within and outside the EU. Highly-publicized disagreements (most recently over GE-Honeywell) have emphasized the need for close cooperation between authorities over particular cases. This will make life easier for firms in many respects, but it is unlikely to lead to a systematically less restrictive regulatory environment.

There is also growing international coordination of competition policy in other areas, notably in the investigation and prosecution of cartels (see Nyqvist, 2001; Waverman *et al.*, 1997). Whether there are more international cartels in existence now is impossible to say, though there are some reasons to be doubtful. However, more of them are being investigated and prosecuted, including recently the Lysine and vitamin cartels. So far these have involved cartels with strong and damaging effects within the territory of rich countries. Nothing would do more to persuade developing countries that they too have a stake in the international rule of competition law than a high-profile prosecution of a cartel whose price fixing has taken place primarily outside Europe, the United States or Japan. Such cartels certainly exist.

Finally, within the EU there has been a major effort to control state aids to industry (see Besley and Seabright, 1999), with substantial pressure exerted on national governments that subsidize their own national firms. Here, state power and corporate power are evidently not in conflict: rather, an international competition authority seeks to restrain both states and corporations whose actions distort competition at an international level. This development has a political basis in the EU — it would be unrealistic to see a widespread extension to a broader international context.

But there is a clear general lesson for the constructive regulation of globalization. Countries can have a collective interest in an order of law that restricts their freedom to pursue internationally damaging policies that may be individually rational (though sometimes are not even that). This order may simultaneously restrict the power of corporations and of nation states — there is no incompatibility between these two characteristics. For such an order to maintain its legitimacy, it is important that it yield visible benefits to all those who sign up to it, sufficient to outweigh the visible costs of abiding by it when that may seem onerous. It is too early to tell whether the order of international competition law is likely to meet this stringent requirement, but the countries that subscribe to it should focus on this key aspect of globalization.

6.3.5 Intellectual property and the spread of knowledge

Economic development has always been about more than building up stocks of capital — more fundamentally it has been about finding better ways of working and living. Many of the most radical innovations in human history (such as writing, printing and wireless telegraphy) have been important not just because of their direct benefits but also because they have enabled a faster transmission of subsequent ideas and innovations across the globe. But it is well known that knowledge has characteristics of a public rather than a private good: in particular, it is often much easier to imitate the insights of others than to attain them for the first time. The effects of globalization on the spread of knowledge are therefore likely to be more complex for private goods that are the subject of traditional trade theory.

Investment in knowledge is not like investment in ordinary capital goods. Many innovations require large investments of time, skill and other resources, often for a very uncertain return. Once made, however, they can be copied at low cost, and it would often be efficient for societies to encourage such copying if they could do so without undermining the incentives to create the innovations in the first place. So we face a trade-off: either reward innovation, with the risk that innovations once made will spread too slowly, or facilitate the spread of existing knowledge, with the risk that everyone will become imitators rather than innovators. In practice we find a compromise, with systems of intellectual property rights (patents, trade marks and copyrights) which grant temporary monopoly power to reward the presumed creator of an innovation, removing it after some time so that the innovation can be encouraged to spread. There is much argument about where exactly this compromise should be made (see Boldrin and Levine, 2002, for a forceful expression of the view that current patent and copyright legislation grants far too much control to intellectual property owners over the subsequent uses that are made of their ideas). Nevertheless, there is no fundamental disagreement that a compromise of some kind is needed.

The intellectual property rights trade-off is fundamentally between dynamic efficiency — enhanced innovation and growth — and static efficiency — that innovations, once made, be adequately exploited. In the short run, however, it often looks more like a trade-off between the owners of intellectual property — typically well off — who receive rents on their innovations and the users who pay the fees but are typically much poorer. Add to this the fact that the static inefficiencies and transfers between users and owners can be identified and measured, while the dynamic gains (future innovations) have largely remained beyond quantification, and the stage is set for potentially explosive conflicts of interest.

Globalization affects the nature of this trade-off in two main ways. First, by enlarging markets it increases the potential rewards to successful innovation for any given degree of intellectual property protection. The owner of a patent can derive rewards from selling the invention in new markets, even if intellectual property protection is fairly weak in those markets, so long as the owner derives rewards additional to those available in its original market. Extending the same degree of intellectual property protection to the new market is not necessary for ensuring that the innovator will benefit from market enlargement. Second, globalization enables potential competitors in new markets to use the innovation to compete against the owner of the patent in its original markets. If pirated copies of software or compact discs find their way back into markets of the original copyright owners, globalization may undermine the incentives for innovation that were the rationale for the original intellectual property protection. But if copies of the innovation merely serve some proportion of the new markets that would otherwise have been served by the patent owner, then the latter's incentives for innovation have not been diminished by globalization, and have merely not increased by as much as they might have wished.

It is quite proper for industrialized countries to be concerned lest inadequate intellectual property protection in foreign countries undermine the degree of protection previously granted at home (as would occur for goods re-exported from the foreign country). But it is quite unwarranted for industrialized countries to insist that all the benefits of globalization accrue to the owners of innovations already created at home and none to potential new users abroad. For instance, making AIDS drugs available at lower prices in developing countries than the patent holders might choose is not to undermine incentives for innovation, but merely to ensure that a larger share of the benefits from market enlargement accrue to developing countries than the patent holders would voluntarily concede.

In practice, direct copying of innovations is rarely easy or costless, and such copies as are made are often imperfect. This means that many innovators can continue to profit by their innovations even in the face of vigorous attempts to copy them, because discerning buyers will prefer to buy from the original inventor. Indeed, distance still matters to a remarkable degree in the spread of knowledge (see Section 2.1 and Mowery and Ziedonis, 2001). Innovation has been vigorous in such industries as financial services in spite of equally vigorous copying; the originators of innovations are regarded as more trustworthy by a large proportion of the potential market.

At a macroeconomic level, theoretical arguments about the optimal degree of intellectual property protection have been inconclusive. Kanwar and Evenson (2001) survey such arguments and conclude that only empirical studies can settle the question. They claim, on the basis of a cross-sectional econometric study, that 'the evidence unambiguously indicates the significance of intellectual property rights as incentives for spurring innovation'. Even if their evidence is robust, their conclusion is one about the links between *national* levels of IPR protection and *national* rates of innovation. It cannot be used as an argument about the appropriate level of international protection, since international economic integration, as we have pointed out, already substantially raises the rewards to innovation in relation to the costs.

Intellectual property issues have come to the fore in recent discussion about globalization because the current stock of intellectual property is distributed very unequally across the world. Suddenly countries have come to identify themselves as primarily producers (exporters) of ideas or primarily consumers (importers). The former seek higher levels of IP protection than they would do nationally because they receive transfers from the rest of the world. The latter correspondingly seek lower levels. Thus, for example, McCalman (2001) identifies likely rent transfers from current stocks of knowledge under the Uruguay Round's TRIPs Agreement. He finds major inflows for the United States ($4.5 billion p.a.), much smaller ones for five European economies, and outflows for everyone else, including Canada, the United Kingdom, Japan and developing countries. For India and Mexico, for example, the losses amount to one-fifth and one-quarter per cent of GDP, respectively.

In fact, there is every reason to think that the TRIPs Agreement will hurt the smallest and poorest countries.[21] They have nothing to patent or copyright, the absolutely small level of fees they pay could not conceivably affect OECD countries' incentives to innovate, and yet they are likely to have to pay significantly more for the IP they use and, more importantly, for goods embodying IP. The situation for middle-income countries and even larger low-income countries is less clear cut. They could pay enough fees to affect incentives, but they are also economically large enough to generate some IP of their own (e.g. Brazil, India and China). Given that their IP is likely to be relatively unsophisticated — i.e. more readily copied than very hi-tech ideas from the United States — they could eventually become strong beneficiaries of legally enforced IP rights.[22]

Addressing the asymmetries in the TRIPs Agreement would assuage a lot of criticism of globalization. Better than a complete renegotiation of TRIPs, however, would probably be a development of its current flexibilities and ambiguities to redress its existing imbalances. One might think both of extending IPRs to things that developing countries currently have, and of reducing the coverage of IPRs in areas in which developing countries are consumers. For example, at present sophisticated western companies appear to be able to patent very minor developments of traditional knowledge. Although, to our knowledge, none have yet turned round and tried to charge the traditional users for using their now patented knowledge, it is clear that it will be the western company, not the traditional societies, that gains fees from future developments of those products. Ensuring that patents really are novel (as they are legally required to be) would be a useful step, as would finding ways to ensure that patents based on traditional knowledge have the prior informed consent of their traditional users.[23]

There are other potentially useful reforms, which could be implemented purely by the unilateral declaration of industrialized countries that they would not take disputes concerning these issues to the WTO. These include:

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[21] It is not yet fully implemented.

[22] This contrast is evident in the Doha Declaration on TRIPs and Public Health. Countries with drug industries can benefit immediately from the clarification that they can compulsorily license patented drugs for local use under certain circumstances. Those without such industries cannot currently compulsorily license cheap producers elsewhere and hence reap the immediate benefit. Their only comfort is an instruction to WTO's TRIPs Council to consider the issue carefully over the next year.

[23] This is what the Convention on Biological Diversity prescribes for exploiting genetic resources.

- Making it easier for developing countries to register their own geographical indicators (which label products by region of origin).

- Clarifying the scope of compulsory licensing in industries other than pharmaceuticals (for instance, by addressing anti-competitive enforcement of patents).

- Explicitly acknowledging ‘farmer’s privilege’ — the right to replant the seed of one’s own harvest to create the next crop. The mechanism by which these steps might be taken would be for industrial countries to be explicit that they will not take disputes over such things to the WTO.

The TRIPs Agreement also imposes significant initial and continuing administrative costs on developing countries. For example, Finger and Shuller (2000) cite Mexico’s establishment of an agency, costing $32.1 million over 1992-6, just for the implementation of its industrial intellectual property laws. The same authors suggest that the initial cost of the TRIPs, customs valuation and SPS Agreements could exceed total annual development expenditure in small developing countries. And this is on top of the continuing cost of administration in terms of skilled labour. Capacity building and technical assistance are only part of the answer to the latter. They can provide no substitute for local political and bureaucratic effort that they absorb.

The increased ease of communications across the world has many consequences for both the extent and the diffusion of innovation. Just as satellite dishes make it easier for internationally recognized brands to extend their global reach, so telephones, faxes, email and the internet have all increased the ease with which products, processes and business methods can diffuse across national frontiers. Not all of the effects of this are positive, but overall the returns to both innovation and the adoption of the innovations of others are likely to rise. It should be remembered also that many kinds of international technology transfer take place not in the high-science contexts of pharmaceuticals and aeronautics, but in such diverse and comparatively unglamorous fields as accounting methods and international hotel management. It is legitimate to be concerned that globalization should not undermine intellectual property protection, but when overall returns to innovation are rising it is also legitimate to be concerned that the benefits of such rising returns should be widely shared.

6.4 Globalization and the citizen (civil society)

States and corporations are not the only organizations that provide citizens with alternatives to markets as forms of association within modern industrial societies. Civil society is formed of many other kinds of diverse institution — clubs, churches, political parties, trade unions, charities, non-governmental organizations, neighbourhood groups, lobbies, self-help organizations, sporting bodies — that allow people to associate with each other for their mutual benefit. Sometimes the value lies in the association itself, in the pleasure of spending time with the like-minded. Sometimes the value lies in the greater ability of individuals acting collectively to obtain benefits for the group (Olson, 1956). Not only may individuals benefit directly from association in such institutions, but such networks may produce positive externalities for the rest of society.

A tradition of political theory and modern political sociology has emphasized the role of civil society in checking and balancing the state (Gellner, 1994, writes that 'the price of liberty may once have been eternal vigilance: the splendid thing about civil society is that even the absent minded…can look forward to enjoying their liberty'). More recently a literature has emerged arguing that associative institutions can create 'social capital' — namely, a tendency to foster cooperative habits that contribute to both social cohesion and economic growth.[24] This has been documented empirically to occur in various ways, from fostering greater political cooperation (Putnam, 1993) to improving the performance of financial systems (Guiso *et al.*, 2000) and increasing the probability of success of development projects (Seabright, 1997). In spite of apparent confirmation from microeconomic data, however, there is still controversy about whether social capital is important at the macro level (compare Helliwell, 1996, and Knack and Keefer, 1997).

Are there any reasons to fear that globalization may weaken social capital? Highly mobile individuals who have ties outside their immediate locality may be less likely to engage in associative activity within that locality. People whose time is spent elsewhere, either through travel or through virtual means such as the internet, will have less motivation and less available time to devote themselves to civic action closer to home. Di Pasquale *et al*. (2000) provide evidence to suggest that home ownership fosters 'better citizenship', both because 'homeownership gives individuals an incentive to improve their community and because homeownership creates barriers to mobility'. Costa and Kahn (2001) argue that part of the decline they claim to observe in measures of social capital in the United States over the period 1952-88 is explained by 'rising community heterogeneity (particularly income inequality)', which itself may be a consequence of increased migration. But investment in social capital is highly correlated with education levels (Glaeser *et al*., 2000; Goldin and Katz, 1999), so that any adverse effects of higher mobility *per se* may be more than offset by the educational investments that tend to accompany mobility.

It is of course possible that looking for evidence of the effects of globalization on local involvement omits important non-local effects of social capital. Citizens who are connected to sources of information outside their immediate locality may become better informed, more motivated and more active citizens as a result, even if their contribution does not always take place in the community in which they live. We are not the first to point to the paradox that the organizations that have protested most vigorously and effectively against globalization have also benefited visibly from the improved communications and transportation technologies that have enabled them to coordinate their protest actions. They would be the first to contest the accusation that they are less effective citizens because they often travel across the world to assert their point of view.

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[24] Dasgupta (2000) provides an overview and Dasgupta and Serageldin (2000) a broad range of contributions.

Indeed, the fact that non-governmental organizations (NGOs) have played such a vocal and influential role in shaping the debate about globalization suggests that it would be a mistake to focus too narrowly on its effects on local communities. Even NGOs whose mandate is very local are increasingly networked to others elsewhere that share their broad concerns. Like corporations, NGOs increasingly operate across national boundaries. Like corporations, some have grown to large size through informational and other economies of scale. Like corporations, some have filled specialist niches that have become viable as a result of the networking opportunities that international communications make possible. While we do not wish to suggest there are no differences between corporations and NGOs,[25] both forms of organization have responded in a flexible and innovative fashion to the challenges of an economy in which events in one place are increasingly informed by an awareness of what happens elsewhere, even at great distances.

This does not mean that there is no reason to be concerned about the implications of globalization for civil society. On the contrary, in a global marketplace for ideas and a global forum for citizenship, there may be many pockets of deprivation: communities whose citizens are too focused on events elsewhere to devote attention to events outside their front door; individuals who are perplexed by the challenge of responding to a fast-moving, internet-wired society; minorities who are oppressed by the technologies of the majority (including new possibilities of surveillance). But there are no reasons for thinking that globalization limits the tendency of citizens in general to form voluntary associations with one another: it is just that these associations are less predictable in scope, geographical location and general character. Like many of the effects of globalization, therefore, the impact on civil society is likely to be to increase the overall diversity of outcomes, to the great benefit of those who prosper and the increasing bewilderment of those — an important minority — who lose out.

[25] Glaeser and Shleifer (1998) discuss the nature of differences between for-profit and not-for-profit organizational forms, both with and without appealing to differences in the characteristics of those entrepreneurs who set up such organizations.

7. Cooperation among governments and the role of the EU

In Section 6 we considered how the relationship between national governments and corporations (as well as households and other elements of civil society) is evolving under the pressures of globalization. Here we consider the relationship of different national governments to each other. To what extent does globalization change the stakes in international cooperation? Could cooperation work significantly better than it does? And to what extent does the European Union, as the foremost example in the world today of close cooperation among nation states, have a catalytic role to play in promoting a more effective cooperation among the world's nation states?

The EU is a regional grouping, and we begin by asking what is the appropriate role for regionalism in the face of the pressures of globalization.

7.1 The role of regionalism in today's world

There are three main alternative ways to think about the relationship between globalization and regionalism. First, regionalism might be a defence against or brake upon globalization. Second, it might be just one form of globalization, perhaps even a particularly strong form. Third, regionalism might be a stepping-stone on the road to multilateralism and hence an active agent of globalization.

The case for viewing regionalism as a defence against or brake upon globalization is that in return for a small loss of economic efficiency relative to complete globalization, regional blocs may be able to acquire greater control over their affairs.

First, spillovers between countries — say, the shifting of investment in response to lowering environmental standards — can create free-rider problems: individual optimization by each country leads to a sub-optimal outcome with standards being too low. We expressed scepticism above that there is significant evidence of such a race to the bottom occurring in practice. But if it does become a problem, cooperation to deal with it may not be sustainable at a global level, because the incentives to cheat are too high and mutual trust too low. Such cooperation might be feasible for a regional group, especially if the members are closely interdependent.

Second, regional cooperation could create a bloc with sufficient market power to halt the flow of globalization — restrict trade — and so turn the terms of trade in its own favour. Such gains will be at the expense of other members of the world community, but they will offer 'defence' to the bloc itself and weaken globalization. The influence of such a bloc would extend beyond merely influencing the prices of tradable goods. It could also include influence over technical standards: a large bloc might plausibly set its own standards, and the importance of its markets could force producers elsewhere to meet these standards when they trade with it. Alternatively, it might influence or capture the global standard.

A third element of defence is that by cooperating regionally, small powers might be able to analyse world issues and enter world negotiations more cheaply. Provided that the members have fairly similar interests, analysis and negotiation have a public good element within the bloc, so cooperation is efficient. CARICOM provides an excellent example of such cooperation (Andriamananjara and Schiff, 2001). A fourth source of gain would be in monetary affairs. The currencies of small countries offer almost no scope for independent policy, whereas a regional currency might permit a regional monetary policy.

All these arguments amount to saying that in a globalized world, national sovereignty may be weak in many economic dimensions: the costs of being out of line are just too large. But by pooling sovereignty regionally, governments can retain or perhaps even create it. Note, however, that all these cases require deep cooperation — joint decision making and implementation. This is a lot more than the regionalism of a mere trading bloc.

The second way of viewing regionalism is as another strain of globalization — maybe even a particularly virulent strain because it threatens to go deeper. Both strengthen outside influences on the lives and wellbeing of a country’s citizens. In the mid-1990s, for example, the aspect of US trade policy that provoked the most passionate public debate was the North American Free Trade Agreement (NAFTA), not the WTO or the Uruguay Round. Many developing and transition economies now spend at least as much effort negotiating agreements with the EU as managing their relations with the WTO, and the EU is seen as a much greater constraint on their behaviour. In this view, regionalism is the problem, not the solution.

A third possibility — vigorously debated among economists (see Winters, 1999) — is to view regionalism as a stepping-stone towards world-wide non-discriminatory trade. A world of many effective trading blocs is a recent phenomenon, so there is no convincing history from which to draw inspiration. The world trading system has not fallen apart under its current load of regional arrangements, but there has not yet been even one full round of GATT/WTO negotiations under such circumstances.

None of these three points of view is unambiguously persuasive. For example, it is often suggested (by Krugman, 1991, for instance) that blocs increase the negotiating power of their members, implying higher tariffs between the blocs. But members of regional free trade areas still have good reasons to lower their tariffs against non-members, not least in order to compete with their partners. Bond and Syropoulos (1996), Bagwell and Staiger (1997), Bond, Syropoulos and Winters (2001) all suggest that regionalism could make multilateral cooperation more difficult. A case in point is the question of how to evaluate ‘domino regionalism’, whereby non-member countries facing a new trade bloc could respond by trying to join it or to create a new bloc (Baldwin, 1995; 1997): one act of regional integration may stimulate the next because, the larger a bloc, the greater the costs to excluded countries of not belonging to it. There is no doubt that domino regionalism has occurred, but this is not evidence of the virtues of regionalism. In a regionalized world, a country may be better off inside rather than outside a bloc: if there is gang warfare in your neighbourhood, it may be best to belong to a gang. That does not, of course, make gangs a good thing.

This domino process is unlikely to lead to global free trade. If blocs made trade negotiations easier, they might help: coordinated coalitions could facilitate progress just by reducing the number of players represented in a negotiation (Kahler, 1995; Krugman, 1993). But the gains from having fewer players in the last stage of a negotiation could be offset by the difficulty of getting bloc members to agree joint positions in the first phase — consider the obstacles to achieving EU positions on agriculture and cultural protection in the Uruguay Round.

It is sometimes claimed that the regional approach to trade liberalization makes it easier to handle the tough cases (Kahler, 1995) — that there are areas in which regional liberalization between similar or like-minded countries is feasible when multilateral progress is not. In this sense regionalism does enhance the effects of globalization. This seems most likely for activities that are highly restricted (agriculture, trade subject to anti-dumping measures, some services) and areas that are highly technical or sensitive (standards, competition policy or services regulation). But until recently, even regional integration agreements among developed countries had not advanced much further with liberalization than the multilateral system (Hoekman and Leidy, 1993). Thus, for example, agriculture frequently remained restricted (as in EFTA); transport, culture and other 'sensitive' services were excluded (CUSFTA); and government procurement was ignored *de facto* if not *de jure* (in the EEC).

Perhaps the key point is that regionalism operates antithetically to the procedures of multilateralism, which has been instrumental in the relatively peaceable nature of the world and growth in world prosperity. The basic principle of multilateralism is non-discrimination (as in the Most Favoured Nation principle, which immediately and automatically extends bilateral agreements to all members). Reciprocity is diffuse in that governments do accept individual actions that appear not to be in their immediate interests, but it is generally accepted that, overall, every country has to gain. Regionalism, on the other hand, is discriminatory and does exacerbate tendencies for parties to focus more strongly on some links than others.

7.2 The international financial architecture and policies towards capital flows

Can a country reap the benefits of financial integration, while at the same time limiting the risk of financial crises? And are such crises more effectively tackled by cooperation between governments?

Financial crises tend to have similar features. Currency crises are typically the culmination of unsustainable domestic policies, such as fixed exchange rates and a widening current account imbalance (most recently in Argentina). Banking crises are often the outcome of large credit lines (short term and denominated in foreign currency) used to finance long-term domestic projects, associated with the expectation that the government will bail out the banks if necessary (as in Thailand).

If these were the only causes of financial crises, countries that wished to open up their financial markets while limiting the risk of crises would need only to implement effective domestic regulation: obvious priorities are the design of financial supervision (Eatwell and Taylor, 2000), possibly accompanied by some regulation on capital inflows, such as those imposed by Chile. If designed to lengthen the maturity of international borrowing, such controls could help, although there are sceptics (Edwards, 2001).

The possibility of ‘contagion’, however, namely destabilizing speculation against a country’s currency simply because it is geographically close or otherwise similar to a country already undergoing a crisis, indicates that domestic policies are often insufficient to avoid a financial crisis and speculative attacks may be ‘self-fulfilling’: an otherwise well-behaved country may be pushed off balance, from a good to a bad equilibrium, simply as a result of a shift in expectations. Contagion implies the presence of an international externality, which provides a generally sound case for cooperation among governments to resolve the problem.

The precise nature of the solution, however, is a matter of considerable debate (for a summary of the extensive literature on ‘international financial architecture’, see Kenen, 2002). The ‘Tobin tax’ has been much discussed as a solution to financial crises, and one that would simultaneously raise finance for international development assistance.[26] But it is a flawed idea, for several reasons. Perhaps the simplest is that international capital market transactions do not come conveniently labeled ‘stabilizing’ and ‘destabilizing’ — there is no way to discourage the latter without also discouraging the former. Moreover a Tobin tax, assuming it had an effect at all and was not subject to massive evasion, would have that effect by reducing liquidity and making markets thinner. On average, thinner markets are more volatile, not less, which explains why (as we discussed in Section 3.2.2) there is no evidence that capital controls reduce the frequency of crises. Thus, if the concern is excessive exchange rate volatility, for instance, a Tobin tax on foreign exchange transactions would be likely to produce the opposite effect, raising rather than reducing volatility (for related evidence, see Hau, 2001). It would almost certainly be ineffective against large speculative attacks of the kind that have provoked recent crises, since the expectation of large imminent exchange rate realignments creates an incentive to trade that dwarfs the effect of a transactions tax at any realistically conceivable level.

A better way to deal with contagion is the international provision of liquidity to countries whose fundamentals are sound and that are attacked without apparent reason. This is easier said than done: to avoid moral hazard liquidity provision must be credibly

[26]Increasing levels of international development assistance is necessary and important. It should be achieved directly and paid for out of general taxation rather than used as a pretext for a tax that would have undesirable effects. The increases recently announced by the EU are entirely to be welcomed. There remains room, of course, for policies designed to make existing aid more effective.

limited to such cases of contagion, but these are difficult to verify. The soundness of 'fundamentals' is a matter of judgement, and this judgement is often exercised, even by international institutions such as the IMF, with some political discretion.

Key issues in the debate over a new 'financial architecture' for the global economy are two-fold: how to limit the occurrence of financial crises, and how to deal with a crisis when it breaks out. There are a range of measures that would help to reduce the frequency of crises: rules for corporate governance, proper accounting methods and principles, new capital ratios for banks, efficient regulators, implementing a wide range of standards and codes. New institutional mechanisms could much improve the way in which crises are resolved when they can not be prevented (Eichengreen and Portes, 1995). The IMF has recently revived serious discussion of new arrangements for sovereign debt restructuring (Krueger, 2002).

So far the EU has been essentially silent in this debate, although the Tobin tax idea has often surfaced in the Commission and around the Ecofin dinner table. For example, the main response to the IMF proposals for orderly workouts of debt has come from the United States (Taylor, 2002), although the EU does now have a common position which has influenced the G7 'Action Plan'.

The EU would be in a unique position to contribute to this discussion. The key issues are essentially related to governance. Both spreading financial standards and the process of identifying which countries merit assistance in the form of international liquidity to overcome a crisis, raise questions of governance. And this is an area where the EU has a unique experience.

Spreading standards often means bringing a country to accept financial practices that may be far from that country's tradition. The independence of bank regulators from the government and the enforceability of their decisions is the best example. Standards cannot be imposed: to work effectively they must be 'owned' by the countries that use them. This is a difficult process, often requiring a change in attitudes that have deep cultural and historical roots. The EU is perhaps the only institution in the world that has managed to achieve this. Twenty years ago the 'culture of fiscal responsibility' was little more than a German concept; today it is an idea 'owned' by all EU member states. It is this 'success story' that lends the Union the credentials to be an active partner in the architecture debate.

The same is true for the governance of international organizations, and of the IMF in particular. Who lends to the IMF the legitimacy to select those countries that merit financial assistance? Too often IMF decisions seem dictated by its largest shareholder — the bailout of Turkey and teh IMF treatment of Argentina are but the most recent examples. If we are serious about dealing with contagion through the use of international liquidity, there should be no doubt as to the legitimacy of the institution that makes the decision. Once again, this is an area where the EU has many lessons to offer.

We are not suggesting that EU-type institutions could be easily transferred to the global financial market. EU institutions rest on supranational treaties that are unthinkable at the global level. Still, the long process through which Europe has built its institutions and the legitimacy they have acquired make the EU, and the Commission in particular, ideal participants in the architecture debate.

7.3 The role of the European Union

Street protests in Gothenburg and Barcelona have brought home to the EU's political leaders that the EU's institutions are associated in the public mind with the globalization process. Even if the EU's influence in some global arenas is constrained, its leaders will be expected to respond constructively and decisively to the challenges globalization brings. As preceding chapters have shown, globalization appears to offer positive opportunities for growth, efficiency and choice. Its effects on inequality are complex, but policy can help to alleviate the unfavourable effects. Still, there are casualties. The best response may be complementary policies rather than restrictions on globalization that would sacrifice its benefits (Sapir, 2001).

Indeed, although in this report we have not been able to discuss the details of all the appropriate policy responses, we have made, and reiterate here, the general argument that many of the apparent costs of globalization reflect domestic policy failures, to that extent they are better tackled through domestic policy reform than through seeking to halt the globalization process. Where there are true international policy spillovers, such as the regulation of international financial markets, the EU should look outwards and take the lead in developing appropriate policy proposals. The 'international financial architecture' debate has been intense, but its outcome has not been very far-reaching, and the serious controversies now over globalization in part reflect this failure. The United States has taken the lead in the 'architecture debate', and Europe has offered few coherent proposals (Coeuré and Pissani-Ferry, 2000; Portes, 2002).

This is perhaps understandable. In the past two decades the EU has been mostly inward oriented. This has reflected the challenges of building the single market — and the single currency, which followed upon it (Portes, 2001a). In spite of these achievements, it would be a mistake for the EU to think now that its main frontier remains within its borders, even if one were to consider this border widely (including the accession nations). Such inward-oriented efforts may ultimately produce an almost perfect EU, but this would be an empty result if it came at the expense of contributing to the security and prosperity of the wider world.

So far the EU has given only passing attention to the big world issues, in particular to globalization, its consequences and the reactions to it. The EU's role in shaping world developments has been even more limited. Two reasons for this stand out: politics — the reluctance of member states to surrender real power to the EU, which then cannot be a 'major player'; and special interests — for example, agriculture and the CAP. The role of special interests is not specific to the EU: the US government, when it negotiates, acts under similar constraints, as the recent imposition of tariffs on steel has demonstrated. But since the administration and Congress are the only decision-making bodies, it is easier for them to play off one interest group against another. Moreover, in international negotiations, the US administration does not suffer from a limited delegation problem. Thus, it can more easily shape the world in a way better suited to its own interests.

The conclusion of such an argument is that the EU must reform itself before it can seriously play a significant role in reforming the world. However, developing a common response to globalization — the major international political economy challenge of our time — could itself be a stimulus to such reform.

A common response to globalization that made a genuine attempt to deal with its most pressing challenges would involve the EU in making some major concessions. For instance, it would need to continue increasing its overseas development assistance, and to liberalize access for developing country exporters to its major markets, particularly in textiles, footwear and agricultural products. It would need to act in international fora such as the World Trade Organization in ways that reflected the needs of the world's poorest countries (over intellectual property rights, for example). Nevertheless, the benefits from doing so, both to the world at large and to the EU's credibility as an actor on the world stage, would more than outweigh any cost of these concessions.

8. The concerns of the street protestors: what are the answers?

Concern about globalization among campaigners has come very close to home at recent European summits, with both peaceful and violent protests on the streets. If the moral outrage at the extent of poverty, hunger and disease in the world, and the political momentum for change generated by the campaign movement, are to achieve anything worthwhile, this outrage will need to be informed by evidence on the economic effects of globalization. As this Report has shown, there is a large body of evidence available, some reasonably clear, some very nuanced and complex. The scorecard is not as bleak as those demonstrating on the streets of our cities usually claim. But there are problems towards which campaigning energy could be directed with the real hope of making life better for the poor.

A second reason for getting to grips with the evidence on the processes of globalization is the need to devise the best policy responses. Very often the appropriate response is a change in domestic policies, not a global-level policy change. The effects of globalization vary between individual countries depending on their institutions and policies. In many developing countries greater openness has been a powerful incentive for domestic policy reforms that would have been appropriate and beneficial anyway. And the best response to the problems that emerge because of globalization is hardly ever a retreat from global integration. On the contrary, this would often harm growth and make poverty harder to solve.

Of course, there is much wrong with the state of the world economy. There is more poverty and inequality than anybody finds acceptable, and there have been many episodes of financial and economic instability. It is not tolerable that in a world of such great wealth so many people lack clean water, have no access to basic healthcare and education or do not have enough to eat. Concern about this is not restricted to those who have been campaigning against globalization. It is essential to understand how we got to this situation, to what extent globalization has either caused the problems or offers solutions, and what policies governments ought to consider now. This section sets out the answers provided by the body of this report to some of the main concerns typically raised by the protestors.

Here is a charge-list of 12 claims that would command widespread support among those who have protested against globalization. Some are true, some are partly true, some are false. But even those that are true usually have implications that are very different from those that are commonly drawn.

8.1 Twelve charges against globalization

1. *Globalization has caused massive poverty*
About 1.3 billion people live in absolute poverty, defined as an income of less than $1 a day. The number has changed little since 1950 but it is a much lower proportion of the larger world population — 24% now compared to nearly 55% then. So, although too many people live in poverty, the problem has proportionately diminished during the recent era of rapid globalization. The reason is that globalization tends to boost growth and growth reduces poverty. The poor as well as the rich see their incomes rise as a result of increased economic growth.

2. *Globalization has resulted in an unprecedented degree of inequality*
This assertion is certainly true of globalization in the nineteenth century, though total world inequality has been much more stable since the Second World War. Average incomes in the richest and poorest countries are further apart than they have ever been, because the OECD nations have grown while the poorest African countries have stagnated. On the other hand, the distribution of incomes within countries has become more equal, with a few high-profile exceptions. In addition some very large countries such as India and China have grown rapidly, offsetting the effect of the African stagnation on total world income distribution. Whether the disastrous African performance is due to insufficient globalization on the continent, or whether Africa's weak governance, low education levels and fragmented civil society put the opportunities of globalization out of reach, is almost impossible to tell on current evidence. At all events the need for sustainable institution building in the world's poorest countries is beyond dispute.

3. *Inequality has increased massively in globalizing countries like China*
The pattern of income distribution in China is one of rapid income growth in coastal provinces, as a result of the country's opening up and market reforms, and little growth in rural interior provinces. urban-rural inequality within provinces does not seem to have increased. The differential impact of globalization poses a tough policy challenge, but it is a challenge for domestic policies. The pattern of income distribution in any country reflects its own history, institutions and political choices. There is no evidence that globalization prevents domestic redistribution policy.

4. *Multinationals are playing governments off against each other, paying less tax and gaining immense power. Big corporations have too much power, certainly more influence than many small and poor countries can ever hope to achieve.*
There is no evidence that corporate power has led to a 'race to the bottom' in taxes on companies' earnings, or in labour and environmental standards. Indeed, there is some evidence that multinational investment is associated with higher environmental standards. Some corporations do indeed evade government taxation and regulatory control, and extreme vigilance is certainly required. But there is no evidence that government regulation of companies is diminishing — if anything their operation in different jurisdictions subjects them to more control rather than less, even if this overlapping control sometimes produces incoherent results. In the end, this claim boils down to a statement of the obvious: that the rich and powerful are in a better position

than the poor and small.

5. *Multinationals exploit workers in developing countries for sweatshop pay and in appalling conditions, in order to cut costs by closing factories in their home base. Workers in both rich and poor countries suffer in the relentless drive for lower costs.*
Corporations look for a combination of lower costs, access to markets and other characteristics such as basic work-force skills, an adequate infrastructure and stable government when they invest across borders. Most cross-border investment takes place between OECD countries, and towards middle-income countries. Almost none flows into sub-Saharan Africa, so cost cutting alone is not the motivation. Multinationals on average pay higher wages in developing countries than other local employers, and real wages have been rising in those countries that have attracted a lot of inward investment. The jobs tend to be eagerly sought, especially by women, whose other prospects for earning an income can be very unappealing. Pay and conditions of course do not match up to those prevailing in the company's home country. Some companies have had to learn from bitter experience, too, that they need to monitor conditions closely in both directly owned factories and those of subcontractors.

In addition to creating jobs in developing countries, investment by multinationals is important for the transfer of technology and expertise from rich to poor countries. This depends on experience and face-to-face contact. In many contexts it is hard to think of any other way technology could be transferred apart from by direct investment.

6. *The big US multinationals are imposing US culture on the rest of the world for the sake of the profits made by the big brands.*
The top global brands change frequently. Examples of US brands that have recently declined significantly in global terms include Levis, Gap, Du Pont and Xerox; even the Coca-Cola brand name has been considered to be worth less than it was. Those that make the biggest impact at home do not always transfer well overseas. Those that do well around the world find they have to adapt to local culture in order to succeed; when they do so adapt they achieve success because consumers want to buy their products. This does not mean that branding raises no important cultural issues — but no brand is in the position of being able to impose itself in a highly rivalrous marketplace.

7. *Globalization harms the environment in countless ways, including the transportation of more and more unnecessary goods around the world.*
The environmental debate is, like the cultural debate, a separate aspect of an assessment of globalization. Some environmentalists are opposed to any further global growth because of its implications for energy use and global warming. If growth could be brought to a halt, it would make it much harder to reduce poverty, for history has no examples of the kind of massive cross-border income redistribution that would be needed to tackle poverty without economic growth. Short of such radical minority views, it is clear that environmental spillovers between nations mean environmental policy cannot be set by individual countries acting alone. There is no evidence that, in general, globalization is bad for the environment, though it has had bad consequences in some specific circumstances. But to the extent that it improves the

prospects for economic growth, globalization certainly increases the urgency of ensuring that this growth is compatible with stewardship of the world's environmental resources.

8. *Farmers in developing countries switch to cash crops that despoil the local environment and mean they can no longer feed themselves in case of a crisis, all in order to satisfy the whims of northern consumers. They are forced out of world markets for their traditional crops by agricultural protection and face dumping of subsidized northern crops on their own markets.*
There is some truth in first of these claims and a great deal of truth in the second. Export crops have sometimes had bad environmental effects, though they are not in general associated with reduced protection from crises. Farmers in poor countries have indeed been forced out of northern markets, and face subsidized exports from rich countries. Fortunately, there are suitable domestic policy responses to the first problem, while the second problem requires developed countries to live up to their own globalizing rhetoric. In other words, more (or more consistent) globalization rather than less.

9. *The international institutions that are supposed to govern the world economy act solely in the interests of the rich countries, especially the United States. They impose policies that are unsuitable for developing countries, such as over-rapid financial liberalization.*
The IMF and World Bank have certainly not succeeded in putting themselves out of business since their creation over 50 years ago. Equally, few rich countries live up to the ideal of the 'Washington Consensus' often recommended for borrowers from the Bank and Fund. On the other hand, both institutions have responded to experience and criticism by adapting their policies, sometimes significantly. In particular, they now recognise the need for careful pacing and sequencing of financial liberalization. And they fulfil a vital role in transferring loans and aid from rich to poor countries, as well as in encouraging private lenders to invest. The international institutions in general work very imperfectly, though their performance needs to be evaluated against the standards of realistic alternatives, not of utopian blueprints.

10. *Aid spending is pitifully low.*
An uncontroversial accusation. Most rich country governments fall substantially short of the 0.7% of GDP target for official aid spending. In recent years there has been some progress in achieving increases in aid, albeit small ones, and more progress in untying aid from orders for equipment and services from the donor country. The evidence is that aid combined with good policies does work. If a developing country has bad policies, though, aid will not make much of a dent in poverty.

11. *The WTO sets the rules to favour big multinationals so they can do things like patent traditional remedies or block access to cheap drugs.*
There has been a growing recognition that the WTO's rules for Trade Related Intellectual Property Rights (TRIPs), while perhaps fair in theory, have not worked in practice. Following the recent showdown over access for developing countries to generic anti-HIV/AIDS drugs, further negotiations will take place; rich countries could

certainly do more to acknowledge the legitimate grievances of the developing world. A fund has been established to provide poor country governments with the technical assistance they will need in general to negotiate effectively in the WTO.

12. *The WTO is secretive, undemocratic and unfair, with an extreme free-market agenda.*
With a one-member, one-vote rule, the WTO is the most democratic of the international institutions. It is a forum for negotiations between member governments, a majority of which are elected. Much negotiation is inevitably conducted in private, but the WTO publishes a vast amount of background material and is also subject to intense media scrutiny. Its agenda is indeed one of continuing trade liberalization, based on the remarkable economic growth fuelled by previous rounds of trade liberalization. WTO rules do not force governments to change their domestic policies, though, but rather commit governments to apply the policies they choose in a non-discriminatory way so that they do not constitute a barrier to trade.

These concise summaries of the evidence on specific concerns will no doubt only raise further questions in the minds of readers who count themselves among the anti-globalization protestors. The bulk of this report set out the economic analysis and evidence in much greater detail. As it is a summary, it gives references to a very substantial body of research. Not all topics of importance have been covered — in particular we have not been able to tackle the issues raised by the globalization of culture, by the international arms trade, and by the international transmission of disease. But on most of the topics with which the anti-globalization protests have been concerned, there is evidence available, and the historical record is often strikingly different from what is commonly believed. Those who are provoked by any of the points here can find the issues set out more fully elsewhere in the report.

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