Price (excluding VAT) in Luxembourg: EUR 15

Publications Office
Publications.europa.eu

ISBN 92-79-00421-2

9 789279 004216

KA-71-05-304-EN-C

EU competitiveness and industrial location

EUROPEAN COMMISSION

SALES AND SUBSCRIPTIONS

Publications for sale produced by the Office for Official Publications of the European Communities are available from our sales agents throughout the world.

You can find the list of sales agents on the Publications Office website (http://publications.eu.int) or you can apply for it by fax (352) 29 29-42758.

Contact the sales agent of your choice and place your order.

EU competitiveness and industrial location

Tassos Belessiotis
Mattias Levin
Reinhilde Veugelers (Coordinator)

EUROPEAN COMMISSION
BUREAU OF EUROPEAN POLICY ADVISERS

The Bureau of European Policy Advisers (BEPA) is a service of the European Commission. It reports directly to the President. It provides advice to the President and the Commissioners and formulates recommendations on issues regarding the policy of the EU. BEPA privileges issues of a strategic or structural nature and concentrates on the earlier stages of the policy development cycle and the development of policy options for consideration by the President and the Commissioners.

BEPA runs three external expert groups advising the President of the European Commission. One is the Group of Economic Policy Analysis (GEPA), a body made up of top European economists. In May 2005, GEPA had a meeting on EU competitiveness and industrial location. At that meeting, a request was made for BEPA to write a report: (i) taking stock of the phenomena of delocalisation and outsourcing in particular and globalisation in general, (ii) assessing the impact on the European economy, and (iii) considering how potential challenges can be addressed. This report — a draft of which was presented to GEPA in September 2005 — is a response to that request.

In drafting the report, the authors have benefited from prior research, workshops and work carried out by other Commission services — notably the Economic and Financial Affairs DG, the Enterprise and Industry DG, the Trade DG, and the Employment, Social Affairs and Equal Opportunities DG — on how globalisation in general and delocalisation and outsourcing in particular affect Europe. Specific reports and notes by these services have been used as references throughout the report. The final chapter of the report was discussed within the inter-services committee set up for the occasion of this report. This committee involved the Competition DG, the Economic and Financial Affairs DG, the Enterprise and Industry DG, the Employment, Social Affairs and Equal Opportunities DG, the Trade DG, and the Secretariat-General. The authors also benefited from comments by GEPA members and BEPA colleagues. Any remaining errors are naturally the responsibility of the authors.

Thanks are due to Mr. Filip Devroe of Sanderus Antiquariaat for the map of the world by Ortelius (c. 1600).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2006

ISBN 92-79-00421-2

Printed in Italy

PRINTED ON WHITE CHLORINE-FREE PAPER

Contents

List of tables and graphs

The good and the bad tiger (*)

The good

Open an iPod, look inside and Adam Smith's division of labour and David Ricardo's specialisation on the basis of comparative advantage are a reality. The iPod's microchip was created and designed in Silicon Valley. The rest of the supply chain is a global party. The highbrow chips are fabricated in Taiwan, other parts in China and the labour-intensive part of the design is done by well-trained Indians in Hyderabad. All under the round-the-clock control of a 'fabless' design house in Silicon Valley. The result is a popular innovative product at an affordable price. Jobs are created everywhere and value is added. Everywhere? What about the manufacturing unemployment in Silicon Valley? What unemployment? The competitive pressure in this market is so immense, that without relocation there would have been no jobs of any kind, let alone manufacturing jobs. Put differently, labour unions that stick to existing manufacturing jobs and see firms go bankrupt are at best ineffective. This little episode will surely silence alarming stories of the West losing its R & D as a result of globalisation. Or will it?

The bad

There are a number of reasons why the iPod story is not trivially transferable to Europe. First, Silicon Valley is an area where leading-edge innovation can flourish. The competitive advantage vis-à-vis the tigers will remain for years to come. The same can be said for Finnish telecom or the area of Catalonia, but clearly not for all. Second, there are endless queues of Chinese with Berkeley and Stanford PhDs lining up. How robust is the competitive advantage in the future if there already exists a critical economical mass, notably midwifed by the West?

The bad tiger cannot be blamed for being a bad tiger. And it is not even clear the tiger is bad at all if it succeeds in shaking up European policy-makers. Effective policies can then turn bad tigers into good ones.

(*) *Source:* Adapted from BEPA's contribution to European Commission (2005f).

Executive summary

'Open an iPod, look inside and Adam Smith's division of labour and David Ricardo's specialisation on the basis of comparative advantage are a reality.' The first sentence of the story opening this report clearly illustrates the extent to which companies increasingly produce and source globally. The story applies to a wide range of products available to our consumers.

Rapid technological change is dramatically increasing the speed and volume of flows of information, goods and services. This in turn is breaking down geographical barriers to economic activity and driving the integration of world markets. The ability to source and locate globally is one facet of the important changes this leads to. Like globalisation, relocation offers important opportunities to our companies that can cut costs and improve quality. The increased efficiency enables them to improve their position in what is today an increasingly global market place. It also offers benefits to consumers, through lower prices for goods and services and access to a wider range of choice.

However, many doubt whether this brave new world is equally enticing for our workers. Many fear the impact delocalisation and outsourcing may have on employment, especially on those with lesser skills. And increasingly, even those with advanced skills fear being exposed to competition, as developing countries move up the value chain and into services.

These concerns have given rise to a vigorous debate. This debate occurs in a context of considerable uncertainty. Little is known at present of the true extent of delocalisation and outsourcing and its impact on employment and distribution in general. This report attempts to shed some light on some key issues. It sketches the contours of globalisation, delocalisation and outsourcing (Chapter 2), outlines the motivations behind firms' decisions about where to locate (Chapter 3) and considers the impact on Europe (Chapter 4). Taking stock of the available evidence and analysis, Chapter 5 assesses what role — if any — policy can play in addressing potential concerns and challenges.

Main findings

Notwithstanding the problems of accurately defining and measuring the phenomena, data so far suggest that delocalisation and outsourcing appear to be limited in scope, especially as compared with other shocks that affect the European economy, such as technological change. However, from this low base it is growing in significance, and more forward-looking surveys suggest that firms intend to use it extensively. Moreover, services are increasingly tradable. This opens the prospect that parts of the services sector will become more subject to relocation.

Consistent with its as yet limited scope, the overall size of adjustment associated with outsourcing and delocalisation so far also appears to be rather limited, with related job losses representing a minor part of overall labour market turnover. However, delocalisation and outsourcing, like international trade in general, have a more important impact on distribution. Those with fewer and lesser skills appear to be more exposed to adjustment, either through lower wages or more unemployment.

There are several reasons why relocation should be taken seriously, despite its as yet limited scope and impact. These relate broadly to the European context within which delocalisation and outsourcing occur.

- First, the EU economy is vulnerable to the shocks created by globalisation. Recent trends suggest that the competitiveness of the EU is undermined by poor productivity growth related to a lack of specialisation in high-growth areas. Moreover, although the EU's trade balance in high-tech sectors is improving, the good performance is due to sectors characterised by intermediate skills and/or upmarket products. In several fast-growing and technologically more advanced sectors the EU is lagging behind. This exposes many European workers to delocalisation and outsourcing, as developing countries are increasingly moving into its arena.

- Second, the EU is not sufficiently exploiting the opportunities offered by new fast-growing markets. The new Member States score highest on the list of sites for relocation for EU firms. Enlargement offers important near-shoring opportunities. But so do other fast-growing areas like China. Enlargement contributes to improving EU firms' ability to face global competition.

- Third, as suggested in Chapter 3, the EU is not sufficiently attractive as an area to locate to. The EU has fallen behind in terms of attracting foreign direct investment (FDI), certainly when adjusting for its large market size. As China offers access to large markets and a huge base of well-developed and lower-priced human capital, it attracts an increasingly larger share of new FDI. With respect to R & D investments, the EU is losing its attractiveness relative to the United States and other third countries. China in particular has rapidly climbed on the list of prospective location sites for research and development.

- Finally, as suggested in Chapter 4, there are signs that Europe is not adjusting as well as it could to the shocks that impinge on its economy. In an ideal world, adjustment costs should be short term. To realise the gains from trade it is necessary to move production factors from declining sectors to sectors where the economy has a comparative advantage and where the factors can be put to most efficient use. Therefore, the costs of adjustment should only arise while resources are reallocated. However, there are significant obstacles to this reallocation process in Europe. This locks resources into inefficient use for lengthy periods of time.

The policy response

In view of the above, the EU is facing a number of challenges in terms of: (i) attracting new investment, (ii) exploiting the advantages world markets offer in terms of opportunities for sales and efficiency enhancement, and (iii) handling the effects of production being outsourced or delocalised.

- As regards new investment, access to large markets is still the predominant motive for investment location decisions. The EU's strongest selling point to retain current — and attract new — investment is therefore the access it provides to a large pool of consumers in its integrated market. However, the evidence suggests that the EU is not exploiting its full potential, as demand remains sluggish and markets insufficiently integrated.

- The second most important reason when deciding where to locate is access to human resources, skills and know-how. The EU also has potential in this area. However, its current competitiveness profile could capitalise more on technology and human skills.

- Despite the fact that a large part of trade and FDI flows occur within the EU-15, the EU could be capitalising more on the positive effects offered by globalisation through: (i) access to large and growing markets outside the EU, like China and India, and (ii) increased efficiencies from global sourcing.

- As regards handling the consequences of delocalisation and outsourcing, Europe needs to address the obstacles to the reallocation process in Europe, which locks resources into inefficient use.

Policy can contribute towards addressing these challenges. Policy should not attempt to manage delocalisation or outsourcing, let alone limit it. The European economy is inextricably linked to the world economy and it is essential for European firms to be able to access international markets, exploit efficiency advantages and access strategic assets in order to stay competitive. Rather, policy-makers should aim at putting in place framework conditions that enable Europe to benefit fully from globalisation while ensuring that losses are small and transitory in nature.

The real challenge is therefore to improve the European economy so that globalisation and delocalisation are no longer a threat to jobs, but an opportunity for growth in the EU. To achieve this, the European economy needs to improve its adaptive capacity. Policy should therefore have two goals: (i) improving competitiveness and (ii) facilitating transition.

The policy instruments outlined below should not be considered in isolation. Rather, they should be part of a coherent and consistent policy approach requiring coordination across the different policy areas and policy levels (EU and Member States). Comprehensive reform programmes (like the Lisbon strategy) are likely to be more effective than piecemeal strategies.

(i) Providing the framework conditions on which Europe can build its sustainable competitive position

The first set of policies focus on the ability of the EU economy to adapt without generating net losses, by creating new activities and jobs, and to shift resources from declining sectors to sectors where Europe can sustain a comparative advantage. This set of policies is not specifically for dealing with the shocks from globalisation and delocalisation in particular. Instead, it overlaps with the set of policies required for dealing with other shocks such as technological change. As such, it broadly fits within the recently revised — but far from implemented — Lisbon strategy for growth and employment. The report outlines four particular policy objectives:

- first, providing a dynamic European market. Ultimately, companies locate where the market is. Providing firms with access to a growing and dynamic market is therefore the best way to ensure that Europe remains the location of choice. While the legal framework is more or less in place, more can be done to deliver a truly dynamic single market across manufacturing and service sectors;

- second, improving Europe's sustainable comparative advantage, preferably in high value-added production. To sustain our social model, we ultimately need to produce and sell goods and services with a high value added. Policy can play a supporting role by putting in place an environment conducive to firms exploiting such markets (e.g. research and development policies, policies that ensure the right framework conditions to bring innovations to the market and competition policy);

- third, improving Europe's ability to adapt and adjust to shocks. Restructuring and relocation are integral parts of dynamic, open economies. Affected workers and regions accordingly need to be able to adapt and adjust quickly. This is currently not sufficiently the case, with many displaced workers finding it hard to find new employment, for example. This is partly due to insufficient new jobs being created, but also to lack of mobility and insufficient wage flexibility. Labour market regulations, training and education policy, immigration and tax policies can all be brought on board to improve the EU's adaptive capacity;

- finally, improving Europe's ability to reap the full benefits from a dynamic global market. Trade policy has a key role in ensuring an open trading system both via multilateral and regional agreements as well as protecting intellectual property rights in the broad sense.

(ii) Facilitating transition and adjustment to shocks

Most theoretical models illustrating the positive effects from globalisation assume full employment and flexible labour markets. However, short-term negative effects on employment are inevitable, as in practice labour market rigidities are always present, particularly in Europe. This is why policies are needed to facilitate the transition. Labour market institutions have a particular role to play in this respect, as they determine the ease by which alternative employment can be found. The report outlines three policy objectives:

- first, temporarily cushion the income impact on workers while stimulating and facilitating re-employment. Unemployment benefits are designed to insure workers against job-loss related income falls. However, more can be done to further cushion the income impact, through, for example, restructuring assistance (e.g. the US Trade Adjustment Fund). In the context of such support, it is essential that it is designed so that incentives remain to take up work should an opportunity present itself. Moreover, tax and benefit systems may need to be reassessed;

- second, cushion the regional impact while facilitating the reallocation of resources economy-wide. Specific policies may be necessary when the impact is especially concentrated in specific regions of the EU. To the extent that a shock affects several regions symmetrically, coordinated policies to address the problems are required;

- third, changes could be anticipated before they occur when sufficiently credible and robust information becomes available. In such cases, workers at risk could be assisted in moving and if necessary in improving their skills. However, such preventive assistance is in many cases associated with severe information problems and anticipatory intervention may run the risk of being inefficient.

The framework outlined above would position the EU better in the world economy. It would enable Europe to benefit more from globalisation. At the same time, it would improve the prospects of the resulting process of adjustment working smoothly. Those who are affected by it would not just be compensated, but also assisted in remaining active participants in the more global economy. This would not only improve efficiency. It would also lead to more equitable outcomes, which would reduce opposition to economic openness.

1. Introduction: the challenges from globalisation

The global economy is undergoing dramatic change. Rapid technological change — particularly with respect to information and communication technologies (ICTs) and transport — is increasing dramatically the speed and volume of flows of information, goods and services, thus breaking down geographical barriers to economic activity and driving the integration of world markets.

More countries are opening up their economies, implementing market-based reforms, offering greater stability and seizing the opportunities that come from closer integration into the global economy. Most notable are the very large emerging market economies such as China and India, which are already rapidly increasing their share of global economic activity ([1]).

The combination of technological advance and policy liberalisation is allowing economic activity to become increasingly specialised and dispersed across countries and continents, increasing the ease with which goods and services can be subdivided and traded between countries. The boundary between what can and cannot be traded is being steadily eroded, and the global economy is encompassing an ever-greater number of tradable goods and services.

The challenges the EU is facing from globalisation have stirred heated public debates, often centred on threats of job losses due to delocalisation, offshoring, outsourcing and the like. The latest results from the Eurobarometer survey (spring 2005) indicate that 'the transfers of jobs to other countries that have lower production costs' scores the highest on the list of things people say they are afraid of: 73 % of the respondents indicated they were currently afraid of this. These high responses come principally from France, Belgium, Greece (87 %), Finland (85 %), Germany (84 %), Hungary and Sweden (81 %).

People seem to perceive the costs of globalisation more than any potential benefits, as shown in Table 1. Again, the high response on delocalisation of companies is due to countries like France (59 %), Belgium (56 %), Germany (51 %), Sweden (49 %), Austria (45 %) and Finland (42 %).

A combination of factors explains what is different now compared with previous globalisation debates and explains the temperature of the current debate in the EU.

([1]) Currently, measured by PPP exchange rates, the USA and the EU-25 each account for just over 20 % of global output. China and India combined account for 19 %. By 2015, the International Monetary Fund (IMF) forecasts that China will account for 19 %, India 8 % while the EU-25 will represent 17 % and the USA 19 %.

Table 1: **European views about trade and globalisation**

There are multiple consequences of the globalisation of trade. When you hear the word 'globalisation' what comes to your mind first? (in %)	EU-25
Opportunities for (NATIONALITY) companies in terms of outlets	16
Foreign investments in (OUR COUNTRY)	12
Delocalisation of some companies to countries where labour is cheaper	38
Increased competition for (NATIONALITY) companies	18
Other (spontaneous)	3
Don't know	14

Source: Eurobarometer, spring 2005.

- ***The weak economy***: Weak economic growth across the EU has exacerbated fears of losing jobs to offshoring. Although many argue that most losses are due to other factors such as shifts in technology (²) or are cyclical rather than structural and, therefore, should be recovered as countries come out of the recession, workers are not very interested in knowing what the real causes of the job losses are. Rather, they want to bring it to an end and want to see policies aimed at restoring employment growth.

- ***Deindustrialisation***: An integral part of the structural change is the secular decline in the share of manufacturing in GDP in the EU as well as in other industrialised countries (³). This transition has undoubtedly been affected by progressively wider trade liberalisation. Competition from new suppliers, especially low-cost ones, have undermined the ability of domestic producers to compete and has led to a decline in market share and in employment in the sectors that are most exposed to international competition. This has reinforced and complemented the secular decline in the share of manufacturing in domestic output. As manufacturing is the most widely traded output and where most product differentiation occurs, increasing trade liberalisation ultimately affects manufacturing sectors more than services.

- ***Information and communication technologies (ICT) are affecting production structures***: International specialisation according to Ricardo's comparative advantage applies increasingly to segments of the production cycle rather than to complete products. The growing share of parts and components in world trade indicates the increasing fragmentation of manufactures. Although fragmentation of manufactures is not new, it is now also spreading to services. ICT has been a fundamental contributor to the increased tradability of goods and services. It allows knowledge to be codified, standardised and digitalised, thereby enabling the fragmentation of many goods and services into components that can be located abroad in order to take advantage of cost differentials, economies of scales, etc. (⁴).

(²) See, for example, the debate on trade versus technology, discussed in Section 4.
(³) The share of manufacturing in the EU-15 declined from 26.3 % of GDP in 1980 to 18.5 % in 2002; correspondingly, the share of (market and non-market) services rose from 58.7 % to 70.9 % during the same period.
(⁴) Unctad (2004).

- ***Services are increasingly affected***: Many jobs considered as non-tradable are suddenly exposed to international competition and risk being relocated. Examples of services being offshored include audiovisual and cultural services; business services; higher education and training services; financial services; health services and Internet-related services just to mention a few. Since services outsourcing is structurally easier than manufacturing outsourcing in terms of resources, space and equipment requirements, it may proceed quickly. Since the service sectors make up the bulk of employment in the EU, this could put many more jobs at risk. Furthermore, while manufacturing outsourcing has primarily affected blue-collar jobs and has led to increased inequality between blue- and white-collar occupations, service outsourcing affects white-collar jobs, and may lead to increased inequality within white-collar occupations.

- ***Emergence of new key players***: The rapid integration of large developing countries such as China and India into the world economy has contributed to reignite a recurrent fear in developed countries: the loss of jobs to low-wage countries. A unique characteristic of the new international partners, as compared with other episodes of emerging developing countries, is a large labour force and relatively high technical capacities. These are sometimes inherited from their industrial past, sometimes stimulated by active industrial policy, as well as transferred by multinationals. A lower wage than elsewhere is an even more attractive competitiveness factor if it comes with a well-educated labour force. The annual output and quality of science and engineering graduates from India and China have been increasing rapidly and are now comparable to the advanced countries. This inevitably translates into low wages in the exportable sectors, a relatively high pool of skilled labour and technical capacities not very different from those of the industrialised countries.

The widespread ambivalence towards globalisation stands in stark contrast to the more sanguine view shared by most economists that trade and investment liberalisation are an important source of rising living standards for the overall population. The broad consensus view, backed up by solid economic theories and robust empirical evidence, holds that the most important long-run impact of international trade and investment on labour markets has been to increase average real wages without undermining the aggregate employment base, thus providing substantial payoffs to the representative household. Indeed, the historical record strongly suggests that increased international integration has never led to a net reduction of employment over more than short periods of time, if at all.

Notwithstanding the overall benefits from deeper international economic integration, both economic theory and empirical evidence demonstrate that in this process the welfare of some people may be reduced even as aggregate productivity and income improve. There is no shortage of evidence indicating significant labour market adjustment costs arising from intensified international competition for certain groups of the workforce.

Obviously, reaping the potential gains from globalisation will necessarily entail adjustment towards further specialisation, innovation and diversification into new areas of comparative advantage. This will induce shifts in the sectoral and occupational composition of employment. Thus, the increase in international economic integration may well be a cause for increased 'turbulence' in labour markets. The reallocation of resources generates — almost inevitably — short-run frictions. This is particularly the case in labour markets, as it can be hard for people to acquire additional skills and/or to move between jobs, sectors, occupations and regions. From this perspective, finding an adequate response to globalisation should best be seen as being part of the broader policy challenge for dynamic economies to successfully cope with structural economic change.

These changing global trends are particularly challenging for Europe, as the present report will suggest. Although Europe is increasingly integrated in the global economy, and maintaining its position in world markets — not least due to enlargement — it is investing and trading relatively less in the fast-growing emerging economies. In addition, it is losing its attractiveness as a location site for new investment. Moreover, compared with its developed economy competitors, Europe's performance with respect to innovation remains relatively poor, being specialised in sectors not requiring high skills and high technology. This is problematic, as competing effectively on international markets — characterised by increases in both global competition and the speed of technological change — requires countries to take advantage of the increasing rewards from innovation. The challenges which Europe will be facing in the future are amplified by the large emerging economies' exports increasingly moving up the value chain. Those countries are also stepping up their investment in research and development. Finally, Europe's relatively rigid economic structures make it difficult to adapt to changed economic circumstances.

Defining globalisation and relocation

Although most of the concerns in the public debate focus on the relocation of economic activities abroad, the report will not focus solely on relocation but take the perspective of globalisation in a broader sense. This is motivated by the difficulty of isolating empirically and conceptually the size and the effect of relocation from globalisation in general. Although the term 'globalisation' is widely used, it is not always clear what it means. In this report, globalisation is defined as the trend of ongoing international integration. Globalisation is not only about exports and imports of goods and services, but also includes FDI and migration of people. Furthermore, from a European perspective, globalisation means simultaneously further integration in the world economy and within-Europe integration (including (further) enlargement). 'Relocation' is more difficult to define and identify, reflecting the loose boundaries of the concept. A strict concept of relocation is associated with the closing/scaling down of a firm's activities in the home market, following the shifting of parts of the production chain abroad. Such concept implies the notion of vertically fragmenting production internationally. This can be done within the firm ('offshoring') or external to the firm ('outsourcing').

Against this background, Chapter 2 begins with an analysis of the current trends on globalisation in general and delocalisation in particular. In order to better understand the changing patterns of globalisation, Chapter 3 reviews what motivates firms to locate investments and which factors are critical location factors for investment decisions and assesses the trends in attractiveness of the EU as a location site. Chapter 4 examines the impact of globalisation, delocalisation and outsourcing on the European economy. Finally, Chapter 5 assesses which policies are necessary to overcome these challenges and to sustain and increase the gains.

2. Patterns in EU international trade, investment and migration

Based on standard international trade theory, economists usually point out three main channels through which increased international economic integration may affect the economy. First, globalisation increases the potential to exploit comparative advantages, which increases international trade in goods and services. Second, more mobile capital enables companies to invest in other regions. Third, if international differences in wages exist, further economic integration may trigger movements of workers in the low-wage regions in search of better-paid jobs in the high-wage regions. The integration process can be based on one or more of those mechanisms, depending on a number of institutional constraints. The chapter reviews these various channels. Sections 2.1, 2.2 and 2.3 describe respectively the recent trends in trade, investment and migration. The chapter closes with a special section on delocalisation (Section 2.4).

2.1. EU international trade patterns

2.1.1. The EU in world markets

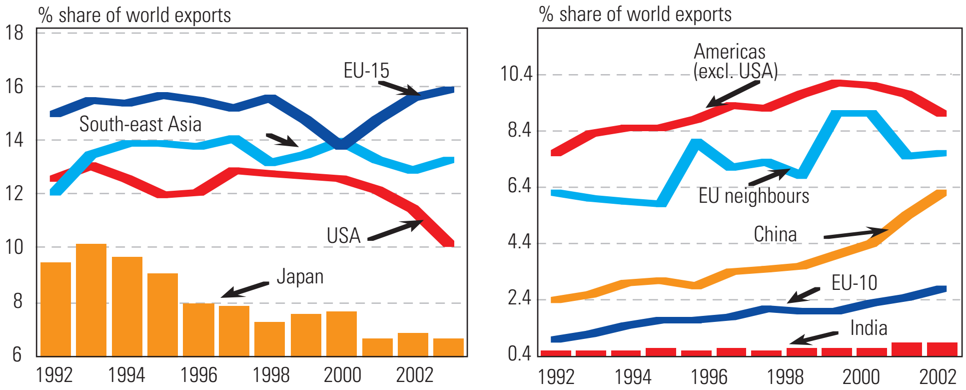
World trade in manufacturing grew at an annual average rate of around 8.5 % over the period 1992–2003. While overall EU-15 trade has been growing considerably less, this relatively poor performance essentially reflects a lack of buoyancy in intra-EU-15 trade flows (5) rather than trade with third countries. The growth rates of extra-EU trade are actually close to world average. Consequently, at the extra-EU-15 level — which is the area of focus for the present analysis — the EU-15 countries have been largely holding their own.

Europe has embraced the process of rising trade integration. The share of extra-EU-15 exports in world exports in manufacturing rose slightly from 15 % in 1992 to 15.9 % in 2003, while their share in world imports declined, resulting in a slight improvement of the EU's trade balance position. The export market shares of the 10 new Member States expanded from below 1 % in 1992 to 2.8 % in 2003. But their share of world imports has increased even more, resulting in a larger trade balance deficit.

Over the same period, the US share in world exports fell from 12.6 % to 10.2 %, simultaneously with an increase in world import share, from 15.1 % to 17.7 %, resulting in a sig-

(5) The share of intra-EU-15 trade in world trade in goods peaked in the late 1980s, with the completion of the internal market, to around 30 % but it has subsequently eased to around 20 % in the beginning of the present decade; for evidence and comments along these lines, see CEPII (2004), especially Figures 5 and 6.

Graph 1: **World export market shares for different countries/country groupings (manufacturing)**



Source: European Commission (2005a).

nificant widening of the US trade deficit. Japan's world market shares in both exports and imports and trade balance surpluses are now somewhat smaller than 10 years ago.

Nevertheless, the most striking development over the last decade is the rapidly growing role of China in world trade. In 2003, Chinese exports accounted for 6.2 % of world exports, up by almost 4 percentage points since 1992. However, as imports rose almost in parallel, China absorbed 5.6 % of world imports as well. Also south-east Asia continued its expansion on world export markets, transforming their trade deficit into surplus. India's share in world exports and imports of about 1 % each is still relatively small.

Table 2: **World export and import market shares and trade balances, 1992–2003 (manufacturing)**

	1992			2003		
	Share of world exports	Share of world imports	Trade balance (% of GDP of area)	Share of world exports	Share of world imports	Trade balance (% of GDP of area)
Extra-EU-15	15.0	16.5	– 0.9	15.9	15.8	– 0.4
EU-10	1.0	1.1	– 2.8	2.8	3.1	– 6.6
EU neighbours	6.2	5.7	0.7	7.6	6.9	1.7
USA	12.6	15.1	– 1.7	10.2	17.7	– 5.3
Americas (excl. USA)	7.6	7.3	0.2	9.0	7.7	2.5
Japan	9.5	6.4	2.8	6.7	5.2	2.1
China	2.4	2.2	1.0	6.2	5.6	1.6
South-east Asia (excl. China)	12.1	12.5	– 2.1	13.3	11.9	3.1
India	0.6	0.7	– 1.5	0.9	1.0	– 2.2

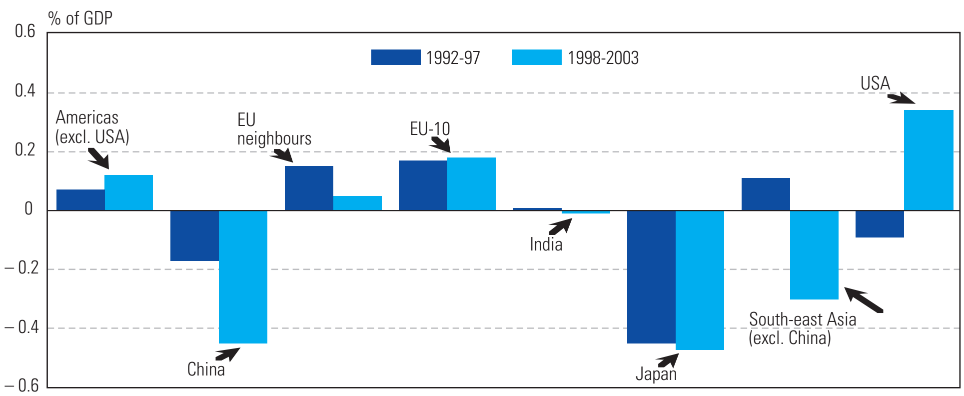
Source: European Commission (2005a).

While on average the EU seems to defend its position on world markets, upon closer inspection of the regions and sectors of trade, there is some evidence that the EU may be less than ideally positioned to fully realise the potential gains from deeper international economic integration. To analyse why this is so, the next sections review the geographical direction and sectoral composition of EU trade.

2.1.2. Geography of EU trade

Changes to the EU-15's overall market positions indicate large and rising deficits with Asia compensated by surpluses with most of the rest of the world. All three areas of Asia have opened up significant trade gaps with the EU. The Chinese trade deficit of nearly 0.5 % of GDP is at similar levels to that of Japan, with which Europe has had a persistently large deficit since the early 1990s. In addition, the mid-1990s' small surplus with the rest of south-east Asia has now been replaced with a deficit of about 0.3 % of GDP. These negative developments at the bilateral level are to a large extent being offset at the aggregate level by the buoyancy of the US market where the EU has seen a sharp turnaround in its trading position. The new Member States as well as the EU neighbours and the Americas group of countries also provide the EU-15 with small but relatively stable trading surpluses.

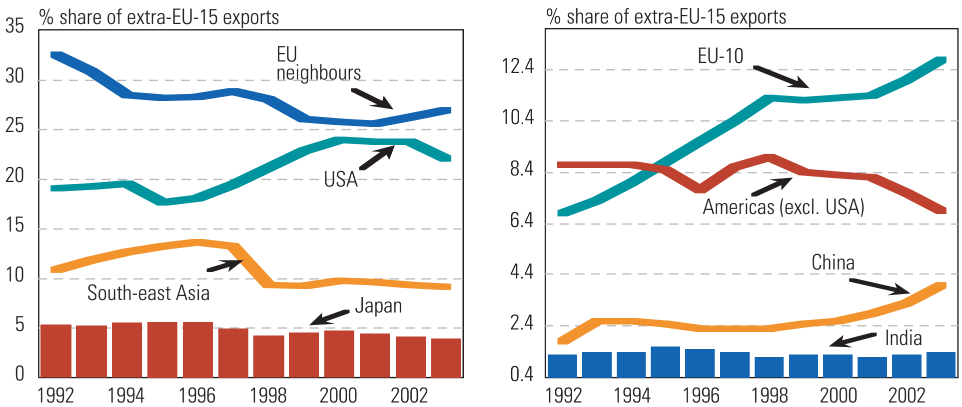
Graph 2: **Extra-EU-15 trade balances**



Source: European Commission (2005a).

Examining the geographical direction of EU exports in more detail suggests that the EU is generally quite inward-looking. With the bulk of EU trade being intra-EU-15, the most dynamic part of the EU-15 export flows is nevertheless the one between the new Member States and the EU-15, reflecting the benefits from recent enlargement. Extra-EU-25 flows have grown too, but adjusting for the rapid growth in these markets, it appears that the EU may not have grasped all opportunities here, especially with regard to the fastest growing areas, like China.

Graph 3: **Shifts in the geographical focus of EU-15 trade (manufacturing)**



Source: European Commission (2005a).

2.1.3. Sectoral composition of EU trade

The sectoral composition of EU trade reveals a similar picture. The six sectors that contributed most to world non-fuel export growth between 1992 and 2003 were semiconductors, passenger cars, telecommunications, computers, computer parts and pharmaceuticals. This shows the importance of the ICT industry as a major driving force behind the growth in exports since the early 1990s ([6]).

The EU has sustained its position in those areas where most of the growth in world exports is realised. However, it has not been able to improve it. This contrasts with the speed with which China has advanced in these areas (the only exception for the moment being passenger cars and pharmaceuticals).

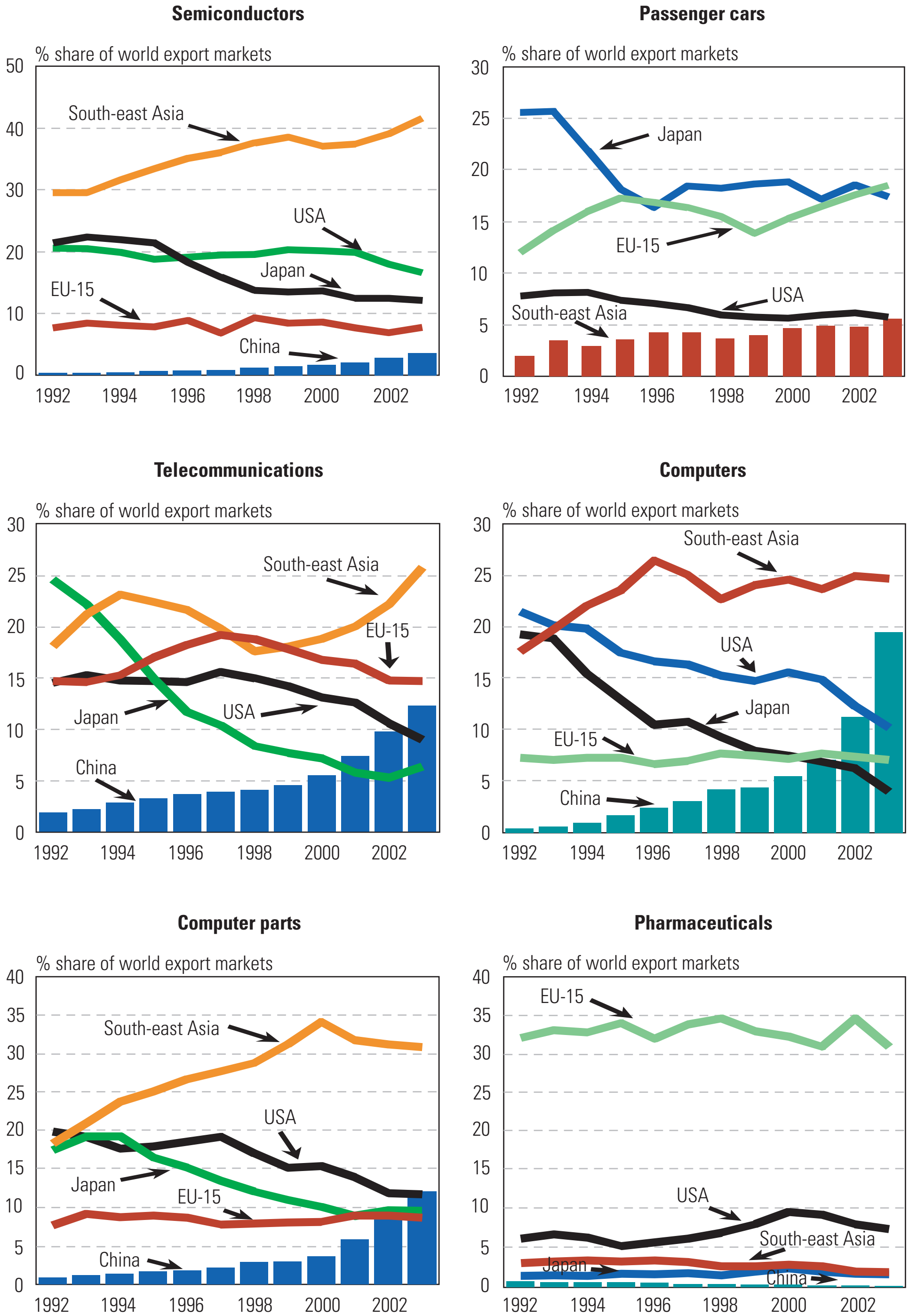
2.1.4. Trade in services ([7])

In most countries, employment growth has been positive in services but negative in manufacturing. While the share of output represented by the services sector has risen in almost all countries, there still remains a wide heterogeneity across countries with respect to the importance of the services sectors. The United States and the United Kingdom are clear outliers as Table 3 illustrates. For these countries, the contribution of the services sector to overall productivity growth has risen in the last 10 years, mainly due to the contribution of high-growth services, namely business services.

([6]) The four ICT products on their own contributed over 20 % of the total growth in non-fuel exports over the 12-year period covered. Semiconductors was the single most important non-fuel export product grouping over the period 1992–2003. This reflects both its very high rate of growth (13.6 %) as well as its large weight in non-fuel world exports (it has a 4.4 % overall share). This single industry contributed nearly 8 % to the overall growth of non-fuel exports over the period 1992–2003, well in excess of the next most important industry, passenger cars. *Source*: European Commission (2005a).

([7]) This section is based on European Commission (2005a).

Graph 4: **Top six contributors to non-fuel world export growth: How does the EU-15 compare with the USA, Japan, south-east Asia and China?**



Source: European Commission (2005a).

Table 3: **The changing structure of output, 1990 and 2002**

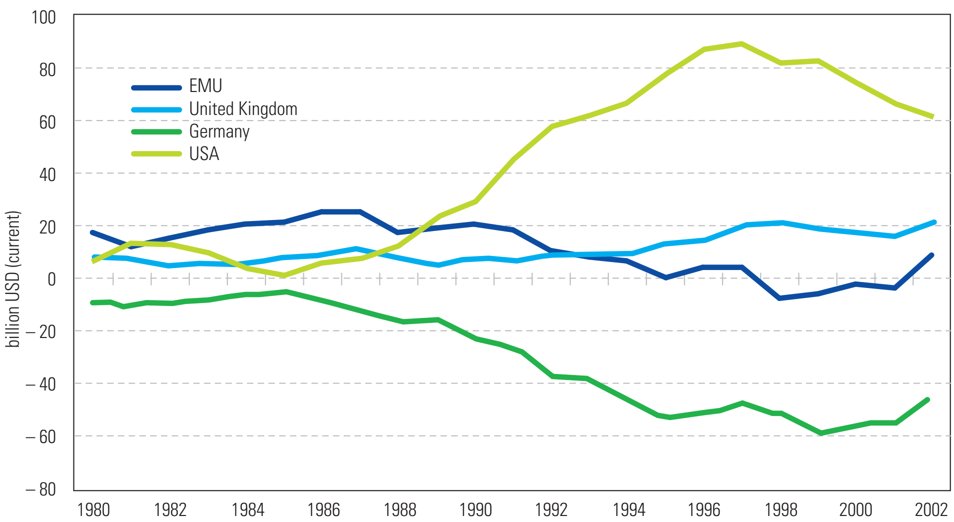
Share of GDP (%)	1990			2002		
	Agriculture	Industry	Services	Agriculture	Industry	Services
Euro area	3	34	63	2	28	70
UK	2	35	63	1	26	73
USA	2	28	70	2	23	75
China	27	42	31	15	51	34
India	31	28	41	23	27	50
Poland	8	50	42	3	30	67

Source: World Bank (2004).

The available data on international trade in services suggest that the rising economic importance of the service sector is yet to be fully reflected in global trade flows. While the services share of world trade has risen by approximately 4 % since 1980, it still accounts for no more than 20 % of world trade. Between 1997 and 2003, world trade in services grew by 35.7 %, just slightly faster than that of trade in goods (34.9 %).

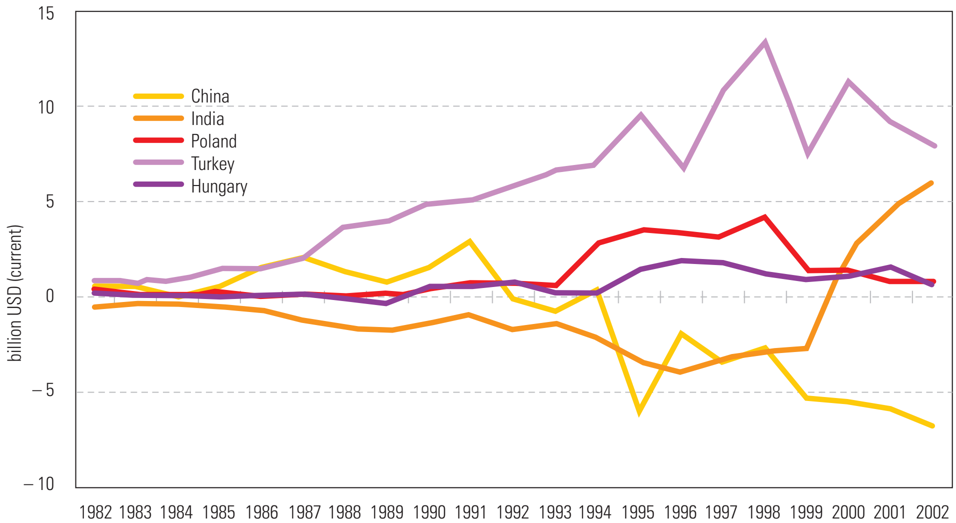
In 2003, the EU-25 was the world's largest exporter and importer of services, accounting for 27.7 % of global exports and 25 % of imports, followed by the USA (20.2 % of global trade). More than half of the EU's international trade in services transactions occurs between Member States. However, with around 32 % of EU external trade in services, the United States is the EU's largest partner. Notably, neither China nor India currently plays a major role in EU trade in services. Among Member States, the UK was the largest exporter and second largest importer (behind Germany) of services in 2003, accounting for 20.2 % of total EU-25 international trade in services.

Graph 5a: **Services trade balance, 1980–2002**



Source: European Commission (2005a).

Graph 5b: **Services trade balance, 1982–2002**



Source: European Commission (2005a).

In contrast with manufacturing, the United States has the largest positive balance of trade in services. Within the EU, the biggest net exporter of services is the UK. However, the Indian 'take off' in 1997 and clear upward trend since then is also remarkable. So is the negative services trade balance of China, and on a bigger scale Germany (see Graph 5a). In sum, these data do not support the presumption that services trade on a global scale is a one-way street from developed to developing countries.

2.1.5. Revealed comparative advantage and price and cost competitiveness

To assess how vulnerable the EU will be to the flows of globalisation requires reviewing the EU's relative sector specialisation. A deteriorating comparative advantage signals that affected industries may not be viable over the medium term. The emergence of competitors, such as China or India, with an ability to compete across a broad spectrum of activities, constitutes such threats, as demonstrated in the previous section. The present section reviews some evidence of comparative strengths and weaknesses in the EU's international trade.

Table 4 presents a classification of EU manufacturing trade by income level of trading partners and intensity of labour skills, using the revealed comparative advantage (RCA) index ([8]). The EU appears to have a stronger comparative advantage in manufactures that are intensive in low-intermediate (RCA index 1.209) and high-intermediate (RCA index 1.144) labour skills. Low-income countries have a comparative advantage in the low la-

([8]) The index of revealed comparative advantage (RCA) for product *i* used here is defined as $RCA_i = \{(X_{EU,j}/\Sigma X_{EU,j})\}/\{X_{W,j}/\Sigma X_{w,j})\}$, where X is the value of exports to destination *j*, EU is the EU-15, W is the world defined here as the EU-15 plus another 93 countries — see European Commission (2005b), Table VI.7.1, for details of country groupings.

Table 4: **Revealed comparative advantage (RCA) index in products by labour skills categories, 2002**

Region by income level	Products by labour skills categories			
	High	High-intermediate	Low-intermediate	Low
EU-15	0.920	1.144	1.209	0.907
High non-EU-15	1.051	1.331	0.984	0.899
Upper-medium	1.114	0.468	0.980	1.048
Low-medium	0.961	0.465	0.791	1.264
Low	0.678	0.252	0.620	1.610

Source: See European Commission (2005b), Table VI.9; the original data are from the Comtrade database.

bour skills categories (index value of 1.610) and this is reflected in the negative trade balance of the EU-15 against these nations. This applies to low- to medium-income nations as well (RCA value of 1.264). However, the EU-15 has less of an advantage than other high-income countries in the high labour skills category. This confirms the concern that the EU is lagging behind in gaining comparative advantage in human capital intensive production.

Similar to human capital, we can analyse the position of the EU by technology content. The data in Table 5 illustrate that the EU enjoys a comparative advantage not in high-technology but in medium-technology goods. Yet again, this confirms the concerns about the future of Europe's position in the international division of labour in a changing trading environment.

Table 5: **RCA index in products by technology categories, 2002**

Region by income level	Products by technology category			
	High	Medium-high	Medium-low	Low
EU-15	0.861	1.174	0.950	0.878
High non-EU-15	1.117	1.134	0.929	0.682
Upper-medium	1.119	0.923	1.057	0.970
Low-medium	0.922	0.565	1.210	1.716
Low	0.467	0.364	1.030	2.665

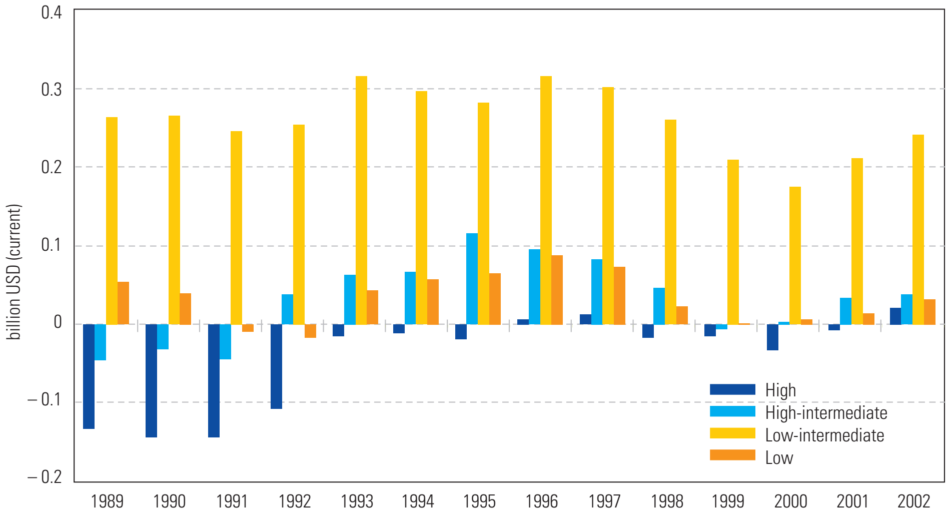
Source: See European Commission (2005b), Table VI.11; the original data are from the Comtrade database.

A relative trade balance indicator ([9]) (Graph 6) shows that the EU's positive trade balance is mainly due to low-intermediate skills sectors and that historically negative trade balances are recorded in high and high-intermediate skills sectors. Nevertheless, the EU has been improving its position in high-skill labour-intensive products since the late 1980s, converting earlier deficits into modest surpluses or balanced trade. The EU has improved its comparative advantage in, for example, specialised machinery, pharmaceuticals, electronic components, organic chemicals, aeronautics and space, measuring instru-

([9]) The indicator is defined as the ratio (X–M)/(X+M), where X (M) is exports (imports) of manufactures.

ments, and paper products. It has seen a decrease in its advantage in automobiles, computer material, textiles and apparel, electronics and electronic products and other manufactured goods [10].

Graph 6: **EU-15 trade by labour skills categories (X–M)/(X+M)**



Source: See European Commission (2005b), Graph VI.9.

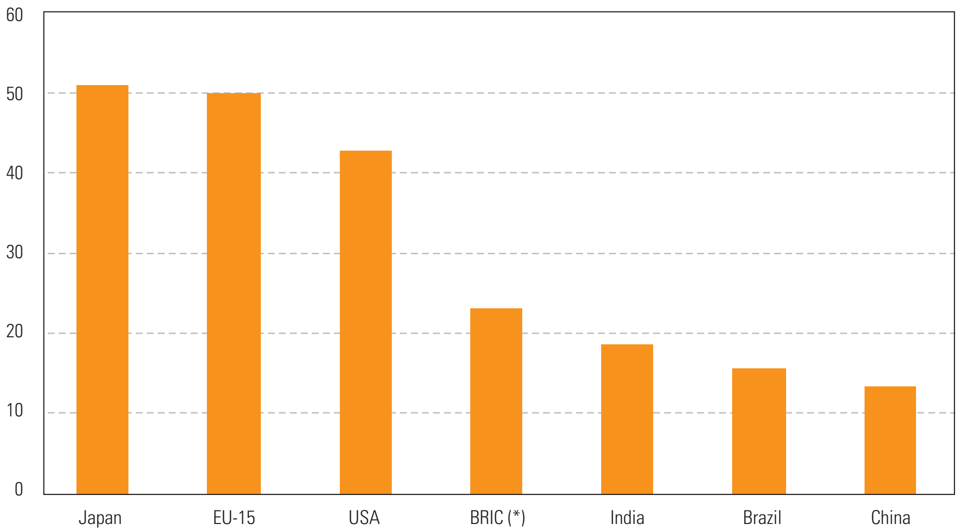
A similar development has taken place with regard to the EU-15's trade by technology content. In 2003, manufacturing exports were less technology intensive in the EU than in the USA and Japan. High-tech industries accounted for about 20 % of total EU manufacturing exports, while they represented more than 25 % of total manufacturing exports in Japan and the USA [11]. US high-tech industries accounted for more exports at world level than the EU or Japan, i.e. nearly 20 % in comparison to 16.7 % and 10.6 %, respectively. However, the world export share of EU high-tech industries increased by 1.8 % annually from 1997 to 2002, somewhat catching up with the USA and Japan. Earlier deficits in high-technology manufactured products narrowed until the mid-1990s but this has been reversed subsequently. Deficits continue to characterise trade in low-technology products but the EU-15 records considerable surpluses in medium-high technology products, and less so in medium-low ones [12].

Beyond comparative advantages in high-tech and high-skill sectors, products that can command a price premium on world markets due to other dimensions like quality, reputation, design, related services and the like are also interesting targets for sustainable comparative advantages. The CEPII (2004) study shows that the EU's overall good position on world markets is due to its strong export performance in upmarket products. These products now account for 48 % of EU exports and 41 % of US exports. In contrast, they only account for 15 % of Chinese exports. Furthermore, the EU market position in consumer

[10] For a detailed discussion, see CEPII (2004), especially Table 8.
[11] European Commission (2005e).
[12] See in particular European Commission (2005b), Graph VI.12.

goods is highly positive for top-of-the range products while negative for low- and medium-range products. Hence, an important objective for the EU is to consolidate and further improve this position.

Graph 7: **Proportion of exports accounted for by upmarket products**
(%, average 1995–2003)



(*) BRIC: Brazil, Russia, India and China – *Source:* CEPII (2004).

Unlike trade in goods, it is more difficult to evaluate comparative advantage in **trade in services**. The CEPII (2004) study shows that in contrast to the USA, where the comparative advantage in services is increasing rapidly, the EU-15 appears to continue to specialise in trade in goods ([13]). The increase in US specialisation in services is a reflection of the more rapid decline in the share of manufacturing in national income and the rapid structural transformation of the economy. The EU services sector is performing poorly in terms of productivity growth when compared with the USA and the persistent fragmentation of the services market in the EU is not contributing to improving its performance ([14]).

2.2. Foreign direct investment

Shifts in FDI could also significantly affect the global distribution of economic activity in the coming decade. This section starts by reviewing the EU's position in FDI flows and stocks. By reviewing inwards FDI perspective, Section 2.2.2 assesses the attractiveness of the EU as a location site for investments. The final section reviews outward FDI, looking at where EU firms are locating their investments.

([13]) See CEPII (2004), especially Figures 27–29.
([14]) The performance of the services sector in the EU and in the USA has been discussed extensively in O'Mahony and van Ark (2003).

EU trade and China

The principal driver of recent European trade growth beyond its borders has come from increased integration with certain emerging economies, particularly China ([15]). With total trade doubling between 1999 and 2003, China is now the EU's second most important trade partner on a country basis. According to Eurostat figures, in 2003, among the EU-25 Member States, Germany was the largest exporter to China, with EUR 18.3 billion, or 44 % of the total, followed by France (EUR 4.7 billion or 11 %). Germany (EUR 22.5 billion or 21 %) was also the largest importer from China, followed by the United Kingdom (EUR 17.3 billion or 16 %), the Netherlands (EUR 14.7 billion or 14 %), France (EUR 9.6 billion or 9 %) and Italy (EUR 9.5 billion or 9 %).

Whilst China remains dependent on imports of high-tech components, its own exports of components, telecommunications equipment and consumer electronics all moved up the value chain. This shift up the value chain can be expected to continue. China's high-tech industries are still less developed than those of developed countries. However, they are growing rapidly, which creates the momentum for catching up ([16]). According to the OECD classification for high-tech industries, the contribution of high-tech industries to manufacturing value added increased in China from 6.2 % to 9.3 % over the period 1995–2000, still very much below US values, but coming close to shares for Italy, Germany and France.

With respect to exports of high-tech products, impressive growth rates are realised, such that, despite the important growth rates in exports in general, the share of high-tech products in exports has been increasing from 11 % to 25 %. Nevertheless, since at the same time the Chinese economy is increasingly importing high-tech products, the Chinese trade balance in high-tech is still negative ([17]).

China has become the focus of considerable debate in recent months following the liberalisation of textile quotas with the expiration of the Agreement on Textiles and Clothing on 1 January 2005. Over the period 1996–2002 China's trade surplus with the EU-15 in textiles and textile products was EUR 2.7 billion and has since increased further. China is competing in the EU textiles market with other foreign producers but the sheer volume of its exports has been used as an opportunity to raise protectionist demands. Between 1995 and 2004, China's market share in textiles and textile products in the EU-15 has risen by some 4 percentage points (to 43.3 %) as has the share of Bangladesh (to 8.7 %) followed by Turkey's growth of 2.6 percentage points (to 22.6 %). These increases have been at the expense of Egypt, India and the Maghreb (Algeria, Morocco and Tunisia) countries which together have experienced a decline in market share of some 10 percentage points during this period. Related to the comments made previously, the share of textiles and textile products in China's total exports to the EU-15 declined by close to 10 percentage points between 1995 and 2004. The data confirm the EU's comparative disadvantage in these products and the substantial gains from trade China's emergence in the international trading system offers.

([15]) See European Commission (2004a).

([16]) China's fast and impressive development is strongly related to growth in its science and technology base. With a real annual growth rate of more than 15 % per year, despite the strong growth in Chinese GDP, gross expenditures on R & D as a share of GDP have managed to increase from 0.7 % to 1.31 %.

([17]) This negative balance is due to the electronics and computer (integrated manufacturing) sector. In computers and telecommunications, the balance for China is positive.

2.2.1. Trends in global FDI flows

FDI flows are running in real terms at more than five-and-half times the average prevailing in the first half of the 1980s. Moreover, growth in FDI seems likely to continue over the next decade ([18]).

The geographical distribution of FDI remains very uneven. Most FDI flows still take place among developed economies, with the EU-15 and the USA currently dominating global flows. The OECD (2005b) reports three factors that have determined the distribution of FDI within the OECD area and elsewhere. First, diversity in macroeconomic performance across the world has made those nations that are performing poorly less popular as FDI destinations. This applies especially to the core EU-15 Member States in contrast to the strong growth performance of the USA. It also applies to other emerging economies. Second, the weakness of the US dollar has made the USA a comparatively more attractive location to invest. It has also stimulated large balance sheet adjustments on repayment of inter-firm loans, which has the effect of depressing FDI inflows especially in some of the European countries in 2004. Third, structural factors have favoured investment outside the OECD area. These are low production costs, a potentially profitable and expanding market, and favourable regulatory and administrative conditions.

Greater integration of the large emerging markets into the global economy will contribute to significant changes in the geographical distribution of global FDI flows, with rapidly growing economies attracting increasing inflows and becoming more important suppliers of FDI. These trends are already apparent. In 2003, emerging and developing economies accounted for 31 % of total global FDI inflows, up from 18 % in 1990. The growth of FDI inflows to China has been particularly striking. In 1990, China accounted for 1.7 % of global FDI inflows. By 2003, it accounted for almost 10 %, above all Member States except the UK and Germany. Forward-looking survey evidence points to a continuation of this trend, with China and India particularly attractive.

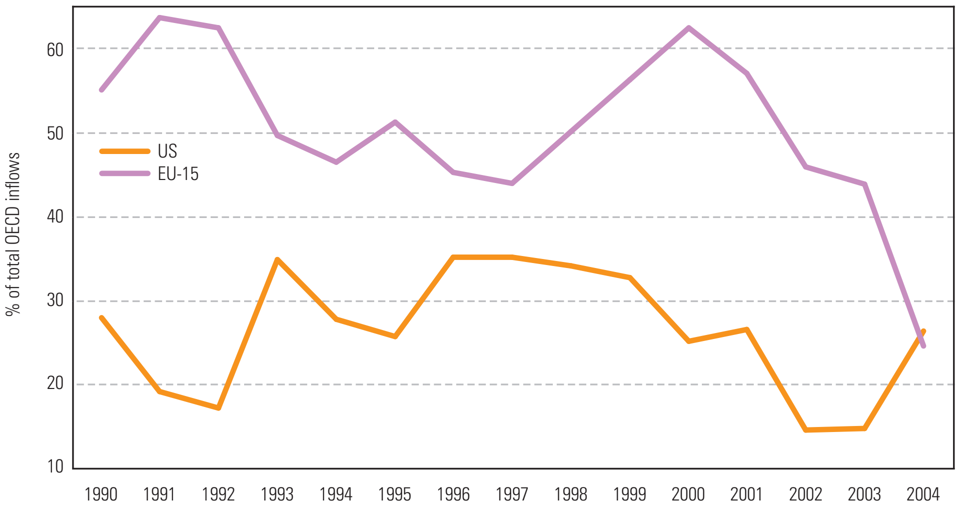
2.2.2. Inflows to the EU: is the EU losing its attractiveness as a location for FDI?

The largest share of total OECD FDI inflows has been directed towards the EU-15. However, there has been a marked decline since 1999, particularly in Germany and France with only the UK seeing an increase in FDI inflows ([19]).

The major part of inward FDI comes from Member States (i.e. intra-EU), predominantly the old ones (intra-EU-15). In terms of inflows from third countries, most investments come from the USA. The EU appears to have fallen behind the USA in terms of its ability to attract inward (non-EU-15) investment. A range of structural issues, including the regulatory environment, skills and labour costs, are likely to be important factors (Chapter 3 examines in more detail the factors that determine the location of investment).

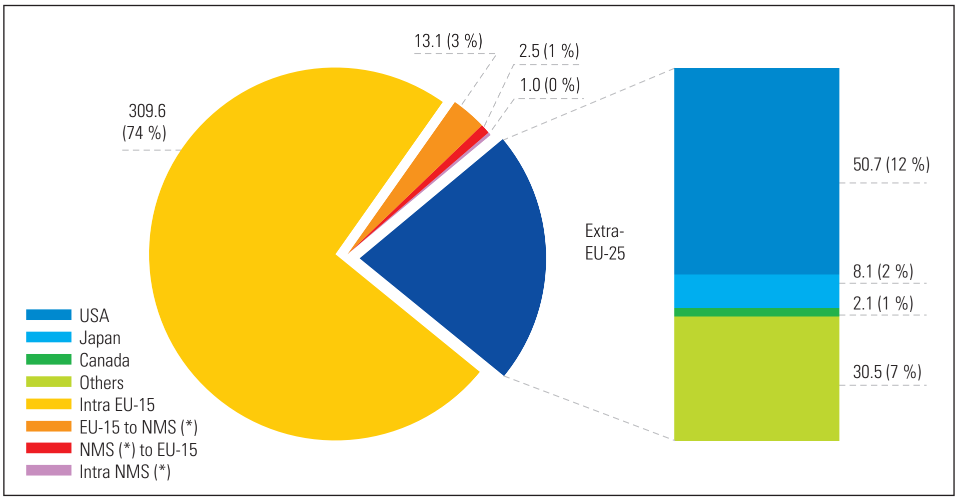
([18]) See also Unctad (2005).
([19]) For additional details, see OECD (2005b).

Graph 8: **Share of FDI inflows into the EU-15 and USA** (% of total OECD inflows)



Source: OECD (2005b), Tables A.1 and A.2.

Graph 9: **FDI inflows into the EU-25, extra and intra** (2002, billion EUR and share)



(*) NMS: New Member States
Source: European Commission (2005a).

2.2.3. FDI outflows: Are EU firms investing abroad?

EU firms locating investment abroad can exploit the benefits from access to markets, access to low-cost and/or high-quality inputs and access to strategic assets, including know-how, thereby improving their overall profitability.

Europe's stock of outward investment increased sharply in the 1990s. At the beginning of the decade, EU firms tended to be less integrated into the world economy compared with their US counterparts who were quicker to expand internationally in the 1960s and 1970s. The EU has since caught up in terms of international exposure. However, FDI outflows have been decreasing since 2001.

Table 6: **EU-25 FDI outflows, 1999–2002** (billion EUR)

	1999	2000	2001	2002
EU-15 outflows	307.1	403.0	257.8	130.6
Of which:				
USA	191.4	182.1	141.9	45.1
New Member States	12.1	19.9	16.3	16.1
China	2.2	2.2	3.1	2.6
India	0.8	0.9	1.0	0.7

Source: Eurostat.

As illustrated by Graph 9, the vast majority of the EU-15's outward FDI is directed at other EU-15 Member States. Outside the EU-15, the major destination country remains the USA (Table 6). Despite the substantial increase in FDI inflows to China and India since the early 1990s, the EU-15 FDI outflows to the 10 new Member States were vastly larger than those to China ([20]). Therefore there appears to be scope for Europe to develop its investment relationship with emerging economies further.

2.3. European migration

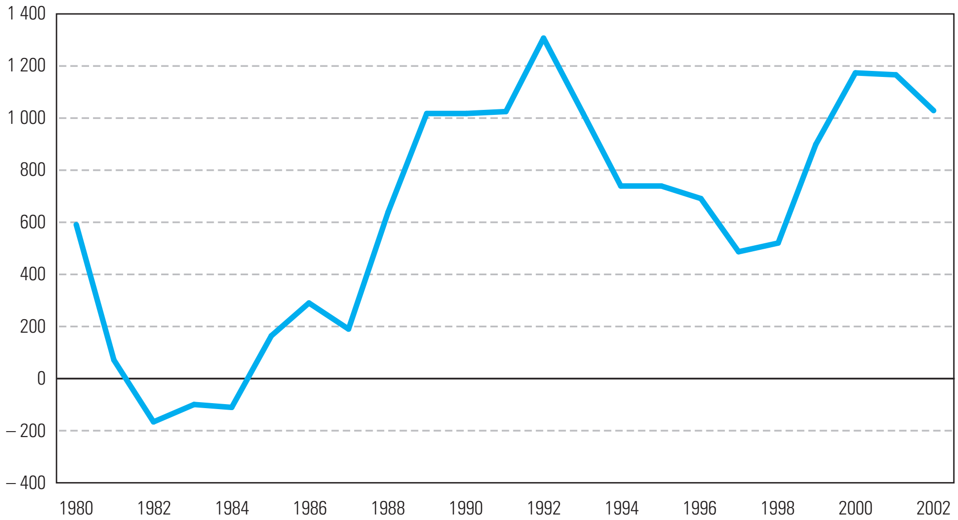
Globalisation has mainly been driven by the free movement of goods, services and capital flows. Labour flows on the other hand have never been an important driving force ([21]). Nevertheless, migration has increasingly become an area of interest. Migration may not only have an impact on wages and employment. The relationship between migration and FDI and trade also needs to be considered. For instance, if migration of workers is hampered — as it is the case in many EU countries — firms may move to the low-cost workers rather than workers moving to the firms in the high-wage regions.

2.3.1. Migration inflows

Flows of immigrants into the EU have grown considerably in recent years, rising from an average of 1.9 million during the period 1997–2001 to 2.6 million in 2002 and to an estimated 2.5 million in 2003 ([22]). It is possible that the estimated inflows for 2003 reflect a stabilisation of the trend following a modest downturn recorded in 2001 after several consecutive years of growth.

([20]) US firms appear to be investing more in fast-growing emerging countries than their EU counterparts. Asian emerging economies were the destination of 12.3 % of US FDI between 1999 and 2002.
([21]) European Commission (2004a).
([22]) OECD (2005c). See also European Commission (2004a and 2005a).

Graph 10: **Net immigration flows in the EU,** in thousands



Source: New Cronos, Eurostat.

2.3.2. Migration and the labour market

Immigrant workers represent a significant component of the labour force in the host countries. In the EU-15, during the period 1998–2003, this ranged from 1.6 % in Finland to 9.2 % in Austria, to 9.5 % in Greece (2001) and to 45 % in Luxembourg. Nevertheless, in several Member States the share of foreign workers stagnated or declined in the post-1998 period. This was the case for Belgium, France, Luxembourg and Austria ([23]).

Migration flows into the labour forces of the EU Member States are generally lower than the USA, where higher levels of immigration have contributed to higher rates of GDP growth in recent years. Notably, the USA has better absorbed immigrants into its labour market. In 2002, the EU-15 unemployment rate for nationals was 7.1 % compared with 15.8 % for non-nationals; the EU-15 employment rate for nationals was 66.4 % compared with 52.6 % for non-nationals; the US unemployment rate for foreign nationals was 4.2 %, compared with 4.0 % for nationals; and the US employment rate for foreign nationals was 66.7 % compared with 67.2 % ([24]).

Despite the growing foreign and migrant labour force in host EU countries, participation rates are generally lower than those of the native population. The difference is most pronounced in the case of women but it is also observed in the case of men.

([23]) See OECD (2005c), Table I.10, for details. This development may be a reflection of measurement problems in that those that become nationals are not counted in the stock of foreigners. Although substantial numbers of migrants are admitted into these countries each year, some clearly leave and others become citizens.

([24]) See European Commission (2004a).

2.3.3. Migration and skills

It has recently been suggested that a selective migration policy could be an answer to Europe's problem of the 'brain drain' and its need to elevate its scientific and innovation performance. Table 7 presents data on the educational attainment of foreigners and nationals in several OECD countries including EU ones.

For most EU countries, the skill level of foreigners is lower than for nationals. It is clear that the EU imports low-skilled foreign nationals compared with nationals ranked by less than upper-secondary education. There are some exceptions — Greece, Hungary and Portugal for example. Among those with upper-secondary education, nationals dominate in all reported cases except in Greece, Portugal and Finland where the share of foreigners with this level of education is higher than the share of nationals. Finally, reality is more diverse in the case of tertiary education. In several Member States (the Czech Republic, Denmark, Spain, Ireland, Hungary, Portugal, Slovakia and the UK) the share of foreigners with tertiary education is higher than those in the national population. But in Belgium, Germany, France and Finland the share of foreigners with tertiary education is lower than in the national population.

The general pattern of educational attainment of migrants is also consistent with the distribution of their employment in the host countries. Compared with nationals, foreign workers are overrepresented in low-skill professions — construction, hotels and restaurants and in household services — but their sectoral distribution varies across the Member States ([25]). Since some of these sectors are cyclical, the vulnerability of employment of foreign workers to business fluctuations is considerable.

Overall the EU appears to be much less successful than the USA in absorbing migrants into its labour markets. One reason could be that the EU has a larger share of low-skilled immigrants. This suggests an ever more important challenge for EU migration policy.

2.4. Delocalisation ([26])

Within the wider context of globalisation, the specific phenomenon of delocalisation is increasingly a cause for concern for the public and policy-makers in many developed economies, including in Europe. The political debate on this issue is currently fuelled by the perception that the phenomenon has become more pervasive both within each sector of the economy (extending progressively to the whole range of activities at the firm level) and across sectors (as no industry, including services, seems to be sheltered from international competition). The section begins with the definition of delocalisation and difficulties associated with its measurement and then provides an overall picture of the sectoral and geographical dimension of the phenomenon.

([25]) See OECD (2005c), Table I.13, for details.
([26]) This section draws heavily on European Commission (2005a) and European Commission (2005f).

Table 7: **Distribution of foreign and national adult population (25–64) by level of education** (2002–03 averages in %)

	Less than upper secondary		Upper secondary		Tertiary level	
	Foreigners	Nationals	Foreigners	Nationals	Foreigners	Nationals
BE	52.3	37.8	25.7	33.5	22	28.7
CZ	25.9	11.7	52.5	76.6	21.5	11.7
DK (2002)	30.7	27.6	41.7	46.7	27.5	25.7
DE ([1])	47.1	13.6	38.2	62.4	14.7	24
EL	42.1	46.8	40.9	35.3	17	17.9
ES	43.3	58.3	28.5	17.2	28.2	24.6
FR	63.9	33.5	20.6	42.5	15.5	23.9
IE ([1])	21.3	40.1	28.6	35.4	50.1	24.5
IT	34.9	34.9	34.7	39.7	30.3	25.4
LU	43.8	27.5	38	56.7	18.2	15.8
HU	20.2	27.4	52.6	58	27.2	14.5
NL (2002)	43.7	31.9	31.5	43.3	24.8	24.9
AT	42.9	19.3	43.4	63.7	13.7	17
PT	55.4	79.1	28.1	11.1	16.6	9.8
SK	13.2	13.8	67.8	75	19	11.2
FI	29.1	24.8	46	42.4	24.9	32.8
SE ([1])	23.7	18	45.4	55.5	30.9	26.5
UK ([1])	30.9	17.4	25.5	53.1	43.6	26.2
AU (2001) ([2])	43.3	56	29.1	23.6	27.5	20.4
CA (2001–02) ([3])	16.7	16.6	56.3	62.9	27	20.5
CH	31.4	8.1	44.6	65.2	24	26.7
NO	18.4	13.7	42.3	53.8	39.2	32.5
US	30.5	9	35.7	51.9	33.8	39.1

([1]) About 7.4 %, 13 %, 6 % and 43.4 % of the foreign population did not respond to the question on education attainment in Germany, Ireland, Sweden and the United Kingdom respectively. This is also the case for 10.7 % of UK citizens living in the United Kingdom.

([2]) Upper secondary refers to completed year 12.

([3]) Lower secondary refers to below 11–13 years of elementary and secondary schooling, upper secondary refers to a high-school diploma or a non-university post-secondary certificate, and tertiary level refers to some post-secondary education plus university degrees.

Sources: European countries: European Community Labour Force Survey (Eurostat) except for Denmark: Population register; Canada: Labour Force Survey; United States: Current Population Survey; Australia: Census.

Source: OECD (2005c), Table I.12, p. 65.

2.4.1. Measurement issues

There is no generally accepted definition of the phenomenon. For the present report a wide concept will be adopted defining 'delocalisation' as the process of relocation of economic activities towards foreign sites, closing down activities at home. It reflects the changes in the way firms do business when adapting to the more competitive environment and to the faster technological progress.

The trend towards greater trade integration, the deregulation of international capital movements and the reduced transport and communication costs allied with the technological developments of recent years have led firms to increasingly fragment the production chain to optimally locate the various stages of production across different sites (either abroad or at home).

Table 8 summarises the most common names used. In general, firms relocate activities to foreign sites via two mechanisms. The first is 'offshoring', which implies that firms retain the ownership of the whole of the production process while locating parts abroad via the setting-up of subsidiaries. The second is 'international outsourcing', which implies contracting out parts of the production process to external suppliers located in another country. Throughout this report, offshoring, outsourcing or international outsourcing are used interchangeably when firms relocate part of their domestic operations to third countries — whether material production or services, and whether the organisation abroad is external or internal to the offshoring firm.

Table 8: **A firm's sourcing options: most common names used**

	Internal to firms	External to firms
Domestic	*Domestic in-house production* (a firm produces its products domestically without any outside contracts)	*Domestic outsourcing* (a firm uses services supplied by another domestically-based company)
International	*Overseas outsourcing/offshoring/* *intra-firm international outsourcing/* *vertical FDI/* *captive offshoring/* *vertical specialisation* (a firm uses services supplied by its own foreign-based affiliates)	*Overseas outsourcing/offshoring/* *offshore outsourcing/* *arm's length international outsourcing* (a firm uses services supplied by an unaffiliated foreign-based company)

Some clarifications will be useful. First, in a strict sense offshoring implies a change of location, or relocation, of production and the employment activities associated with it. As a consequence, domestic production will be substituted by foreign production, whatever the final destination of the product. However, offshoring is sometimes used in a broader sense to include other types of international trade and FDI activities not always requiring a relocation of jobs — for example, if EU-based companies expand by investing in affiliates overseas rather than by expanding their domestic operations, thus creating new jobs overseas while maintaining EU jobs.

Second, as a result of its increasing tradability, offshoring of services has gained momentum and it is expected to continue to do so in the future. Especially in the USA, there is a tendency to use the terms outsourcing and offshoring only for services ([27]). In Europe, however, delocalisation of goods still dominates the discussions, especially in mainland Europe. White-collar offshoring is affecting mostly the UK and Ireland although the phenomenon is spreading across the continent. Delocalisation of services will be discussed in Section 2.4.3.

2.4.2. Trying to grasp the size of the phenomenon: no reason to be worried?

Despite the widespread perception that the phenomenon has greatly increased in recent decades and that it is likely to continue to grow ([28]), it is difficult to quantify its extent, as information on how much of the production process of firms is shifting to foreign sites is not readily available. As regards historic data, two main sources are normally used: FDI statistics and trade statistics. Surveys of companies' relocation intentions are a useful complement, since although often less representative and more subjective, they pick up more recent trends.

2.4.2.1. FDI statistics

As FDI flows reflect the activities of multinational enterprises (MNEs), they are often used as the main measure of delocalisation. However, there are problems in doing so. FDI statistics cover all investments undertaken abroad, i.e. joint ventures and greenfield investments including relocation. As a result, it is not possible to isolate relocation. While not all FDI activities can be associated with firms' decisions to fragment the production chain, not all delocalisations imply FDI flows ([29]). Nevertheless, FDI statistics may give an idea of the overall pattern of EU companies' internationalisation activities.

Reviewing the FDI statistics presented in the previous sections in the perspective of delocalisation, there is not much evidence supporting delocalisation being a large phenomenon. First, developed countries remain the main recipients of EU outflows, with intra-EU-15 and the USA the major destination. In comparison, only a small part went to the new Member States, and even less to China and especially India. Second, while FDI flows to China have increased over the past years, one should bear in mind that this region has a high growth rate and therefore represents a huge potential for companies. Many multinationals invest in China in order to have access to this large market; they are not necessarily all cases of delocalisation.

2.4.2.2. Trade statistics

Both offshoring and outsourcing imply the existence of trade flows. Trade data may therefore be used as indicators of delocalisation, particularly intra-firm trade and trade in intermediate goods which are used as inputs in production processes, as well as trade in computer software design and business services including accounting and other back office

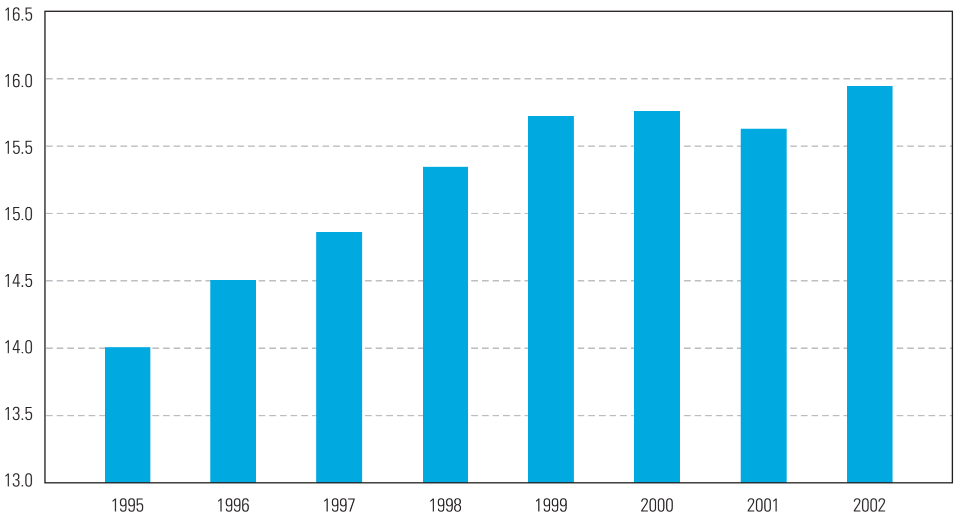
([27]) See, for example, Bhagwati et al. (2004).
([28]) According to Unctad (2004) offshoring is in its infancy. Unctad expects the trend to offshore to be just about to approach a pivotal 'tipping point' from which cascades of new offshoring will spring.
([29]) For example, if a firm chooses to contract out parts of the production to other firms located in another country.

operations services (30). However, it is not straightforward to track down the size. The use of firm and plant-level data would be most likely to accurately reflect pure delocalisation decisions, but their availability is limited.

(i) Intermediate goods trade

There is growing evidence that trade in intermediate goods (31) accounts for an increasingly large proportion of total trade, although the growth is modest.

Graph 11: **Percentage share of parts in international trade**



Source: CEPII (2004).

(ii) Trade with developing countries

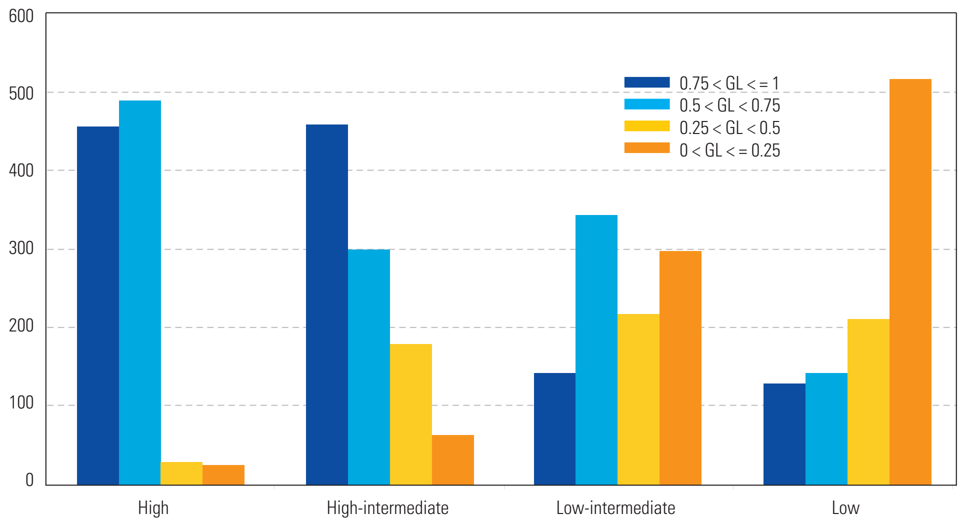
Another way to grasp the size of delocalisation is to analyse trade statistics with developing countries, which are seen as low-cost locations (32). This method is also imperfect because it does not isolate trade originating from relocated companies. But it helps assess the importance of these countries in our exchanges. As indicated above, the majority of EU trade flows occur between high-income countries. About 20 % of EU trade flows (respectively exports and imports) concern low-medium and low-income countries (among which is China).

The character of Europe's trade with low-income countries is typically inter-industry and reflects the importance of more traditional comparative advantage factors, as the follow-

(30) These categories of activities are thought to be most likely to encompass outsourcing activities.
(31) Input–output tables are often used to construct industry-level indicators of the relative importance of imported intermediary goods (e.g. Hijzen, 2005). If the discrimination between imported and domestically produced inputs is not available, often input–output tables are combined with trade data to construct the indicators (e.g. Amiti and Wei, 2005).
(32) See, for example, Fontagné and Lorenzi (2005).

ing graph shows. It maps EU trade by income level of its partners and the Gruber-Lloyd index, which measures the intra/inter-industry character of trade ([33]).

Graph 12: Distribution of EU total trade (exports plus imports of manufactures) by the Gruber-Lloyd (GL) index and income level of partners (data for 2002)



Source: European Commission (2005b).

The value of the Grubel-Lloyd index for intra-industry trade with high-income nations is equal to 0.74, suggesting that trade with partners of comparable levels of development is to a large extent intra-industry. Despite increasing globalisation and trade liberalisation, it is unlikely that in the foreseeable future this pattern of trade will change in any substantial way.

For Europe's trade with low-income countries, the Grubel-Lloyd index is on average substantially lower, reflecting the relative importance of inter-industry trade. Nevertheless, for products such as rubber and plastics, basic metals and fabricated metal products as well as office machinery, electronic valves and tubes, radio and television receivers and other instruments, the Grubel-Lloyd index takes values in excess of 60 %.

The relatively high values of the Grubel-Lloyd indicator in the case of trade with low-medium income countries suggest that a mix of factors is present, reflecting both traditional comparative advantage and intra-industry influences. The EU trades in some product categories (insulated wire, electronics and electronic tubes, for example) as much with

([33]) The Gruber-Lloyd index, a measure of intra-industry trade, is defined as $1-\{|X_i-M_i|/(X_i+M_i)\}$ where X and M represent exports and imports, respectively, of good *i*. When all trade is intra-industry, the index equals 1; when no trade is intra-industry, the index equals 0. While the data also show the prevalence of intra-industry trade across all products in the EU's trade with high-income countries, they do not support certain popular misconceptions such as that in textiles, clothing and related products the EU trades with non-industrial producers. In fact, there is considerable trade in these products with high- and upper-medium income nations suggesting greater specialisation across different segments of these products, obviously the luxury and exclusive brand names.

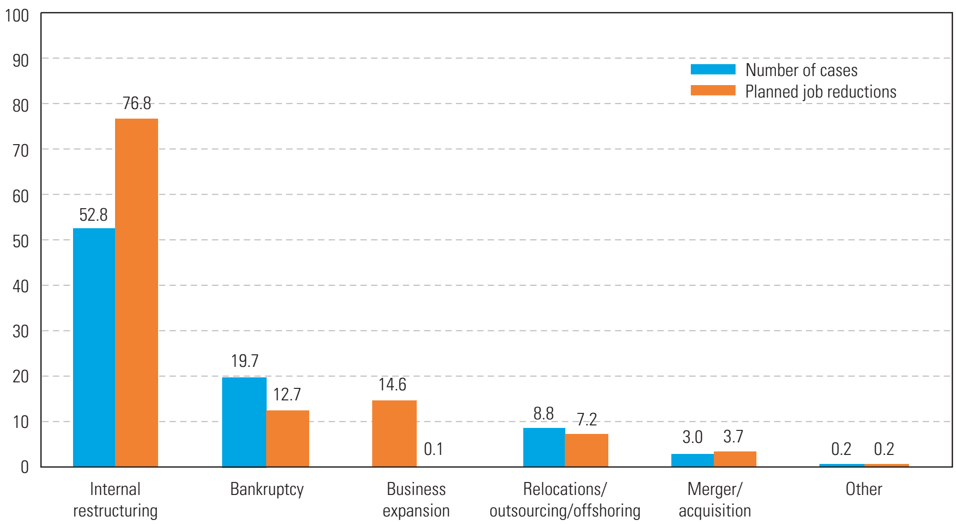
high-income as with low-medium income countries. This is undoubtedly a reflection of the ability of low-medium income trading patterns to exploit opportunities based on traditional factor endowments and opportunities associated with product differentiation and economies of scale.

The vertical integration of production, often at the background of these data, implies that the correlation between exports and imports volumes is high and, consequently, the role of net exports in macroeconomic fluctuations is reduced while the impact of the shocks themselves could be more widely spread internationally. Delocalisation and related shocks will in principle affect mostly the inter-industry part of trade. In this area, it is likely that the EU has less of a competitive advantage than in the more sophisticated areas involving intra-industry trade and, hence, the competitiveness challenge is that emanating from industrial trading partners rather than from low-income competitors.

2.4.2.3. Restructuring

Another way to assess the importance of relocation is to look at restructuring in Europe. Relocation is one way to re-organise the value chain of companies. The European Restructuring Monitor has been covering all the restructuring operations of European companies since 2002. Although this monitoring is not exhaustive, it shows that relocation and outsourcing represent 7.2 % of planned job reductions in total restructuring and 8.8 % of cases of total restructuring. In comparison, internal restructuring accounts for 76.8 % of planned job reductions. These relocations occur mainly in traditional labour-intensive sectors (textiles, leather), but also in intermediate sectors such as electrical and electronic equipment. In the UK, financial services are particularly affected.

Graph 13: **Restructuring in the EU, 2002–04** (%)



Source: European Monitoring Centre on Restructuring (2005).

2.4.2.4. Surveys

There is much anecdotal evidence in the press. Cases of offshoring or plans to offshore are reported almost daily. Surveys and informal predictions abound, suggesting that delocalisation intentions are pervasive.

- A recent survey of executives of more than 120 companies in the USA and Europe with annual revenues over USD 1 billion shows that 76 % of the firms currently outsource one or major human resources functions (The Conference Board, *Newsletter*, summer 2004).
- According to a survey by DIHK (the German Chamber of Commerce), one fourth of German businesses plan to send operations abroad over the next three years (three years ago one fifth of Germans businesses planned to do so). Companies such as Lufthansa, Siemens or Philips have either headed east or have announced plans to do so (CFOEurope.com, 'Offshoring by the numbers', June 2004).
- The Dutch Ministry of Economic Affairs recently found that 52 % of relocated enterprises went to central and east European countries and that only about 1–1.5 % of lost employment (equivalent to 9 000 jobs annually) could be attributed directly to relocation decisions.
- Unctad's *World Investment Report* (2004) notes that, among the world's 1 000 largest companies, some 70 % have still not relocated any business processes to emerging economies. Additionally, in a 2004 survey of the top 500 European firms, only 39 % had experience with the offshoring of business services.
- In Ernst & Young's European Attractiveness Survey 2005, 32 % of the surveyed companies responded positively to the question on relocation intentions (to be compared with 33 % in 2004). The geographical distribution of relocation sites for these intentions is: 40 % central and east European countries, 22 % China, 16 % western EU, 7 % India, and 2 % USA.

2.4.3. Delocalisation in services

Progress in information and telecommunications technology and diminishing trade barriers have made it possible for a growing range of service providers to separate production from the site of consumption. Until recently, many services faced a trade-off between being located where inputs are cheaper and maximising closeness to the customer base. However, due to technological changes, services may now to a larger extent fragment the production process. Moreover, given the labour intensity of many of the services sectors, they are likely to be inclined to take advantage of the gains of relocating to low-wage countries where it is increasingly easy to find relatively well- trained workers. Nowadays, services as different as architecture, accounting, software programming and radiology can be produced where inputs are cheapest to be delivered to clients located elsewhere. Hence, increasingly a wider range of sectors and occupations are now facing direct pressure from producers in low-wage/costs locations. According to Unctad's *World Investment Report* (2004), 'offshoring represents the cutting edge of the global shift in production activity, giving rise to a new international division of labour in the production of services' and it is expected to continue.

Recent studies have examined the phenomenon of delocalisation of services more closely (Bhagwati et al., 2004; Amiti and Wei, 2005). This trade-based evidence shows that delocalisation is still largely concentrated in manufacturing. Amiti and Wei (2005) show, using data on industry level outsourcing intensity ratios for the USA and the UK, while the share of service imports increased on average from 3.5 % (0.4 %) in 1992 to 5.5 % (0.8 %) in 2001 in the UK (USA), the ratio for manufacturing outsourcing in 2001 was 27 % in the UK and 12 % in the USA. Moreover they show that while manufacturing outsourcing in the UK peaked in 1996, it has been on a downward trend since then. In the USA it has been steadily rising but at a slower pace than service outsourcing.

Amiti and Wei (2005) — looking more closely at trade of business, computing and information services — further note that 'trade in services, like trade in goods, is a two-way street. Most countries receive outsourcing of services from other countries as well as outsource to other countries'. They find evidence of increasing exports of such services from emerging economies such as India and China. However, both countries are also themselves significant outsourcers (importers) of business services, which reflects the two-way nature of business services trading. The main recipients of cross-border outsourcing of business and computer services in 2002 were the USA (USD 59 billion), UK (USD 37 billion), Germany (USD 28 billion), France (USD 21 billion) and the Netherlands (USD 20 billion). India was ranked in sixth place (USD 18.6 billion) and China 14th (USD 10 billion). The largest surplus countries — i.e. countries to whom the rest of the world outsources more than the reverse — of combined computing and business services were the UK, USA, Hong Kong, India and Singapore. Among the Member States, France was also a significant net exporter of these services, whilst Germany and Italy were significant net importers.

Although service delocalisation today seems minimal, there appears to be a clear potential for continued rapid expansion. The global services sector accounts for over 70 % of GDP in advanced economies and over 50 % of GDP in developing countries. However, only 10 % of services are currently traded, which is low compared with over 50 % of manufactured goods. Moreover, services accounted for only around 20 % of total global exports in the late 1990s. This would suggest considerable room for further expansion of trade in services. However, as the majority of services provision requires face-to-face contact and/or is difficult to codify, such jobs are not likely to be subject to international outsourcing in the foreseeable future. Prominent examples are retailing, catering, restaurants and hotels, personal care or tourism. Services jobs making intensive use of ICTs or jobs in sectors that can be traded/transmitted with the help of ICTs (ICT-enabled trade in services) are the jobs most at risk. This analysis suggests that around 20 % of the share of total employment in services could potentially be affected by international sourcing of IT and ICT-enabled services.

Although it is clear that services will typically have a lower tradability as compared with manufacturing, the growing relevance of services activities around the globe has been mirrored in a shift in the composition of global FDI, with services now accounting for a growing proportion of investment ([34]). Between 1970 and 1990 the share of services in the

([34]) The larger share of the flows of FDI in services relative to manufacturing can be at least partially explained by the fact that many services sectors are still intrinsically non-tradable and require physical presence of the firms in the markets they supply. This should not necessarily be interpreted as delocalisation of economic activities.

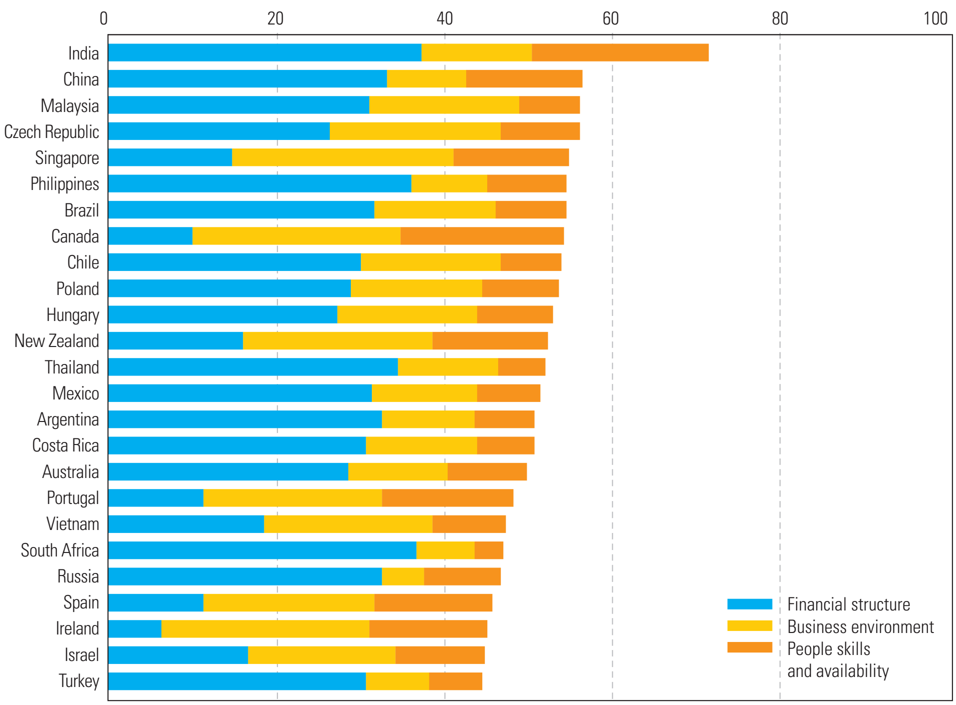
world FDI stock grew from one quarter to almost a half, and by 2002 had risen to about 60 %. This has also been the case in the EU: almost 70 % of Member States' inward FDI and almost 60 % of its outward FDI is related to services. Indeed, services trade and FDI tend to be complementary, because establishing commercial presence abroad even for goods manufacturing also often brings stronger services trade, for example in terms of transport (e.g. supplying goods to foreign affiliates), and communications (e.g. data transactions with foreign affiliates).

Overall, although it is difficult to document the phenomenon with hard data, the available evidence on FDI, trade and restructuring seems to suggest that the phenomenon of delocalisation is currently limited in scope but growing.

2.4.4. Geographic breakdown of delocalisation

The growing importance of developing countries and in particular of large emerging economies like India and China as host sites for relocated activities is undeniable. This trend seems likely to gather further strength in the future. Developing and transition economies appear to figure more prominently in multinational companies' investment plans. China and India lead the ranking of the most attractive offshoring locations in the world.

Graph 14: Offshore location attractiveness ranking, 2004



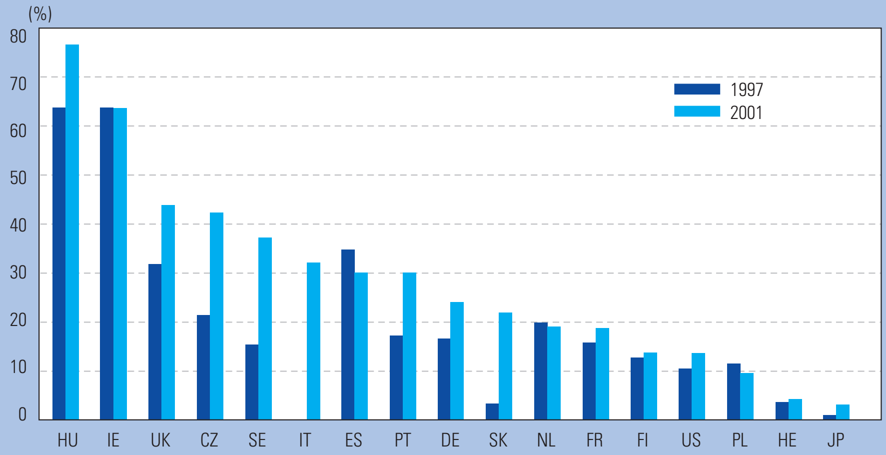
Source: AT Kearney (2004).

Outsourcing of research and development (35)

As the previous section has demonstrated, services, including high-skilled services, are not immune from being delocalised. The relocation of R & D activities is the subject of much discussion. Relocation of R & D activities is particularly worrying, as R & D investments are needed to help develop new products and revitalise old ones. If the current relocation of activities is part of a cycle in which we destroy old jobs and create new ones, do we have the ability to create new goods and new jobs? Or are we outsourcing our innovative capability as well? If yes, where is the value added and employment from these outsourced innovations created? At home?

In most EU countries, the share of foreign affiliates in R & D expenditures is smaller than their share in manufacturing production, like in the USA, France and the UK. Hence R & D activities are still less internationalised than production. This confirms that most research still remains at corporate headquarters. Nevertheless, the percentage of R & D carried out abroad is increasing rapidly. Total R & D expenditures of foreign affiliates increased between 1991 and 2001 by more than 50 % in the OECD area (OECD, 2004). R & D expenditure by affiliates of foreign companies is increasingly contributing to R & D spending in most EU Member States, as well as in the USA and Japan, reflecting the growing importance of **inward R & D FDI.** The share of foreign affiliates in total R & D expenditure by enterprises has risen most noticeably in the new Member States like Slovakia, the Czech Republic and Hungary, but in the EU-15 also in the UK, Sweden and Portugal. For the UK, the rise in share for foreign affiliates is substantial, from 32 % to 45 %, with the USA being the major source country and the pharmaceutical industry the largest recipient sector. In Germany, France, Finland, the USA and Japan the shares are much smaller, and the increase was less

Share of foreign affiliates in R & D spending, by year and country



Source: Research DG, *Key figures 2005*.

Data: OECD, Activity of Foreign Affiliates database.

Notes: UK: 1997–2003; CZ, US: 1997–2002; HU: 1997–98; PT: 1999–2001; SK: 1996–2002; FR: 1998–2002; PL: 2000–02; EL: 1997–99; IT: no data available before 2001.

(35) This section draws on European Commission (2005a and 2005e). See also OECD (2004) and Unctad (2005) for a discussion on the internationalisation of R & D.

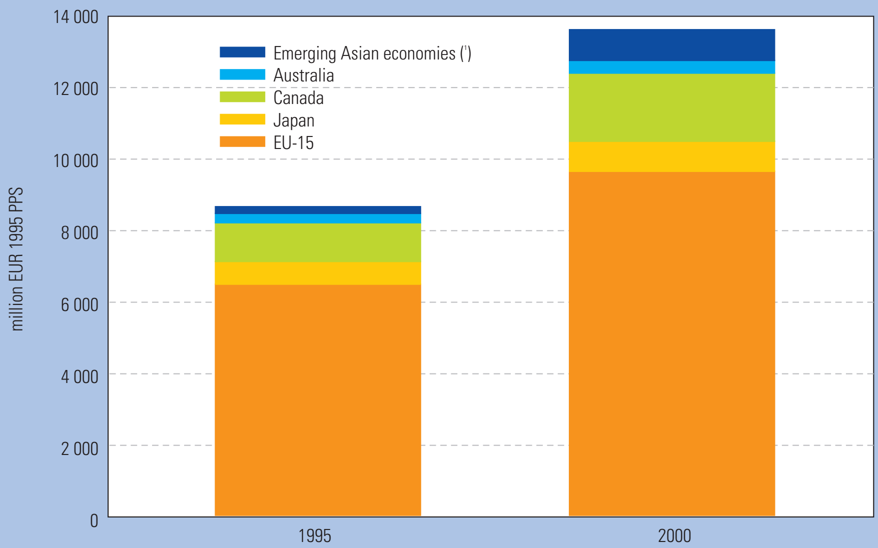
marked but still substantial. In other countries (e.g. Ireland) the shares remained relatively constant, which indicates that R & D by affiliates of foreign companies has increased in line with domestic R & D.

Europe is losing its attractiveness for international R & D investment

The USA has experienced a gain in its share of foreign affiliates' R & D spending since the mid-1990s. A large part of this shift towards the USA came from EU company affiliates on US territory. Between 1997 and 2002, R & D expenditures of US-based affiliates of EU manufacturing firms increased by 54 % in real terms. US firms increased their R & D expenditure in EU-based affiliates by 38 %. As a result, the net gain for the USA increased by a factor of 5.4 over recent years. During that period, foreign R & D investments in the USA were mainly targeted at high-technology areas. Pharmaceuticals and communication equipment alone accounted for more than half of the R & D expenditures by foreign affiliates in 2000 ([36]).

Furthermore, US outward R & D investment has grown over recent years in all the major regions. However, growth has been fastest outside the EU-15, particularly in emerging countries such as China, where US outward R & D investment increased by 25 % per year since the mid-1990s (against 8 % per year in the EU-15). As a result, the EU-15 share in total US outward R & D investment has been declining since the late 1990s. These trends are expected to continue as

US outward R & D FDI by destination (1995–2000)



Source: Research DG, *Key figures 2005*.

Data: US Bureau of Economic Analysis: US direct investment abroad — Operations of US parent companies and their foreign affiliates (Washington, DC, annual series).

Note: 'US overseas R & D expenditure' refers to R & D expenditure performed by majority-owned non-bank foreign affiliates of non-bank US parent companies. Data include: R & D expenditures conducted by affiliates, whether for themselves or for others under contract; exclude R & D expenditures conducted by others for affiliates under contract; (¹) China, Hong Kong, Singapore and Taiwan.

([36]) In 1990, the pharmaceutical industry spent 50 % more on R & D in Europe than in the USA. In 2001, the situation was reversed with 40 % spent more in the USA. The consequence of this trend is that Europe accounted for almost twice the number of unique drug launches by the USA during the period 1993–97. In 1998–2002 the proportions were reversed. It is particularly disquieting that even European-headquartered companies shift their R & D to the USA. Ten years ago, 73 % of their research in Europe was done in Europe; nowadays it is only 59 %. Better pricing, more attractive product-approval climate, and greater availability of human capital seem to be the main factors behind the trend.

long as new actors build up their science and technology infrastructures and open their markets to foreign entrants.

Survey data on FDI intentions further demonstrate that the emerging markets are currently attracting an increasing share of overseas R & D outlays by multinational firms. For example, a global survey conducted by the Economist Intelligence Unit in 2004 showed that top companies' favourite location for planned R & D investment was China followed by the USA and India. Also in the Unctad ***World Investment Report*** (WIR) (2005), China comes out as top destination in developing countries, next to India, while the USA remains the top destination in developed markets, following by Japan and the UK in third place.

The emergence of China and to a lesser extent also India as a location for R & D activities corresponds to an increasing annual output and quality of science and engineering graduates from India and China, and an increasing share of countries like China and South Korea in patenting activities. For example, with respect to scientific papers, China accounts for 4.5 % of total SCI publications in 2003, occupying sixth place in the world. Also with respect to patents, China has displayed a strong growth performance, not only in Chinese patents (SIPO), but also in Triadic patents. It occupied 12th position in WIPO rankings in 2002.

To summarise, most R & D still remains concentrated in the home market, but the trends towards more internationalisation of R & D is increasing, albeit slowly. R & D internationalisation is still mainly an intra-triad phenomenon with the EU but increasingly even more the USA as major locations for foreign R & D. But China is on the rise.

2.5. Concluding remarks

A key concern about outsourcing and delocalisation is the possibility that it may cause home country employment to decline, a topic that will be examined in Chapter 4. The statistical evidence reviewed in this chapter would suggest that the scope of the effects in question will be small, given the currently small scale of the phenomenon relative to the size of the economy. Nevertheless, the more forward-looking survey evidence suggests a continuing growth in future. Furthermore, relocation is increasingly a fact in services as well, which will touch to a higher degree high-skill services, including R & D, thereby affecting all parts of the value chain. Moreover, this section has also demonstrated that the EU economy — with its specialisation and comparative advantage in medium-tech industries — is vulnerable to the shocks created by globalisation. Before reviewing the evidence on effects in Section 4, the next chapter discusses the drivers behind firms' decisions to (re)locate. This will allow a better grasp of the trends in the EU's competitiveness and the likely benefits and costs of globalisation.

Summary of Chapter 2

While Europe is embracing the process of international market integration. Despite the generally weak impact of outsourcing and delocalisation on economic performance, Europe remains particularly vulnerable to shocks created by globalisation.

Globalisation

- Europe has defended its position on world markets. The share of extra-EU-15 exports in world exports has risen slightly, the export market shares of the 10 new Member States expanded. Over the same period, the US export share in world exports fell.

- A striking development over the last decade is the rapidly growing role of China in world trade. In 2003, Chinese exports accounted for 6.2 % of world exports, up by almost 4 percentage points when compared with 1992. China's exports are not only of the low-cost, low-skill type; the share of high-tech products in China's exports has been increasing considerably. Despite a strong performance in international trade, however, there is some evidence that the EU may be less than ideally positioned to fully realise the potential gains from deeper international economic integration.

- With the bulk of trade and FDI for the EU being intra-EU-15, the most dynamic part of the intra-EU flows are nevertheless the ones between the new Member States and the EU-15, reflecting the benefits from the recent enlargement. Extra-EU flows have grown too, but adjusting for the rapid growth in these markets, the EU has not taken all opportunities here, especially with regard to China, and in comparison with the USA.

- Although the EU's trade balance in high-tech sectors is improving, the EU's trade performance is due to sectors characterised by intermediate skills and/or upmarket products, which can be sold at higher prices due to non-price factors, such as quality, reputation and complementary services. In several high-tech products the EU is lagging behind.

- In those areas where most of the growth in world exports is realised (semiconductors, passenger cars, telecommunications, computers, computer parts and pharmaceuticals), the EU has managed to keep its position, but has not made strong advances. The speed with which China has developed its position in these areas is remarkable. The only exception for the moment is passenger cars and pharmaceuticals.

- Trade and FDI with these fast-developing countries are not only motivated by low costs, but also access to skills and markets. As regards the EU, it has fallen behind in terms of attracting inward FDI, certainly when adjusting for its large market size, with China attracting an increasingly larger share of new FDI. While this is undoubtedly a reflection of stock-adjustment behaviour, it also suggests that investors see new opportunities in these locations motivated in part by costs and technology advantages.

- Finally, the EU is less efficient than the USA in absorbing migrants into its labour markets, importing principally less skilled immigrants.

Delocalisation

- Trade and FDI statistics show that delocalisation remains as yet a limited phenomenon. However, surveys on EU firms' intentions to delocalise suggest that it will become more important in the future. Even so, the number of affected jobs is likely to remain small compared with restructuring originating in the normal cyclical and

structural behaviour of the economy in general.

- Although most of the delocalisation projects are still in manufacturing, it is increasingly affecting all sectors, including labour-intensive service sectors. The trend of delocalising R & D activities is increasing, although most R & D still occurs in the home market. The EU is losing its attractiveness for R & D investments relative to the USA and other third countries. China in particular is a new hot spot on the list of prospective location sites for R & D.

- The new Member States score highest on the list of sites for relocation for EU firms. Enlargement offers important near-shoring opportunities. But so do other fast-growing areas like China. Enlargement contributes to improving EU firms' ability to face global competition.

3. Drivers of industrial location and EU competitiveness

Neo-classical trade theories suggest that a nation's characteristics, such as the availability of low-cost inputs including labour and natural resources, determine the types of economic activity in which they specialise. On this basis, countries specialise according to comparative advantage. With falling trade barriers, such theories are useful in explaining why firms increasingly shift economic activities to nations endowed with abundant cheap labour. However, these theories fail to adequately explain the bulk of trade between advanced countries. Trade of this nature is often in similar goods or within the same firm or industry. Many firms do not select low-cost locations for all of their activities. They rather seek to exploit other location advantages, combining them with their own firm-specific advantages. Moreover, production often concentrates in relatively few industrial locations; firms in related industries may co-locate and these patterns may persist over time. Accordingly, firms often locate close to similar firms to enjoy knowledge spillovers, to have access to a specialised, skilled labour force and to benefit from specialist suppliers. The implications of globalisation for firms in these industries may be to consolidate activity in relatively high-cost locations. As clusters of firms can generate increasing returns to scale — i.e. the bigger the cluster, the bigger the benefits from being a part of it — early decisions of firms and governments can have long-lasting implications, and gains from clusters can be cumulative.

This chapter reviews the factors that drive firms' location decisions (Sections 3.1 and 3.2) and presents how the EU scores on these factors (Section 3.3). This allows a better understanding of the underlying processes of a firm's and nation's competitiveness.

Two concepts of competitiveness

The concept of competitiveness has various meanings especially in popular discussions where it often is used to signify commercial success. Broader aspects that are usually brought together under competitiveness are those used by the World Economic Forum in their annual **Global Competitiveness Report** (37). Two quite different concepts are discussed briefly here, competitiveness of **enterprises** and competitiveness of **nations**. Central to both concepts is productivity growth so that, ultimately, competitiveness is synonymous with vigorous and sustained productivity growth.

Competitiveness of an enterprise refers to and is usually assessed by its performance in domestic and/or international markets

(37) See, for example, World Economic Forum (2005).

measured by improving market shares, and consequently higher than average profitability. The more intrinsic factors that give rise to such success primarily concern an enterprise's ability to innovate which results in high productivity growth; the structure of the market where the firm is purchasing its inputs and selling its products; and the nature of the products the firm is producing. Other aspects of enterprise competitiveness often used concern cost performance relative to competitors, excellence in aspects of non-price competition such as product and service quality, or simply to price competitiveness ([38]).

Nations are not like enterprises and competition between nations is of an entirely different nature. A more meaningful definition of a nation's competitiveness would refer to a nation that experiences rising standards of living and is able to generate employment opportunities for those who wish to work ([39]).

As Krugman (1994) noted more than 10 years ago, the concept of competitiveness is not just elusive but sufficiently seductive to be used carelessly in public discourses. The most recent version of the fallacy of extrapolating the notion of competitiveness of an enterprise to that of a nation has appeared precisely in the case of outsourcing and of delocalisation. While indeed some firms and their employees could well become uncompetitive in the event of unfavourable shocks, the nation as a whole that experiences these shocks will be reallocating its resources from sectors of low competitiveness and declining productivity growth to those of rising competitiveness/productivity growth in order to sustain the growth in its standards of living and to reap the gains from trade.

3.1. The drivers of (de)localisation decisions

Firms may have several motives — often intertwined — to shift production operations from home to overseas locations. In general, three major motives are identified in the literature: increase efficiency, acquire strategic assets, seek and improve access to markets ([40]). In addition, the policy environment is another important factor.

- By locating the different stages of the vertical production chain in different countries, some firms **seek to increase efficiency** by optimising the use of resources in each stage of the production process according to the host country characteristics. In general, the focus of firms is on the world market, not the local market, leading to exports from the foreign location to the world market or back to other parts of the value chain within the firm. The location factors driving this type of firm strategy are the availability, quality and prices of factors of production, either in the form of raw materials, physical capital, skilled or unskilled labour or intermediate inputs.

- More recently, the growing internationalisation of R & D activities by multinational companies has directed the attention towards considering **the acquisition of strategic assets** as a motive for delocalisation (particularly through FDI in R & D). Firms aim to improve their existing assets, acquiring (and internalising) assets or creating completely new technological assets by locating R & D facilities abroad. Location decisions are based not only on the technological infrastructure of the host country, but also on the

([38]) For a detailed discussion of various aspects of competitiveness, see ECB (2005).
([39]) This is the definition used in the Commission's annual *European Competitiveness Report*.
([40]) Caves (1996) and Dunning (1988). Also included is the risk reduction strategy, correlated with diversifying FDI. Most studies find little support for the importance of this type of FDI.

presence of other firms and institutions, which may create positive externalities for the investing firms. These externalities may result from spillovers of information from other R & D units, access to trained personnel and links with universities or government institutions.

- **Market-seeking** motives for FDI are a major motive for FDI decisions in general. The decision to locate production abroad in this case is driven by factors such as the current and future size of the host market (demographic and in terms of income per capita), the distance between the home and the host market as well as the access to other markets from the chosen location. These types of investments are not seen as being taken as a result of direct competition with the home market, and as such do not draw much attention in the discussions about delocalisation ([41]).

- Finally, the broad **policy environment** may to some extent affect all types of location decisions. Transparent FDI regulation ensuring proper investment protection, product and labour market regulation, as well as the availability of infrastructure are important elements in the attractiveness of locations ([42]). Many governments have gone even further by providing special incentive schemes, such as tax breaks and other financial incentives. While on balance research shows that the distribution of FDI across countries is more determined by economic fundamentals and the broad policy environment affecting all firms alike, policies specifically targeting FDI can still affect the location choice of multinational companies when underlying economic fundamentals are similar across countries ([43]). For example, empirical studies show mixed evidence on the effect of tax rates on FDI, ranging from significantly positive to significantly negative ([44]). Devereux and Griffith (1998) demonstrate that effective tax rates do not play a role in the choice whether to engage in FDI, but once the firm has decided to invest abroad, the exact choice of location may be influenced by differences in effective tax rates. Nevertheless, in terms of economic significance, Devereux and Griffith underline that agglomeration effects are important determinants of location choices and that policy-related incentives need to be very large to overcome those agglomeration effects.

3.2. Evidence from business surveys on critical firms' location drivers

3.2.1. Location decisions in general

Business survey results complement economic theories and econometric studies that try to predict the location and investment decisions of firms, and econometric studies seeking to explain past decisions. Recent surveys point to a range of factors that play a role in actual location decisions in general.

([41]) This type of FDI may nevertheless imply delocalisation of activity as far as it substitutes for direct exports from the home country that would take place if the decision to locate abroad had not been made.
([42]) Alesina et al. (2005).
([43]) Blomström and Kokko (2003).
([44]) However, de Mooij and Ederveen (2003) find that the median value of the tax elasticity of FDI is around – 3.3, indicating that a 1 percentage point reduction in the host-country tax rate will raise FDI flows towards that country by 3.3 %.

- **Access to market**. The larger the host market, the greater the likelihood that multinational firms will be able to recoup the fixed cost of their foreign plants. Access to the single market is often quoted as the most determining factor for businesses locating in the EU. For instance, the 2005 European Attractiveness Survey by Ernst & Young — the international accounting and consultancy firm — identifies the development of an existing market position or the search for new markets as the main location driver for investment in Europe. Interesting to note is that **cost-saving** objectives, which are most closely associated with delocalisation, are only mentioned in third place ([45]).

- **Highly skilled and productive labour force.** The Invest in France Agency ([46]) found a highly skilled and productive labour force to be one of the main reasons for international business gravitating to France. AT Kearney — the management consultancy firm — found that education and skills were the primary reasons why companies chose to remain onshore ([47]).

- **Regulatory regime.** The AT Kearney survey also found that 64 % of global investors identified government regulation as the most critical risk to corporate operations. Regulation and bureaucracy came top of the list of concerns about FDI in China and India respectively.

- **Tax regime**. A recent study by the Federation of German Industry (BDI) ([48]) highlighted the impact on decision-making of the perceived burden created by the complexity of the German tax system. At the same time, evidence from empirical studies on the effect of tax rates on FDI is less robust, ranging from significantly positive to significantly negative.

3.2.2. Relocation decisions

The location factors behind **relocation** are typically associated with cost factors. The Ernst & Young survey reports cost motivations as the predominant motive for relocation (69 %). However, a survey of executives in Europe and the USA reported that lower labour costs from offshoring did not translate into big savings, with nearly 50 % of the firms seeing savings of less than 15 % ([49]).

Costs differentials are not the only reason behind offshoring. The Ernst & Young survey reported that, next to cost savings, tapping into markets is reported in 40 % of the cases as rationale for relocating activities and increasing market shares in 37 %, indicating the intertwining of cost and market related motives, even for delocalisation decisions. A firm can also offshore in order to be closer to a market in search of economies of scale or to access certain skills. For example, language skills are essential for call centres. As Unctad

([45]) Ernst & Young (2005). Also the econometric literature has thus far found no strong evidence on the effects of labour costs on FDI, unless differences are sufficiently big.
([46]) Invest in France Agency (2004).
([47]) AT Kearney (2004).
([48]) BDI (2004).
([49]) CFOEurope.com, 'Offshoring by the numbers', June 2004.

(2004) and Amiti and Wei (2005) report, a significant number of FDI offshore projects go to developed countries, suggesting that low labour costs are not the only reason to offshore. Along the same line, the evidence presented above points out that only one fifth of FDI goes to industries where low labour costs are a key factor and the share of unskilled labour is high.

3.2.3. R & D location decisions

Empirical studies find that, although most R & D done abroad is still mainly for development and adapting of products to local markets, the acquisition of new technologies is becoming an important motivation. Nevertheless, both demand (close to supply markets) and supply related (access to S & T resources) motives are heavily intertwined motives for locating R & D activities abroad ([50]). Agglomeration effects seem also to be particularly important in technology intensive sectors ([51]).

A recent Dutch study on R & D location factors confirms that the availability of qualified personnel is the most important location factor for multinational companies in the Netherlands. The survey also shows that world-class quality of research institutes and universities and opportunities for public–private partnerships have become major location factors ([52]).

3.3. Countries' attractiveness for location of investment ([53])

Having investigated the critical factors that shape **firms'** decisions to locate investment, we now move to examining the attractiveness of **countries** for investment decisions. Before assessing the EU's attractiveness in Section 3.3.2, Section 3.3.1 first briefly discusses how locations can be distinguished by their competitiveness characteristics.

3.3.1. Locations distinguished by their competitiveness characteristics

Conventional trade theory recognises that countries can be distinguished on the basis of factor endowments. In recent years, economists and policy-makers have realised that these endowments go beyond capital and labour. Countries possess other important characteristics that determine their attractiveness as places to locate enterprise ventures to produce and trade ([54]).

Nations, of course, compete for these mobile factors through a variety of instruments ranging from tax and subsidy favours to improving the regulatory and administrative en-

([50]) See European Commission (2005a) for an overview.
([51]) This means that regions with a relatively higher existing stock of FDI are more likely to attract further investments, after controlling for other location-specific characteristics. See, for example, Head and Mayer (2004).
([52]) Ministry of Economic Affairs, the Netherlands (2004).
([53]) See European Commission (2005f).
([54]) The proposition that factor endowments and comparative advantage can be endogenous was raised in the context of explaining trade between similar countries involving similar industries, that is, intra-industry trade. Siebert has stressed that increased international mobility of capital, skilled labour and technology will inevitably influence the productivity of the immobile factors — land and less skilled labour (Siebert, 2006).

Table 9: **Business competitiveness index (BCI), 2005**

Country	BCI ranking	Company operations and strategy ranking	Quality of national business environment ranking
US	1	1	2
FI	2	9	1
DE	3	2	4
DK	4	4	3
UK	6	6	6
JP	8	3	10
NL	9	8	8
AT	10	11	9
FR	11	10	11
SE	12	7	14
CA	13	18	13
BE	16	12	17
IE	19	16	20
ES	25	25	26
ET	26	33	25
CZ	27	29	27
PT	30	39	28
SL	32	27	35
HU	34	40	32
CY	36	48	36
IT	38	28	39
SK	39	47	38
EL	40	42	40
LT	41	41	41
PL	42	43	46
LV	48	51	48

Source: World Economic Forum (2005).

vironment and securing legal certainty, to providing the necessary infrastructure, to ensuring that the supply of skilled employees is adequate and to providing an environment supportive of research and innovation ([55]). Other broader competitive elements that are not specific to firms consist of the range of cultural amenities and lifestyle qualities that the location offers through, for example, the provision of public goods.

([55]) For a discussion of these and related issues, see ECB (2005).

Taxation can be an important factor in determining the competitiveness of locations. Inter-state tax competition for attracting new investment is quite intense in the USA and undoubtedly elsewhere including within the EU-25. Liberalisation of capital account transactions and the increase in FDI flows in recent years suggests that tax considerations can be instrumental in directing direct investment towards particular locations ([56]).

2.3.2. The EU's attractiveness for investment

The information typically used to assess the attractiveness of countries needs to be interpreted carefully. Often, the material may be qualitative reflecting survey opinions, or the data may not be comparable across units of observation or even the methodology used to compile the data may be different. Nevertheless, and subject to these qualifications, the ECB finds that the euro area is on average a less favoured location than its competitors, especially compared with the USA ([57]). The business competitiveness index of the World Economic Forum's annual report on competitiveness nevertheless places several EU Member States in high positions ([58]).

As discussed previously, the key factors that determine the overall location attractiveness for business are: market access, human resources, research and innovation, costs and the quality of the administrative environment as well as, more controversially, the level of taxation. How well does the EU score on these specific location factors?

EU and location factors

- Need to adapt to increasing demand for qualified workers as Europe's scientific base must provide key skills for technological innovation. A worrying data is that China produces more than 200 000 IT engineers per year, the USA 50 000–70 000, while France and Germany only 5 000–6 000.

Human resources

- Labour productivity per working hour in the EU still lags behind the US level (100 for the EU-15, 85 for the EU-25, and 114 for the USA, all in 2003).
- Slow population growth and low labour force participation rates (72 % in 2003) could translate into a shrinking workforce.

Research and innovation

- R & D expenditures over GDP below other industrialised countries (2 % for the EU-15, 1.95 % for the EU-25, and 2.76 % for the USA).
- Venture capital as a percentage of GDP lagging behind the USA both at the initial and expansion stages (venture capital in the

([56]) See, for example, de Mooij and Ederveen (2003) on the estimates of the relevant elasticity.
([57]) See ECB (2005).
([58]) See World Economic Forum (2005) and also Table 9.

USA represents at least half of a percentage of GDP in the USA and only one tenth of a percentage in Europe). Total market capitalisation in the euro area remains significantly smaller than in the United States (130 % of GDP in the USA and, as an example, 50 % in Germany). This translates into less private capital available for industries to thrive and innovate.

- In the US Patent Office, in 2001, US companies filed 322 patents per million inhabitants, compared with 80 filed by European companies. In Europe, European companies filed 161 patents per million inhabitants, but US firms managed to take out 170.

Costs

- Employment costs (total yearly pay + benefits, EUR 2004) in the EU-15 were 1.22 times the US level.

Regulation

- An overall product market regulation indicator for the EU-15 showed a 1.4 value (1 for the USA) in 2003.

- For the EU-15, a difficulty of firing index was 3.4 times the level of the index in the USA.

- Firing costs (in terms of weeks of wages) is 50 in the EU-15 and 8 in the USA.

Market and industrial vitality

- Average annual GDP growth rate in the EU-15 was below 2 % for the period 1990–2003, while it was well above 2.5 % for the USA.

Taxation

- Survey evidence on the importance of taxation as a factor of competitiveness is reported in Salvatore (2002) on 1999 data from the World Economic Forum (WEF). In answering the question, 'the tax system in your country promotes business competitiveness' on a scale of 1 (lowest) to 7 (highest), business executives mentioned only six Member States (rank in parentheses) — Austria (4.0), Finland (4.0), the UK (4.3), the Netherlands (4.4), Ireland (4.7) and Luxembourg (5.4) — from the EU-15 with a rank of at least 4. Thus, business executives considered that in the majority of Member States, and mostly in the large continental ones, the tax system did not contribute to improving competitiveness ([59]).

The evidence on the attractiveness of the EU for investment presented in the box does not provide reasons for optimism. In this respect, and as prelude to the policy discussion in Chapter 5, the views of what (potential) investors see as important policy areas for improving the EU's attractiveness may be of interest. In the Ernst & Young survey mentioned above, 50 % of the surveyed executives (from the EU, USA and Asia) indicated 'modernising and simplifying EU and national regulation' as one of the three most favoured policy measures to boost EU attractiveness, 49 % 'make labour markets more flexible' and 44 % 'make innovations easier and support R & D investment'. 'Completing the EU single market' and 'strengthen the EU competition policy' came out as a second tier of measures (respectively 32 % and 26 %). Lower on the list of favoured measures are industrial policy at the EU level (9 %), stimulating sustainable development (10 %) and improving EU infrastructure (14 %).

([59]) See Salvatore (2002), Table 3.

The impact of exchange rate fluctuations on EU competitiveness

The appreciation of the euro has also been a factor that has recently contributed to concerns about whether certain segments of production activities can be competitively produced in or outside the EU. The nominal and real exchange rate for the euro has fluctuated widely and has played undoubtedly a lesser role, if any at all, in determining the trends in comparative costs and prices and, hence, it is unlikely to have influenced in any systematic manner decisions about the location of production. Moreover, competitiveness indicators such as real exchange rates measured on the basis of prices or costs invariably exhibit strong cyclical behaviour which is unlikely to have played a major role in firm production decisions. Note also that despite interest in developing estimates for long-term (fundamental equilibrium) exchange rates there is no consensus on the methodology or the relevance of these estimates, whenever such estimates are produced. Real exchange rates adjust, either through changes in relative prices or through changes in the nominal exchange rate, in response to imbalances and they themselves are part of the adjustment process.

4. Benefits and costs to the EU

The present chapter discusses how international trade in general and outsourcing and delocalisation in particular affect Europe. Economic theory predicts that gains from trade are substantial but dispersed while losses are limited but concentrated. Moreover, economic theory predicts that, while over the medium term the gains from trade are unambiguous and Pareto superior, in the transition phase there can be losses experienced by different segments of workers and citizens. This is the context within which the impact of outsourcing and delocalisation on economic performance should be considered. As delocalisation and outsourcing are natural parts of a dynamic and open market economy, they undoubtedly generate transitional losses but they also enlarge the real incomes of the trading nations and generate resources that can be used to compensate the losers. Whether the short-term costs are large or not depends principally on the structure of the economies in question and the flexibility to adapt to economic shocks.

Studies confirm these observations, documenting gains for European countries, for example due to businesses achieving substantial factor cost savings which improve their productivity and enable them to compete more efficiently. Provided that these cost savings are passed on, consumers may benefit from lower prices. The studies also highlight negative effects, for example on employment. While these losses are limited overall, they tend to affect different workers' classes unequally, with low-skilled workers being the primary losers.

Therefore, while trade, migration, FDI and outsourcing and delocalisation are natural parts of our open economies — and which Europe overall gains from — the potentially negative short-run effects may not be negligible. A key policy question is, therefore, how to design policies that permit us to reap the benefits from the free movement of people and free trade in goods, services and location and production decisions while minimising the adjustment costs associated with these freedoms. This will be subject of the final policy chapter.

4.1. Delocalisation and outsourcing in context

Research and experience suggest that the gains from trade considerably outweigh the costs. Delocalisation and outsourcing is a form of international trade. However, does it change the normal trade calculus of costs and benefits?

4.1.1. The general trade equation

Openness to trade and investments have a positive impact on economic growth, subject to certain caveats. More specifically:

- Gains from trade arise as countries specialise in the production of goods and services where they have a comparative advantage. Such advantages may arise either because a country has a technological advance compared with others (Ricardian trade models) or because they are particularly intensive in one factor of production relative to other countries (Heckscher-Ohlin trade models) ([60]). To realise these potential gains, countries need to move production factors to the sectors where they have a comparative advantage. By specialising according to comparative advantage, income levels increase and so does overall welfare. The gains from trade are further boosted by the increases in competition, the potential to realise economies of scale and potential technology spillovers that openness engenders ([61]).

- It is difficult to estimate the size of gains from trade. Nevertheless, studies have concluded that openness to trade and investment increases growth and provides for higher aggregate economic welfare. For example, economies that have been open towards trade and investment in the 1990s have grown twice as fast as less open ones ([62]).

- While society overall gains from trade, some individuals, sectors and classes of workers may lose out, for example those working in industries exposed to international competition but which fail to adjust. Low-skilled workers in countries where high-skilled labour is abundant may also lose out. While the overall gains should be sufficient to provide compensation to those who lose and still experience net gains, such compensation rarely takes place. In practice, therefore, trade liberalisation policies could in principle be expected to have distributional effects generating both winners and losers, and policies are necessary to even out these effects. In this regard, the flexibility of shifting resources from sectors that lose as a result of trade liberalisation towards those that gain is an essential precondition to ease the incipient distributional consequences of trade liberalisation policies.

- OECD countries have indeed experienced increased inequality recently and several studies have investigated whether trade is the reason behind the declining fortunes of less educated workers. The evidence suggests that trade has a minor impact on the incomes of low-skilled workers compared with the dominant factor, skill-biased technological change ([63]). The evidence also suggests that trade openness does not have an important effect on overall unemployment. Even so, some suggest that trade openness has contributed towards an increased sense of economic insecurity and greater income and consumption volatility ([64]). Overall, while trade openness has contributed towards income gains this may have come with some increase in income volatility and labour market turbulence.

([60]) OECD (2005a).
([61]) Summarised overview from OECD (2005a).
([62]) OECD (2005a), which also reviews other studies documenting gains from trade. For example, Frankel and Romer (1999) have found that output per capita increases with between 0.5–2 %. Bassanini and Scarpetta (2001) find that if openness to trade increases with 10 %, output per working-age person increases with 4 %.
([63]) See, for example, Dewatripont et al. (1999).
([64]) OECD (2005a).

4.1.2. Delocalisation and outsourcing; a qualitative break?

As pointed out in Chapter 2, advances in ICT have made it possible to disperse in different locations the production of goods and services away from the place of consumption. This has enabled firms to break up the production chain and locate production in countries where it is most efficient. Overall, this has led to a fragmentation of the international production chain and a new international division of labour.

In this second wave of globalisation, developing countries are increasingly able to combine their traditional advantage — principally, low labour costs — with an ability to provide high-quality production conditions. This has contributed to the rapid integration of China and India — both countries with large labour surpluses — into the world economy. This integration and an overall increase in trade with low-wage countries have been the major driving forces in international trade in recent years. In comparison, intra-EU trade, the traditionally dynamic part, has become more subdued recently. This declining dynamism of intra-EU trade and its continuing dominance of EU trade patterns suggest that some Member States are not taking advantage to the extent possible of the benefits associated with trade expansion in the more dynamic parts of the world (see Chapter 2) ([65]).

These developments patterns will undoubtedly have an impact on the nature and character of adjustments in Europe and they have already given rise to concerns. The increases in imports, FDI outflows and immigration inflows have increased fears of downward pressure on wages and overall working conditions of low-skilled workers. Moreover, technological advances and the prospect that services — and increasingly those of high value added — may become increasingly traded have fuelled similar concerns among high-skilled workers.

Therefore, trade appears to have become increasingly associated with job insecurity in popular discussions. Contributing to these concerns have been the persistently sluggish EU economy — where economic growth in general and employment growth in particular is underperforming — and plans for further trade liberalisation (Doha Round). Although it would be incorrect to suggest that an anti-trade liberalisation constituency is developing in the EU (over and above what already exists), some have been questioning the wisdom of free-trade principles and their importance for Europe's prosperity. Economists have also considered the possibility that the new patterns of international trade may not necessarily benefit all ([66]).

- Some have highlighted that current trade patterns (north–south trade) may under some conditions lead to non-beneficial outcomes for 'northern' countries ([67]). The increases in skills in countries like China may lead to lower wages for northern workers and lower economic growth. As low-wage countries are increasingly able to provide quality, they acquire a comparative advantage in the same sectors as developed

([65]) See, for example, Bogaert et al. (2004).
([66]) See Monteagudo (2005) for an overview.
([67]) Samuelson (2004).

economies. As differences decline, so may the incentives for trade, which could decrease growth. Second, the entry of large southern countries into the production of similar goods may lead to an overall decrease in the prices of these goods, which may make northern countries worse off. Overall, this may lead to lower wages for workers in the north.

- However, other economists, while conceding this as a theoretical possibility, argue that it is not a very likely one. It would, for example, require China to develop skills in all areas where the EU has a comparative advantage. At the same time, the EU would have to fail to develop new areas of comparative advantage, and given the very different initial conditions in terms of skills, such a development is unlikely ([68]). Moreover, others argue that one should not overestimate the threat coming from skill increases in large developing countries, as jobs offshored so far are predominantly low-skill ones and involve lower value-added services, such as low-end information technology ones ([69]). Even if China and other large developing countries managed to catch up and hence reduce factor-difference driven trade, trade gains can still be realised, this time coming from intra-industry trade.

4.2. Impact of trade, delocalisation and outsourcing on the EU

The challenges arising from delocalisation and outsourcing are conceptually no different from the challenges arising from trade liberalisation in general. Just as with trade liberalisation, how outsourcing and delocalisation translate in terms of costs and benefits depends on the structure of the economy in general ([70]). This section reviews some of the literature on the costs and benefits of trade liberalisation in general and outsourcing and delocalisation in particular.

4.2.1. The theory behind benefits and costs

The ability to outsource and delocalise provides important benefits to companies, consumers and countries ([71]).

- Global sourcing offers benefits to **companies**. It enables them to reduce costs as they can locate and source particular parts of the value chain in the countries where it is most efficient. This saves them money, provides them access to other markets, provides a foothold where they can develop these foreign markets further, provides access to skilled labour and may enable them to use factors of production more flexibly. Allowing companies to delocalise activities where the conditions are most appropriate will in the long run improve their ability to compete internationally. By doing so, it offers the prospect of increasing real incomes and eventually more jobs.

([68]) Panagariya (2004).
([69]) Bhagwati et al. (2004).
([70]) Bhagwati et al. (2004).
([71]) See studies by McKinsey for an overview of how companies and countries benefit.

- Delocalisation offers important benefits to **consumers** as well. They may benefit from lower prices for goods and services and will have access to a wider range of choice; these also will raise real incomes.

- Delocalisation and outsourcing offer benefits to **countries**, both those which are the home of the delocalising companies and those which are the host of the delocalised functions. For both groups, delocalisation is yet another step on the specialisation ladder. For the home country, delocalisation engenders a reallocation of productive resources into more efficient and higher value-added use. The resulting corporate sector's savings also benefit the home country, as these are reinvested in new business activities or returned to shareholders. For the host country, it provides more jobs, more investments and technology. This enables the host country to grow faster and in the medium term this will benefit the home country as well, as the faster growth in the host country is likely to increase the demand for imports, i.e. home country exports.

As regards costs, international trade theory predicts that countries gain when they specialise in areas where they have a comparative advantage. Reallocating resources to that effect engenders an often painful adjustment process though, with some workers losing their jobs as companies are subject to international competition. Therefore, international trade has distributional consequences. Delocalisation is intrinsically linked to trade and sets in motion the same forces. Such adjustment costs may take on a regional dimension if adjustment hits firms, industries or sectors that have a particularly strong regional presence ([72]). This will undoubtedly be the case in Europe too.

4.2.2. Empirical evidence

This section reviews the empirical evidence on the benefits and costs of trade in general and delocalisation and outsourcing in particular. It will assess three key dimensions: (i) impact on the performance of firms (plant productivity), (ii) impact on employment, and (iii) impact on social equality, as evidenced by changes to relative wages and overall position of skilled versus unskilled labour. As noted in Chapter 2, the data on outsourcing and delocalisation are scarce and noisy and there are no official statistics on their extent either ([73]). The uncertainty about the extent of the phenomenon translates into uncertainty about its effects.

4.2.2.1. Impact on productivity

Studies carried out on the impact of delocalisation and outsourcing suggest that it leads to improvements in firm performance. As indicated in Table 10, firms engaging in international outsourcing on average experience positive productivity gains although some firms can gain more than others, most notably those that are simultaneously exporting. Improvements in performance derive primarily from the significant savings on factor costs — estimated to be 45–55 % for US companies by McKinsey — but also from the ability

([72]) Kirkegaard (2005).
([73]) For an overview and assessment of the main measuring methods, see Hijzen (2005).

to further adapt the production process via, for example, consolidation, economies of scale and standardisation. Overall, the final cost base would be at 30–35 % of the initial one before outsourcing ([74]).

Table 10: **Impact of trade, outsourcing and delocalisation on productivity**

Study	Year	Country	Findings
Academic studies			
Görzig and Stephan	2002	Germany	Outsourcing of material inputs can improve establishment performance in terms of returns on sales and profitability. Effects not found for services though.
Mann	2003	USA	Outsourcing of IT production has led to 10–30 % price decreases on IT products. This has enabled a more rapid diffusion of such technologies across the US economy, has contributed to higher productivity growth, and has stimulated the demand for high-skilled services jobs.
Görg, Hanley and Strobl	2005	Ireland	Exporting firms engaging in international outsourcing experience positive productivity gains. A possible reason is that internationally active firms know where to source most efficiently; also, lower input prices enable them to exploit scale economies. The benefits from service outsourcing are less clear. In the short run at least, there appears to be no strong productivity gains from services outsourcing.
Surveys			
McKinsey Global Institute	2003	USA	Firms able to achieve a significantly lower cost base thanks to lower factor costs and more efficient production processes. New cost base 30 % of pre-outsourcing cost base.
McKinsey Global Institute	2004	Germany	Idem, but lower savings. For each euro outsourced, German companies save 36 cents.
McKinsey Global Institute	2005	France	For each euro outsourced, French companies save 36 cents.

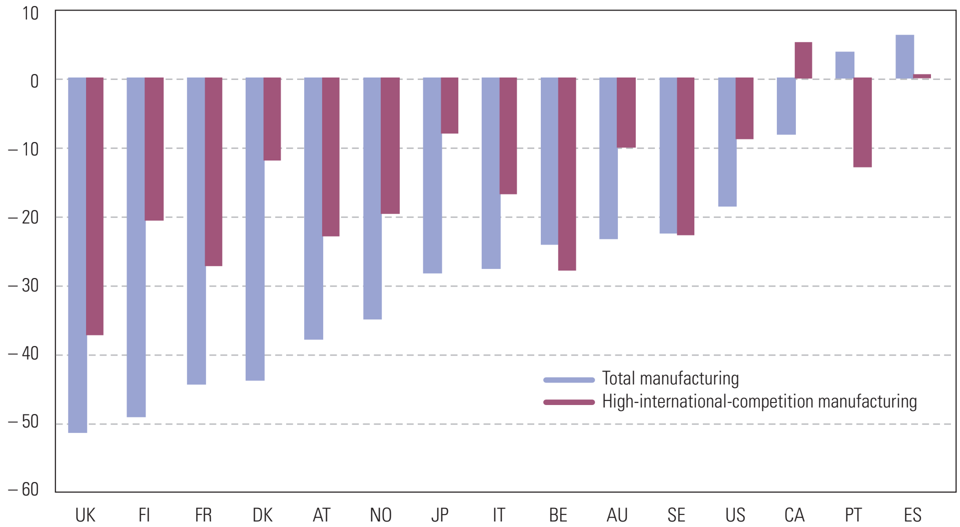
4.2.2.2. Impact on employment

Most of the attention of researchers has focused on the impact of trade, outsourcing and delocalisation on employment. This section will review the literature on: (i) impact of trade in general, and (ii) outsourcing and delocalisation in particular.

The OECD has recently investigated the impact from **international trade in general** on employment. As illustrated by the tables below, the OECD finds that over the period 1980–2000 employment decreased more rapidly in industries that face the strongest increase in international competition in 11 of 15 surveyed countries. On average, these industries have seen a decline in employment by 27 % compared with 16 % in total manufacturing ([75]). However, as stressed by the OECD, employment in manufacturing has overall been very weak, reflecting forces other than international competition, primarily strong gains in productivity, modestly (if at all) rising Engel curves and changing consumption patterns. Moreover, the overall impact on employment has been muted as em-

([74]) McKinsey Global Institute (2003).
([75]) OECD (2005a).

Graph 15: **High international competition and employment growth**
(annual percentage growth rate, 1980–2000)



Source: OECD (2005a), which quotes following sources: OECD STAN database and US Department of Labor, Bureau of Labor Statistics, Foreign Labor Statistics, November 2004, except that wage data for India are estimates based on 2001 and 2003 data from Oxford Economic Forecasting.

ployment in industries exposed to international competition only represented 4 % of total employment in 2000. This is a point made by other observers as well, who stress the long-term trend of decline of manufacturing employment that can be observed in all industrialised nations ([76]). The decline in manufacturing employment and the concomitant strong productivity growth are elements of the transition towards a tertiary economy and has little to do with openness to international trade and globalisation; all industrialising nations have historically experienced this pattern of structural change.

Recent studies have considered the impact of **outsourcing and delocalisation** on employment, primarily in the USA but also in Europe. Most studies have focused on manufacturing but some have also assessed the impact of services' outsourcing and delocalisation. The concern is that the new trade patterns, reflecting an increasing ability of companies to locate production globally, will intensify the impact of international trade on employment. Table 11 summarises recent studies assessing the employment effects of trade, outsourcing and delocalisation.

([76]) CEPII (2004); Bogaert et al. (2004).

Table 11: **Overview of surveys and studies assessing the impact of trade, delocalisation and outsourcing on employment**

	Year	Country	Findings
Surveys			
European Monitoring Centre on Change (EMCC)	2005	Europe	Outsourcing and relocation together represent 7.8 % of all restructuring cases, which corresponds to 3.5 % of total planned job reductions.
McKinsey Global Institute	2005	France	France realises lower gains than the USA, but higher than Germany, from outsourcing. Re-employment of displaced workers estimated at 60 %.
McKinsey Global Institute	2004	Germany	Germany realises much lower gains due to low level of re-employment of displaced workers (40 %).
Forrester Research	2002	USA	100 000 jobs outsourced in 2000.
McKinsey Global Institute	2003	USA	USA realises substantial gains from outsourcing thanks to significant re-employment of displaced workers (69 %).
Forrester Research	2004	USA	3.4 million US jobs outsourced by 2015.
McKinsey Global Institute	2005	Worldwide	Outsourced services jobs from developed to developing countries currently amount to 565 000, which is equal to 0.6 % of total employment in developed countries. An evaluation of eight services sectors (e.g. IT, banking, pharmaceuticals and retail) found that 18.3 million jobs at maximum could in theory be performed remotely (11 % of worldwide services employment). The share was highest in packaged software (49 % of total employment) and lowest in retail (3 % of total employment). McKinsey estimates that, by 2008, total outsourced service jobs will have increased to 1.2 million jobs (1.3 % of total), with IT services and packaged software having the highest portion of high-wage labour demand (13 and 18 % respectively).
Academic studies			
Kucera and Milberg	2002	10 OECD countries	Most of job losses due to intra-OECD trade. Net job losses result from decreasing exports to developing countries, not import penetration.
OECD	2005	12 econometric studies	Most studies find a link between increased import competition (or decreased competitiveness of exports) and declining manufacturing employment. So far, little evidence of outsourcing having detrimental impact on sectoral employment.
Egger et al.	2003	Austria	A comparison of the effects of increased imports, deteriorating terms of trade and outsourcing. The last hurts employment most.
Egger and Egger	2005	Austria	International outsourcing may have a more important effect on employment than often thought, as many industries depend on each other. Outsourcing in one industry may therefore affect employment elsewhere.
Treffler	2001	Canada	Within the context of the North American Free Trade Agreement (NAFTA), about two thirds of the employment losses in the most impacted industries resulted from trade liberalisation. This indicates a large transition cost of moving out of low-end, heavily protected industries.

Aubert and Sillard	2005	France	Between 1995–2001, approximately 13 500 manufacturing jobs were delocalised per year. Half of these went to developing countries, primarily China. Some sectors are more exposed, notably textiles and clothing, but phenomenon experienced in all sectors.
Fontagné and Lorenzi	2005	France	Provided balanced trade; trade with south decreases industrial employment with 0.5–1 %. Limited effects explained by limited weight of south trade overall. However, such trade is increasing and there are distributional effects between skilled and non-skilled labour.
Heitger and Stehn	2003	Germany	No effect of trade with developing countries on wages and employment. Strong effect of technological change and exogenous wage fixing.
Geishecker	2005	Germany	Outsourcing to central and eastern Europe has decreased demand for low-skilled workers in Germany. Due to rigid wages, this has translated into unemployment. The size of the effect is similar to the one imposed by technological progress.
Marin	2004	Germany and Austria	Eastern enlargement leads to small job losses, as jobs in eastern Europe do not compete with jobs in Austria and Germany. The low-cost jobs of affiliates in eastern Europe help Austrian and German firms stay competitive.
Becker et al.	2005	Germany and Sweden	German multinationals are more likely than Swedish ones to locate high-skilled intensive production stages abroad. Even so, in both countries employment in the affiliate substitutes for employment in the parent company.
Faini et al.	1999	Italy	International trade has not contributed to Italy's labour market problems, perhaps due to the effect of falling import prices, which may have boosted labour demand.
Blomström, Fors and Lipsey	1997	Sweden	Outsourcing to developing countries (small) leads to more employment in parent company (especially white collar). Instead of substitution, increase in employment.
Braconier and Ekholm	2000	Sweden	Some evidence of substitution of jobs in Swedish parent to affiliates in other high-income countries, but no evidence of job substitution with affiliates in low-income countries.
Braconier and Ekholm	2001	Sweden Central and eastern Europe	Expansion in central and east European countries' affiliate employment has affected employment elsewhere. Primarily in other low-wage countries in Europe, but also in high-wage countries, albeit to a much lesser extent.
Amiti and Wei	2005	UK (and USA)	Job growth at sectoral level is not negatively related to service outsourcing. For the USA, a small negative effect on employment can be found at firm level, but it disappears quickly when aggregating. This suggests that displaced workers manage to find jobs in other growing industries.
Kletzer	2001	USA	Working in import competing sector exposes worker to somewhat higher risk of job loss.
Mann	2003	USA	Outsourcing of some IT services is projected to increase demand for high value-added IT jobs in the USA.

A number of tentative conclusions can be drawn from these results.

- Overall, outsourcing and delocalisation appear to lead in many cases to job substitution, i.e. the outsourcing or delocalisation of particular production functions abroad lead to job cuts at home. However, there are exceptions, where instead of substitution one sees outsourcing and delocalisation as complementary to home employment.
- Many studies find that the overall size of adjustment associated with outsourcing and delocalisation is limited, with job losses representing a minor part of overall labour market turnover.
- Most studies focus on manufacturing. However, there are some studies on services as well. Many services jobs in Europe are at first sight susceptible to being outsourced or delocalised. Estimations by the OECD suggest that 15–20 % of total employment in service activities in Europe, the USA, Australia and Canada could be subject to outsourcing, but the ILO estimates that only 1–5 % of service sector jobs are potentially contested by low-wage countries.
- There are significant constraints to the extent that outsourcing and delocalisation can take place. While manufacturing activities and to some extent services are vulnerable to outsourcing and delocalisation, the bulk of employment and value added in economies such as ours is based on non-tradable services. Also, information and transport costs and the location advantages that Europe offers will continue to play a significant role in determining industrial location, as indicated by data on foreign direct investment. Finally, enlargement offers an opportunity to internalise the benefits and costs of outsourcing and delocalisation. Investment in new locations in the EU-25 will raise incomes and employment within the EU.

4.2.2.3. Impact on income distribution

The Stolper-Samuelson theorem ([77]) predicts that, under conditions of free trade, factor prices in trading nations will be equal (the real wage and the rate of return to capital), thus offsetting the impact of factor endowments on factor prices. Thus, trade and outsourcing and delocalisation in particular have distributional effects. Recent concerns have been raised about the specific impact on workers with low skills.

Many studies have indeed found that outsourcing and delocalisation has a negative impact on income distribution, as it increases the demand for high-skilled labour and decreases the demand for low-skilled — see Table 11. However, just as with the decrease in manufacturing employment, it is difficult to determine the source of these changes. Many have concluded that, while outsourcing and delocalisation have a negative effect, the main driver for increases in inequality is technological change, not international trade.

([77]) The Stolper-Samuelson theorem says that freeing up international trade will tend to raise the relative price of labour in the labour-abundant country and to lower the price of labour in the capital-abundant country. Initial factor prices, prior to freeing of international trade, reflect relative factor supplies; moving to free trade compensates for the effect of initial endowments on factor prices by raising the relative price of the abundant factor in the labour-abundant country and lower its price in the capital-abundant country; and symmetrically for capital.

Table 12: **Impact of delocalisation and outsourcing on wages and employment by level of skills**

Study	Year	Country	Findings
Bazen and Cardebat	2001	France	Study covering 1985–92 found that delocalisation had negative impact on unskilled labour and wage inequality.
Strauss-Kahn	2003	France	Outsourcing accounted for 11–15 % of shift in relative employment in favour of skilled workers between 1977 and 1985 and 25 % between 1985 and 1993.
Geishecker and Görg	2004	Germany	Low-skilled wages decreased with 1.8 % in 1990s as a result of outsourcing while skilled wages increased with 3.3 %.
Marin	2004	Germany and Austria	Multinational firms in Austria and Germany are outsourcing skill-intensive activities to eastern Europe, taking advantage of cheap abundant skilled labour. This is a response to human capital scarcity in Austria and Germany.
Anderton and Brenton	1999	UK	Outsourcing in textiles accounts for 40 % of the increase in wage inequality and one third of the change in the structure of employment.
Hijzen	2003	UK	Outsourcing behind 12 % of increase in wage inequality during 1990s.
Hijzen et al.	2005	UK	Outsourcing has had a strong negative impact on the demand for unskilled labour in the UK manufacturing industries.
Feenstra and Hanson	1996	USA	Outsourcing (imports of intermediate goods used as proxy) accounted for 31–51 % of increase in relative demand for skilled labour in manufacturing during 1980s.
Feenstra and Hanson	2003	USA	Trade in intermediate goods has effect on relative demand for labour (in favour of skilled) similar to the effect of technological change. For the USA there is evidence that outsourcing in the 1980s and 1990s led to changes in productivity and product prices, which in turn led to a 15 % increase in the relative wage of high-skilled labour.

The negative effects have been found to translate in very different ways. First, there are significant divergences between displaced workers. While some fare well, others have significant problems finding a new or equally well-paid job. One reason could be that displaced workers are often older, less educated, more senior at their workplace and possess inadequate skills (declining sectors). Second, there are also differences between the USA and Europe. In the USA, displaced workers tend to find a new job, but often take a significant wage cut. In Europe, displaced workers tend to face long-term unemployment or complete withdrawal from the labour market. The latter differences undoubtedly reflect the already well-documented differences in labour market performance between the EU and the USA.

Table 13 shows how workers, displaced as a result of trade-related developments, fare in 14 European countries. It shows that blue-collar workers in manufacturing are more exposed to adjustment than white-collar ones, while the opposite appears to be true for services. Moreover, these workers tend to have been employed for a long time. It also shows that a large part of those employed in manufacturing sectors facing high international competition fail to find a new job within two years. However, if they find a job, they do not have to take too much of a wage cut.

Table 13: **Fate of trade displaced workers**

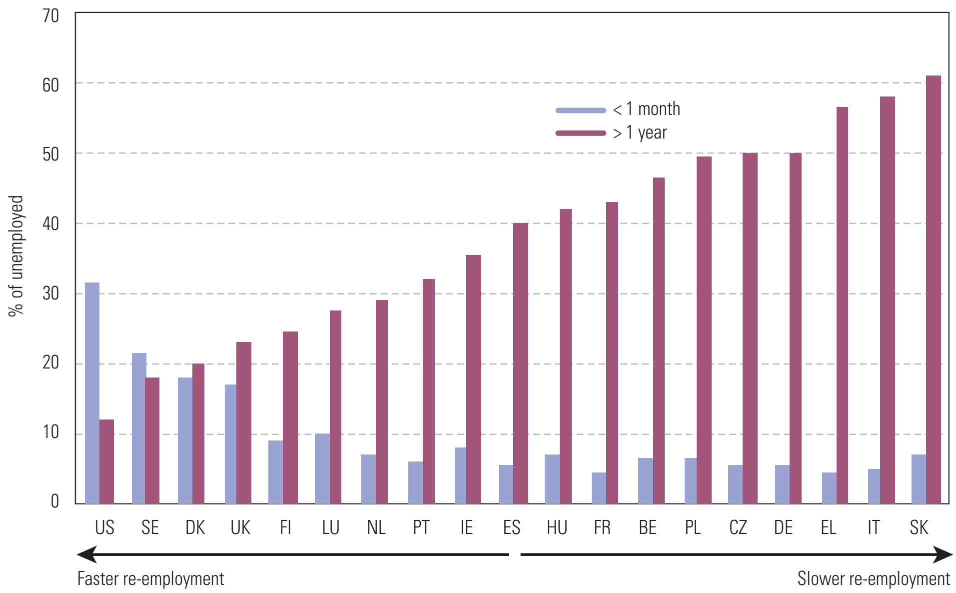
	High-international-competition manufacturing	Medium-international-competition manufacturing	Low-international-competition manufacturing	All manu-facturing	Services	All sectors
Characteristics of workers						
Age at displacement						
15–24	10.4	13.1	11.6	11.8	12.2	11.4
25–54	75.1	75.8	78.1	76.4	78.0	76.9
55–64	14.5	11.2	10.3	11.9	9.8	11.7
Mean	40.9	38.8	39.4	39.7	37.9	39.2
Share women	31.7	44.9	26.2	34.8	43.2	38.2
Predisplacement occupation						
White collar	31.9	20.0	27.1	25.9	73.3	48.5
Blue collar	68.1	80.0	72.9	74.1	26.7	51.5
Job tenure at time of displacement						
More than 10 years	32.1	30.4	27.7	30.0	18.6	21.5
Mean job tenure	7	6.6	6.2	6.3	4.7	5.0
Hourly earnings in old job						
Mean (EUR)	9.51	9.15	9.08	9.43	9.15	9.08
Adjustment costs						
Share re-employed after two years	51.8	58.7	59.6	57.0	57.2	57.3
For re-employed						
Share with no earnings loss or earning more	44.0	45.7	47.3	45.8	49.6	47.1
Share with earnings losses greater than 30 %	5.4	7.0	6.8	6.5	8.4	7.5

Countries: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland and the United Kingdom.
Source: European Household Panel, waves 1 to 8, April 2003, as quoted in OECD (2005a).

4.3. Implications for the EU and its citizens

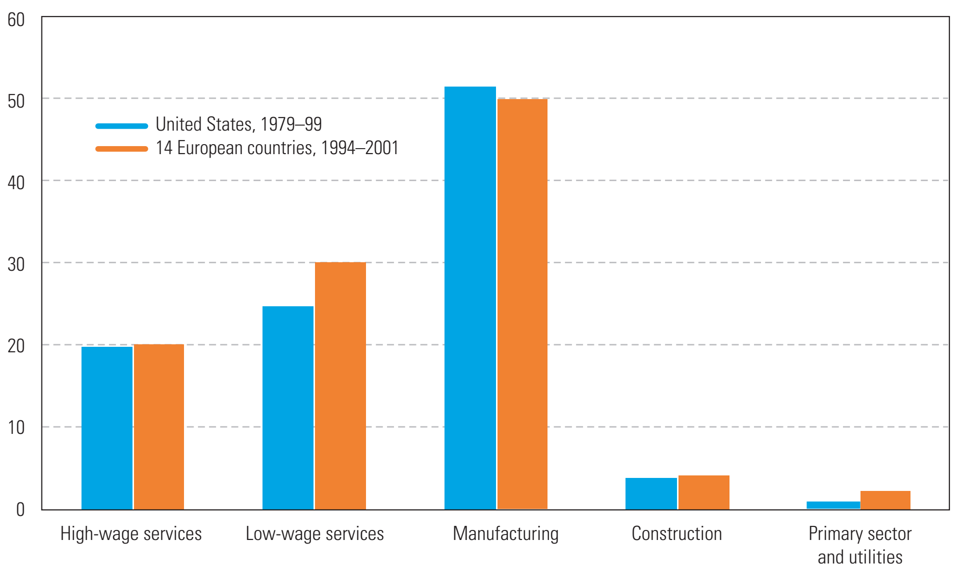
Globalisation is a long-standing phenomenon, representing another stage in the process of internationalisation of our economies. It gives rise to important benefits but it can also generate transitional costs as the economy moves to a new competitive structure. Outsourcing and delocalisation do not constitute a qualitative break from the type of structural adjustments our economies have experienced. What may be 'new' is the speed with which the phenomenon has emerged to impinge upon the ways of producing and consuming for small segments of our economies. While the scale and impact of delocalisation and of outsourcing are currently limited, they have raised concerns among the population and have become part of the popular political folklore at this juncture, not just in the EU but equally promi-

Graph 16: **Duration of unemployment, 2003**



Source: Based on data from OECD (2004).

Graph 17: **Re-employment by industrial sector** (percentage)



Source: OECD (2004).

nently in the USA. It is clear that qualitatively the bogeyman of today is a close relative of the Japanese car bogeyman of the 1970s and of the 1980s which stimulated innovation and reform in the US and EU car industries. With the recovery of economic growth in the EU, the outsourcing bogeyman will also go away.

However, there are signs that Europe is not adjusting as well as it could to the shocks that are imposed on its economy and herein lies the source of outsourcing and delocalisation concerns. In an ideal world, adjustment costs should be short term. To realise the gains from trade it is necessary to move production factors from declining sectors to sectors where the economy has a comparative advantage and where the factors can be put to more efficient use. Therefore, the costs of adjustment should only arise while resources are reallocated. However, there are significant obstacles to this reallocation process in Europe. This locks resources into inefficient use. It leads to capital destruction and the inefficient use of human capital with displaced workers experiencing undue difficulties finding new employment. If the adjustment process does not work, this may lead to permanent exclusion. This is unacceptable, both socially and economically. Thus, it is the lack of sufficient or slow speed of adjustment that contributes to attributing the responsibility for the adjustment costs to globalisation-related shocks rather than to inefficient or distortion-inducing policies.

Graph 16 illustrates the point. In many European countries — notably France, Italy and Germany — very few unemployed return to employment quickly while a very large part remain unemployed for more than a year. This contrast with the USA, Sweden, Denmark and the UK where the reverse is true: the unemployed are much more likely to find a new job within a month.

Moreover, in both Europe and the USA re-employment takes place primarily within the sectors of original employment — see Graph 17. This may reflect the importance of specific human capital, poor retraining opportunities, rigid sectoral wage structures that prevent mobility, as well as geographical immobility and strong location preferences on the part of displaced workers. It is not possible to tell with certainty but the data in Graph 17 may signal that production factors do not move into sectors of improving comparative advantage. If that is the case, from the point of view of economic efficiency it would be desirable if resources were more swiftly reallocated into sectors with an improving comparative advantage. To achieve this, appropriate policies will be necessary.

4.4. Concluding remarks

The prediction of economic theory concerning the impact of international trade on economic performance applies to the case of delocalisation and outsourcing as well: benefits tend to be large, dispersed, long-term and of a permanent nature. The costs tend to be limited, concentrated and of a one-off nature. However, in reality the degree of flexibility of the economy to respond to economic and competitiveness shocks determines to a large extent the nature and duration of the adjustment costs. Overall, the size of adjustment linked to delocalisation and outsourcing is at present limited. In open, dynamic market economies, economic restructuring is a normal part of life and it is a reflection of the impact of domestic and of international shocks on the domestic economy. Incomplete flexibility of the economy and slow adjustment to shocks naturally implies that delocalisation and outsourcing can be sources of short-term difficulties for those that are exposed to their impact. This is the main reason for the need of the adjustment policies discussed in the next chapter.

Summary of Chapter 4

It is not easy to isolate the employment effects of globalisation in general and delocalisation in particular from other competitiveness shocks such as those related to technological change. Furthermore, globalisation and relocation is a two-way street that entails positive and negative effects simultaneously. The evidence suggests that:

- similar to the introduction of new technologies, international trade even with low-wage countries has never led to a net reduction of employment over more than a short period of time. At the aggregate level, there is no evidence that countries with a higher (increase in the) degree of openness, suffer from a higher (increase in the) rate of unemployment;
- the effects of delocalisation on employment are still small, given the: (i) as yet limited scope of delocalisation and outsourcing, (ii) the importance of other forces like technological change, and (iii) the simultaneous process of job creation elsewhere in the economy;
- although in general international trade and investment are not correlated with aggregate net employment losses, *ceteris paribus*, international trade and outsourcing cause a decline in demand for unskilled workers; this is a fundamental prediction of trade theory and the evidence is consistent with it; also, some specific sectors vulnerable to international competition and to shifting comparative advantage can be negatively affected;
- the EU remains vulnerable to competitiveness shocks since it is capitalising insufficiently on the widening trade opportunities offered by world markets. In addition, the process of reallocating resources is not working as well as it should. Displaced workers are often failing to find new jobs and enterprises are often slow to switch into new activities with promising trading value.

5. Policies to enhance competitiveness and manage transition

Previous chapters reviewed the causes, the importance and the effects of delocalisation and outsourcing. To recapitulate, the evidence suggests that currently the impact of the effects in question is small both relative to the size of the economy and relative to the impact of other shocks that impinge upon the economy. However, especially as regards the EU economy, its specialisation and comparative advantage in medium-tech industries and less flexible product and labour markets make it vulnerable to the shocks created by globalisation and shifting comparative advantage. This chapter discusses how these challenges can be addressed by policy-makers.

The first section recapitulates the challenges the EU is facing in view of the evidence presented above. The second part presents what kind of policy responses are needed to tackle the challenges. Outsourcing and delocalisation are natural parts of dynamic, open economies and as such cannot and should not be avoided. The primary role of policy is therefore to ensure that Europe maximises the gains arising from and minimises the losses associated with globalisation in general and outsourcing and delocalisation in particular. This requires a European economy able to successfully handle structural economic change. To achieve this, European economies need to improve their adaptive capacity. Policies are needed to facilitate the transition period during which production factors are reallocated. Beyond facilitating adjustment, there are a number of things that policy can do to position the EU better in the world economy. These policies are more structural in nature.

5.1. The challenges

The EU is facing three challenges at this juncture: (i) strengthening its investment performance and attracting new international investment; (ii) exploiting the advantages world markets offer in terms of opportunities for sales and efficiency enhancement; and (iii) handling the adjustment implications of production being outsourced or delocalised.

- As regards new investment, access to large markets is still the predominant motive for investment location decisions. The EU's strongest selling point to retain current — and attract new — investment is therefore the access it provides to a large pool of consumers in its integrated market of 25 Member States. However, the evidence suggests that the EU is not exploiting its full potential here, as demand remains sluggish and markets remain insufficiently integrated. While part of the problem is undoubtedly cyclical, reversing the poor performance in spending on fixed capital formation and revitalising investment growth remains a significant challenge.

- The second most important reason when deciding where to locate is access to human resources, skills and know-how. The EU has a high potential in this area. However, its current competitiveness profile suggests that it is not capitalising enough on technology and human skills.
- As a large part of trade and FDI flows occur within the EU-15, the EU could be capitalising more on the positive effects offered by globalisation through: (i) access to large and growing markets outside the EU, like China and India, and (ii) increased efficiencies from global sourcing.
- As regards handling the consequences of delocalisation and outsourcing, there are signs that Europe is not adjusting as well as it could to the shocks that are imposed on its economy. This is a more general problem not strictly related to outsourcing and delocalisation but as the latter gain momentum in coming years the adjustment difficulties will also be accentuated. Smooth and least-cost adjustment requires flexibility in markets and an efficient allocation of resources. Globalisation has made this imperative for nations that wish to reap its benefits. There appears to be significant obstacles to the reallocation process in Europe, which locks resources into inefficient use. This is particularly troublesome for labour, with displaced workers experiencing undue difficulties finding new employment. If the adjustment process does not work smoothly, this may lead to permanent exclusion.

5.2. The policy response

Globalisation, outsourcing and delocalisation are not problems per se. The appropriate policy response must be to ensure that all the incipient benefits are realised and our incomes grow in accordance. The European economy is inextricably linked to the world economy. It is essential for European firms to be able to access international markets, exploit efficiency advantages and access strategic assets in order to stay competitive. If EU firms are not exploiting the opportunities offered by globalisation as efficiently as their competitors, they may have to downsize or close down plants altogether.

Europe could exploit the opportunities offered by outsourcing and delocalisation more, by attracting firms from abroad and by EU firms improving their competitive position through international sourcing and selling on world markets. Therefore, the real challenge is to improve the European economy so that globalisation and delocalisation are no longer a threat to jobs, but an opportunity for growth in the EU. To achieve this, the European economy needs to improve its adaptive capacity.

It is beyond the scope of this paper to outline how policy instruments should be formulated and mobilised in detail. Instead, this paper: (i) formulates the general objectives that policy needs to achieve in order to enable the EU to profit fully from globalisation and delocalisation, and (ii) identifies the instruments that have the potential of contributing towards the delivery of these objectives.

5.2.1. Twin goals: improving competitiveness and facilitating transition

Two kinds of policies are needed to address the challenges outlined above. A first set of policies needs to aim at providing the framework conditions on which Europe can maintain and strengthen its sustainable competitive position. Another set of policies should facilitate the process of adjusting to the shocks of globalisation and delocalisation.

The first set of policies focuses on the ability of the EU economy to adapt without generating net losses, by creating new activities and jobs, and to shift resources from declining sectors to sectors where Europe can sustain a comparative advantage. However, creating and sustaining high value-added activities requires a dynamic framework where the economy is able to transform and where innovation can spur productivity and job growth. Without such a dynamic framework, no new jobs will be created to replace the jobs lost. A persistently rigid Europe will not reap the full benefits from globalisation. However, this first set of policies is not specific to dealing with the shocks from globalisation and delocalisation in particular. Instead, it overlaps with the set of policies required for dealing with other shocks such as technological change, new organisational modes for firms and differential productivity shocks. As such, it broadly fits within the recently revised — but far from implemented — Lisbon strategy for growth and employment. The box below details how the Community is developing its policy response to deal with restructuring in general.

Most theoretical models illustrating the positive effects from globalisation assume full employment and flexible labour markets. Since in practice labour market rigidities are always present, particularly in Europe, short-term negative effects on employment are inevitable. No matter how significant the ultimate positive impact of globalisation might be, losses will occur during the period of transition. The real problem occurs when displaced workers remain unemployed. This is why policies to facilitate the transition are needed. Labour market institutions have a particular role to play in this respect, as they determine the ease by which alternative employment can be found.

5.2.2. A 'systems' approach

The policy instruments outlined below should not be considered in isolation. Rather, they should be part of a coherent and consistent policy approach requiring coordination across the different policy areas and policy levels (EU and Member States). A balanced policy mix will benefit from synergies among the different instruments. Comprehensive reform programmes (like the Lisbon strategy) are likely to be more effective than piecemeal strategies.

More particularly, the two sets of policies (improving competitiveness and facilitating transition) should be seen as complementary. The first set of policies is particularly important for remedying the structural problems of the EU economy. Once a more resilient EU economy is in place, the need for policy intervention to facilitate transition decreases. In the absence of a resilient EU economy, transition support could run the risk of becoming permanent.

At the same time, policies to facilitate transition are also important to improve competitiveness, as the gains of trade will be lower if production factors are not reallocated smoothly. Moreover, it can also be regarded as enlightened self-interest for those who argue in favour of economic openness since a skewed allocation of the costs and benefits is likely to erode support for economic openness.

5.2.3. Level of implementation

Instruments at both EU and Member State level need to be considered. Although it is clear that many of the instruments are at the national level, there are nevertheless a number of areas where the Community has instruments at its disposal. Apart from being a direct actor, it can also facilitate and coordinate Member State policy. The summary table in Annex 1 outlines a tentative division of labour between Member States and the Community.

Before detailing the various instruments, it is important to stress that many of them are already in place, both at the EU and at the level of the Member States. At the EU level

Initiatives announced in the communication on restructuring and employment

On 31 March 2005, the European Commission adopted a communication setting out measures to be developed or strengthened with the aim of ensuring 'improved anticipation and management of restructuring' within the EU.

The Commission proposed a refocused **European employment strategy** around three priorities of direct relevance to restructuring: (i) boosting the labour market participation; (ii) improving the adaptability of workers and companies; and (iii) investing more in 'human capital'. The new employment guidelines adopted on 12 July 2005, as part of the integrated guidelines, fully develop the priorities referred to in the communication. The package of proposals put forward by the Commission is described below.

Enhanced coordination between key strands of EU policy

The Commission argues that **enhanced coordination** is necessary across the range of existing EU policies that are relevant to restructuring, such as industrial, competition, trade and employment policy. The Restructuring Task Force created immediately after the adoption of the communication has been instrumental to this. Reinforced dialogue and exchanges between different Commission services have also contributed to that.

New and refocused financial support

The communication identifies reforms of **EU financial instruments** to focus more on restructuring-related developments, including the creation of a Growth Adjustment Fund with an annual budget of EUR 1 billion to enable public intervention where unforeseen events have a severe regional or sectoral impact. Moreover, Structural Funds in general and those allocated to the 'Competitiveness and employment' objective (previously Objective 2) in particular are likely to be more focused on the support to adaptation to change and restructuring.

As a first step in launching the discussion on the priorities for the new generation of cohesion policy programmes, the Commission published on 6 July 2005 draft Community strategic guidelines entitled 'Cohesion policy in support of growth and jobs: Community strategic guidelines, 2007–13'. The guidelines set out a framework for new programmes which will be supported by the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund. In addition, the communication includes proposals on the adaptation of the regulatory framework and the greater involvement of the social partners.

the revised Lisbon strategy for growth and employment details the structural reforms needed to make the EU the most competitive economy. Within this framework, the Commission is setting out measures to be developed and strengthened with the aim of ensuring improved anticipation and management of restructuring within the EU. Nevertheless, the instruments put in place within or beyond the Lisbon strategy need to be mobilised better to fit into a coherent, systemic policy approach to face the challenges of globalisation.

5.3. Providing the framework conditions on which Europe can maintain and build its competitive position

In order to provide a better foundation for Europe to respond to the challenges of globalisation, delocalisation and outsourcing and thereby maximising the opportunities offered by these phenomena, policy needs to focus on four objectives.

- ***Provide a dynamic European market and nurture a vigorous entrepreneurial culture.*** Ultimately, companies locate where the market is. Providing firms with access to a growing and dynamic market is therefore the best way to ensure that Europe remains the location of choice. While the legal framework is more or less in place, more can be done to deliver a truly dynamic single market, most notably in the area of services.

- ***Support an environment conducive to firms moving into high value-added production.*** To sustain our social model, we ultimately need to produce and sell goods and services with a high value added. While Europe stands strong in upmarket products and intermediate skills, we are less strong in other high value-added areas, such as those with a high technology or skill content. While limited, policy could nevertheless play a supporting role by putting in place an environment conducive to firms exploiting such markets.

- ***Improve Europe's ability to adapt and adjust to shocks.*** Delocalisation is bound to happen. Once it does, affected workers and regions need to be able to quickly adapt and adjust. This is currently not sufficiently the case, with many displaced workers finding it hard to find new employment. This is partly due to insufficient new jobs being created, but also to a lack of mobility.

- ***Improve Europe's ability to reap the benefits of a global market.*** Trade policy has a key role in ensuring an open trading system both via multilateral and regional agreements as well as protecting intellectual property rights.

5.3.1. A dynamic European market and a vigorous entrepreneurial culture

Ultimately, companies locate where the market is, as the empirical evidence presented in Chapters 2 and 3 has demonstrated. Therefore, the best way to attract new firms and stem the flow of company resources out of Europe is to provide companies access to a dynamic European market.

A key objective of the single market programme was to raise the dynamism of Europe's economy by removing obstacles that fragment the internal market. Over the years, a more integrated European market has certainly been achieved, supported more recently by the single currency. By and large, it has been a success: a large internal market without currency borders has provided a much better foundation for economic growth. However, the process of integration has gone further in some sectors (goods) than others, most notably services and network industries. Moreover, many of the laws setting up the single market in the various sectors have problems. For example, they often tend to favour incumbents over new entrants. Moreover, the legislative procedure often produces laws that are too detailed to fit a Union as diverse as ours. To address this requires an increased focus on regulatory quality (less and simpler rules with better enforcement), and changes to the way the Commission drafts legislation and to the way legislation is adopted. Such efforts are already under way. It is important that they are continued.

However, it is not only important to get legislation right. Other policies also contribute to providing a more dynamic European market. Competition policy (including State aid policy) is necessary to minimise barriers to entry and control incumbents. A single market by itself will not ensure that incipient economic opportunities are translated into flourishing business ventures. To realise this potential, it is essential that the administrative and business environment encourages risk taking and that individual entrepreneurs are not confronted with unnecessary obstacles and costs when they begin a business enterprise.

5.3.2. Support environment conducive to firms moving into high value-added production

To survive in an increasingly competitive world, Europe essentially needs to produce and sell goods and services with a high value added domestically but also in world markets. The competitiveness challenge of raising productivity growth is alerting us to the difficulties Europe is currently encountering in shifting resources in activities of greater value and of employment promise. Europe stands strong in upmarket products and intermediate skills (e.g. products characterised by a high quality or strong brands), but we are less strong in other areas characterised by high value added, for example sectors with higher skill or technology content, which typically have more scope for sustained growth and where demand for these products is characterised by generally high income elasticity. Policy could play a supporting role in establishing conditions conducive to firms exploiting such markets.

One way to encourage such an environment is by stimulating R & D and innovation. This does not necessarily only mean more funding. The EU and Member States need to spend available resources more efficiently and in a better and more focused way. Overall, research funds should be devoted to areas where they could contribute to deepen Europe's comparative advantage. Moreover, the method of allocation of funds needs to be improved, on an open, transparent, competitive basis.

More needs to be done in order to ensure that the results of such research gain commercial application, translate into new products and processes, and create value in areas where the EU can sustain a comparative advantage. One way to achieve this is by ensuring that the market place is contestable, as this provides firms with the incentive to align their operations so as to achieve the highest value added, a role for competition policy. Also, consistent with what was mentioned earlier, the EU needs to continue its Lisbon reform programme to improve the fundamental framework conditions that determine behaviour in product, capital and labour markets.

Finally, a highly skilled workforce is necessary in order to enhance Europe's comparative advantage in high value-added production and in order to make sure that the financial resources that might be allocated to finance R & D are efficiently employed with complementary human resources. Therefore, human capital policies are of fundamental importance. In this regard, and given the central role of science and technology in current and in prospective productivity performance, it is necessary to motivate greater participation in science and technology studies on the part of the school generation and also to align more closely university curricula to the new sciences. Ultimately, the reform of the university sector and the manner in which higher education is procured and financed will be unavoidable in coming years; it is, therefore, essential to speed up the adjustment process of institutions of higher learning to modern demands. The need for improving performance does not apply only to the university sector. On-the-job training — accessible to all — and upgrading basic skills among the population are also important. Clearly, such training is more effective if it builds on more general human capital investments made earlier in life (primary, secondary and tertiary education).

5.3.3. Improve Europe's ability to adapt and adjust to shocks

Globalisation, delocalisation and outsourcing have benefited the European economy in the past and will continue to do so, thereby raising our real incomes and economic well-being. In order to maximise the benefits and minimise the adjustment costs, European production factors need to adapt and adjust fluently to the various shocks that impinge on our economies. However, as noted in Chapter 4, there are signs that the process of adjustment is cumbersome and works slowly in Europe. This is particularly the case for the European labour force where, by and large, displaced workers often have problems finding a new job within a reasonable time and often become irrelevant to the labour market by joining the ranks of the long-term unemployed.

Generally, to improve adaptability often requires a deeper reform of the structures underpinning our markets. Such **structural reforms** are outlined in the revised Lisbon strategy and involve: (i) reducing of regulatory burdens — both at the Member State and Community level — and in the years to come, a consistent maintenance of simple and uniform rules and procedures which reduce the cost of doing business; (ii) increasing labour market participation; (iii) upgrading the stock of human capital (mainly by training and education but also by facilitating high-skilled immigrants to be granted visas); and (iv) providing a tax system consistent with high national savings that makes Europe an attractive location to invest for foreign and domestic investors.

Of these, the structures underpinning **labour markets** are in particular need of review in order to enable workers to better adapt to economic shocks. This would improve the reallocation of production factors to areas where Europe can develop and sustain comparative advantage. An essential issue here concerns the need for flexibility in labour market arrangements. The costs of firing are intrinsically linked to the costs of hiring, as a higher level of employment protection can often work, *ceteris paribus*, against job creation. Moreover, the growth in real wages needs to be consistent with productivity growth. More flexibility and adaptability will need to be accompanied by investments in human capital. Without investments in skills it will be difficult for displaced workers to find new jobs and to enable the EU to move up the value chain. Investments in human capital should therefore be made at all levels, be it earlier (primary, secondary and tertiary education) or later in life (vocational training, lifelong learning).

Shocks may sometimes have a strong **regional** impact when a particular industry or sector is affected. Unemployment in Europe is concentrated in certain regions (e.g. southern Italy, southern Spain, the former East Germany and certain regions in the new Member States) ([78]). A system that leads to high average unemployment rates and in some cases very high and persistent regional unemployment rates is ill adapted to effectively weather economic shocks, be they trade related or not. To improve the ability of regions to absorb shocks, one should assess the extent to which economic institutions need to be adapted to region-specific needs. One such institution is the process of setting wages. The large regional unemployment differences indicate among other things that labour costs in these regions are too high relative to other regions ([79]). More wage flexibility, for example via a more decentralised wage negotiation process, could contribute towards correcting this. Apart from more flexible wages, adapting institutions to regional needs is likely to involve tax and benefit systems, ensuring that active labour market policies better support mobility across regions, ensure the portability of benefits across regions, and design particular human capital investments in regions already affected or likely to become affected.

5.3.4. Improve Europe's ability to reap the full benefits of a global dynamic market

To reap the benefits from the global economy, the EU has an interest in maintaining an open multilateral trading system. This means ensuring that our own market is sufficiently open to procure and exchange competitively final and intermediate products and to stimulate technical progress. Firms more active in export markets are more likely to benefit from the opportunities offered by delocalisation, creating new jobs at home. Supporting and defending an open and competitive international trading system is the basis for European firms to obtain access to third markets and to prosper through improved specialisation, larger economies of scale and by exploiting commercial advantages in new markets.

The EU should ensure that the positive changes induced by openness are not jeopardised by abuses of fair competition. Consequently, it should continue to ensure that anti-competitive practices do not distort or undermine international trade.

These objectives should be primarily pursued through an ambitious strategy in the Doha Round. It should be complemented by bilateral or regional initiatives, such as regional

([78]) For example, recent figures from Eurostat (October 2005) indicate that regional unemployment in the EU-25 ranges from 2.4 % to 32.8 %.

([79]) De Koning et al. (2004).

trade agreements (RTAs), which allow the pursuit of a wider agenda than on the multilateral arena. Moreover, in view of the EU's comparative advantage on upmarket products — which are not necessarily always high-tech — the EU should continue to defend an improved enforcement of intellectual property rights in the broad sense (beyond patents and also include brand names, trademarks, design, etc.). It should also reinforce international norms and standards to tackle non-tariff barriers detrimental to EU industry.

5.4. Facilitate transition and adjustment to shocks

The policies discussed in Section 5.3 may be thought of as medium-term policies that are relevant irrespective of the source of shocks. They overlap with the reforms embedded in the Lisbon strategy which aim at improving Europe's ability to produce (raising the level and improving growth of its potential output) and raise its standards of living.

Clearly, such policies are essential because more flexible and more resilient economies are adapting to shocks with less transitional costs and over shorter transitional periods than less flexible and less resilient ones. It is well known that the EU economy does not at present have such characteristics and, as mentioned previously, globalisation, outsourcing and delocalisation shocks are bound to create short-term adjustment difficulties and to inflict job and income losses to especially vulnerable segments of the labour market and of our citizenship. Note also that even flexible and resilient economies are invariably characterised by information asymmetries and by 'conservative' deeper preferences that limit the extent of adaptability to shocks. In economies that have difficulties in adapting to structural change, even popular support for free trade, especially during periods of slow growth, may be undermined unless economic policies aimed at addressing these problems can be devised. Finally, governments are invariably expected by citizens to provide responses to external shocks, especially shocks such as those related to globalisation that often appear to offend the popular sense of equity and justice. It is, therefore, important that short-term adjustment policies be also developed as part of the strategy to embrace the various aspects of globalisation and mitigate its short-term negative effects.

Policy to address problems related to outsourcing and delocalisation, which do not interfere with the market allocation signals for efficient use of economic resources, should pursue three objectives.

- ***Cushion temporarily the impact on the incomes of those workers affected by structural change while facilitating re-employment.*** Unemployment benefits are designed to ensure workers against unemployment-induced income loss. However, in the context of such support, it is essential that incentives remain to take up work should an opportunity present itself. To this effect, tax and benefit systems may need to be reassessed.

- ***Cushion regional impact while facilitating reallocation of resources economy-wide.*** Specific policies may be necessary when the impact is especially concentrated in specific regions of the EU and, to the extent that the shock affects symmetrically several regions, coordinated policies to address the problems are required. Clearly, the policies in question must also consider occupational and geographical mobility incentives and the option of movement of workers towards regions experiencing better economic fortunes.

- ***Anticipate change.*** Changes could be anticipated before they occur when sufficiently credible and robust information becomes available especially as regards sectors that are likely to be affected. In such cases, workers at risk could be assisted in moving and if necessary in improving their skills. However, such preventive assistance is in many cases associated with severe information problems and anticipatory intervention may run the risk of being inefficient.

5.4.1. Cushion impact on workers' incomes while stimulating and facilitating re-employment

To maintain support for economic openness, it is necessary to ensure adequate short-term support for those affected by structural change. Unemployment benefits already provide such support. However, it could be explored whether more can be done to cushion the impact while ensuring that incentives remain to take up new jobs.

In order to provide additional income support to workers displaced by trade, delocalisation and outsourcing, some kind of additional restructuring assistance could be provided. This could be modelled on the US trade adjustment assistance programme.

It is not clear that the assistance programmes should be taken up at the EU level, since the costs occur at Member State level. However, the Commission may well need such an instrument from a political economy point of view. Community involvement in support measures may succeed in counteracting the popular impression that the Community is responsible for the costs by its focus on market opening. It is politically difficult for the Commission to push for further market opening if it cannot show that it cares about those affected by opening. Restructuring assistance would fill that void, provided that it is clearly targeted and controlled.

In the context of such support, it is essential that incentives remain to take up work should an opportunity present itself. To this effect, tax and benefit systems may need to be reassessed, for example via decreases in marginal effective tax rates and reforms aimed at 'making work pay'. Furthermore, even though less of an issue in Europe compared to the USA, some workers hesitate to take up new employment due to an associated wage decrease. It could be contemplated whether additional insurance systems against such wage losses should be implemented. Some Member States have already done so to some extent (see box below). These initiatives are too recent to have been thoroughly tested. They are associated with risks, for example the impact on how thoroughly job seekers look for good jobs and how it affects the willingness to undergo training. Tests of a similar system in Canada ('Earnings supplement project') found that, while it did not affect the job search intensity, those covered by the insurance considered a wider range of potential jobs. However, the system had little influence on the amount and duration of unemployment benefits ([80]).

([80]) OECD (2005a), p. 56.

Outline of a potential Trade Adjustment Fund

Creating a fund to support adjustment is not new. The Sapir report put forward a **Restructuring Fund** aimed at facilitating the process of resource reallocation that follows deeper and wider economic integration. It would be available to all workers adversely affected by change. Workers could use the fund to cover three needs: (i) re-training, (ii) compensation for relocation costs, and (iii) setting up a new business. Eligibility would be limited in time, subject to renewal. The Commission, as part of its 2004 proposal for the next financial perspectives, put forward a **Growth Adjustment Fund** aimed at improving the responsiveness of expenditure to changes in circumstance. The aim was to help deliver cohesion and growth objectives and help deal with events that have a harder than foreseen impact on growth and employment. Following annual Lisbon programme evaluations, the fund would be used to address gaps in delivery by topping up expenditure in competitiveness and cohesion headings. However, the Commission proposal was not well received by Member States, who were either opposed or unconvinced.

An extension of these ideas is a model for a **Structural** or **Trade Adjustment Fund** (S(TAF)) which may be based on the experience of the US trade adjustment assistance (TAA) and its more recent reincarnation in the form of the NAFTA-TAA. The original motivation of the US TAA was to ease the burden of adjustment to economic change following the beginning rounds of trade liberalisation in the early 1960s.

Such a fund could be appealing. First, it may be aimed at **workers** affected adversely by globalisation and the opening up to international trade; it might be made available to workers other than those directly affected by trade-opening measures, and this would include secondary workers working in downstream industries that supply the affected enterprises; it could be modelled in such a way that monitoring its effectiveness is secured; it should aim at restoring workers' skills and promoting mobility and finding employment; and it should have such characteristics that are consistent with incentives for those affected to seek alternative employment quickly and not fall into the welfare and poverty trap.

While problems arising from structural change may be considered best dealt with at Member State level, there is an important Community dimension too. Trade policy is implemented at the EU level and, hence, the inequities related to this may in part be dealt with by the EU budget. Moreover, as structural change might affect different industries across the EU simultaneously, it is difficult to assign the full adjustment costs to Member States alone. Finally, because of the nature of the workers and industries likely to be affected — older industries and less skilled workers — there is a need to assist in retraining and relocation and in promoting their occupational and geographical mobility. While the involvement of the EU here is not necessarily compelling, it is possible to find support for using some of the EU financial resources to supplement resources of Member States used for structural adjustment assistance.

Examples of wage insurance

France has since 1999 put in place a system of wage insurance (***conventions d'allocations temporaires degressives***) for workers subject to mass layoffs who find a new permanent job that pays less. The insurance covers 75 % of the wage difference (maximum EUR 153/month). The previous employer is expected to contribute further. In case the employer cannot, the ceiling can be increased to EUR 229 per month. This insurance is limited to two years.

A wage insurance system is also in place in **Germany** since 2003 (***Entgeltsicherung für ältere Arbeitnehmer***). It covers job losers above the age of 50. If they are re-employed in a job paying less than their previous one, they are entitled to two forms of insurance: first, 50 % of the gap in earnings; second, a top-up of pension contributions so that these reach 90 % of the level of the previous job. These insurances are not limited in time.

Source: OECD (2005a).

In order to facilitate the re-employment of displaced workers, active labour market policies are likely to play a role. However, some are more effective and efficient than others. Job search and placement assistance are good, especially if assistance is rapid and tailored to individual needs. Vocational training and subsidised employment may have some effects but are costly and come with a time lag.

5.4.2. Cushion regional impact while facilitating reallocation of resources economy-wide

Adjustment to trade, outsourcing and delocalisation may sometimes hit a particular region hard. In other words, the shock may be asymmetric and sector specific. Addressing this requires appropriate long-term policies aimed to enable regions to perform better. However, a case can be made to offer some short-term assistance to those regions that suffer a particularly severe trade-related shock. Such assistance, through regional policy/ Structural Funds, should not run counter to the overall goal of ensuring a reallocation of resources economy-wide. It should therefore not lock displaced workers into job creation programmes for a prolonged period of time. Accordingly, it should be temporary, effectively acting as a short-term income support to regions. In addition, these measures should be transparent and cost efficient.

5.4.3. Anticipate change

In view of the often uncertain fate of displaced workers, it would at first sight make sense to try to anticipate the sometimes predictable shocks. The sooner the intervention starts, the lower the total costs will be. At a micro-level, such prior intervention to assist workers at risk could be envisaged. Firms could aim to provide workers with advance notice and active labour market policies could be geared towards providing job search assistance and planning prior to displacement. Information about retraining and about mobility possibilities will also be essential to assist workers in their job search.

References

Alesina, A., Ardagna, S., Nicoletti, G. and F. Schiantarelli (2005). 'Regulation and investment', *Journal of the European Economic Association*, MIT Press, Vol. 3(4), pp. 791–825.

Amiti, M. and S. Wei (2005). 'Fear of service outsourcing: Is it justified?', *Economic Policy*, April 2005, CEPR, London.

Anderton, R. and P. Brenton (1999). 'Outsourcing and low-skilled workers in the UK', *Bulletin of Economic Research*, Vol. 51, No 4.

Aubert, P. and P. Sillard (2005). 'Délocalisations et reductions d'effectifs dans l'industrie francaise', *INSEE Document de Travail*, INSEE, Paris.

Baily, M. and D. Farrell (2004). 'Exploding the myths about offshoring', McKinsey Global Institute.

Bassanini, A. and S. Scarpetta (2001). 'The driving forces of economic growth: Panel data evidence for the OECD countries', *OECD Economic Studies*, No 33, OECD, Paris.

Bazen, S. and J. M. Cardebat (2001). 'The impact of trade on the relative wages and employment of low skill workers in France ', *Applied Economics*, 33, 2001.

Becker, S., Ekholm, K., Jaeckle, R. and M. A. Muendler (2005). 'Location choice and employment decisions: A comparison of German and Swedish multinationals', *CESIfo Working Paper*, No 1374, January 2005.

Bhagwati, J., Panagariya, A. and T. N. Srinivasan (2004). 'The muddles over outsourcing', *Journal of Economic Perspectives*, Vol. 18, No 4, pp. 93–114.

Blomström, M., Fors, G. and R. E. Lipsey (1997). 'Foreign direct investment and employment: Home country experience in the United States and Sweden', *Economic Journal*, November 1997.

Blomström, M. and A. Kokko (2003). 'The economics of foreign direct investment incentives', *NBER Working Paper*, No 9489, Cambridge, MA,

Bogaert, H., Gilot, A. and C. Kegels (2004). 'L'industrie a-t-elle un avenir en Belgique?', *Working Paper*, No 10, Bureau Federal du Plan, Brussels.

Braconier, H. and K. Ekholm (2000). 'Swedish multinationals and competition from high- and low-wage locations', *Review of International Economics*, No 8.

Braconier, H. and K. Ekholm (2001). 'FDI in eastern and central Europe: Employment effects in the EU', *CEPR Discussion Paper*, No 3052.

Bundesverband der Deutschen Industrie — BDI (2004). 'Die Steuerbelastung der Unternehmen in Deutschland'.

Caves, R. (1996). *Multinational enterprise and economic analysis*, Cambridge University Press.

CEPII (2004). *European industry's place in the international division of labour: Situation and prospects*, CEPII, Paris.

De Koning, J., Layard, R., Nickell, S. and N. Westergaard-Nielsen (2004). 'Policies for full employment', UK Department for Work and Pensions.

De Mooij, R. and S. Ederveen (2003). 'Taxation and foreign direct investment: A synthesis of empirical research', *International Tax and Public Finance*, 10, 673–693.

Dewatripont, M., Sapir, A. and K. Sekkat (1999). *Trade and jobs in Europe — Much ado about nothing?*, Oxford University Press.

Drezner, D. W. (2004). 'The outsourcing bogeyman', *Foreign Affairs*, May/June 2004.

Dunning, J. (1988). 'The eclectic paradigm of international production: A restatement and some possible extensions', *Journal of International Business Studies*, 19, pp. 1–31.

ECB (2005). 'Competitiveness and the export performance of the euro area', *Occasional Paper Series*, No 30, ECB, Frankfurt.

Egger, H. and P. Egger (2005). 'Labour market effects of outsourcing under industrial interdependence', *International Review of Economics and Finance,* 14 (2005), 349–363.

Egger, P., Pfaffermayr, M. and A. Weber (2003). 'Sectoral adjustment of employment: The impact of outsourcing and trade at the micro-level', *IZA Discussion Paper*, No 921, Institute for the Study of Labour (IZA).

Ernst & Young (2005). European Attractiveness Survey 2005. http://www.ey.com/global/download.nsf/International/European_Attractiveness_Survey_May_2005/$file/EY_European_Attractiveness_Survey_June_2005.pdf

European Commission (2004a). *European Employment Report 2004*, European Commission, Brussels.

European Commission (2004b). *European Competitiveness Report*, European Commission, Brussels.

European Commission (2005a). 'The European economy: Annual review 2005', European Commission, Brussels, forthcoming.

European Commission (2005b). *EU sectoral competitiveness indicators*, European Commission, Brussels.

European Commission (2005c). 'Delocalisation: Which challenges for the EU economy?', note for the Economic and Policy Committee, European Commission, Brussels.

European Commission (2005d). 'Price and cost competitiveness', Economic and Financial Affairs DG, second quarter 2005, update 1 August 2005, European Commission, Brussels. http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetiteveness_en.htm

European Commission (2005e). *Key figures 2005: Towards a European research area. Science, technology and innovation.* European Commission, Brussels. ftp://ftp.cordis.lu/pub/indicators/docs/2004_1857_en_web.pdf

European Commission (2005f). 'Relocations: A fact sheet', Enterprise and Industry DG, manuscript, May 2005, European Commission, Brussels.

European Monitoring Centre on Change (2005). *European Restructuring Monitor Quarterly*, Issue 2, summer 2005. http://www.emcc.eurofound.eu.int/erm/templates/displaydoc.php?docID=28

Faini, F., Falzoni, A. M., Galeotti, R. H. and A. Turrini (1999). 'Importing jobs and exporting firms? On the wage and employment implications of Italy's trade and foreign direct investment flows', *Giornale degli Economisti e Annali dell'Economia*, Vol. 58, No 1.

Feenstra, R. C. and G. Hanson (1996). 'Globalisation, outsourcing and wage inequality', *NBER Working Papers*, No 5424, National Bureau of Economic Research.

Feenstra, R. C. and G. Hanson (2003). 'Global production sharing and rising inequality: A survey of trade and wages' in K. Choi and J. Harrigan (eds), *Handbook of International Trade*, Blackwell, Oxford.

Fontagné, L. (2005). 'Faut-il avoir peur des délocalisations?', Fontagné: *les cahiers*, Cahier No 21, En temps réel, Paris.

Fontagné, L. and J-H. Lorenzi (2005). *Désindustrialisation, délocalisations.* Conseils d'Analyse Économique, Paris.

Forrester Research (2002). '3.3 million US services jobs to go offshore', *Trends*, November 2002.

Forrester Research (2004). 'Near-term growth of offshoring accelerating', *Trends*, May 2004.

Frankel, J. A. and D. Romer (1999). 'Does trade cause growth?', *American Economic Review*, Vol. 89, No 3.

Geishecker, I. (2005). 'Does outsourcing to central and eastern Europe really threaten manual workers' jobs in Germany?', paper presented at the workshop 'The effects of relocation on economic activity: an EU perspective', organised by the Economic and Financial Affairs DG, European Commission, 21 June 2005.

Geishecker, I. and H. Görg (2004). 'International outsourcing and wages: Winners and losers', DIW, Berlin.

Gorter, J. and R. de Mooij (2001). 'Capital income taxation in Europe: Trends and trade-offs', CPB, The Hague. http://www.cpb.nl/eng/pub/bijzonder/30/

Görg, H., Hanley, A. and E. Strobl (2005). 'International outsourcing, foreign ownership, exporting and productivity: An empirical investigation with plant level data', paper presented at the workshop 'The effects of relocation on economic activity: an EU perspective' organised by the Economic and Financial Affairs DG, European Commission, 21 June 2005.

Görzig, B. and A. Stephan (2002). 'Outsourcing and firm-level performance', DIW, Discussion Paper No 309, DIW, Berlin.

Head, K. and T. Mayer (2004). 'The empirics of agglomeration in trade', *Handbook of Regional and Urban Economics*, 4, Elsevier North Holland.

Heitger, B. and J. Stehn (2003). 'Trade, technical change and the labour market adjustment', *World Economy*, 26(10).

Hijzen, A. (2003). 'Fragmentation, productivity and relative wages in the UK: A mandated wage approach', *GEP Research Paper*, 2003/17.

Hijzen, A. (2005). 'Outsourcing and the skill structure of labour demand revisited'. Paper prepared for a European Commission workshop, May 2005.

Hijzen, A., Görg, H. and R. C. Hine (2005). 'International outsourcing and the skill structure of labour demand in the United Kingdom', *The Economic Journal*, 115 (October), 860–878.

Invest in France Agency (2004). 'The attractiveness of France scoreboard', IFA, Paris.

Kearney, AT (2004). 'Global services location index', AT Kearney Inc., www.atkearney.com

Kirkegaard, J. F. (2005). 'Outsourcing and offshoring: Pushing the European model over the hill, rather than off the cliff?', *IIE Working Paper Series*, WP 05-01. Institute for International Economics, Washington DC.

Kletzer, L. (2001). *Job loss from imports: Measuring the loss*, Institute for International Economics, Washington DC.

Krugman, P. (1994). 'Competitiveness: A dangerous obsession', *Foreign Affairs*, March/April, pp. 28–44.

Kucera, D. and W. Milberg (2002). 'Trade and the loss of manufacturing jobs in the OECD: New factor content calculations for 1978–1995', *Discussion Paper*, 135/2002. ILO, Geneva.

Mann, C. L. (2003). 'Globalisation of IT services and white collar jobs: The next wave of productivity growth', *International Economics Policy Briefs*, Institute for International Economics, Washington DC.

Marin, D. (2004). 'A nation of poets and thinkers — Less so with eastern enlargement? Austria and Germany', *Discussion Paper* 2004:06, Department of Economics, University of Munich.

McKinsey Global Institute (2003). *Offshoring: Is it a win-win game?*

McKinsey Global Institute (2004). *Can Germany win from offshoring?*

McKinsey Global Institute (2005a). *How offshoring of services could benefit France*.

McKinsey Global Institute (2005b). *The emerging global labour market,* June 2005.

Ministry of Economic Affairs, the Netherlands (2004). *Buitenlandse Directe Investeringen in R & D*, The Hague.

Monteagudo, J. (2005). 'A brief review of the literature of offshoring', manuscript, Enterprise and Industry DG, European Commission, Brussels.

OECD (2004). *Labour force statistics 1983–2003*, Paris.

OECD (2005a). *OECD employment outlook 2005*, Paris.

OECD (2005b). *Trends and recent developments in foreign direct investment,* Paris.

OECD (2005c). *Trends in international migration*, Paris.

O'Mahony, M and B. van Ark (2003). *EU productivity and competitiveness: An industry perspective*, European Commission, Brussels.

Panagariya, A. (2004). 'Miracles and debacles: In defense of trade openness', *The World Economy*, Blackwell Publishing, Vol. 27 (8), pp. 1149–1171.

Salvatore, D. (2002). 'Relative taxation and competitiveness in the European Union: What the European Union can learn from the United States', *Journal of Policy Modelling*, 24:4, pp. 401–410.

Samuelson, P. (2004). 'Where Ricardo and Mill rebut and confirm arguments of main-stream economists supporting globalisation', *Journal of International Economics*, 19:1, pp. 1–18.

Siebert, H. (2006), 'Locational competition — A neglected paradigm in the international division of labour', *The World Economy*, Vol. 29, No 2, pp. 137–159.

Strauss-Kahn, V. (2003). 'The role of globalisation in the within-industry shift away from unskilled workers in France', *NBER Working Paper*, No 9716.

Treffler, D. (2001). 'The long and short of the Canada–US Free Trade Agreement', *NBER Working Paper*, No 8293.

Unctad (2004). *World Investment Report 2004: The shift towards services*, Unctad, Geneva.

Unctad (2005). *World Investment Report 2005: Transnational corporations and the internationalisation of R & D*, Unctad, Geneva.

World Bank (2004). *World development indicators 2004*, World Bank, Washington DC.

World Economic Forum (2005). *Global Competitiveness Report 2005–06*, Geneva. http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme %5CGlobal+Competitiveness+Report

Annex 1:

Summary table of proposed set of policies

Providing the framework conditions on which Europe can maintain and build its sustainable competitive position

Objective	Description	Policy instrument	Level
A dynamic European market	• Provide access to a large, integrated and growing market. • Increased focus on regulatory quality, changes to the way the Commission drafts legislation and to the way legislation is adopted. • Liberalisation of still regulated sectors (services). • Competition policy to minimise barriers to entry and control incumbents. • State aid policy to control Member States' support to declining industries and to assist in the build-up of comparative advantage.	Single market Competition policy State aid policy	EU
Support environment conducive to firms moving into high value-added production	• Stimulate research — basic and applied. • Spend better and in a more focused way. • Devote funds which contribute to deepen Europe's comparative advantage. • Improve method of allocation by subjecting fund applications to peer review. Award funds only based on merit.	EU R & D policy (EU budget) National R & D policy Competition policy	EU Member State
	• Ensure innovations translated in new value added. • Improve framework conditions by providing SME support and improving availability of private capital (well-functioning capital markets).	Single market Competition policy Risk capital action plan Innovation policy	EU Member State
	• Create better environment for businesses. Assess industrial performance in view of particular sectoral needs and specificities.	Business regulations	EU Member State
	• Improve skills of the workforce	Human capital investments	Member State
Improve ability to adapt and adjust to shocks	• Structural reforms aimed in general at: (i) reducing regulatory burdens both at the Member State and EU level and, in general, create favourable regulatory and administrative conditions; (ii) increasing labour market participation; (iii) upgrading the stock of human capital (mainly by training and education but also by facilitating high-skilled immigrants to be granted visas); and (iv) providing a tax system more friendly to FDI, since FDI seems to be reacting to it.	Assessment of regulatory quality (existing and new) Labour market regulation Training and education policy Immigration policy Tax policy	Member State EU

Objective	Description	Policy instrument	Level
	• Improve effective protection by protecting individual (via income protection), not job. • Improve participation by improving flexibility and bringing cost of labour in line with productivity (particular attention to fixed costs). • Improve prevention by investments in human capital.	Adapt protection legislation Improve flexibility Tax and benefit reform Competition policy (entry) Human capital investments	Member State EU
	• Explore potential to adapt regional institutions to regional needs, diversify their economic activity.	Reform of tax and benefit systems Support mobility and portability across regions Human capital	Member State EU
A dynamic global market	• Maintain an open, multilateral trading system. • Maintain open domestic market to provide cheap inputs and allow healthy competition vis-à-vis the rest of the world, as well as to stimulate technical progress. • Improve access to third markets. • Pursue via multilateral and regional negotiations. • Defend an improved enforcement of intellectual property rights protection. • Tackle non-tariff barriers detrimental to EU industry.	Trade policy	EU

Facilitate transition and adjustment to shocks

Objective	Description	Policy instrument	Level
Cushion income impact on workers while stimulating and facilitating re-employment	• Ensure adequate short-term support for those affected by structural change broadly.	Unemployment benefits	Member State
	• Explore potential to provide targeted income support, e.g. modelled on US Trade Adjustment Fund.	Restructuring assistance (EU budget)	EU
	• Ensure that individuals are encouraged to take up new work by reassessing tax and benefit systems.	Decrease marginal effective tax rates 'Make work pay'	Member State
	• Contemplate schemes for covering wage loss.	Additional wage insurance	Member State
	• Provide job search and placement assistance rapidly and tailored to individual needs.	Active labour market policies	Member State
Cushion regional impact	• Consider short-term assistance to regions suffering severe trade-related shocks, provided that such assistance does not run counter to the overall goal of ensuring a reallocation of resources economy-wide.	Regional policy/ Structural Funds	EU Member State
Anticipate change	• Aim to provide workers with advance notice. • Job search assistance and planning prior to displacement.	Active labour market policies	Member State

Annex 2:

GEPA meetings on EU competitiveness and industrial location

Summary of the first meeting, 4 May 2005

The session on EU competitiveness was organised around four presentations. The first assessed whether enlargement has brought about a new division of labour in Europe and, if so, whether new policies are needed. In a global economy, firms organise themselves along global lines. As regards eastern Europe, firms tend to 'offshore' production to another country but keeping it inside the firm rather than 'outsourcing' it to an independent supplier. Focusing on Germany and Austria, evidence so far suggests that offshoring has not led to significant job losses. The reason is that jobs in the new Member States do not compete with jobs in Austria and Germany. On the contrary, low wages in the new Member States have helped Austrian and German firms to remain competitive. However, it appears that the jobs offshored are often high-skilled. This is a response to a shortage of relevant skills in the old Member States. High-skilled workers in the old Member States are therefore facing increasing competition from low-wage, high-skill rich countries in eastern Europe and Asia. To address this challenge, Europe should enhance its human resources. It should, for example, liberalise the movement of high-skilled workers, encourage foreign students to remain in Europe after graduation and improve incentives to invest in education. A focus on human capital is more effective than tax incentives to firms or further subsidies to research and development.

A second presentation further investigated the role of human capital. A high-skilled labour force affects comparative advantage. However, there are signs that Europe is slipping behind the USA. For example, the gap between the USA and the EU as regards educational achievements has increased over the years. Moreover, the USA has a strong comparative advantage in high-skill sectors, with the United Kingdom being the only European country coming close. Indeed, some European countries appear to have shifted their comparative advantage into low-skill areas over the years. If skills are lacking domestically, these could be imported. However, Europe has problems in attracting *skilled* immigrants. This contrasts with the USA, where immigration accounts for a large part of the increase in the skilled population. The EU's poor ability to attract skilled immigrants is a result of Member States' immigration policies, which are restrictive and in effect tilted towards attracting unskilled immigrants. Europe's relative lack of skills affects the ability to innovate, to absorb new technologies and ultimately economic growth. It is a major determinant of the income gap with the USA. In order to achieve a more educated labour force, Europe should favour skilled immigration.

Delocalisation and outsourcing are increasing concerns among EU citizens according to the third presentation. In France, for example, globalisation is perceived as a threat to employment. These concerns contrast with the view of economists who stress that:

(i) countries gain from trade specialisation, (ii) domestic policies are the main reason behind unemployment, and (iii) the macroeconomic impact of outsourcing is limited. The impact of imports from the south on Europe's labour markets is limited. The employment costs should be weighed against the significant benefits for producers (cheaper inputs) and consumers (cheaper consumption basket). Even so, delocalisations are an illustration that Europe has come to the end of an era. Europe is today a smaller economy in the world than it was at its creation. Moreover, the EU model of trade integration has reached its limits; to achieve further gains from trade it has to deepen integration with the rest of the world. While holding its own in top-quality products, Europe is losing ground in high-tech products. Overall, current concerns over Europe's attractiveness are hardly warranted, as the foreign presence of European firms is mostly motivated by a desire to have access to large markets elsewhere. Even so, European policy-makers should not be complacent. Factories will ultimately follow clients, and they are largely elsewhere. Moreover, the most promising markets are low-cost locations *and* well endowed in human capital. In sum, Europe should not introduce any impediments to these natural economic processes. Instead, Europe should complete the single market and pursue sound macroeconomic policies. In order to improve its capacity to adjust, further structural reforms are necessary. In order to regain lost ground in technology, the EU should support long-term technological programmes.

The final presentation brought these various themes together by looking at Europe's industrial competitiveness in a globalising world. A firm's survival depends on its relative capability within its industry. This is a combination of productivity together with 'quality'. While low wages can compensate for low productivity, they cannot compensate for poor quality. This is a heavy handicap for developing countries in the first phase of globalisation. For these, globalisation involves a severe shake-out of less capable firms. In addition, their firms face the heavy task of building up quality levels. However, it is the second phase of globalisation which has more of an impact on Europe. In this phase, firms are increasingly able to couple high-quality know-how with a low-wage environment. Developing countries' own firms and multinational companies located there are now driving this process forward rapidly. Faced with this process, high wages by themselves do not spell the death of European manufacturing. As illustrated by US experience, survival depends on flexibility: switching from one product line to another when imports penetrate. To facilitate flexibility, policy should focus on facilitating the movement of people and expertise across companies and businesses. One central issue in this respect is the link between the costs of firing and the costs of hiring labour. Europe should *not* try to stop outsourcing. Outsourcing is one tool at the disposal of firms to minimise their costs and hence see off their competitors. Deprived of this, it is difficult to see how they can survive in the global market. As for industrial policy, this is by its nature a long-term process. The single most important ingredient is the **consistent maintenance of simple and uniform rules and procedures which reduce the cost of doing business**. In order to enhance flexibility and reduce costs, industrial policy should be aimed at: (i) educating, training and if need be retraining the workforce, and (ii) working with companies to improve capabilities by a balanced mix of financial support, access to capital and direct help and intervention.

Discussion

Following these presentations, the discussions centred on the following themes.

- ***Effects of delocalisation and outsourcing.*** The phenomenon of outsourcing and delocalisation is much more limited than is popularly perceived. Research suggests that the net employment effects are very small. Even so, behind the net effects on employment is a large turnover with employment falling in some areas but increasing in others. The effects of outsourcing primarily depend on domestic institutions, notably the response of the labour market. It can have a more negative impact on employment if labour markets are inflexible.

- ***Addressing the divergence between real versus perceived impact.*** Popular perceptions of delocalisations as widespread and threatening the European social model pose a political problem. To bridge this gap, policy-makers should better explain the phenomenon.

- ***Policies to cushion potential impact.*** Moreover, policy-makers should: (i) develop policies that cushion transition costs, and (ii) pursue economic policies, as embodied by the Lisbon agenda, that increase the adaptability when faced with shocks. The latter policies are more of a medium- to long-term nature. It involves deepening capital markets, invest more effectively and efficiently in education, enhance incentives on labour markets, provide for inflow of skilled migrants, and ensure a flexible services market.

- ***The role of industrial policy.*** Policies aimed at helping particular sectors overcoming competitiveness problems are seldom effective. The best industrial policy is therefore to open markets and to secure effective competition.

- ***Managing transition.*** Policy-makers should protect people, not jobs. Policies should help people that are losing from the process of economic change. However, it is very difficult to manage transition. Therefore, while investing in peoples' skills is important, the best foundation to weather transitions is to provide a framework of well-functioning markets.

- ***The role of migration.*** Europe currently does not put its labour resources sufficiently to good use. Even so, skill shortages are manifest in key sectors. While better investing in improving the skills level of its citizens, Europe should nevertheless try to attract skilled migrants. The importance of skilled migrants has been illustrated by US experience. Even so, equally if not more important in explaining US performance are the microeconomic reforms carried out in the 1980s. Moreover, Europe may find it difficult to attract skilled migrants under current institutional arrangements (notably wages).

- ***Social spending and competitiveness.*** It is sometimes claimed that high levels of social spending hamper competitiveness. However, the quality of social spending is the key determinant. The experience of Nordic countries appears to suggest that there is no inherent contradiction between high levels of social spending and external competitiveness.

- ***Division of labour.*** Labour market regulations and social policies should be adapted so that potential negative effects from delocalisations do not materialise. However, this is primarily a Member State competence, with the EU having little say.

Summary of the second meeting, 21 September 2005

The first session was devoted to the presentation and discussion of a report prepared by the Bureau of European Policy Advisers (BEPA). Notwithstanding the problems of accurately defining and measuring relocation, it appears to be still relatively limited in scope. However, it is growing. This reflects its ascendance as an important tool for many European companies in their quest to remain competitive. The overall size of adjustment associated with outsourcing and delocalisation also appears to be rather limited, with related job losses representing a minor part of overall labour market turnover. However, relocation has a more important impact on distribution, with the less skilled being more exposed to lower wages or higher unemployment. Moreover, relocation is increasingly moving into the service sector, including high-end ones (e.g. R & D). The impact of outsourcing and delocalisation is therefore not negligible. There are several reasons why it should be taken seriously. These relate broadly to the European context within which delocalisation and outsourcing occur. First, the EU economy is particularly vulnerable to the shocks created by globalisation. Although the EU's trade balance in high-tech sectors is improving, the EU's trade performance is due to sectors characterised by intermediate skills and/or upmarket products, which can be sold at higher prices. In several high-tech, high-growth products the EU is lagging behind. This exposes many European workers to delocalisation and outsourcing, as developing countries are increasingly moving into this arena. Second, the EU is not sufficiently attractive as an area to locate to. Third, the EU is not sufficiently exploiting the opportunities offered by new fast-growing markets. Finally, there are signs that Europe is not adjusting as well as it could to the shocks that are imposed on its economy.

In view of the above, the EU is facing a number of challenges in terms of: (i) attracting new investment; (ii) exploiting the advantages world markets offer in terms of opportunities for sales and efficiency enhancement; and (iii) handling the effects of production being outsourced or delocalised. Policy can contribute towards addressing these challenges. Policy should not attempt to manage delocalisation or outsourcing, let alone limit it. Rather, policy-makers should aim to put in place framework conditions enabling Europe to benefit fully from delocalisation and outsourcing while ensuring that losses are small and transitory in nature. Policy should therefore have two goals: (i) providing the framework conditions on which Europe can maintain and build its sustainable competitive position; and (ii) facilitating transition and adjustment to shocks.

Following this presentation, the discussion centred on the following themes.

- ***Small numbers, large impact.*** Even though the statistics on the size of relocation and its impact appears limited currently, one should not forget that the major challenge facing Europe — doubling of the global labour force — impacts Europe via channels not exclusive to trade.

- ***Location competition.*** Trade theory is not sufficient to explain the kind of competition that firms and countries are engaged in today. In a world of mobile capital, countries and regions are increasingly competing for mobile factors and adapt their policy instruments accordingly (e.g. tax). This competition for location accelerates structural change.

To position the EU better, policy needs to focus on raising productivity by investments in education, training, research and innovation.

- ***Business perceptions.*** Technological advances and deregulations have decreased the importance of borders and have made it possible for companies to exploit cost advantages in a wider range of locations. Most companies accordingly have a very positive view of this more open world economy in general and relocation in particular.

- ***Importance of the new Member States.*** The new Member States contribute significantly to overall EU growth and are one of the reasons why the EU-25 manages to retain more business than otherwise would have been the case. In that respect, enlargement means the integration of new opportunities and enables the EU to face global challenges. This importance needs to be further stressed, otherwise enlargement risks becoming associated with problems in the public mind. This argument needs to be sustained by rigorous analysis.

- ***EU trade performance.*** The EU is doing better than both the USA and Japan in upmarket goods. Moreover, overall trade figures are positive and the EU is also doing well in other sectors. However, to maintain this position is challenging. As regards trade policy, the EU needs to be more ambitious and more willing to confront potential opposition to further market opening with good arguments.

- ***Compensation to achieve reforms.*** Economically, it is quite clear what reforms are needed in order to put Europe on a sounder foundation. However, reforms have distributional consequences and, overall, the appetite for such reforms in Europe is limited. The only way to overcome this opposition is to fully compensate those who stand to lose from reforms. This will be expensive, however. Moreover, the distributional impact may not be limited to the short-term transition period. The decreasing demand for those with lesser skills also has long-lasting effects on income distribution. This necessitates a consideration of how, for example, tax policy can be used as a compensatory instrument.

- ***Community involvement (1) — the Lisbon strategy.*** Views on the appropriateness of the Lisbon strategy differed considerably. Some saw the Lisbon strategy as not only ineffectual but even harmful, as it gives citizens the impression that Member States are addressing Europe's structural problems while in effect they do not. Even so, others saw Lisbon as appropriate, at least in principle. Twenty years ago, Europe faced a similar challenge from the so-called newly industrialised countries (e.g. South Korea and Taiwan). The strategy of policy-makers at the time was to launch the single market programme. That strategy has not worked as well as expected, notably due to the exclusion of labour market and social policy matters from its coverage. Lisbon — attempting to incorporate these areas — is therefore the right strategy in principle. Even so, the failure of some large Member States to fully endorse the revised Lisbon strategy is worrying.

- ***Community involvement (2) — restructuring assistance.*** Most of the policies needed to enable the EU to better face international competition and handle associated transitional change lie with the Member States. As the failure lies at national level and as Member States already have instruments in place, some argued that it makes little economic sense for the Community to be involved in restructuring assistance. However, others claimed that Community involvement in support measures is needed to counteract the popular impression that the EU is only interested in market opening, not assisting those who have to deal with the consequences of that opening. It is politically difficult for the Commission to push for further market opening if it cannot show that it cares about the people.

- ***Community involvement (3) — the EU budget.*** The EU needs a budget that equips it to deal with the future challenges facing Europe. The compromise put on the table earlier this year did not do that sufficiently. A better budget is needed in order to promote science and research and handle structural adjustment.

European Commission

EU competitiveness and industrial location

Luxembourg: Office for Official Publications of the European Communities

2006 — 100 pp. — 17.6 x 25 cm

ISBN 92-79-00421-2