

# **Trade and the Global Economy: The role of international trade in productivity, economic reform and growth**

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May 2004



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The role of international  
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# FOREWORD

International trade has been a major driver of global growth and prosperity over the last fifty years. As trade has expanded, global incomes have grown. Open economies have been able to harness the power of trade to boost competitiveness and productivity, helping improve living standards and sustain economic growth.

But the successes of the last half century should not lead us to be complacent. Despite major reductions in trade barriers, protectionism continues to be a major drag on our economies and a barrier to lifting developing countries out of poverty.

Protectionism imposes a double burden on tax payers and consumers. In the case of European agriculture, the cost to tax payers is about €50 billion a year, plus around €50 billion a year to consumers via artificially high food prices – together the equivalent of over £800 a year on the annual food budget of an average family of four. Furthermore huge distortions in international agriculture markets prevent the world's poorest countries from trading in the products they are best able to produce. Continuing barriers to trade are costing the global economy around \$500 billion a year in lost income.

With the benefits so clear, and the costs so substantial, why is there not a greater constituency for further progress in reducing barriers to trade? Why is the current round of trade talks in the WTO failing to make faster progress?

Part of the answer lies in the mercantilist approach which some participants take to trade negotiations. While opening new export markets is rightly seen as a success, opening economies to imports is often (wrongly) seen as a 'concession'.

This paper aims to show why such an approach is deeply misconceived. It is openness to imports which brings the dynamic benefits that help drive productivity in our economies. And it is imports which bring direct benefits to consumers and producers through access to a wider range of goods and services at lower cost. Of course exports are vital to our economy. But imports matter too.

Protectionism is hurting both our economies and those of developing countries. We need urgently to open our own markets, and put an end to unfair subsidy practices which distort world markets particularly in agriculture and labour-intensive goods where protection is highest and developing countries are most competitive. We need to face our historical responsibilities and help those developing countries whose export revenue has become increasingly dependent on our byzantine preferential regimes, and who could face significant adjustment costs during the transition to a fairer world trading system. And we need to assist developing countries to design carefully sequenced trade reform packages, integrated into development and poverty reduction strategies and supported by international aid flows to help them overcome serious capacity constraints and capture the potential benefits of more open markets.

Border protection and export subsidies are two of the most distorting ways to support farmers, depressing world prices and making them more volatile while depriving efficient farmers of access to the world's largest markets. In 2002 the EU sugar regime

lowered the value of Brazil, Thailand and South Africa's sugar exports by over \$700 million – countries where nearly 70 million people survive on less than \$2 a day. And we cannot continue to plead that reforming agriculture would cause us unbearable pain: developing countries stand to benefit significantly from agricultural reform, but the main beneficiaries will be our own economies.

The EU should show leadership. The EU has, as a result of reforms this year and last in which Margaret Beckett played a leading role, already taken steps to tackle trade distorting domestic support, and should continue to do so. We warmly welcome Pascal Lamy and Franz Fischler's recent proposal to put all export subsidies on the table for negotiation.

But we believe the EU can and should go further. The EU should agree to further significant further agricultural reform so that border protection is substantially reduced and export subsidies are no longer an issue for world trade by 2010 by:

- making a unilateral commitment to end all export subsidies, setting a clear end-date now; and

- committing to the elimination of all agricultural tariff peaks, towards the maximum level for non-agricultural products.

This will allow an orderly adjustment to a less protected and more competitive environment. And with CAP spending already at €50 billion per year, we cannot argue that we lack the resources to manage an effective transition.

Not all countries will benefit in the short term from a multilateral reduction in trade barriers. For some the costs of this preference erosion will be substantial.

The IMF has already taken an important step in establishing a new facility to help countries which face balance of payments problems as a result of preference erosion. We should seriously consider supplementing this with additional grant resources, designed to help the most vulnerable countries adapt and reap the benefits of more open global markets.

More broadly, some of the world's poorest countries will face serious constraints in managing the transition to more open markets and capturing their benefits. They need carefully designed and sequenced trade reform packages, integrated into development and poverty reduction strategies and supported by aid flows, in order to ease capacity constraints and help manage change.

Together, these two steps – real movement on agriculture and additional support to help the most vulnerable countries adjust – could make a real contribution to unlocking the potential of the Doha Development Agenda. Without such progress, we continue to put the global recovery at risk.

Trade negotiations should not be seen as a game in which we win only where others lose, but as a collaborative effort to reduce barriers to trade to the advantage of us all.

# INTRODUCTION AND SUMMARY

## Trade and the global economy

**1.1** The world today is significantly more economically interdependent than it was fifty years ago. World trade has expanded, with exports growing from \$84 billion in 1953 to \$6,272 billion in 2002. Much of the increase has been in trade between industrialized countries. But developing countries and emerging markets are playing a growing role: exports from developing countries as a whole accounted for 29 per cent of world trade in 2001.

**1.2** This expansion in the volume of world trade over the past half century has been supported by a steady decline in trade barriers, helping to sustain global growth and enable economic development. As trade barriers have fallen, the structure of international trade has also changed. New information and communication technologies have had, and continue to have, a profound effect. Some services which previously could only be provided domestically can now be traded internationally. Finer differentiation between products designed to meet specific consumer needs has led to a rise in intra-industry trade – where countries exchange goods which fall into the same broad industrial classification but differ in their specialized features. In addition, technological advances have allowed companies to slice up production processes, locating different stages of production in different regions or countries.

**1.3** These developments offer major new trading opportunities for all economies. They also imply change. Resources are shifting away from traditional industries and into new ones; and the process of change will continue, as developing countries increase their share of world trade. The global benefits from the continued expansion of world trade are potentially substantial. A good pro-poor outcome of the current round of multilateral trade negotiations could boost global income by over \$500 billion. The complete elimination of all agricultural and manufacturing tariffs could yield benefits of over \$1,000 billion annually.

**1.4** However, doubts about the advantages of greater openness to trade are feeding a persistent protectionism and putting these benefits at risk. While expanding export markets are widely accepted as beneficial, increases in imports can be seen as threatening, replacing domestic production with goods and services from abroad. Governments are often under pressure to respond by protecting sectors from international competition. At a global level, progress on the current multilateral trade round has thus far been slow.

**1.5** This paper aims to show why continuing reductions in trade barriers are important for the UK, for Europe and the rest of the industrialised world, and for developing countries where trade has the potential to make a significant contribution to poverty reduction. It addresses openness in the relatively restricted sense of openness to trade in goods and services. A comprehensive Government White Paper, to be published later this year, will look more broadly at both trade and investment, and will set out how the Government intends to translate the importance of trade openness into specific policy actions including the implications for the Doha Development Round in the World Trade Organisation (WTO).

**Trade productivity and growth** **1.6** Both economic theory and countries' experience show that economies which trade more tend to grow faster (chapter 2). Income growth depends importantly on a country's capacity to raise its productivity. Openness to trade – both exports and imports strengthens - the drivers of productivity, by enabling a more efficient allocation of resources; by providing greater opportunities to exploit economies of scale; by exposing the domestic economy to greater competitive pressures; by rewarding innovation and providing access to new technologies; and by increasing incentives for investment. Taken together, these factors mean that openness to trade can play an important role in raising the long-run sustainable rate of productivity growth in the economy.

**1.7** Notwithstanding the approaches of many trade negotiators, the dynamic effects of openness derive from exposure to imports as well as from opportunities to export. It is the extra competition and innovation which imports bring that helps boost productivity. Moreover, openness to imports increases choice and reduces costs not only for consumers (where the benefits can be considerable), but also for producers. In short, restrictions on imports penalize exporters. It follows from this that the mercantilist approach in which many trade negotiations proceed – a zero-sum game where success is defined solely as accessing as many new export markets as possible, while opening home markets is seen as a “concession” – is so misguided.

**1.8** Openness to trade has helped promote structural change in the UK economy, enhancing processes already underway due to technological advances, and allowing domestic resources to shift from less productive to more productive uses. In Europe too reductions in trade barriers have boosted economic performance: EU GDP is estimated to be nearly 2 per cent higher as a result of the creation of the Single Market. But the EU still has a long way to go in reducing barriers to trade with the rest of the world, particularly in agriculture. Increased external openness is an integral part of the Lisbon Agenda to promote economic reform within the EU.

**1.9** Globally, countries which have moved more rapidly towards more outward-looking trade policies have found it easier to sustain high rates of productivity growth. Different countries have pursued different approaches to trade reform. But while the precise mix of policies have varied from country to country, the key is to move clearly and consistently towards greater openness – imports as well as exports.

**The costs of protection** **1.10** Despite the manifold benefits of openness to trade, trade protection remains a significant problem (chapter 3). Although barriers to trade have fallen significantly over the last half-century, particular sectors and products remain subject to high levels of protection. Average import tariffs between OECD countries are around 3 per cent; but tariff peaks reach 506 per cent in the EU, and 350 per cent in the US. The highest tariffs are typically levied on goods from the developing world.

**1.11** Agriculture is heavily protected worldwide, imposing substantial costs on both developing countries and our own economies. Industrial countries' total support to agriculture exceeds \$300 billion annually. In Europe alone the Common Agriculture Policy (CAP) costs taxpayers some €50 billion a year, plus another €50 billion in extra consumer costs through higher food prices. The global benefits of significant agricultural liberalisation could be as high as \$350 billion by 2015.

**1.12** In addition to imposing substantial costs on taxpayers and consumers in home countries, developed country protectionism also significantly constrains developing countries' ability to compete fairly in the global market-place, hindering their efforts to improve standards of living and reduce poverty. Some of the most damaging anti-development practices include:

- ⌘ border protection and export subsidies, depressing world prices and making them more volatile while depriving efficient farmers of access to the world market. In 2002 the EU sugar regime lowered the value of Brazil, Thailand and South Africa's sugar exports by over \$700 million – countries where nearly 70 million people survive on less than \$2 a day.
- ⌘ tariffs that escalate as raw commodities are processed into higher value-added goods. Tariff escalation has strong anti-development effects by discouraging poorer countries from diversifying into higher value-added exports and deterring investment in building up supply-side capacity in their economies.
- ⌘ tariff peaks – high levels of protection for specific products. Among non-agricultural products, the EU has 135 tariff lines over 15 per cent and about 600 tariff lines between 10 and 15 percent, many in labour-intensive products in which developing countries have a comparative advantage. The US has 230 tariff lines above 15 per cent, and Australia has nearly 800.
- ⌘ product standards which effectively prohibit imports from developing countries, such as EU quality standards on dairy products which require them to be manufactured from milk from cows kept on farms and milked mechanically. Developing country agricultural exporters often rank such standards above tariffs and quotas as the most important barrier to trade with the EU.
- ⌘ anti-dumping measures which allow countries to impose retaliatory tariffs on low-cost imports, and which tend to be used in sectors of importance to developing countries such as textiles, clothing and steel.

**1.13** Whether its aim is to support agriculture, encourage investment in key sectors or safeguard employment, OECD trade protection is typically an inefficient, expensive and ultimately ineffective way of achieving these objectives:

- ⌘ The CAP is the EU's most expensive single policy, costing a typical family of four the equivalent of £832 a year. But despite this, farm incomes in the EU have continued their steady decline relative to non-farm incomes.
- ⌘ The cost to the consumer of protecting employment in the EU's 22 most protected sectors is eleven times the average wage. And rising steel tariffs in the US have failed to prevent steel producer employment from falling by more than 5 per cent.
- ⌘ For every dollar of aid given to selected developing countries by the US and EU through sugar preferences, \$2.75 of economic damage is done to other developing countries whose exporters are denied access to US and EU markets.

**1.14** The political difficulty of dismantling protectionist mechanisms means they tend to persist long after they have ceased to be economically justified. The stated objectives of protectionist policies can almost always be achieved more cheaply and effectively through alternative policies. Targeted income support and retraining for those leaving declining industries can achieve the same objective as import restrictions (i.e. preventing unemployment) at much lower cost, and with much greater benefits in terms of labour market flexibility and the productivity of the economy as a whole. Additional incentives for R&D-intensive sectors provide a more direct means of compensating companies for spillover benefits than protection.

**1.15** The global welfare gains from significant liberalisation in agriculture alone could reach \$350 billion. The estimated gains from reducing protection on manufactured goods range from \$190 billion for partial liberalisation to \$644 billion for full liberalisation. The impact of further opening up of services trade is harder to quantify, but could be extremely significant. In short, while estimates vary according to different models used, the order of magnitude is compelling. Reducing protection would make a very substantial contribution to global welfare.

**Capturing the benefits and managing change**

**1.16** Changes in the structure of production and employment are an intrinsic part of capturing the benefits of greater openness to trade. This requires flexibility in labour, product and capital markets; and social policies which, while providing adequate support, help manage change rather than preventing it (chapter 4). The relationship between flexibility and openness is mutually reinforcing: openness can help increase flexibility in the economy. The European Union in particular must press forward with its economic reform agenda, alongside greater openness to trade, as part of the drive to improve productivity and competitiveness.

**1.17** Governments have a vital role to play in creating flexibility – equipping their economies to benefit from the dynamic opportunities which openness to trade generates. Investment in education and training enables individuals and firms to respond positively to change. Economic reforms which reduce the regulatory burden on business, encourage competition and promote enterprise and innovation have a strong mutually reinforcing relationship with trade openness.

**1.18** Flexibility and fairness should be advanced together. Social safety nets are very important in supporting individuals dislocated by trade reform, and can help maintain support for change through difficult transition periods. But social protection should contribute to flexibility – by linking it to opportunities to acquire new skills, for example. The focus should be on enabling individuals to re-enter the labour market as quickly and smoothly as possible.

**Capturing the benefits of trade in low income countries**

**1.19** Trade has the potential to lift millions of people out of poverty (chapter 5). Developing countries stand to gain substantially from further reductions in trade barriers. A significant reduction in developed country barriers to trade in agriculture could benefit developing countries by up to \$75 billion a year – significantly more than total annual aid flows.

**1.20** But developing countries have to overcome significant capacity constraints in order to capture the benefits of more open trade. In many low-income countries, low levels of human, physical and institutional capital seriously constrain their economies' capacity to respond to the signals from international markets. High transaction costs – for example transport, insurance, customs procedures, communication costs – often dwarf the impact of formal trade barriers. Low-income countries also typically have much higher barriers to the entry and exit of firms, and poor access to financial services.

**1.21** Overcoming these capacity constraints will require significant resources in addition to current aid flows. Given the public good nature of many of these investments (especially those in education and health), it is unlikely that private investment will fill the gap. It is therefore critical that trade reform in developed countries is accompanied by increases in aid flows through mechanisms such as the International Financing Facility. Aid and trade will then reinforce each other, with a substantial impact on development and poverty reduction.

**1.22** Developing countries also face specific problems in managing the transition to more open markets in their own economies. For those dependent on preferential access to rich country markets, erosion of the value of those preferences through multilateral reductions in trade barriers could have a significant effect, necessitating profound structural change. Low-income countries also tend to be more heavily reliant on tariff revenue; and they are more vulnerable to balance of payments short-falls.

**1.23** This suggests carefully designed and sequenced trade reform packages, which are integrated into development and poverty reduction strategies, and supported by significant additional international aid flows for investment in physical, human and institutional capital would help ease capacity constraints and help manage change. Eliminating quota restrictions and customs exemptions, reducing non-tariff barriers and reducing tariff dispersion to the minimum are likely to be sensible first steps in most developing countries' trade reform programmes.

**1.24** Developed countries have an important role to play in providing the resources for the investment needed. This includes direct assistance to facilitate adjustment in those countries badly affected by the loss of preferential margins; and substantial additional resources to allow countries to build a pro-trade infrastructure, and boost their social spending in education and health.



# 2

## TRADE, PRODUCTIVITY AND GROWTH

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**2.1** This chapter explains how openness to trade helps drive productivity improvements and hence economic growth. It looks at how openness has operated in practice in the UK economy to promote structural change and increase productivity; and at how Europe has benefited from reductions in barriers to trade. It shows how a mercantilist approach to trade negotiations, which ignores the benefits from openness to imports, misses some of the most important gains from trade. Finally, it looks at the impact of openness on growth in other countries, including the conclusions we can draw from cross-country regression analyses of openness and growth.

### Openness and productivity

**2.2** Income growth depends crucially on a country's capacity to raise its productivity, i.e. its capacity to find new ways of making more effective use of the resources which it has available. This means developing techniques which enable existing goods and services to be produced more efficiently, or which expand the range or quality of goods and services which can be produced.

**2.3** In the United Kingdom, the Government's strategy to raise domestic productivity has focused on five key drivers of productivity performance:<sup>1</sup>

- ⌘ improving competition, to sharpen the incentives for producers to develop and adopt more productive techniques
- ⌘ promoting enterprise, to encourage the adoption of innovative processes and products
- ⌘ supporting science and innovation, to promote the development of new technologies and more efficient ways of working
- ⌘ raising skill levels to create a more productive workforce
- ⌘ encouraging investment, to increase the stock of physical capital used in production.

**2.4** Globalisation and trade expansion will impact on the importance of these drivers for future prosperity. For example, a continued pace of technological advance that drives globalisation and innovation will further increase the demand for a highly skilled workforce with the ability to absorb and generate new ideas and adapt to changing techniques and shifting product demand.

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<sup>1</sup> More detail on the Government's approach to productivity in the UK can be found in the series of publications "HM Treasury: Productivity in the UK", numbers 1 through 5, published between 2000 and 2004 by HM Treasury, and available electronically at [www.hm-treasury.gov.uk/documents/enterprise\\_and\\_productivity/ent\\_index.cfm](http://www.hm-treasury.gov.uk/documents/enterprise_and_productivity/ent_index.cfm)

**2.5** Openness to trade strengthens the drivers of productivity through six important (and mutually reinforcing) routes:

- ⌘ **more efficient allocation of resources.** Trade enables each country to specialise in the production of those goods and services which it can produce most efficiently. Countries can raise overall consumption by exchanging their surplus production for the surplus production of other countries which have a different comparative advantage.<sup>2</sup>
- ⌘ **economies of scale.** In the absence of trade, economies of scale are constrained by the size of the domestic market. Trade removes this constraint, allowing industries and firms to produce on a more efficient scale than would otherwise be possible.
- ⌘ similarly, trade increases incentives for firms to **innovate**, because the rewards from successful innovation will be proportionately greater if firms are selling in larger (i.e. export as well as domestic) markets. Where highly productive firms expand as a result of exports, this boosts the productivity of the economy as a whole.
- ⌘ **greater competition.** Trade openness exposes domestic firms to greater competition. This helps to encourage exit from the marketplace of the least productive firms; reduces monopoly rents; drives down margins; and reduces prices for consumers. Competition further reinforces incentives to innovate, helping to create more competitive firms which can then compete more effectively in world markets.<sup>3</sup>
- ⌘ **access to new technology.** Trade can provide direct access to goods and services that incorporate new technologies, particularly where more open trade regimes have led to different stages of the production process being undertaken in different countries.<sup>4</sup>
- ⌘ **incentives for investment.** Better access to imports and to export markets increases the scope for productive investment by creating new business opportunities. Foreign direct investment (FDI) enables technology and innovation developed abroad to be applied to domestic production, enhancing competition and leading to a faster diffusion of more efficient and innovative processes.<sup>5</sup>

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<sup>2</sup> Comparative advantage refers to those activities which a country can undertake most efficiently. For a more detailed explanation see, for example, Krugman and Obstfeld (2003)

<sup>3</sup> For example, Szanami et al (1995), citing Richardson (1989), note that “when the reduction of import barriers undermines domestic monopolies, oligopolies, and cartels, freer trade yields significant additional benefits”. Many other sources support this, including detailed work in Messerlin (2001)

<sup>4</sup> See, for example, Coe & Helpman (1993) and Eaton & Kortum (1995)

<sup>5</sup> See, for example, Proudman & Redding (1997)

**2.6** There are four key points in this analysis, discussed in more detail below. First, trade operates by enhancing the existing processes which drive economic growth. Second, the benefits from trade derive as much from increased access to imports as from greater access to export markets. Third, foreign investment provides an important channel through which countries can benefit from technologies developed in the rest of the world, and from the different costs of resources across countries. Fourth, the pace of structural change is likely to be faster in open economies, with the full benefits of trade openness accruing to economies that can easily redeploy labour and capital between firms and from declining to expanding industries.

**Enhancing  
existing  
growth-  
promoting  
processes**

**2.7** In a closed economy, the speed and pattern of economic development is determined by the labour, capital, natural resources and technology available in the domestic economy. This has implications for all five drivers of productivity growth. Competition is limited by the number of firms that are viable. Innovation, enterprise, investment, and the development of skills are limited by the prospective returns which can be earned by selling to the domestic market.

**2.8** In an open economy, these constraints are less binding, and economic growth can proceed more rapidly. International trade allows domestic resources to be transferred away from goods and services which can be produced more efficiently abroad, and into goods and services which can be produced more efficiently at home. Competition is greater, promoting greater efficiency; and access to foreign as well as domestic markets raises the prospective returns to investment, innovation, enterprise and skills development.

**2.9** In practice, economies are neither wholly closed nor completely open to international trade, but somewhere in between. Consequently all countries can benefit from reforms to trade policies that increase their exposure to foreign competition and their participation in global markets.

**Imports as  
well as  
exports**

**2.10** The growth-enhancing effects of trade derive from exposure to imports as well as gaining larger markets for exports. Imports are critical for the dynamic competition and technology effects listed above (paragraph 2.5). Imports also provide direct benefits to consumers by allowing access to a wider range of goods at lower prices, rather than restricting consumers to those goods and services which can be produced domestically. Conversely, seeking to restrict imports would require transfer of domestic labour and capital into import-substituting activities, regardless of whether this represents the best use of these resources. Unrestricted access to imports also supports exports by reducing the prices of essential production inputs.

**2.11** The mercantilist approaches which characterize many trade negotiations ignore these benefits from imports. The purpose of negotiations is mistakenly taken to be expanding export opportunities while minimising demands for greater openness to imports. This view can result in a defensive approach to trade negotiations in which negotiators aim to extract substantial “concessions” from other parties, while offering little in return. Such a strategy entails a high risk that negotiations will break down. Recognition of the benefits from increased trade warrants adopting negotiating strategies that are more conducive to reaching a deal that can benefit all parties. A defensive approach is self-defeating since it fails to recognize the long-term incompatibility of simultaneously pursuing policies to promote exports while restricting imports.

**Foreign investment** **2.12** Openness to trade can directly affect the amount of foreign investment that a country attracts. For example, access to imported inputs and to export markets may be critical in determining the viability of an investment project. In such circumstances, countries with substantial barriers to trade may attract less foreign investment than they otherwise would.

**2.13** The relative importance of factors determining an individual firm's decision to invest will differ across industries. In some cases, foreign investment will act as a substitute for trade, for example when investment abroad is a more profitable option for supplying foreign markets than exporting domestic production. But in other cases, foreign investment may stimulate cross-border trade, for example when locational factors (relative cost of production in the home and foreign market, the availability of skills and of production inputs in each location, the distribution costs applicable to each location, and the size of local markets) lead firms to divide their production process across two or more countries.

**2.14** In either case, barriers to trade affect investment decisions. Where investment decisions are primarily influenced by trade barriers rather than by the inherent economic advantages of production in a given location, there may be a risk of investors increasing resistance to trade reforms (because they have a vested interest in maintaining the relevant barriers), reducing competitive pressures in the longer term.

**Structural change** **2.15** Changes in the structure of employment and production are a necessary part of economic development and flow not just from openness to trade but also from technological developments and changes in consumer preferences. The benefits of structural change are apparent in hindsight, but often resisted as they occur. For example, the "lump of labour" fallacy – namely, that there is a fixed amount of work to go around in any given economy – has often led to concern that technological improvements will lead not just to a reduction in the number of people needed to complete a particular task, but to a reduction in the number of working people needed in the economy as a whole. This can lead to delays in implementing technological innovations which have important potential productivity benefits.

**2.16** Such fears have not been borne out by experience. While new technology has displaced workers from particular tasks, firms and industries have responded by taking on expanded or different priorities, and employment levels have remained high. Similarly, countries which are open to trade maintain high levels of employment by redeploying labour and capital into the production of goods and services which are valued in competitive markets. The process of redeployment inevitably brings transitional costs, which may fall particularly heavily on those least well equipped to cope with change – for example those with non-transferable skills. But the outcome for the economy on a whole is clearly positive; and there is a great deal governments can do to minimise transitional disruption to individuals' lives (see chapter 4).

**2.17** Changes are currently particularly striking in trade in services. Until recently, international trade has been much greater in goods than services. The distribution of production and consumption of services is now changing, as advances in technology and substantial declines in communication costs mean that an increasing range of services can be produced remotely and traded internationally.

**2.18** The relocation of some service sector jobs to countries with a more competitive ratio of labour cost to skills – ‘off-shoring’ – presents an opportunity, as well as a challenge, for developed economies. As with trade in goods, increasing imports of services produced more cheaply abroad means that the overall costs of services fall. This provides direct benefits to consumers, and lowers the cost structure of businesses, allowing them to raise profits and increase employment and investment.

**2.19** Higher productivity and a lower cost structure also bring second round benefits that permeate through the economy. These include releasing labour to be reallocated into higher value-added and higher skill jobs. However, the extent to which these benefits are realised will depend on the domestic response to the challenge of foreign competition in services, including the availability of appropriate opportunities for upskilling workers. Where a large proportion of the workforce is engaged in low-skilled and low wage activities which are exposed to direct competition, a comprehensive programme of skills enhancement becomes an essential element of any response.

**2.20** Many firms in different sectors are taking advantage of the opportunity to source cheaper services through imports. Providers of computer, financial, and general business services in particular are benefiting. Firms use different levels of offshore contracted services, ranging from back-office processing and customer contact functions (including call centres) through to wider corporate functions, knowledge management services and research and development. McKinsey Global Institute have estimated that the potential cost reduction for businesses from importing less skill-intensive services is between 30 and 50 per cent.<sup>6,7</sup>

**Importance of economic flexibility**

**2.21** Changes in the structure of production and employment are an intrinsic part of capturing the efficiency and productivity benefits of greater openness to trade. It is for this reason that flexibility – the ability of individuals and firms to respond to economic change efficiently and quickly – is an important concomitant to open markets. Chapter 4 highlights how flexible and well-functioning labour, capital and product markets enable structural change to occur while maintaining high levels of employment.

## Trade and productivity in the UK

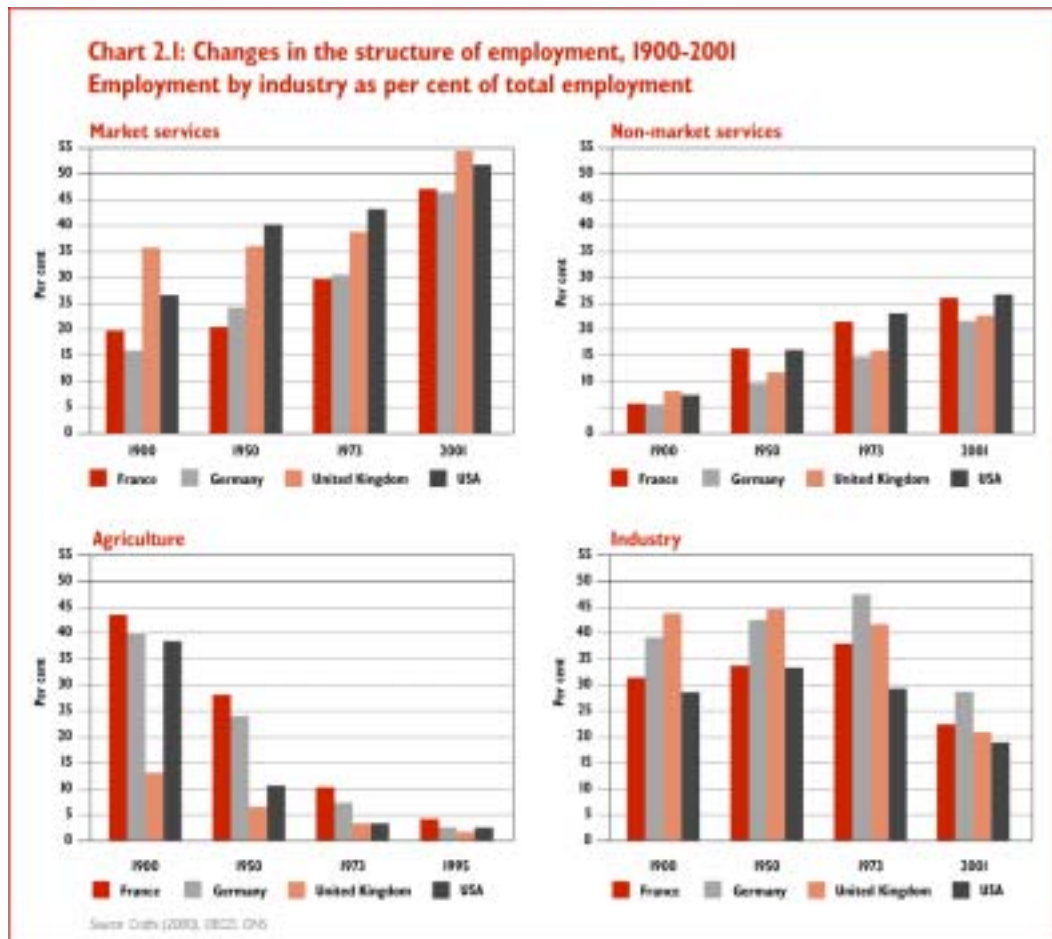
**2.22** Trade has contributed to changes in the structure of output and employment in the UK as elsewhere. Over the last century developed countries in general have seen a significant shift in industrial structure away from agriculture and manufacturing and into services (see chart 2.1). Technological innovations have been the main driver, enabling productivity advances. Improvements in agricultural productivity in the first half of the century freed up labour resources which were then deployed elsewhere. Subsequent advances in manufacturing techniques allowed a further reallocation of labour resources into services sectors.

<sup>6</sup> The labour cost differential is typically much greater than half (a software developer in India earns around a tenth as much as a software developer in the US); but importers often need to invest in additional management and compensate for infrastructure bottlenecks in order to ensure the imported service meets their needs. These additional costs tend to reduce the overall saving from a potential 90 per cent from labour costs alone to the 30 to 50 per cent range.

<sup>7</sup> For a more detailed treatment of offshoring see DTI (2003) and the forthcoming White Paper on Trade and Investment.

**2.23** The UK's openness to trade has enhanced the process of structural change, enabling the economy to shift resources into those activities in which it is more productive. Openness to trade allowed the UK to meet demand for products made more efficiently elsewhere through imports rather than through domestic production, thus releasing resources for use in production of greater value to the economy (see box 2.1).

**Competition 2.24** Greater trade openness also provided strong incentives to improve efficiency, as firms increasingly faced competition from imports as well as domestic competitors. Competition is a key driver of “productive churn”, the process by which resources and market share are reallocated from inefficient to more efficient producers. Formation of new firms, closure of their less productive rivals, and the transfer of resources between existing plants and firms are all part of this process (economic research suggests that, particularly in developed economies, productivity gains from trade openness tend to be associated more closely with expansion and contraction of firms than with major contractions of whole industries).<sup>8</sup> For the UK, these elements of productive churn may together have accounted for around half of labour productivity growth, and as much as 90 per cent of total factor productivity growth over a twelve-year period.<sup>9,10</sup>



<sup>8</sup> See, for example, Wacziarg & Wallack (2003), Bernard, Jensen & Schott (2003), Bernard, Eaton, Jensen & Kortum (2000)

<sup>9</sup> Total Factor Productivity (TFP) attempts to measure underlying productivity, taking account of the inputs used in production, where inputs are generally labour and capital.

<sup>10</sup> Disney et al (2000) cited in HMT (2002)

**2.25** Trade openness also helped UK firms to respond more effectively to competition by providing access – through imports – to a wider range of value-for-money intermediate inputs of both goods and services. The critical role played by intermediate inputs and imported production equipment is evident in virtually every UK sector. For example, high-tech and capital-intensive manufacturing in the UK depends on high-quality imported electronic equipment; pharmaceutical companies import basic chemicals as intermediate inputs; and even businesses in perishable sectors such as food processing often import packaging materials. In all these sectors imports allow final prices to remain low and help keep UK firms competitive.

**Innovation 2.26** In addition, the potential of larger markets, alongside increasing exposure to competition, has provided strong incentives for firms to innovate, moving quickly to take advantage of productivity-enhancing technologies. The automotive sector in the UK is a good example of a sector in which FDI helped this process to take place (see box 2.2).

**Box 2.1: UK comparative advantage: textiles manufacturing vs business activities services**

In general developed countries have a comparative advantage in the production of capital and skill intensive, rather than labour intensive, goods and services. The production of textiles is relatively labour intensive; so in a developed economy greater openness to trade in textiles would be likely to result in reallocation of resources away from domestic textiles production and into other activities.

This is indeed what happened in the UK. Between 1970 and 2003, the weight of textile output in manufacturing output fell from 9.4 per cent to 3.6 per cent. The weight of textile employment in manufacturing employment also fell – from 12.3 per cent in 1985 to 5.6 per cent in 2003. The fact that the textile industry's employment weight in manufacturing is higher than its output weight suggests that the manufacture of textiles is relatively more labour intensive than the average for the manufacturing sector.

As relative domestic output fell, the value of textile imports as a percentage of domestic production rose – from 50 per cent in 1983 to 74 per cent in 2002. At the same time, textile exports as a percentage of production rose from 29 per cent to 51 per cent. This suggests that domestic demand for textiles switched from domestically produced goods to cheaper imports; but that at the same time textile manufacturers managed to slow the relative decline in output by exploiting new export opportunities.

Trade has impacted differently on high-skill sectors in which the UK has a comparative advantage. These sectors have absorbed the resources released from less competitive sectors. For example, between 1985 and 2002 the renting and business activities services sector increased its share in total services output from 21 per cent to 33 per cent.<sup>11</sup> At the same time, its employment share grew from 14 per cent to 19 per cent. The fact that its employment share is lower than its output share indicates that this sector is relatively less labour intensive than the services sector as a whole. The fact that the output share grew faster than the employment share suggests that productivity in this industry was growing faster than the average for the services sector.

Between 1991 and 2002, the value of exports from the renting and business activities sector as a proportion of domestic output in that sector rose from 10 per cent to 16 per cent. At the same time, imports increased their share from 6 per cent to 9 per cent. This suggests that the sector benefited significantly from the opening of export markets and competed successfully with potential imports. This example also shows that a successful and expanding domestic sector is fully compatible with rising imports.

<sup>11</sup> The increase in this sector's output was driven almost entirely by business activities rather than renting, based on the increase in relative shares of services gross value added. "Market research and management consultancy", "computer services" and "other business services" sub-sectors made the greatest contribution. (Source: ONS).

**Box 2.2: Innovation in the UK automotive sector**

In the late 1980s and early 1990s, three Japanese automotive giants set up operations in Britain to supply the European market. While many factors were involved in their decision to locate in Britain, trade openness was clearly critical, both in providing access to export markets across Europe and in allowing sourcing of inputs from supply chains in Japan and across the world, as well as in Britain.

However, their arrival also highlighted the poor state of the UK auto supply industry. An industry report<sup>12</sup> suggested that while some Japanese plants could simultaneously achieve outstanding levels of productivity and quality, no UK plants could do the same, and many achieved neither. These “world class” plants were twice as productive and with significantly higher output quality than the UK plants, as well as having much more streamlined supply chains. Even against other European suppliers the UK was not a strong performer: a large proportion of components by value were sourced elsewhere in Europe.

Over the next decade, the Japanese-owned manufacturers encouraged the auto supply industry to set up links and learn directly from Japanese suppliers. The result was a sharp increase in the rate of innovation and adoption of best practice techniques by UK firms. An estimated 385 companies in the sector have taken part in collaborative activities as part of an industry forum set up to facilitate this exchange of knowledge, with typical savings per company of £250,000 per year. Key performance metrics have all seen strong improvement.<sup>13</sup>

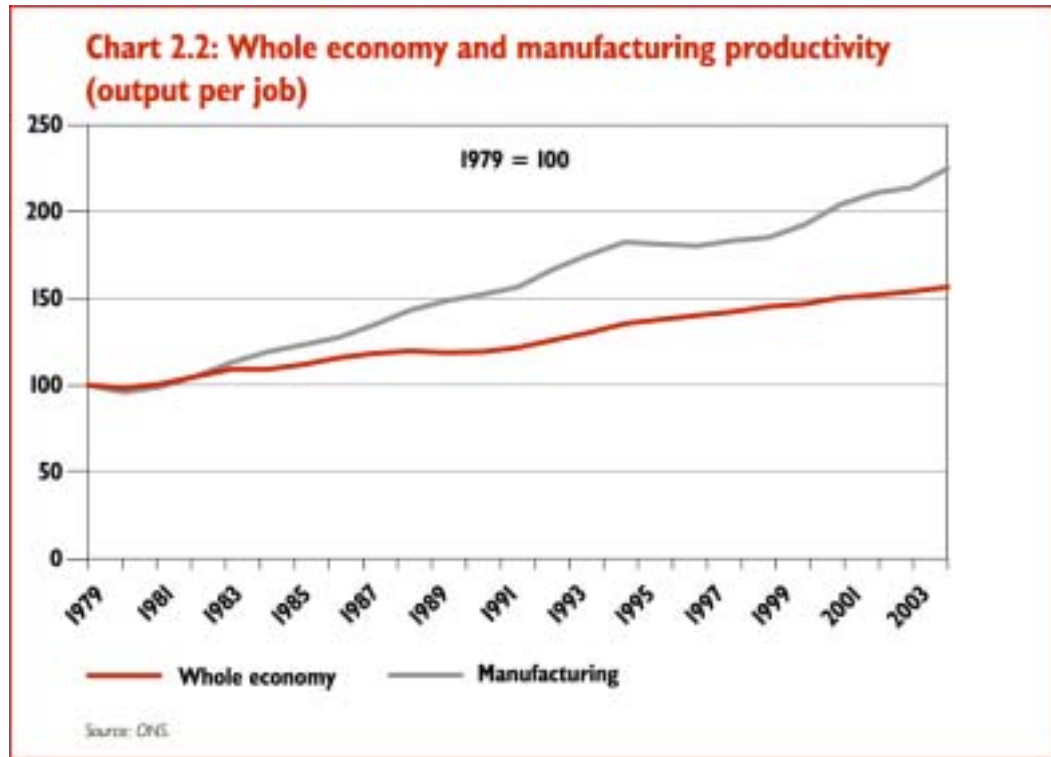
Increasing competition from Japanese and other European automotive suppliers in both domestic and export markets was already forcing the UK sector to innovate and improve efficiency. FDI offered the opportunity to speed up the process, resulting in a more streamlined and productive sector.

**2.27** The impact on the economy of these structural shifts, due to both trade and technological change, has been strongly positive. Wages in both manufacturing and services have increased, reflecting productivity gains (chart 2.2). Employment as a whole has risen. Those regions which depended heavily on manufacturing have maintained their share in total employment, reflecting the creation of new jobs in non-traditional sectors. At the same time, consumers have gained access to a wider range of goods and services, with improved quality and value for money. GDP and real household income levels have continued to grow.<sup>14</sup>

<sup>12</sup> Anderson Consulting (1993)

<sup>13</sup> DTI Manufacturing strategy (2002)

<sup>14</sup> ONS



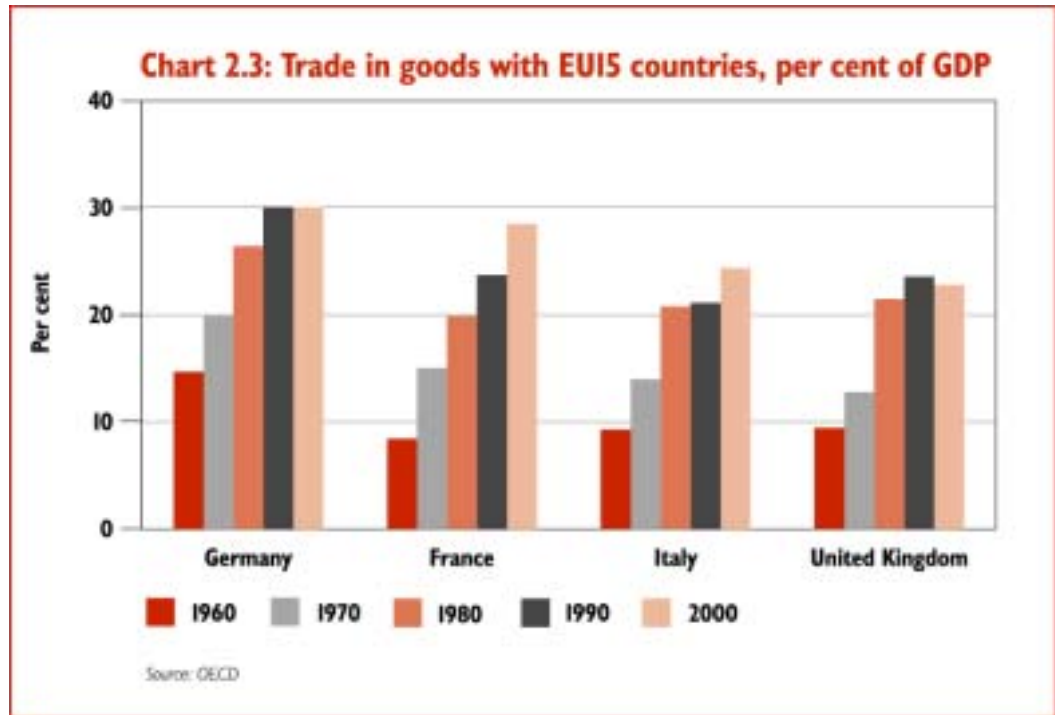
## Trade and growth in Europe

**2.28** In Europe, increased openness to trade helped drive productivity and economic growth after the Second World War, in particular in the “Golden Age” of European growth between 1950 and 1973. In Western Europe, export volumes were actually lower in 1950 than they had been in 1913, reflecting the legacy of the two world wars and of the protectionist trade policies pursued in the interwar period. Since 1950, Western European trade has expanded at around 6.5 per cent per annum, and by over 8 per cent per annum between 1950 and 1973, spurred by multilateral reductions in trade barriers and the formation of the European Union. During the 1950-1973 period GDP per capita in Western Europe grew by 4.1 per cent per annum, compared with only 1.3 per cent per annum in the late nineteenth century. Economic historians have concluded that progressive reductions in trade barriers were instrumental in the strong European economic performance after 1950:

*“With regard to trade policy, defined widely to include industrial policy, a strong consensus emerges which will be familiar to economists examining post-war trends in the wider world. Outwardly oriented development and relatively free trade seem to promote growth in the long term”.*<sup>15</sup>

**2.29** The formation of the European Economic Community (EEC) in 1958 and the European Free Trade Area (EFTA) in 1960 reduced trade barriers within Europe, notably on trade in industrial products. The EEC established a customs union, in which tariffs and other explicit restrictions were eliminated on trade between member countries, and a common tariff applied to trade with other states. The EEC and EFTA both provided European producers with easier access to each other’s markets, leading to a strong expansion in intra-European trade (chart 2.3).

<sup>15</sup> Crafts and Toniolo (1996a) in Crafts and Toniolo (eds)



**2.30** The growth of trade within industries, rather than between industries, played an important part in this expansion – and continues to do so. Intra-industry trade now accounts for about 70 per cent of European trade.<sup>16</sup> Access to larger markets has allowed producers to exploit economies of scale, enabling greater product differentiation in order to meet consumers' needs more precisely.

**2.31** European countries which pursued less open policies in the 1950s did not advance as rapidly as their neighbours (see box 2.3). More inward looking policies meant that those countries became more reliant on the resources and the growth potential of their own domestic market, with less scope for generating competition and realizing economies of scale. These constraints shaped both the speed and the pattern of those economies' subsequent development.

### The Single Market Programme

**2.32** In the mid 1980s the European Union embarked on the Single Market programme, further reducing the impediments to cross-border trade within the EU. The costs incurred in exporting to other EU states were cut by adopting standard administrative documents, and by abolishing border checks on the movement of goods. The programme also tackled other non-tariff barriers by a combination of agreeing technical standards at the EU level for some goods, and by mutual recognition of national standards in other areas. Evidence suggests that the initiative delivered significant benefits, although some barriers to trade persist. The European Commission estimate that by 2002 EU GDP was 1.8 per cent higher as a result of the creation of the Single Market. In addition, the market has increased the ability of EU firms to compete in global markets, and made Europe a more attractive location for foreign investors. European consumers have benefited from a wider range of goods and services, and from lower prices.<sup>17</sup>

<sup>16</sup> OECD (2002)

<sup>17</sup> European Commission (2002a)

**Box 2.3: Trade policy and economic performance in France, Spain and Ireland**

In **France**, stringent import quotas were in place through much of the 1950s, and tariff levels were notably higher than in neighbouring European countries. The reduction of trade barriers after 1958 seems to have played an important role in enabling labour productivity to grow by 4.6 per cent per annum between 1958 and 1973.

Trade barriers fell significantly in the 1960s, following the formation of the European Economic Community, and as a result of the Dillon and Kennedy trade rounds. This led to a substantial re-orientation of French trade: between 1958 and 1968, the share of French exports going to former colonies fell from 38 per cent to 14 per cent, while the share going to OECD countries rose from 47 per cent to 70 per cent. Import exposure of the domestic market rose from 8 per cent in 1959 to 17 per cent in 1971, contributing to an increase in competition, and led to French firms becoming more innovative.

**Spain** also moved away from an inward-looking policy at the end of the 1950s. Until then, economic policy had aimed at rapid industrialisation through import substitution based on import quotas, exchange controls and extensive state control of production and investment. GDP per capita grew by 3.5 per cent per annum between 1950 and 1960, but the inward focus meant that Spanish industry could not compete on international markets. Low exposure to foreign competition hindered innovation and the adoption of technological advances made in other countries, undermining Spain's ability to catch up with the leading European economies. The stabilisation plan adopted in 1959 led to the abolition of the system of multiple exchange rates, and the replacement of quotas on 90 per cent of imports by a (still high) tariff.

The opening of Spanish markets proceeded gradually with average effective protection estimated at 34 per cent in 1980. GDP per head grew by 6.3 per cent per annum between 1960 and 1973. This was accompanied by increased integration with the international economy, with exports rising from 6 per cent of GDP in 1959 to 11 per cent of GDP in 1974, and foreign investment accounting for 6 per cent of fixed capital formation over the same period.

**Ireland** adopted an import substituting industrial policy during the 1930s. Industrial employment and output rose rapidly between 1932 and 1937, but this initial success was not sustained. Between 1950 and 1960 the growth of GDP per capita averaged 2.2 per cent per annum, much lower than the 4.7 per cent per annum achieved in Western Europe. Ireland's industrial structure was characterised by a large number of small firms, with limited potential to exploit the economies of scale that would have enabled them to survive without protection.

The establishment of the Anglo-Irish Free Trade Area in 1966 and Ireland's entry into the European community in 1973 brought a gradual but progressive reduction in trade barriers. The ratio of merchandise trade (exports and imports) to GDP rose from 69 per cent in 1960-73 to 106 per cent in 1974-89. Between 1965 and 1980 GDP per capita grew by 3.8 per cent per annum, more strongly than in Western Europe as a whole.

*Sources: France: Sicsic and Wyplosz (1996); Spain: Prados de la Escosura and Sanz (1996); Ireland: O'Grada and O'Rourke (1996).*

**2.33** While the European Union has been very significant in promoting cross-border trade between its members and within the wider European Economic Area, it has been less aggressive in removing trade barriers with the rest of the world. This has been particularly the case in agriculture, but also in labour intensive manufacturing such as textiles and footwear and processed agricultural goods. Export subsidies for European products have depressed prices in the rest of the world, compounding the adverse effects of European policies for other countries. European citizens have also paid a cost, in terms of higher taxes, higher consumer prices and a less competitive market (see chapter 3).

### Flexibility in Europe

**2.34** Periods of rapid economic growth are typically periods in which there are substantial changes in the structure of output and employment – especially when GDP growth is accompanied by rapid trade growth, and labour and capital are redeployed into exporting industries. If new employment opportunities are not created sufficiently rapidly, the process can be potentially costly both to individuals and to the economy as a whole. Rapid growth in Europe in the 1960s was underpinned by smooth adjustment in labour, product and capital markets. This was reflected in high rates of investment, the absence of inflationary wage pressures and a low rate of unemployment.<sup>18</sup> However, the flexibility of European markets in the 1960s was subsequently eroded, particularly in labour markets. At the Lisbon European Council in 2000 European leaders instituted a programme of economic reform that aimed to raise the employment rate in Europe, and create a dynamic knowledge-based economy. Such reforms are also necessary to enhance Europe's capacity to compete in international markets.<sup>19</sup>

### External Openness and the Lisbon Agenda

**2.35** Trade openness has a continuing role to play as a catalyst for competition, innovation and modernisation in Europe – necessary if Europe is to achieve its goal of becoming the most dynamic knowledge-based economy in the world by 2010. Removing the significant regulatory and other barriers to trade within the EU, especially in services, is essential. The March 2004 European Council conclusions noted that the mid-term review of the Lisbon Agenda on economic reform should look at the role of external drivers of growth, competitiveness and employment. External openness to trade is a vital component of the strategy to achieve the Lisbon targets.

## Beyond Europe: global growth and developing countries

**2.36** The expansion of trade in the UK and Europe was part of a wider movement towards more open markets in the period following the second world war. The link between openness and economic performance can also be seen on a global scale. Trade barriers rose substantially following the First World War as countries reverted to protectionist policies in order to promote domestic output and employment (table 2.1). This led to a marked slowdown in the pace of world trade growth: the volume of trade grew by only 40 per cent between 1913 and 1950, compared with some 400 per cent between 1870 and 1913. As a proportion of GDP world trade fell significantly – on one estimate trade volumes fell from 22 per cent of world GDP in 1913 to just 9 per cent of GDP in 1938.<sup>20</sup>

<sup>18</sup> See Eichengreen (1996) in Crafts and Toniolo (eds) (1996)

<sup>19</sup> See HM Treasury (2004)

<sup>20</sup> Esteveadeordal, Frantz and Taylor (2002)

**Table 2.1: Average tariff levels in selected countries**

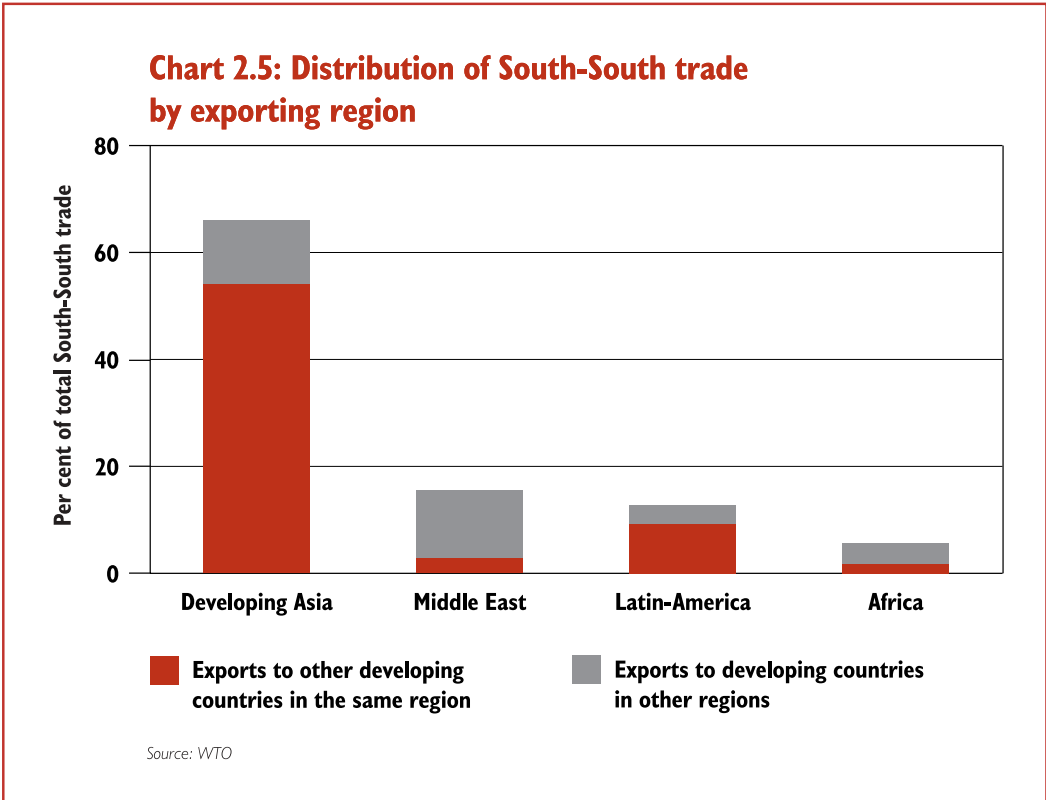
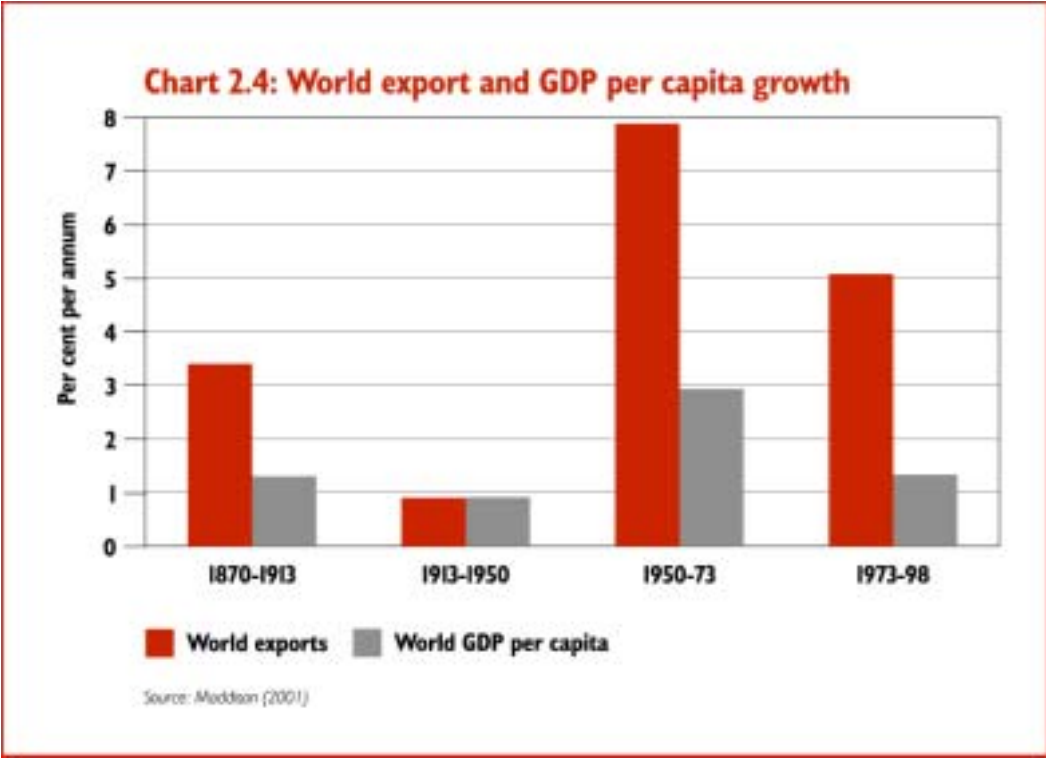
	1925	1931
<b>France</b>	9	38
<b>Germany</b>	15	40
<b>Italy</b>	16	48
<b>United Kingdom</b>	4	17
<b>United States</b>	26	35

Source: Irwin, D (2002)

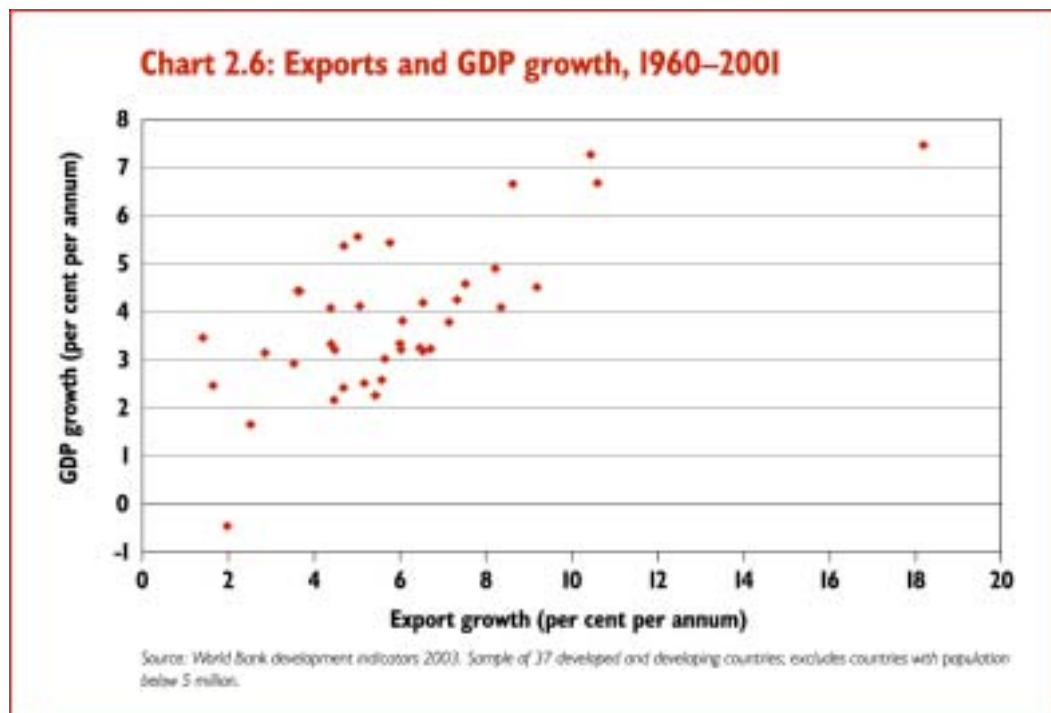
**The GATT 2.37** After the second world war, governments began consciously to adopt more outward-looking policies. This impetus led to the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947, which provided a framework for progressive mutual reduction in tariffs. The original GATT negotiations were long and arduous, and came close to collapse on many occasions, reflecting the tensions which exist between the benefits of trade and the economic changes associated with opening markets.<sup>21</sup> Despite these tensions, the first GATT negotiations succeeded in reducing tariffs by around 20 per cent; and the framework for multilateral trade negotiations thus established led to further reductions of around 35 per cent in the Kennedy Round (1964-67) and 33 per cent in the Tokyo round (1973-79). These reductions applied primarily to manufactured goods: substantial barriers to trade remained in agriculture, textiles and services. The benefits flowed mainly to developed economies with developing countries remaining largely outside the GATT process. Nevertheless, as trade barriers fell, both global trade and global income per capita increased. In particular, the strong growth of both exports and output between 1950 and 1973 stands in marked contrast to the weak performance of both in the first half of the century (chart 2.4).

**Emerging Markets and Developing Countries 2.38** As trade barriers fell in the industrialised world, some developing countries also began to open up to trade, leading to the emergence of new markets and contributing to substantially accelerated growth in the more successful economies. From the early 1980s to the late 1990s average tariff rates in developing countries halved, from around 30 per cent to 15 per cent. Over the same period, trade volumes increased significantly, and the composition of developing country exports changed: the share of manufactured goods in developing countries' exports rose from around 25 per cent to over 80 per cent in 1998. Trade between developing countries became – and continues to be – increasingly important, growing twice as fast as world trade: 10 per cent versus 5 per cent between 1990 and 2001. However, these flows are concentrated among emerging markets in Asia: Africa's share of South – South exports is extremely small (see chart 2.5).

<sup>21</sup> In general, the benefits of greater openness to trade tend to be spread across the population and to build over time, whereas the costs are more highly concentrated and more immediate. As a result, the impetus for trade reform has tended to ebb and flow, depending on how confident policy-makers have been in their economies' ability to make short-term adjustments and grasp the opportunities which a more open trade regime provides.



**2.39** The fact that developing countries took longer to move towards more open policies in part reflected a strong commitment to import substitution in many countries – restricting imports of manufactured goods in order to shift demand towards domestic production, with the aim of promoting rapid industrialization. These strategies had mixed results (see chapter 3). In a number of countries, import substitution enabled domestic industries to develop. However, in the medium term, continuing such policies meant that development was constrained by the limited resources and markets which the domestic economy could provide. These effects were compounded by continuing protectionism in developed countries, which prevented developing country producers from accessing lucrative markets. Longer-term success required countries to draw on resources which could be supplied more cheaply by the rest of the world, and to exploit economies of scale by producing for foreign as well as for domestic markets.



**2.40** Countries which moved more rapidly towards more outward looking trade policies found it easier to sustain high rates of productivity growth (see chart 2.6). For example, Korea in the 1960s, Chile in the 1980s and India in the 1990s all experienced a rapid acceleration in growth, following the adoption of reforms including substantial reductions in their barriers to foreign trade:

- ⚡ during the 1960s, Korea dismantled its import restrictions and reoriented its industrial policy towards export industries (see box 2.4). Between 1965 and 1985 import volumes grew by 16 per cent per annum, and GDP per capita by 7.7 per cent per annum, compared with only 3.4 per cent per annum for Asia as a whole. By 1985 Korean GDP per capita was around 2½ times higher than in Asia as a whole, whereas it had been only 8 per cent higher in 1965.

- ⌘ between 1975 and 1979, Chile eliminated all quantitative restrictions and trade controls and reduced its tariffs substantially. Between 1980 and 2000 import volumes grew by 6 per cent per annum, and GDP per capita by 2.7 per cent per annum, compared with only 0.4 per cent per annum in Latin America as a whole. By 2000, Chilean GDP per capita was 69 per cent higher than the Latin American average, compared with only 6 per cent higher in 1980.
- ⌘ India began to dismantle its import restrictions during the 1980s, and continued with a far-reaching reform programme in 1991, including a reduction in tariffs from 85 to 25 per cent. Trade grew strongly, with import volumes rising by 7 per cent per annum. GDP per capita grew by 3.9 per cent per annum between 1985 and 2000, up from 1.5 per cent per annum between 1970 and 1985.

#### **Box 2.4: Export-led growth in South Korea<sup>22</sup>**

Despite a severe shock to the economy in the Asian financial crisis, South Korea has seen strong growth in both output and trade over the past three decades and a massive improvement in living standards. This was achieved through a mix of export promotion, trade and investment liberalisation and industrial protection. These were accompanied by strong investment in education, and a high adaptability which enabled South Korea to deal effectively with changes to its economic structure, including the loss of formerly competitive sectors to lower-wage economies.

In 1965, Korean GDP per capita was only 8 per cent higher than the Asian average. By 2000, it was over 3½ times higher. This remarkable advance has been accompanied by strong increases in international trade. Import volumes have grown at 15 per cent per annum since 1965.

Until the 1960s, South Korea exerted strict controls over imports. However, this import substitution policy failed to lead to the development of domestic industry. Instead, it led to excess capacity in the primary sector, which continued producing goods for which there was little demand.

From 1962, the government instituted a number of export promotion measures, as well as allowing a depreciation of the won through a floating exchange rate. Industrial policies supported industries with the potential to thrive in export markets through export subsidies and directed credit. At the same time, restrictions on imports were cut substantially, exposing Korean industry to international competition. The number of items automatically approved for import rose from zero in 1963 to 63 per cent in 1964, and many import quotas were abolished in 1967. Tariffs were also cut sharply, with the effective tax on imports falling from nearly 40 per cent in 1960 to 8 per cent in 1967.

In the 1970s, South Korea faced increasingly strong competition from lower-wage economies in labour-intensive light industries. The government therefore gradually reduced the export promotion schemes in favour of policies specifically targeted at developing heavy and chemical industries.

<sup>22</sup> Based mainly on Choi (2002) and Irwin (2002).



**2.41** Approaches to import liberalization in these countries differed: in Chile there was an across-the-board reduction in tariffs; in Korea tariffs were reduced only gradually but the government implemented complex (and administratively demanding) schemes to compensate exporters for the additional costs which import barriers imposed. In other countries export processing zones have been used, though not always successfully (see box 2.5). However, in all three cases reductions in barriers to imports were an important part of the drive to increase exports. Early reductions in quantitative restrictions on imports were particularly important (identified as a “vital first ingredient” in a detailed study of trade reforms in developing countries).<sup>23</sup> Moreover, the direction of travel was consistently towards greater openness, suggesting that establishing a clear and credible direction in favour of reform is as important – if not more important – than the pace at which specific reforms are implemented.

### Cross-country studies

**2.42** These lessons from individual countries’ experience are largely borne out by cross-country studies, the majority of which have found a systematic link between openness and growth (see box 2.6 for an explanation of the limitations of this type of study). For example, Sachs and Warner (1995) found a positive relationship between a simple summary measure of openness and growth, concluding that annual GDP growth rates in open economies were two percentage points higher than in closed economies. Edwards (1998) considered nine different measures of trade openness and found that in 17 out of 18 regressions, countries which were identified as more open had higher rates of productivity growth, and that in 13 of these instances the effect was statistically significant. Frankel and Romer (1999) suggest that an increase of one percentage point in the ratio of trade to GDP is associated with an average increase in income per person of at least half a per cent. Dollar and Kraay (2004) divide a sample of 73 developing countries into “globalisers” and “non-globalisers”, using criteria based on trade as a share of GDP and reductions in average tariff rates,<sup>24</sup> and show that the average growth rate in GDP per capita since 1980 has been higher for the globalisers than for the non-globalisers. Lewer and van den Berg (2003)<sup>25</sup> review the results of a large number of cross-country and time series regressions, finding that on average a one percentage point increase in the growth of exports is associated with a one-fifth percentage point increase in economic growth.

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<sup>23</sup> Papageorgiou, Michaely and Choksi (1991)

<sup>24</sup> This excludes the 24 countries that were members of the OECD in 1990, together with five “early liberalisers”, namely, Chile, Hong Kong, Taiwan, Singapore and South Korea.

<sup>25</sup> This brings together results from 196 cross-country and 402 time series regressions of real GDP growth on real export growth, and 37 cross country and 57 time series regressions of real GDP per capita growth on real export growth.

**Box 2.5: Export Processing Zones**

Export Processing Zones aim to promote exports and stimulate foreign direct investments (FDI) by offering exemptions from import tariffs, alongside other tax incentives, to particular industrial zones, sectors or factories. The success of China, Korea and other East Asian countries in creating sustainable export growth through EPZs has encouraged many other countries to follow suit. The International Labour Organisation estimates that by the late 1990s there were more than 850 EPZs across the world.

Experience with EPZs, however, has been mixed, particularly in low and middle income countries. For example, while the Mauritian EPZ is considered a clear success and a key factor in explaining Mauritius' outstanding economic performance compared with the rest of the region, other African countries such as Zimbabwe, Senegal, Madagascar and Cameroon have failed to benefit substantially from EPZs.

Mauritius' success can be explained by its particularly strong business ties to Asia, the division between political and economic elites which enabled it to capture the rents from preferential access to EU markets relatively efficiently, and the very high level - up to 50 per cent - of the equity of firms in the EPZ owned by Mauritian nationals.<sup>26</sup>

On the other hand, the Dakar EPZ, established in 1974, never managed to take off. By 1990 it was employing only 600 workers. As in many EPZs, while the government provided significant tax and customs incentives, it failed to reduce the burden of other business regulations such as minimum employment and investment floors, and consequently failed to attract both national and foreign investors.

Kenya's garment EPZ shows both the short-term benefits and the long-term risks of "footloose" investment. In 2000, the US implemented the African Growth and Opportunity Act giving Kenya duty and quota free access to the US. FDI in the Kenyan garment EPZ increased by 42 per cent in 2001, mostly from entrepreneurs already experienced in exporting to the US and relocating production from the Middle East and Sri Lanka. This led to a boom in exports. The sustainability of the sector, however, will be highly uncertain once the Agreement on Textiles and Clothing (ATC) is phased out at the end of 2004.

EPZs can be a useful transition mechanism towards increased openness, but they require high quality institutions to implement them effectively; a clear and credible reform path leading to integration into the domestic economy; and an overall investment friendly environment. Research suggests that EPZs have often failed because institutions and governance have not been able to manage the rent-seeking, corruption and inefficiency risks inherent in the high degree of selective interventionism embodied in EPZs.<sup>27</sup> In addition, the Kenyan example highlights the broader difficulties which discretionary – and distortionary – preferential market access schemes cause developing countries (see chapter 5).

<sup>26</sup> Subramanian and Roy (2001)

<sup>27</sup> Subramanian and Roy (2001)

**Box 2.6: Measuring trade barriers in cross country studies**

The prediction that countries which are more open to trade will experience higher income levels or higher growth rates has been tested using econometric techniques. Important difficulties in such research include constructing appropriate measures of openness, and establishing conclusively the direction of causality.

Simple measures such as the volume of international trade to GDP provide a proxy indicator of trade barriers. Other things equal, lower barriers to trade should lead to higher trade volumes. Hence although trade volumes do not measure barriers to trade directly, they should reflect the impact of trade barriers, including those that are not easily measured. Measures of trade as a proportion of GDP need to be adjusted to take account of a country's size, since large countries will be able to supply a greater range of goods and services from within their own borders, and hence have a lower propensity for international trade than smaller countries.

Other measures of trade distortion have included tariff levels, measures of non-tariff barriers, the difference between blackmarket and official exchange rates and cross country differences in price levels for tradable goods. However, such measures remain imperfect, in that they are unable to capture adequately the different forms that trade barriers can take. This is particularly true for non-tariff barriers: for example, differences in product standards can deter cross-border trade but are not easily incorporated into a summary measure of a country's openness to trade.

Another limitation of these cross-country studies is their inability to isolate the effect of openness conclusively from that of other factors which tend to accompany trade reform. Policies correlated with growth (openness, macroeconomic stability, rule of law, effective institutions) tend also to be correlated among themselves. This means that it is very difficult to disentangle the effects of openness from the effects of other associated policies.

**2.43** More recent cross-country analysis suggests that the extent of the boost to growth associated with a more outward orientation depends on the context in which the policy change occurs – see for example Rodrik and Rodriguez (2001) and Wacziarg and Welch (2003).<sup>28</sup> Where other obstacles, such as political instability, poor macroeconomic policy or insecure property rights are the dominant constraint on economic growth, reducing trade barriers may yield limited benefits (box 2.7). Conversely, measures to improve the domestic business environment and strengthen domestic institutions can boost growth, even without a reduction in trade barriers. This underlines the importance of placing trade reform in the context of broader development strategies, particularly in poor countries where the institutional environment is typically less developed (see chapter 5).

<sup>28</sup> Rodriguez and Rodrik (2001) in Bernanke and Rogoff (2000); and Rodrik, Subramanian and Trebbi (2002)

**Box 2.7: Conclusions from Wacziarg and Welch (2003)**

Wacziarg and Welch found that on average, countries which opened their economies to trade between 1950 and 1998 increased their GDP growth rates by 1.4 per cent a year, rising to 2.5 per cent for those which opened between 1990 and 1998. Among 24 developing countries, around two-thirds experienced increases in the growth rate of GDP per capita after moving from being closed to open, but a third saw GDP per capita growth rates decline – often because political and macroeconomic instability undermined economic performance.

They considered the context in which trade reforms occurred for 13 of these 24 countries,<sup>29</sup> and drew the following conclusions:

- ⚡ Countries which sustained and deepened their trade reforms over time were more likely to see sustained improvements in GDP per capita growth rates.
- ⚡ The evidence on the success of specific approaches to trade reform was mixed. In particular, Indonesia, Taiwan and Korea all successfully pursued growth strategies that combined an outward-oriented development model and industrial policies, but this strategy has been less successful in other countries.
- ⚡ However, coherence of the reforms matters. In Israel and the Philippines, domestic policies which insulated domestic producers from the effects of trade reforms hampered the ability of countries to benefit from trade reform.

The context in which reforms are introduced is also important. Restrictive macroeconomic policies, currency overvaluation and political instability can prevent trade reforms from boosting economic growth, at least in the short term.

**2.44** Reforms are also likely to yield greater benefits if they can be sustained and deepened.<sup>30</sup> This suggests the possibility of self-reinforcing circles. Countries which institute reforms in unfavourable circumstances may see little or no benefit in the short-term, which may then undermine the support for existing and further reforms. By contrast, countries which introduce reforms in favourable circumstances may find it easier to sustain and build on support for their programmes. In the case of India, the failure of earlier attempts at reform meant that the easing of restrictions proceeded cautiously after 1985, followed by more far-reaching reforms in 1991.<sup>31</sup>

<sup>29</sup> The thirteen countries and the date from which they became open economies on the Sachs and Warner measure are: Poland (1990), Ghana (1985), Uganda (1988), Taiwan (1963), Chile (1976), South Korea (1968), Indonesia (1970), Colombia (1986), Philippines (1988), Hungary (1990), Mexico (1986), Botswana (1979) and Israel (1985).

<sup>30</sup> Wacziarg and Welch (2003)

<sup>31</sup> Panagariya (2004)

## Conclusions

In summary:

- ⌘ Increasing openness to trade can play a critical role in helping to raise the long-run sustainable rate of productivity growth.
- ⌘ Trade operates by enhancing the existing processes which drive economic growth. Changes in the structure of production and employment are an intrinsic part of capturing the efficiency and productivity benefits of greater openness to trade.
- ⌘ The mercantilist distinction between the benefits of exports and imports is false, and is harmful not least when it hinders progress in trade negotiations. The dynamic effects of openness derive both from exposure to imports and from opportunities to export. Moreover, restrictions on imports penalize exporters by increasing their production costs compared with international competitors. Consequently, it is easier to sustain an export-led strategy when there are no restrictions on imports.
- ⌘ The evidence of the last fifty years bears this out. In the industrialized world, the reduction in trade barriers following the second world war led to an increase in trade and faster economic growth. Globally, those countries which moved consistently towards a more open trade regime have been able to sustain rapid economic growth, becoming the emerging markets of the last few decades.
- ⌘ The clarity of direction and consistency of trade reform matters. Within this, different countries have pursued different mixes of policies (e.g. the Korean approach combining liberalization with intervention, or the Chilean model). But in general, the more complex the policy mix, the greater demand on institutional capacity, and the less likely trade policy reforms are to succeed in the absence of other reforms.
- ⌘ The context in which trade reform occurs matters: without macroeconomic and political stability, reductions in trade barriers may deliver little or no benefit and risk undermining support for further reform.

