European Foundation for the Improvement of Living and Working Conditions

Restructuring and employment in the EU: The impact of globalisation

ERM REPORT 2007

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Foreword

The debate about Europe's future role and place in a globalised economy is heating up – among policymakers, concerned citizens, in boardrooms and in the media. As international trade intensifies and new players are entering the scene, the world seems to have reached a new stage of economic integration. Globalisation describes a process of increased interdependency of national economies: markets for goods and services, but also markets for labour and capital are integrated on an international scale. Whereas economists tell us that this integration through trade will lead to an overall increase in welfare in the long term, policy makers and citizens are concerned about short-term, negative effects, about those losing out from intensified competition on integrated world markets.

Has the nature and extent of globalisation really changed? Is a new globalisation paradigm emerging? Are there tried and tested remedies which will help to cope with the impact of globalisation? These are the questions the ERM report 2007 addresses. It examines the changing nature and economic impact of intensified trade, identifies the sectors, regions and types of jobs most affected by it and describes what active labour market policies can do to help alleviate the problems caused by globalisation. The report draws on data collected by the European Foundation in the European Restructuring Monitor (ERM) as well as data from the European Labour Force Survey and the OECD.

This report is intended to inform the debate about globalisation and its impact on employment by providing empirical evidence, detailed analysis of policy measures and their effectiveness as well as presenting future perspectives. We hope that it can thus contribute to a better understanding of the phenomenon, which is the prerequisite for finding constructive solutions for the challenges ahead.

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Director

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Overview

The theme of *ERM Report 2007* is globalisation and restructuring. Globalisation is taken to mean the changing scale and nature of international trade and increase in foreign direct investment (FDI). The first three chapters examine the distinguishing features of recent globalisation, outline some possible future trends and draw some broad policy implications of these trends. Chapters 4 to 7 deliver a more focused policy perspective, with particular reference to the European Globalisation adjustment Fund (EGF). They also present experiences from some Member States on how to cope with the more problematic aspects of globalisation. While it may appear that the development of the market economy has led to an accelerating rate of international trade, this is not the case. World trade, in terms of merchandise exports as a percentage of GDP, grew from 5% in 1870 up to 8% by 1930, only to fall to 5% by 1950. It then increased up to around 10% in 1970, reaching 17% by the turn of the millennium. While foreign direct investment has also increased significantly in recent decades, much of the increase is between Member States of the European Union.

The nature of trade has, however, shifted significantly. Originally, trade was largely between countries with quite different productive capacities, often based on their different natural resources, but by the 1960s, it was increasingly between developed nations, exchanging quite similar types of products. Around the 1980s, the key trend was the emergence of various (Asian) Tiger economies, which delivered intermediate products with increasingly high-skill content to the developed world at low cost. Foreign direct investment played a key role in the development of these economies which became an integral part of international production networks (IPN) led primarily by US, and Japanese multinational companies. IPNs have subsequently increased in importance and are increasingly utilised by European companies.

Subsequent developments in information and communication technology (ICT) have permitted a more efficient coordination of global supply chains and enabled trade in services that can be codified and transmitted digitally. This has radically opened up the potential for an even finer degree of specialisation in the supply chain and thus international trade, not in final products, but in functions or tasks within firms. Were this potential to be fully realised, it would have massive implications for the scale and nature of structural change and accompanying labour market adjustment. Firstly, while services make up roughly 70% of employment in Europe, they have previously largely been exempted from international trade. The potential labour market adjustment would therefore be unprecedented. Secondly, it implies that adjustment would occur not as previously between different firms and sectors, but within firms across a broad range of sectors. This has consequences for policy which in many policy fields is currently sector based. In addition, the lack of a clear sector profile makes future structural adjustment more unpredictable than previously was the case.

However, it is exceptionally difficult to find concrete empirical evidence of a radically new globalisation paradigm. Offshoring – the shift of identifiable jobs in Europe to other locations – is one indicator of a new globalisation phase, but there is little evidence of a significant increase in this phenomenon either in the European Restructuring Monitor (ERM) or from other sources. According to the ERM, less than 8% of jobs lost in Europe were due to offshoring and there is no sign of a recent major increase. Manufacturing still dominates the offshoring statistics, which occurs in rather labour-intensive mid-tech sectors in the EU15 and in lower-tech sectors in the NMS10. The only service sector with significant offshoring is banking and insurance.

Manufacturing jobs from the EU15 are mainly offshored to the NMS10, while service jobs are predominantly moved to Asia. However, it is underlined that offshoring is probably an inappropriately

narrow empirical focus, as the location of new investment (and jobs) is not captured by the concept of offshoring. Moreover, the main negative impact of globalisation is almost certainly not that jobs are offshored, but that they are simply destroyed.

Trade flow data and econometric studies have shown no decline in the importance of distance for trade. With costs of the international transport of merchandise largely dependent on the price of oil and with the marginal cost of digital communication already close to zero, there is little reason to expect any imminent fall in transport costs. Thus one should be somewhat sceptical about the current empirical validity of a new globalisation paradigm entailing massive trade and FDI flows and the end of distance as a hindrance to international trade. However, there certainly is the potential for an ever-finer slicing of the global supply chain and a significant take-off in the international trade in services some time in the near future as firms better learn how to exploit the potential that technology offers.

The possibility of an imminent new globalisation paradigm is further enhanced by the other main recent characteristic of trade, namely the increasing participation of China, India and the ex-Soviet countries in the global market economy. The economic performance of China and India has been highly impressive and both have increased their market share of EU imports. It is not just the size of these economies that has led to their success in European markets. Chinese manufacturing and the provision of services from India has exhibited high growth in total factor productivity and there is no narrow economic reason to suppose that they will not continue to do so. The report does, however, point out that there are some indications that both political and environmental factors may prevent GDP and export growth from continuing at the current high rates.

While the growth of China and India is viewed with concern from some quarters, practically all economists agree that trade liberalisation increases overall economic welfare in a country. Indeed, the high performance of the world economy since the mid-1990s is some indication of these overall positive effects. There are, of course, winners and losers within countries, at least in the short term, as labour is reallocated from the sectors that lost out from trade liberalisation to those that benefited from it.

The nature of trade has changed somewhat since David Ricardo expounded the theory of comparative advantage, which, as he exemplified in the trade of English cloth for Portuguese wine, was largely in finished products. Over time, trade has taken place at ever finer levels of specialisation (or stages) of the global supply chain. While this has complicated the process both in terms of coordinating supply chains and in analysing the consequences of trade, it would appear that the gains from trade and the distributional outcome have remained essentially the same as they were in Ricardo's time. The key policy issue is to ensure access to foreign markets and to ensure that the labour market adjustment occurs as quickly and painlessly as possible.

However, it must be emphasised that while economists do believe that trade liberalisation does enhance economic welfare, an increase in productivity in, for example, China in goods where Europe has a comparative advantage (high-tech activities) can induce a permanent loss of per capita real income in Europe. Economic welfare can be maintained in Europe only if it continues to maintain a productivity gap with China in high-productivity activities. As China is continually increasing productivity even in the high-tech sectors, the only viable strategy for Europe is to ensure that it

remains ahead of the high-tech pack. The only other alternative is protectionism, which yields other and greater losses. Thus, one should be clear about this; globalisation can pose problems and, due to their size, India and China can pose big problems.

The basic message of the first chapters of the report is that there appears to be as yet no significant shift in the nature or extent of globalisation that has had serious overall negative consequences for aggregate employment in Europe. The 1970s and 1980s saw a massive decline in European textiles, iron and steel and shipbuilding and were striking examples of shifts in the international division of labour that had extremely severe consequence for certain European regions, possibly more serious than the job losses currently being experienced. The major current concern is to maintain European competitiveness in the high-tech activities so that they constitute the comparative advantage of Europe, even in the future.

Chapters 4 to 7 are concerned with how to deal with some of the problems of globalisation from the perspective of the individual worker. The main focus is placed on the recently introduced European Globalisation adjustment Fund (EGF), which is to finance active labour market policy (ALMP) measures for workers who lose their job (displaced) due to adverse trade conditions, with a view to considering the appropriate measures that could be implemented by Member States.

There are no evaluations of ALMP in Member States specifically designed for trade-displaced workers. While there is little reason to expect that the policy recommendations for trade-displaced workers should be much different from that of workers displaced for any other reason, there are in fact few proper evaluations of measures addressed to displaced workers in general. However, an examination of the ALMP addressed to the unemployed, with consideration of the special circumstances of displaced workers, suggests that there are strong arguments for intensified job search measures including career orientation and counselling for displaced workers. While, of course, there is a role for training measures, it is difficult to generalise on the type of training required, which will vary with the characteristics of the workers and the requirements of the local labour market. However, some of the few existing European evaluations of policy for displaced workers suggest that for training to have a positive impact, considerable resources are required and there is some indication that training should be oriented towards more general education (schooling) measures than typically is the case for ALMP. While temporary wage subsidies may have a role in other situations, they should only be applied to displaced workers under exceptional circumstances. Research shows that temporary wage subsidies generally do not create new jobs. Either they have no effect at all (deadweight loss, i.e. the person who got the job would have got it even without the subsidy) or lead only to the substitution of one worker for another (crowding-out effect). For equity reasons, crowding-out effects are not acceptable in the context of displaced workers.

Turning now to policy directed towards trade-displaced workers, the experiences of the Trade Adjustment Assistance (a US measure similar to the EGF) indicate serious implementation problems in terms of low take-up rates (poorly publicised) and difficulties and conflicts in determining which workers are deemed to have been displaced due to trade. In addition, it is viewed by many to be unfair, as workers displaced due to other reasons receive very little assistance in the United States. The motivation of the measure is political, i.e. to facilitate the passage of trade liberalisation legislation through Congress.

The EGF is similarly motivated in terms of compensating the losers of globalisation. The political and EU-level perspective has some further implications for the orientation of EGF measures. The strongest recommendation for EGF policy is what not to do. Despite some recommendations to the contrary, the EGF should not be used to finance temporary wage subsidies. Deadweight loss implies that the EGF spending goes to the new employer of the trade-displaced worker. This is obviously not the purpose of the EGF. If the wage subsidy leads to crowding-out, then the cost of trade-induced displacement is shifted from the trade-displaced worker to the person who the employer would have otherwise employed had the labour cost-reducing wage subsidy not been available. Neither is this the purpose of the EGF. Thus, wage insurance or temporary wage subsidies generally, or indeed any ALMP that results in crowding-out, negate the valid political rationale of the EGF as a quid pro quo for trade liberalisation. When those who are crowded-out or a wider public become aware of these effects, this may have negative political consequences for the European Union.

In addition to the general recommendations outlined above for all displaced workers, the idea of an intra-EU mobility grant is promising. As only few Member States have such a measure, it would largely avoid EGF funding simply replacing national funding. Moreover, an intra-EU mobility grant could be clearly identified as an EU measure providing obvious evidence of the EU's contribution to labour adjustment policies and, of course, the free movement of labour is fundamental to the Single Market. Given that there are very high costs of moving outside a Member State, it might require a prohibitively high grant to have a decisive impact on the migration decision. However, it does compensate the trade-displaced workers who are actively trying to improve their situation and, unlike a temporary wage subsidy, is not likely to lead to crowding-out effects.

Globalisation is of some concern to workers in Europe and many believe it threatens their job. A recent Eurobarometer study found that Swedes and Danes were most optimistic in this respect. These are two countries with a high degree of external flexicurity and it is argued that if workers are both temporarily compensated for the loss of their job and have good chances of getting a new one, they are less prone to such concerns. As such, both these countries may offer interesting perspectives on how to cope with some of the problematic aspects of globalisation.

A key and oft-neglected element in the Danish flexicurity model is adult vocational education and training, which contributes greatly to reskilling the workforce in response to shifts in competitiveness. It is addressed primarily to employed persons and delivers competencies for the labour market as opposed to merely completing a course, and waiting times are short and well aligned with working time arrangements. Each year, the tripartite continuing training committees develop or change approximately 500 adult vocational training programmes, reflecting the new competencies required in line with changing training and education needs. The competence descriptions set the framework for education and training development and new or updated programmes can be set up within six weeks. Many observers of the Danish model of the labour market have come to the conclusion that it is not the policy design that is the most important or influential element, but the way that policy is implemented. In this context, the key factor is its corporatist structure, with the presence of tripartite bodies in both policy formulation and implementation. The administrative flexibility and efficiency of the Danish system of adult vocational education and training together with the deep involvement of the social partners would appear to be a clear and important example of this.

While the extent of jobs lost due to offshoring may be exaggerated in the public debate, it is undoubtedly a challenging issue for employees and their representatives and may become increasingly widespread in the future. As offshoring involves more than one country, there is an obvious role for institutions with employee representatives from the involved countries. While EU-wide collective agreements are of negligible importance, European Works Councils (EWCs) are potentially an important forum in this context. It is argued that the possibility for EWCs to influence restructuring issues in general is largely related to the degree of the overall business strategy and in particular the degree of centralisation of management in international human resource management strategy. While national trade union federations attempt to support EWCs, they do not have the necessary influence at the company level, though the industrial relations tradition of the home country does also play some role.

Offshoring is a particularly difficult issue for any EWC, as there may be real difficulties for the employee representatives to openly discuss the issue due to the potential conflict of interest in obtaining investment for their respective national sites. From the perspective of the employee representatives, it would appear that the national forum is still of great importance. Typically, much of the employee influence in restructuring is how the consequences for employees are to be dealt with in terms of compensation, retraining, etc. This is seldom a transnational issue. These factors, together with the current relatively weak legal status of the EWCs, suggest that the national industrial relations forum is still of primary importance.

One interesting national approach is that of Sweden's largest white-collar union, SIF. Their policy advice to company-level unions is relevant to the current wave of globalisation, as they have a major presence in the technology and knowledge-based sectors that previously were rather immunised from offshoring but may increasingly experience it in the future. Their approach is proactive, attempting to engage in social dialogue and is decidedly non-confrontational. The point of departure is that offshoring is an extremely complex decision for the company and that the company may make the wrong decision. The local union is encouraged to engage with management as early as possible and is provided with guidelines to try to identify when an announcement of offshoring may be imminent. The challenge to the management decision is largely based on its economic rationale and the local union is also provided with a methodology to discuss the economic consequences of, and alternatives to, offshoring with management. According to SIF, common management errors include the lack of a dynamic cost calculation, an underestimation of the tasks currently performed in-house (and so the under-specification of tasks in an outsourcing contract) and no full investigation of the potential to invest and increase productivity in the current site. This approach is deeply embedded in the consensual culture of Swedish industrial relations and is not obviously transferable to other countries, even though the legislative basis for information and consultation does not differ greatly from those in many other Member States. It is noticeable that the main focus of the unions on restructuring in general in Sweden is not about the decision to shed jobs, but the process after the decision is taken in order to ameliorate the negative consequences of job loss for the employees.

The impressive economic performance and social cohesion found in Denmark and Sweden show that the high road to global competitiveness is possible and that labour market adjustment can be made less painful than is the case in other parts of Europe. There are many factors behind this success, but the continual upgrading of the competencies of the labour force plays a vital role.

Introduction

International trade is practically synonymous with the historic development of Europe over four centuries to become the predominant economic power of the industrial revolution. First Portugal and Spain, then the Netherlands and the UK became the leading global traders of their time. Even today, Europe's biggest economy, Germany, is the largest exporter in the world. It could have been otherwise. Before the age of discoveries Asia, mainly China and India, accounted for over 65% of world GDP. But while they both remained largely isolationist, the rival European nation states competed for the domination of the maritime trading routes throughout the world and laid the foundations for the industrial age.

Early international trade was very limited as regards the type of goods traded. Europe imported mainly luxury items, such as spices, tea and sugar, that were not available domestically. So while this trade made some very wealthy, its impact on domestic prices and wages was almost negligible. However, as the scale and scope of traded goods increased, both its positive and negative effects spread throughout the economy, benefiting some and harming others. The first great domestic trade debate of the industrial age was between the English landowners and the Manchester liberals and culminated in the final repeal of the Corn Laws in 1846. Indeed, free trade was a central tenet of the Industrial Revolution. The ideas of Adam Smith and David Ricardo destroyed the prevailing mercantilist view that in trade, one country's gain was the other's loss. Today there is hardly an economist who would advise against the opening up of product markets to trade and the consensus, since Ricardo expounded his theory of comparative advantage, is that the economic welfare of all nations is enhanced by free international trade.

However, trade produces both winners and losers. The latter tend to be the focus for policymakers, as it is often the already most disadvantaged that suffer most, either through lower wages or unemployment. The labour market is one of the most imperfect of all markets, rife with inherent rigidities. It is only in the very best of times that most workers can seamlessly move out of a declining sector and into an expanding one without incurring substantial and long-lasting losses. It is also important that this transition happens quickly. Social exclusion can be a vicious circle and the longer workers are out of the labour force, the more difficult it is to return. Indeed, there are regions in the affluent northern EU15 countries that still bear the scars from the crises in heavy industry, largely caused by earlier bouts of foreign competition.

Just as an economically efficient Europe must focus on the big picture and pursue a policy of free trade, a socially cohesive Europe must also recognise that there are losers from trade liberalisation and, in turn, ensure they can recover from these losses. Currently, this aspect of the 'social market economy' is best exemplified by the (external) flexicurity model pursued in some Member States which permits the labour market to adjust to foreign competition but also provides those who are losing out with the means to cope with the immediate losses and to provide them with the opportunity to regain their position in the labour market.

The *ERM Report 2007* provides some perspectives on the labour market impact of trade liberalisation. It will identify some of the recent and emerging trends in the current bout of deepened globalisation and, in general terms, suggest how policy should be reoriented to address these new circumstances. It also takes up, in more concrete terms, how policymakers and the social partners can best address some of the negative consequences of globalisation. In this context, the recently adopted European Globalisation adjustment Fund is the main focus of attention.

It might appear that the argument for free trade is won for ever; this is not the case. Before the First World War, the ongoing trade liberalisation had appeared irreversible, only to be followed by protectionist policies from practically every developed economy in the world, which seriously compounded the effects of the Great Depression. Only five years ago, there were serious trade policy disputes between the EU and the US. Currently, there are powerful advocates of a more protectionist US stance within the Democratic Party. No one can be sure exactly how Europe would react if the US introduced protectionist measures.

Europe's citizens and policymakers must therefore be made aware of the benefits of free trade. It is hard to underline these benefits if the labour markets are not able to adjust quickly to the ensuing structural change and if there is no assistance made available to the inevitable losers. While the European Globalisation adjustment Fund is, financially, only a small step in this direction, it is, at the very least, symbolically important for the credibility of both the Union's trade policy and its wider social ambitions. However, the European Union has neither the mandate nor the resources to substantially facilitate labour market adjustment. The European Employment Strategy provides many guidelines that the Member States might find useful in this respect, particularly the measures for 'improving adaptability of workers and enterprises, and increasing investment in human capital through better education and skills'.

Finally, while trade does enhance economic welfare, it is essential that Europe continues to maintain comparative advantage in the high-skill, high-tech segments of the global market. There are several very large emerging economies that are becoming increasingly competitive in these areas. If they succeed in the high-tech market of the future, it will lead to a loss in European living standards. The famous Lisbon commitment to make Europe 'the most dynamic and competitive knowledge-based economy in the world' is the key goal for European economic policy in the globalised world. Delivery of this high road to global competitiveness lies primarily with the Member States, by first fully adopting national ownership of the Lisbon Strategy and then implementing it by the means appropriate to their national contexts.

1 Economic globalisation and labour markets

Globalisation is a word that was coined in the international business world in the 1960s but has since gained widespread use, largely through the efforts of its opponents. It has economic, geographical, cultural, ecological, institutional and political dimensions. Economic globalisation is best defined as an increase in the interdependency of national economies and the greater integration of the goods, services, labour and capital markets. This report deals with economic globalisation, but rather narrowly defined, as it does not cover international migration of labour and capital market integration. This is not because they are unimportant. On the contrary, international migration is both a politically sensitive issue and, economically, a very important one. Indeed, it has been argued that the economic returns from the removal of barriers to international migration are potentially greater than the further reduction of tariffs. Global finance is similarly of utmost importance and some concern, and in no other market has globalisation been so far reaching and all-embracing. While this has certainly yielded some benefits, the exceedingly complex and volatile nature of these markets constitutes the Achilles heel of the global economy. So while most economists are generally very positive towards free trade, many have serious concerns over the current stability of global financial markets. The focus of this report on trade and the international division of labour is motivated by a need to limit this extensive topic to matters most closely related to the restructuring of the European economy.

A key theme of this chapter is how both the changing scale and nature of trade increases the economic interdependency of countries. Originally, trade was largely between countries with quite different productive capacities, often based on different natural resources. Ricardo's[1] theory of comparative advantage, still the central tenet of trade theory, showed that overall, both countries gain from the trade. Trade, as exemplified by English cloth and Portuguese wine, was largely in finished products. Over time, trade has taken place at ever finer levels of specialisation (or stages) of the global supply chain. While this has complicated the process both in terms of coordinating supply chains and in analysing the consequences of trade, it would appear that the gains from trade and the distributional outcome within nations have remained essentially the same as they were in Ricardo's time. This chapter presents the key recent developments in imports to the European Union, which can be summed up as an increase in the supply of intermediary goods from medium-income economies and the increasing skill content of these of intermediate purchases. This is probably the most concrete evidence of a shifting international division of labour.

The end of the first great bout of globalisation, characterised by increased trade and massive global capital flows, ended about the time of the First World War. World trade, in terms of merchandise exports as a percentage of GDP, grew from 5% in 1870 up to 8% by 1930, only to fall to 5% by 1950. The Great Depression fuelled protectionism during the 1930s and prolonged and deepened its effects. After the Second World War, trade increased again, up to around 10% in 1970 and reaching 17% by the turn of the millennium.

Technological advances, from the compass and improvements in naval navigation to the railroads and container shipping, were essential prerequisites for earlier waves of intensified globalisation. O'Rourke and Williamson (2002) have demonstrated the importance of declining transport costs

[1] David Ricardo, British political economist, 1772–1823.

for freight, information and people for the growth of trade, particularly in the pre-1914 period. While shipping freight rates are no longer falling relative to the value of that being shipped, the current discussion on globalisation places much emphasis on the reduction in the costs of digital communication.

As in previous rounds of globalisation, political decisions have been crucial. Much is made of the emergence of China and India, but the continuing dismantling of tariffs and other barriers to trade are also of great importance. Table 1 shows a steady decline in tariffs since the end of the Second World War in industrial goods. However, progress towards further reductions in tariffs has been postponed by the failure of the WTO's Doha trade negotiations.

Table 1: Most favoured nation tariff cuts by industrialised countries on industrial goods

Implementation period	Round	Tariff reduction (%)	Tariff at period beginning
1948–63	First five GATT Rounds	36	15.4
1968–72	Kennedy Round	37	11.3
1980–87	Tokyo Round	33	8.3
1995–99	Uruguay Round	38	6.2

Source: Subramanian and Wei (2005).

The nature of trade has shifted in recent decades and this affects the labour market in terms of employment levels and skill distributions. A clear trend is that trade occurs at an increasingly finer level of the global supply chain. A more detailed level of specialisation requires increased capacity to coordinate the global supply chain, and in this respect the role of information and communication technology (ITC) has been vital. Another key trade development over the last 25 years has been the increased participation of previously undeveloped nations. These countries have exhibited remarkable levels of economic growth and have increasingly made significant inroads in the export of intermediate goods in the high-skill segment to the EU. It is shown that this process has been continuing for decades and there is little empirical evidence of the recent emergence of radically new types of trade.

The nature and logic of trade pre-1980

The changing nature of globalisation over time is rather well mirrored in the development of trade theory. With the advent of the market economy and industrialisation, international trade took place primarily between the manufacturing centre and the periphery, where it was obvious that both had absolute cost advantages in different goods. Ricardo's simple but subtle theory showed that trade between two countries will enhance overall welfare if each country exports the commodity in which they have a comparative advantage. The source of the comparative advantage was usually expressed in terms of higher productivity due to technological factors. The Heckscher-Ohlin theory explained comparative advantage in slightly different terms and predicted that a country would export products that used its abundant factor of production and import products that used its scarce factor.

These theories could explain trade patterns between more and less advanced nations, as the larger the differences in productivity, the larger were the gains from trade. However, by the 1960s and 1970s, it became apparent that trade had been expanding most rapidly amongst countries which had similar levels of technology and relative factor endowments; in other words, most of the world's trade consisted of trade amongst advanced economies and within the same sectors, i.e. 'intra-industry trade'. The explanations provided emerged from the realisation that broad aggregates such as sectors and uniform final goods did not capture the extent of product differentiation that had emerged since the Second World War.[2] Focus was placed on product-specific scale economies, the demand for variety from consumers and specialisation advantages in the production and uses of intermediate inputs. Advanced economies, because of their economic size, had advantages in covering set-up costs in the production of specific product variants and hence could produce a wider range of such product variants. Similarly, they might employ more sophisticated production processes which could make use of a wider range of specialised inputs and hence benefit from the availability of a wider range of such inputs. Finally, once they became the dominant producers, they benefited from the mark-up profits which can be obtained in imperfectly competitive markets. These profits in turn provide the income to cover the fixed costs involved in developing and producing new product variants.

Emergence of the 'Tiger economies'

In the 1980s, a new group of economies emerged which began to obtain significant market shares in world trade and showed a historically unprecedented speed of catching up in income levels.[3] The groups of catching-up economies of South-East Asia, the 'Tiger economies'[4], had a strong emphasis on export-orientation, and introduced innovative public policies (industrial policy, education policy, competition policy, export promotion, R&D policies) to promote such rapid growth.[5]

It was in the trade among these emerging Tiger economies and Japan (and to a lesser extent the US) that one could observe the first significant increase in what has come to dominate the discussion on international trade in Europe, i.e. the potential of 'vertical differentiation and integration' through international production networks (IPNs). Along with the success of the Japanese export industry came rising wage costs that threatened to undermine Japanese manufacturing competitiveness. With numerous low-wage countries in the immediate proximity, Japanese manufacturers began to offshore the labour-intensive parts of their manufacturing production to these countries. This came to be termed 'triangle trade', where Japanese firms produced some high-tech parts in Japan, carried out the labour-intensive processing in the Tiger economies and then exported to the West. Closely related to this phenomenon were the managerial advances which enabled the efficient use of supply firms, particularly in car manufacturing. This 'offshore outsourcing' became a key factor in maintaining the competitiveness of Japanese manufacturing. Even in the US, this phenomenon became rather significant, with the labour-intensive part of the work being carried out, for example, in Mexico.

[2] See for example Krugman (1980) and Helpman and Krugman (1985).

[3] Although Japan was one of the catching-up economies after the First World War, the start of its catching-up process dates back to the last quarter of the 19th century. Hence, although this process was heavily interrupted through the destruction of Second World War, it does not qualify as a new post-Second World War phenomenon.

[4] The first Asian Tiger economies were Hong Kong, South Korea, Taiwan and Singapore (Tigers 1), but soon, additional economies in South-East Asia made inroads into international trade and hence a second group emerged, comprising Indonesia, Malaysia, the Philippines and Thailand (Tigers 2).

[5] See Amsden (1990) on South Korea; Johnson (1982) on the Japanese example; and World Bank (1993) on East Asia.

Furthermore, the integration of financial and product markets and the reduction of entry barriers which facilitate cross-border corporate integration (e.g. through mergers and acquisition) had led to the renewed importance of flows of foreign direct investment (FDI).[6] Multinational corporations (MNCs) were the important agents driving such flows and the analysis of such corporations developed alongside the new trade theory.[7] The structure and behaviour of the firm was largely absent from previous trade theory and it is in the nexus of trade theory and the theory of the boundaries of the firm (the buy or make in-house decision) that key features of the current round of globalisation, such as international sourcing and globally integrated production systems, are to be understood.

IPNs have since developed considerably and are now extensively used even in European companies. Their development has been facilitated by the remarkable developments in information and communication technology of the last two decades, which have permitted both a detailed coordination of the supply chain and have facilitated closer contacts with partners and customers. While many observers of this phenomenon see it largely in terms of short-term cost saving, IBM CEO Samuel Palmisano expressed the key role of IPNs as follows:

> *'These decisions are not simply a matter of offloading non-core activities, nor are they mere labor arbitrage. They are about actively managing different operations, expertise and capabilities to open the enterprise up in multiple ways, allowing it to connect more intimately with partners, suppliers and customers, and most importantly, enabling it to engage in multifaceted, collaborative innovation.' Palmisano (2006)*

Key empirical characteristics of recent international trade[8]

A key feature of the global dynamics of trade flows over the recent past has been the rapid growth in import penetration in the EU15 and the US market by a select group of successful catching-up economies (CUEs). As one would expect, the European CUEs (central and eastern Europe, southern Europe and Ireland) are important in the EU15 market but almost absent from the US market, while Mexico is strongly linked to the US market but does not feature in the EU market. However, the Asian catching-up economies (first Hong Kong, Republic of Korea, Singapore and Taiwan and subsequently Indonesia, Malaysia, the Philippines and Thailand), China and India feature strongly in both the US and the EU.

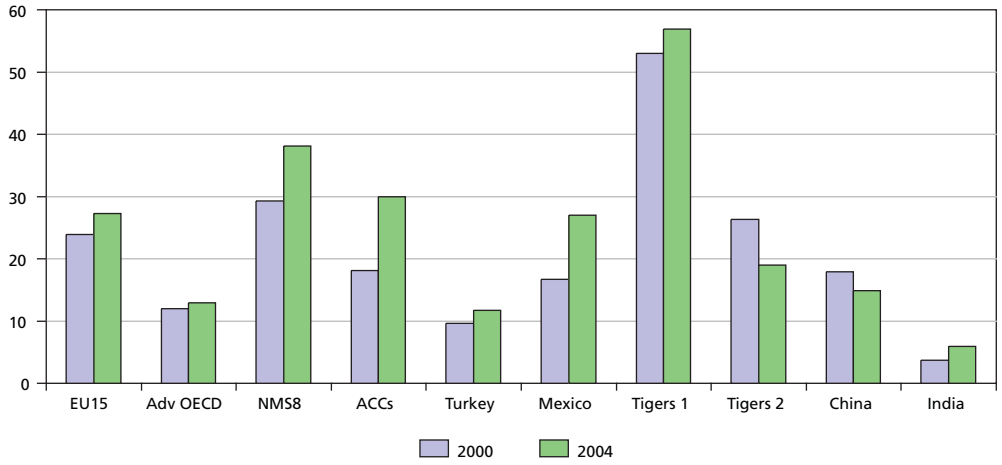
Figures 1a–c show some important features of the selected group of catching-up economies. Foreign direct investment plays an important role in the CUEs (Figure 1a); the groups of CUEs encompass a whole spectrum with respect to wage and productivity levels (Figure 1b), where some of them have come close in wage rates and productivity to the more advanced economies (Tigers 1), while most of them still show substantial gaps.

[6] This was a 'renewed' interest as, after the massive capital flows in the pre-First World War period, international capital flows subsequently shrunk dramatically in the interwar period, only to increase again since the 1950s.

[7] See for example Brainard (1993) and Markusen and Venables (1998).

[8] Parts of this chapter, in particular the empirical material, are based on Landesmann et al. (2007).

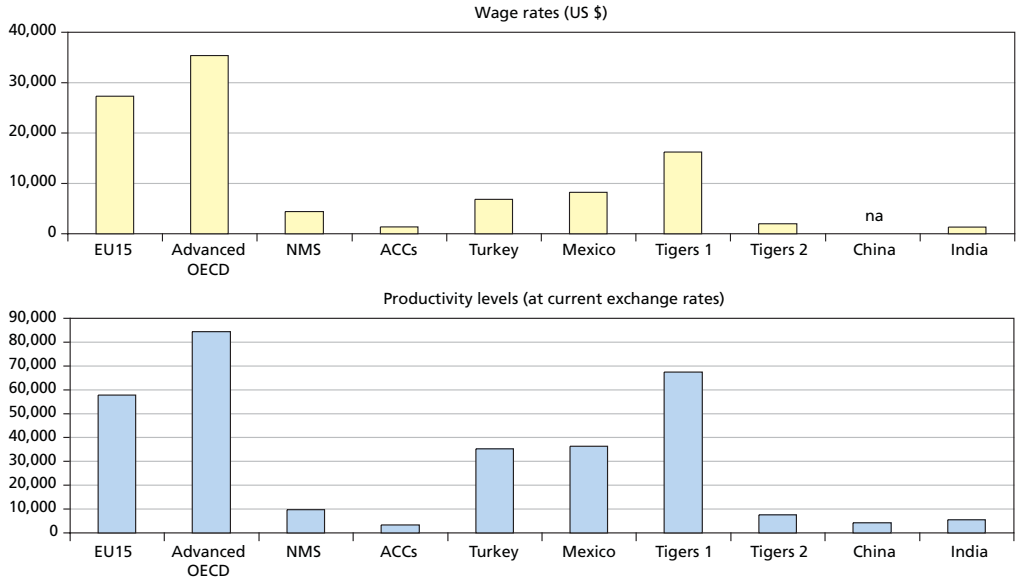
Figure 1a: The stock of foreign direct investment (FDI) in % of GDP, 2000 and 2004



See Box 1 for the country classification.

Source: Calculated from UNCTAD Foreign Direct Investment Data.

Figure 1b: Manufacturing sector competitiveness, 2004

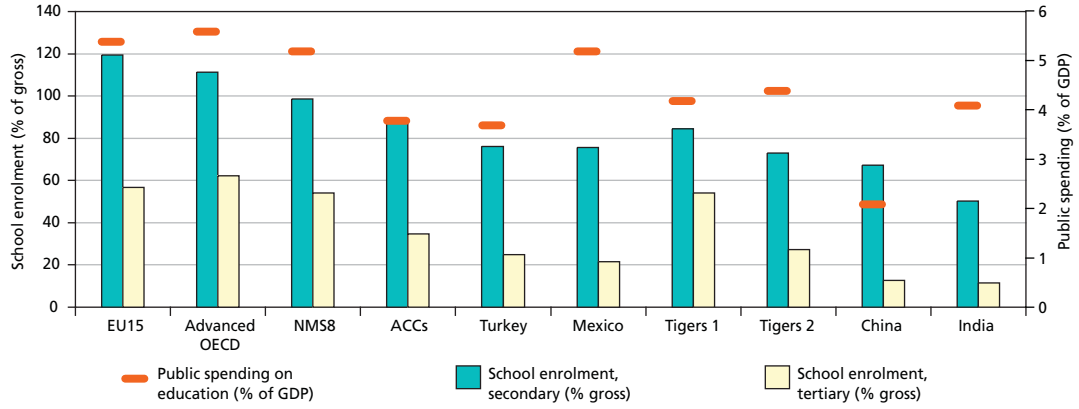


See Box 1 for the country classification.

Source: Calculated from UNIDO Industrial Statistics.

Figure 1c shows that most of the CUEs make major efforts in relation to human resource development, as seen from the share of public spending on education as well as from school enrolment rates. This suggests that they may be able to compete in higher-skilled product markets, something that shall be developed further below.

Figure 1c: Infrastructure indicators: human resources in %, 2001



Note: Gross school enrolment is defined as students of all age groups enrolled in the respective education sector in per cent of the relevant age group (therefore shares may exceed 100%).
See Box 1 for the country classification.
Source: World Bank, World Development Indicators.

Table 2 shows the value-added shares of the three large sectors of the economy, agriculture, manufacturing and services, and the share of manufactures in total exports. Most of the CUEs have a share of manufacturing in GDP which is similar or significantly beyond that in the advanced OECD economies and, in an even wider range of economies they show a higher share of manufactured goods in total exports than the more advanced economies. The exceptions are either countries in which tourism features strongly (for example, Turkey) or India which is so far an exception amongst the CUEs in that it developed a strong position in service exports (call centres, etc.). Hence, many of the CUEs play a prominent and increasing role as producers of manufactured commodities in global trade relations. Complementary data show that global trade in services is still dominated by trade within the developed world and that CUEs remain net importers of advanced tradable services (i.e. financial and business services).

Table 2: Economic and export structure, 2004

	Economic structure in % of gross value added			Export structure in % of total exports	
	Agriculture	Manufacturing	Services	Manufacturing	Services
EU15	2.7	19.2	69.0	59.3	26.9
Advanced OECD	4.1	15.7	66.8	40.7	23.0
NMS8	4.3	20.6	64.9	62.0	21.2
Turkey	13.0	14.0	63.3	59.6	29.0
Mexico	4.0	18.5	69.5	78.2	7.2
Tigers 1	1.4	19.7	74.5	75.1	17.1
Tigers 2	12.9	28.6	46.8	65.9	12.4
China	17.4	39.9	38.6	80.1	10.8
India	22.7	15.6	50.7	51.1	32.1

Note: Shares do not add up to 100% as some sector shares are not identified, such as mining and construction.
See Box 1 for the country classification.

Box 1: Geographical coverage of the sample of countries

The sample covers 45 countries, which can broadly be classified into advanced economies and catching-up countries. The group of advanced countries is divided into EU Member States and other advanced OECD members (Australia, Canada, Iceland, Japan, New Zealand, Norway, Switzerland, United States).

The group of catching-up economies falls into three broad geographical regions: the EU cohesion countries, central and eastern European countries (CEECs) and Asian emerging countries. The cohesion countries consist of Greece, Portugal and Spain. In some of the tables and figures the CEECs are divided into the eight new central and eastern European members of the European Union which joined in mid-2004 (NMS8 – excluding Cyprus and Malta for which trade in goods is very small) and the two latest Member States plus candidate countries (Bulgaria, Romania, Croatia and Turkey; the first three sometimes referred to as ACCs).

The Asian countries are split into the early or first wave of Asian Tigers (Hong Kong, Republic of Korea, Singapore, Taiwan where available) and the second wave of Asian Tigers (consisting here of Indonesia, Malaysia, the Philippines and Thailand). Two additional emerging markets are also included: China and India. These groups of catching-up economies have – at different stages – become successful internationally, particularly in manufacturing production and trade. The same is the case for the new EU Member States (NMS) but less so for the two newest entrants and the candidate countries.

The focus, therefore, is on eight groups of catching-up regions. Comparisons are also made between two groups of advanced economies: the remaining 12 old EU Member States (or 'EU-North', i.e. the 15 'old' Member States less the three cohesion countries) and the advanced OECD countries outside of the EU.

The final point as regards the nature of South-North trade integration is that trade specialisation between the CUEs and the developed economies is not static. Figures 2a and 2b depict the development of relative market shares in different industry groupings (see Box 2 for a classification of these industry groupings) where these have been grouped by the degree to which they require more or less technological know-how. The grouping is also rather similar in the degree to which different industries require more or less labour skills (as measured for example by educational attainment levels).

Thus within a rather short time span (from the mid-1990s to the early 2000s), the trade positions in EU markets by industry type have changed quite considerably in the case of most of the CUEs. Over that period, the CUEs' market shares on EU markets depend less on doing well in industrial areas which require only very low technology (and skill) input, as they have made significant inroads in industrial areas which require medium (or higher) technology inputs. This is an important dynamic of changing trade specialisation.

Figure 2a: Relative market shares in EU imports by industry groupings, 1995–97

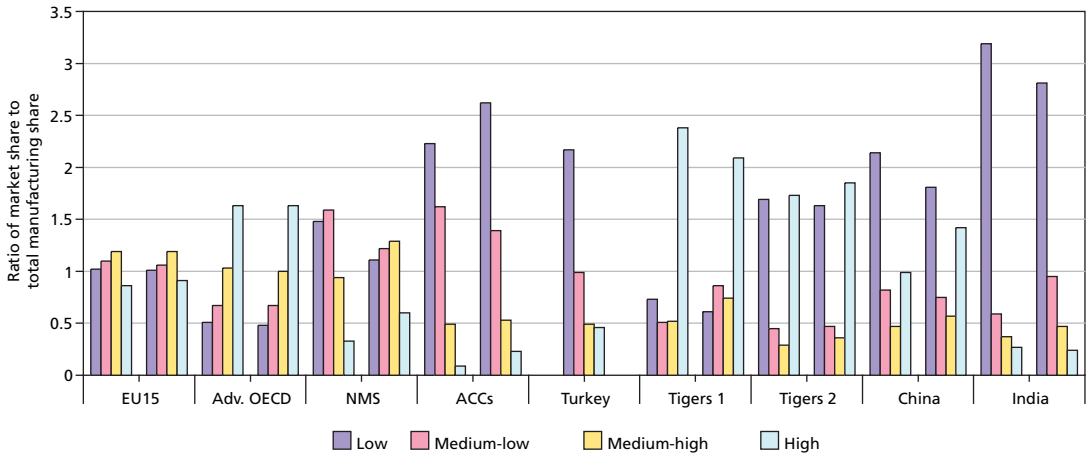
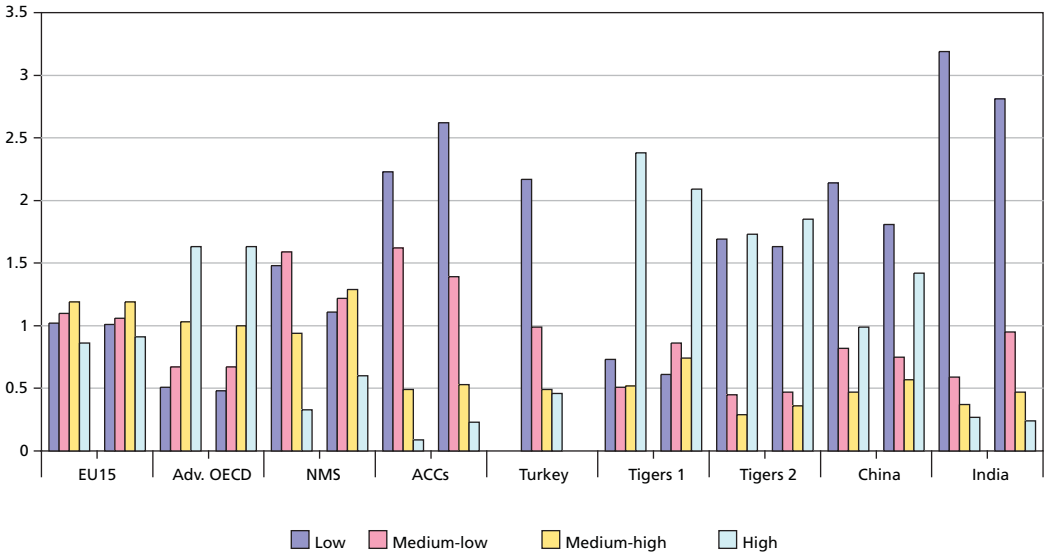


Figure 2b: Relative market shares in EU imports by industry groupings, 2002–04



Note: The shares refer respectively to the relative market share position of the different industrial groupings (low, medium-low, medium-high, high) in a country's exports to EU15 markets. The market shares are always set in relation to (i.e. divided by) the country's overall market share in EU15 imports.
Source: COMEXT database; WIIW calculations.

Box 2: Grouping of industries

NACE code	Industry description	Technology group	Technology intensity
15	Food products and beverages	1	low tech
16	Tobacco products	1	low tech
17	Textiles	1	low tech
18	Wearing apparel; dressing and dyeing of fur	1	low tech
19	Leather and footwear	1	low tech
20	Wood and wood products	1	low tech
21	Pulp, paper and paper products	1	low tech
22	Publishing, printing and reproduction of recorded media	1	low tech
23	Coke, refined petroleum products and nuclear fuel	2	medium-low tech
24	Chemicals and chemical products	3	medium-high tech
25	Rubber and plastic products	2	medium-low tech
26	Other non-metallic products	2	medium-low tech
27	Basic metals	2	medium-low tech
28	Metal products	2	medium-low tech
29	Machinery and equipment n.e.c.	3	medium-high tech
30	Office machinery and computers	4	high tech (separately identified)
31	Electrical machinery and apparatus n.e.c.	3	medium-high tech
32	Radio, television and communication equipment and apparatus	4	high tech
33	Medical, precision and optical instruments, watches and clocks	4	high tech
34	Motor vehicles	3	medium-high tech
35	Other transport equipment	3	medium-high tech
36	Furniture, manufacturing n.e.c.	1	low tech
37	Recycling	1	low tech

Note: n.e.c. = not elsewhere classified
Source: Landesmann et al. (2007).

Fragmentation, outsourcing and offshoring

By the mid-1980s, and particularly in the Japanese 'triangle trade', trade in intermediate products had become a significant feature of international trade between some countries. This was driven by the specialisation advantages in the production and uses of intermediate inputs, which allowed wider choice for buyers of such intermediate inputs to obtain a better fit in relation to the requirements for specific production purposes. This concept of 'vertical product differentiation' helped in understanding trade and production specialisation between countries at different levels of economic development.[9] Moreover, some recent empirical studies emphasise that trade between advanced economies is often characterised by a large share of vertical intra-industry trade (see Fontagne et al., 2006) and hence that international trade integration can imply strong intra-industry reallocation and consequentially also some employment reallocation.

However, international production supply chains can be organised either within a single multinational company, i.e. performed within the same decision-making unit (the 'firm'), or by means

[9] See Aturupane et al. (1999) and Fontagne et al. (2006).

of contractual arrangements with other firms. This distinguishes international outsourcing from the international operations of a multinational, whereby in the latter case a company might arrange the shipping of inputs between different subsidiaries. The reasons why companies may choose intra-company transactions and thus forego the advantages of the flexibility in obtaining the best trading partner are related to transactions costs, asset specificity and the problem of incomplete contracts.

Transaction costs obviously arise in the case of contracts having to be drawn up between independent decision-making bodies, which do not arise in the case of transactions within the same decision-making unit.

Asset specificity refers to specific investments made in relation to specific transactions, for example, specific training required for a particular order, product specifications or logistic investments. Once such specific investments are made, there is the issue of dividing up the returns, and since contracts are in most cases incomplete, it is likely that the returns will not be securely divided up according to the investments made by the transacting partners and may lead to an under-investment in such relationships.

To overcome such problems, there is the possibility of 'internalisation', i.e. of conducting such transactions within the same company, as the issue of the distribution of such rents then disappears. However, internalisation leads to costs involved in losing the flexibility mentioned earlier in always choosing the most efficient supplier. It also raises issues of intra-company incentive structures.

Hence, depending upon the extent and character of asset specificity and the incomplete contract problem, a firm will either choose the path of outsourcing or intra-company, non-market transactions. Presumably the reason why outsourcing has become a more widespread phenomenon recently is that a shift has occurred in the relative cost-benefit situation between integration and outsourcing. An example of such a change could be that as industries globalise, there are fewer transaction-specific investments needed, as contracts, conditions, etc. have become more standardised. Lower transaction-specific investments means a decline in the asset specificity problem. Furthermore, there are now more potential suppliers and hence the opportunity costs of losing the flexibility inherent in market transactions would be higher. Finally, standardisation of contracts and better legal enforcement possibilities worldwide also reduce the incomplete contracts problem.

Patterns of outsourcing

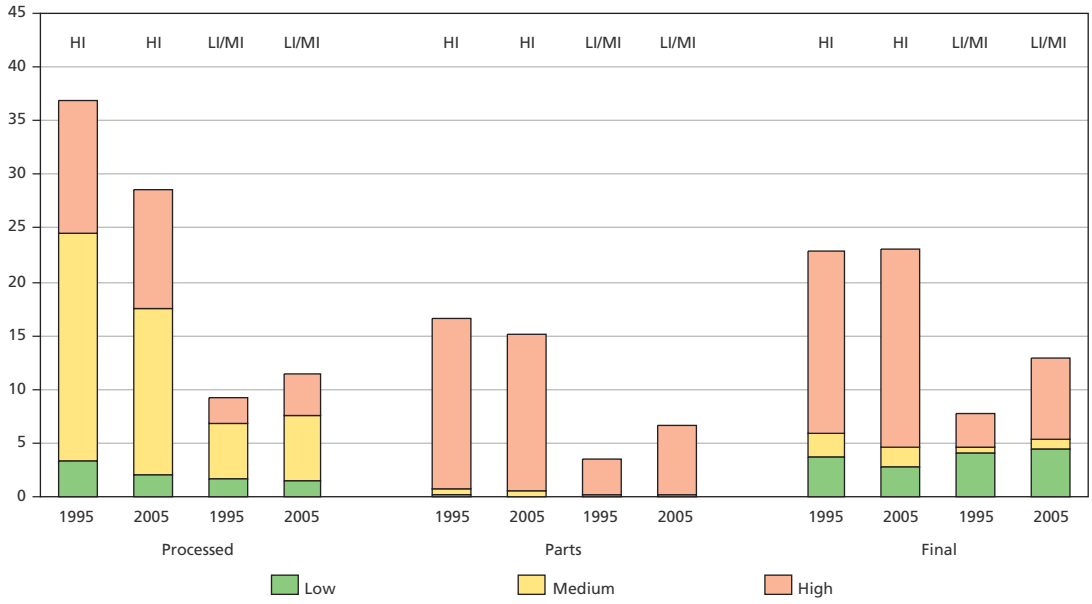
Landesmann et al. (2007) study the structure of imports of intermediate inputs into the EU27, with respect to whether these came from high-income or low- and medium-income countries and with respect to the skill content of these imports. The focus of this analysis was to determine whether there was a particular pattern in outsourcing backwardly-linked stages of production to low- and medium-income countries. If the skill content in the imports of intermediate inputs from low- and medium-income countries was low, this would indicate a typical pattern of outsourcing; the less skill-intensive stages of production are outsourced to low-/medium-income countries, while the more skill-intensive stages remain in higher-income countries.

They found that there is evidence of some vertical differentiation in that the skill content of imports of intermediate inputs from high-income countries is indeed higher than the skill content from low-/medium-income countries, but that over time this gap has narrowed significantly, i.e.

medium-income countries are also increasingly exporting intermediate inputs with a higher skill content to high-income economies. Furthermore, there is a significant shift of imports of intermediates as a whole from high-income to medium-income economies and this shift is stronger than in the case of final goods.

Figures 3 and 4 summarise the results obtained in this study. It shows that there was a shift in the shares of intermediate imports (processed inputs and parts) supplied by low-/medium-income countries to EU27 markets and, furthermore, that this shift in shares was stronger in the case of intermediates than in the case of final goods.

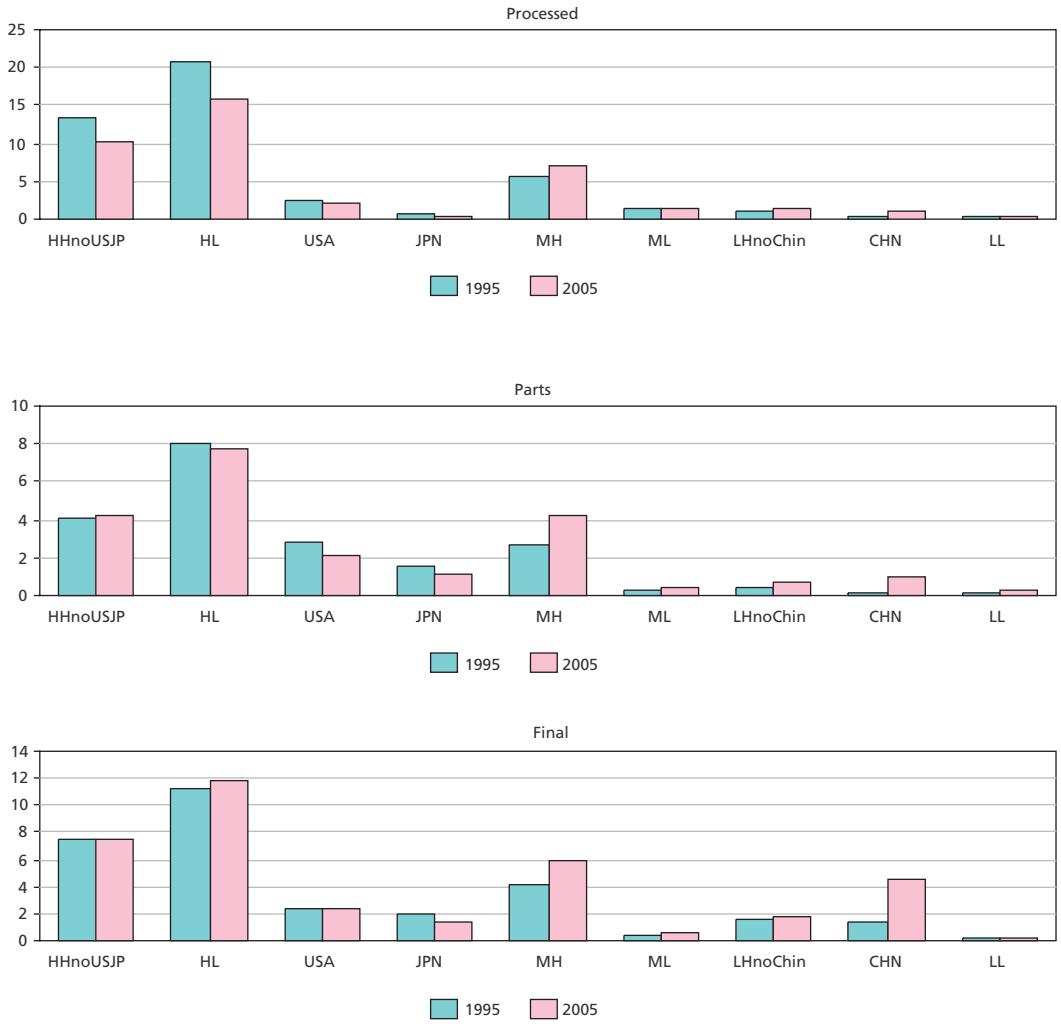
Figure 3: Shares in EU27 imports by high- and low-/medium-income countries and by import categories, 1995 and 2005 (in %)



Note: HI: High-income countries, LI/MI: Low-/medium-income countries; see Box 3 for country groupings.
Source: Landesmann et al. (2007), calculated from UN trade statistics.

Figure 4 shows the breakdown of imports of processed inputs, parts and final goods by different supplier groups (distinguished here as high-income, medium-income and low-income countries). Additionally, the countries were identified as fast- or slow-growing economies, i.e. H or L economies, over this period; see Box 3 for details. What emerges is that there are two groups of catching-up economies which account for most of the growth of import shares of the low-/medium-income group: the group of MH countries, i.e. the medium-income, high-growth economies, many of which are the central and eastern European catching-up economies, and China, which is, so far, an LH, i.e. low-income, high-growth economy. It is interesting to observe that China increased its share in EU27 imports mostly in final goods, while the MH countries increased their share both in intermediates (processed inputs and parts) as well as in final goods. As many of these countries are located in Europe, it appears that geographic distance matters for outsourcing.

Figure 4: Imports of EU27 by source regions and by import categories (shares in % of total imports), 1995 and 2005



Source: Landesmann et al. (2007), calculated from UN trade statistics.
Notes: See Box 3 for the country and group codes. LHnoUSJP means low-growth, high-income countries excluding the US and Japan. LHnoChin means low-growth, high-income countries excluding China.

To summarise: (i) there is evidence of increased outsourcing from high-income to medium-income economies (ii) the skill content of intermediates purchased from medium-income countries is increasing rapidly, pointing to both an outsourcing and a catching-up process and (iii) geographic proximity matters in outsourcing.

Trade, offshoring and labour markets

For over 50 years, economists have thought about the labour market consequences of free trade in terms of the Heckscher-Ohlin-Samuelsson model (HOS) and its extensions in Stolper and Samuelsson (1941). HOS states that a country will export the good that intensively uses its relatively

Box 3: Classification of regional groupings

Country	Code	Group	Country	Code	Group
Australia	AUS	1HH	Spain	ESP	5MH
Austria	AUT	1HH	Taiwan	TWN	5MH
Finland	FIN	1HH	Argentina	ARG	6ML
Great Britain	GBR	1HH	Brazil	BRA	6ML
Italy	ITA	1HH	Colombia	COL	6ML
Netherlands	NLD	1HH	Costa Rica	CRI	6ML
Norway	NOR	1HH	Greece	GRC	6ML
Japan	JPN	2JPN	Israel	ISR	6ML
USA	USA	3USA	Mexico	MEX	6ML
Bel./Lux.	BELU	4HL	New Zealand	NZL	6ML
Belgium	BEL	4HL	South Africa	ZAF	6ML
Canada	CAN	4HL	Uruguay	URY	6ML
Denmark	DNK	4HL	Venezuela	VEN	6ML
France	FRA	4HL	Bangladesh	BGD	7LH
Germany	DEU	4HL	India	IND	7LH
Germany, West	BRD	4HL	Indonesia	IDN	7LH
Iceland	ISL	4HL	Malaysia	MYS	7LH
Luxembourg	LUX	4HL	Mozambique	MOZ	7LH
Sweden	SWE	4HL	Pakistan	PAK	7LH
Switzerland	CHE	4HL	Sri Lanka	LKA	7LH
Bulgaria	BGR	5MH	Thailand	THA	7LH
Chile	CHL	5MH	Tunisia	TUN	7LH
Croatia	HVR	5MH	Turkey	TUR	7LH
Czech Republic	CZE	5MH	China	CHN	8China
Estonia	EST	5MH	Algeria	DZA	9LL
Hong Kong	HKG	5MH	Côte d'Ivoire	CIV	9LL
Hungary	HUN	5MH	Cameroon	CMR	9LL
Ireland	IRL	5MH	Egypt	EGY	9LL
Korea	KOR	5MH	Ethiopia	ETH	9LL
Latvia	LVA	5MH	Ghana	GHA	9LL
Lithuania	LTU	5MH	Jordan	JOR	9LL
Poland	POL	5MH	Kenya	KEN	9LL
Portugal	PRT	5MH	Morocco	MAR	9LL
Romania	ROM	5MH	Nigeria	NGA	9LL
Singapore	SGP	5MH	Peru	PER	9LL
Slovakia	SVK	5MH	Philippines	PHL	9LL
Slovenia	SVN	5MH	Ukraine	UKR	9LL

Note: The classification into country groupings has been made on the basis of income levels (using GDP per capita at PPP; average over the period 1990) into high-, medium- and low-income countries and then grouping them again into high-, medium- and low-growth economies (on the basis of GDP per capita growth estimated over the period 1980–2003) so that we arrive at six country groupings, HH, HL, MH, ML, LH and LL, where the first letter stands for the income group and the second letter for the growth group; apart from these groupings, the US, Japan and China have been separately identified.

abundant factor of production and will import the good that intensively uses its relatively scarce factor. To approximate the situation of the EU in international trade, it is assumed that the relatively abundant factor is high-skilled labour and the relatively scarce one is low-skilled labour.

A country in which unskilled labour is relatively scarce would in autarchy (an economy closed to trade) have a price structure where unskilled labour-intensive products would be relatively expensive, as the costs of unskilled labour would be relatively high. As this country opens up trade with other countries where unskilled labour is relatively abundant, the prices of the export goods (intensive in high-skilled labour) would rise due to the increase in demand coming from exports and the price of import goods (intensive in low-skilled labour) would fall as cheaper imports enter the domestic market. The product price increase in the exporting sector increases the demand for both skilled and non-skilled workers in that sector, but demand increases more for the skilled workers and drives up their wages relative to the unskilled. The supply of extra workers to the expanding export sector comes from the shrinking low-skilled sector, which has released more low-skilled than high-skilled workers and further pushes down the wages for low-skilled workers. Other results emerging from the HOS theory were the strong effects trade liberalisation could have on employment structures across industries and, furthermore, because of the change in relative factor prices, upon the choice of techniques within industries and the capital labour or the skilled-unskilled labour ratios.

It is the fate of the workers in the low-skilled sectors that dominates the discussion of the negative effects of trade liberalisation in the EU. So far the argument has been that declining demand for low-skilled labour is only expressed in terms of wages. However, wages in the labour market seldom adjust smoothly downwards in response to declining demand and will lead to some unemployment of low-skilled workers. Not all of these low-skilled workers will be immediately re-employed in the growing export sector; they may remain low-skilled and unemployed. The ensuing excess supply of low-skilled labour may thus tend to reduce the wages for low-skilled workers in the entire economy, i.e. even in sectors that do not compete in global markets. While generally, trade theory does conclude that trade liberalisation is welfare enhancing, there are adjustment costs as labour is reallocated between sectors. Realistic theories of the labour market would indicate that the adjustment costs may be considerable and long lasting. The need for a relatively smooth adjustment is the economic rationale behind the recently introduced European Globalisation adjustment Fund that is taken up in detail in the second half of this report, together with other means of dealing with this labour market adjustment.

Adjustment of labour markets

The nature of labour market adjustment to adverse shocks varies between countries, depending upon institutions such as the wage bargaining system and the design of social security. Broadly speaking, the negative consequences of trade in the importing sector can occur through a downward wage adjustment or through higher unemployment. Table 3 shows that, broadly speaking, the worsened position of unskilled workers relative to skilled workers took the form of a large increase in the earnings differential in the US and the UK. In continental countries, the earnings gap did not widen to the same extent. While unemployment increased during the 1980s in relative terms, the unemployment rate of low-skilled workers increased in Germany and Italy but not in the UK and the US.

Table 3: Labour market adjustment in five countries

Country	High to low education earnings ratio (men)*		Unemployment rate**			
			Low-skilled workers		High-skilled workers	
	1980	1990	1979–82	1991–93	1979–82	1991–93
US	1.37	1.51	9.4	11.0	2.1	3.0
UK	1.53	1.65	12.2	17.1	3.9	6.2
France	1.66	1.66	6.5	12.1	2.1	4.2
Germany	1.36	1.42	7.6	10.7	2.0	2.2
Italy	1.60	1.61	4.8	7.5	12.2	12.5

Source: *Nickel and Bell (1996), **Peters (2001). Both cited in Brakman et al. (2006).

In recent decades, there has been a considerable shift in the distribution of wages from low-skilled to high-skilled labour. It might be obvious to attribute this to increased international trade, in accordance with the HOS theory. While this has been a hotly contested issue in economics for decades, it would appear that today, most economists consider the impact of trade to be marginal. It is argued that the scale of trade is still too small to have a significant impact on wage distribution.

The prime alternative suspect is 'skill-biased technological change'. New technology has typically always replaced lower-skilled labour, while the increased use of, for example, ICT has increased the demand for higher-skilled workers. Furthermore, labour-saving technology is more prevalent in manufacturing than in services and manufacturing has a larger share of lower-skilled workers. Finally, theory predicts that an increase in the relative price of skilled labour-should increase relative employment of unskilled workers within industry. But the growth in inequality has been accompanied primarily by a within-industry shift in relative demand away from unskilled workers.[10] However, it may not be appropriate to view skill-biased technological change and foreign competition as two distinct factors. For example, it may well be that the competitive pressures from abroad are a key factor behind the need for firms in the EU to introduce productivity-enhancing technology.

The HOS theory was framed in terms of firms in sectors. What does economic theory have to say about the labour market and distributional effects of offshoring? Usually, it is not perceived as different from specialisation effects linked to any other form of vertical differentiation. It ultimately depends on whether certain factors of production become more or less scarce through the process of outsourcing. Thus, if relatively low-skilled activities become offshored, this will lower the employment and/or wages for these workers.

Alternative theoretical models

There are a number of other theoretical models that try to draw more explicitly from theories of the boundaries of the firm and trade theory.[11] They are rather complex and can generate a variety of results, particularly as regards the distributional implications for high- and low-skilled labour. Much has been made in these models of the positive productivity effects of global outsourcing. While in

[10] See, for example, Berman et al. (1994) for the US and Machin et al. (1996) for the UK, Sweden and Denmark.
[11] See, for example, Grossman and Rossi-Hansberg (2006) and Helpman (2006).

principle such effects are also present in the HOS model, much more emphasis is placed on the productivity enhancement potential of global outsourcing. The increase in total factor productivity in firms that have successfully outsourced may then lead to such a demand for their product that it will increase demand not only for high-skilled workers, but also for the remaining low-skilled jobs that cannot be offshored.

Results in Hijzen and Swaim (2007) suggest a small positive effect of offshoring on sector-level employment, based on manufacturing data in 17 OECD countries. They also provide a brief, accessible and recent review of literature and cite some other studies that also find positive net employment effects at sector level. However, OECD (2007), using the same data, finds no positive employment effects resulting from the increased productivity and so the net employment effect is negative. Indeed, it is exceptionally difficult to rigorously test hypotheses on offshoring. Those generated by traditional trade theory could largely be tested on data on trade between different sectors in different countries. With the offshoring of particular tasks within the firm to other firms abroad, it is difficult to imagine how hypotheses could be properly tested without firm-level data which can trace the geographical source of intermediary goods all along the global supply chain. These will hardly be available in the foreseeable future.[12]

Until economists become more confident about modelling such complexities and better firm-level data becomes available, the safest bet is to take the distributional implications of the HOS model as given and remain agnostic as regards possible positive employment effects. Moreover, the point of departure of this research is perhaps not the most appropriate one. It compares the number of jobs after offshoring with the number before. The existing number of jobs before offshoring is probably not the realistic counter factual case; it could be no jobs at all. In this respect, offshoring should of course be viewed in a much more positive light.[13] There are other interesting and new policy implications of a fully developed global supply chain with extensive 'trade in tasks', particularly in services. The somewhat speculative final chapter of this part of the report (Chapter 3) investigates some of the policy scenarios related to these issues.

[12] In principle, input-output tables are the appropriate means of ascertaining the amount, type and source of inputs to final production and the best research is based on such data. However, they have serious shortcomings. Probably most importantly, it is assumed that the entire value added of imported intermediaries originated in the exporting country. In other words, it does not consider where the inputs to the intermediary imports were produced. These may even have come from the home country. Moreover, with the focus on intermediaries (inputs), it ignores the possibility of the offshoring of final assembly. Finally, it does not capture the possibility that the offshored activity is not reimported but exported to a third country.

[13] Pedersen (2004) describes the experience of ECCO, a Danish producer of shoes. Until 1984, the shoes were produced in Denmark by 620 employees. After establishing subsidiaries in Portugal, Indonesia, Thailand and Slovakia, ECCO in 2002 had 8,200 employees abroad and 705 employees in Denmark. But while the 620 were process or production line workers, the 705 were employed in design, research, development, quality tests, sales and marketing. Given unit wage costs in Denmark, one wonders whether the company would exist today had they not offshored the lower-skilled jobs.

2 Evidence of offshoring in the European Restructuring Monitor

The practice of relocating economic activity from EU Member States to other countries in search of lower costs and/or greater efficiency as part of a wider process of globalisation has attracted a good deal of public interest over recent years because of the job losses which have been a direct result. In many countries, a few well-publicised cases have featured prominently in the media and have prompted popular concern about the implications for employment of competition from parts of the world with much lower labour and other costs. However, relatively little is known in reality about how widespread the process is, how many jobs have been lost in the Union as a result and what kind of jobs these have been. The prevailing view seems to be that the jobs in question have generally been low-skilled ones in labour-intensive manufacturing industries in which developing countries with abundant supplies of cheap labour have a clear comparative advantage. But how far this is the case in practice cannot easily be answered by the data readily available. This chapter will throw light on this issue based on data from the European Restructuring Monitor (ERM) between 2003 and 2006.[14]

The information used comes primarily from the ERM, though this has been extended to include the nationality of the enterprises responsible for the offshoring, which is not always reported in the database. Offshoring is often combined with other forms of restructuring, such as plant closure or internal reorganisation, and may not be reported as the main form of restructuring in the online ERM database. An effort has therefore been made to identify cases of offshoring from the information reported, irrespective of whether they are labelled as such in the database. In addition, efforts were made to extract both the type of work (occupation) being offshored and the destination of the offshoring.

Since most offshoring cases are from the EU15, most focus is placed on offshoring outside of these countries as a group. This allows cases of movement from EU15 countries to the new Member States in central and eastern Europe to be captured. There, labour costs in particular are generally much lower than in the EU15 and, accordingly, the motivation for offshoring may be similar to that underlying offshoring further afield. Part of the aim is therefore to examine the scale of shifts of activity to the new Member States and to compare the features with those of movements to third countries.

Cases of offshoring so defined are distinguished from those of shifts of activity to another country within the EU15 or to another region in the same country. These are labelled 'relocation' and the scale of this is compared in the analysis here to that of offshoring. It should also be noted that cases of outsourcing are included as offshoring if there is a switch from own production to purchasing the goods or services in question from a supplier in a country outside the EU15. Such cases have the same direct implications for domestic employment as if the company concerned opened a factory or office abroad instead of sourcing supplies from a third party.

It is important to recognise the nature of the data used and their limitations. The information compiled by the ERM is entirely dependent on the details reported by correspondents in Member States on cases involving the job creation or loss of at least 100 jobs. While there is little reason to question the quality of the reported data as such, there are some concerns as to the extent to which

[14] This chapter was written by Terry Ward (Applica) in cooperation with Donald Storrie.

the ERM is representative of restructuring cases in general. Appendix 1 provides some details on the ERM, including some indication of likely directions of bias. However, despite its possible limitations, the ERM is a unique source of information on restructuring cases undertaken by large enterprises, which provides a valuable insight into cases of offshoring. It seems reasonable to assume that the cases reported, which number over 350 over the period 2003 to 2006, and their details are fairly representative of the instances of offshoring over this period and are, accordingly, indicative of what has happened.

Finally, while there may be concerns about the representativeness of the overall numbers affected by restructuring, there is little reason to suppose that the percentage of total job loss attributable to offshoring is not representative. Kirkegaard (2007) provides a global overview of offshoring throughout the developed world. He considers the ERM to be the best available data on the issue in Europe. He compares the contribution of offshoring to total job loss in both the EU and the US and finds that the ERM data tell roughly the same story as the more developed administrative data compiled by the US Bureau of Labor Statistics.

Cases of restructuring involving offshoring

The ERM contains details of almost 3,500 cases of restructuring involving jobs losses in the EU Member States over the four-year period 2003 to 2006 (Table 4).[15] This includes cases reported in the 10 new Member States which joined the Union in May 2004 and Bulgaria and Romania who joined in January 2007, though such reporting began only part way through the period. The number of cases recorded where job losses occurred was the same in the first two years, though the effect on employment was some 26% larger in 2004 than in 2003. The employment effect from the cases reported was similar in 2005, with around 600,000 jobs being lost through restructuring of various kinds (plant closures, mergers, internal reorganisation, outsourcing). The number of cases increased to around 1,050, in part reflecting the expanded coverage of the new Member States. In 2006, both the number of cases and number of workers affected declined by around 10%, though there were still some 600,000 jobs lost as a result of restructuring.

Table 4: Cases of restructuring involving job losses and offshoring in the EU, 2003–2006

	Total cases involving job losses		Cases involving delocalisation		Delocalisation as % of total	
	Number of cases	Announced cut in employment	Number of cases	Announced cut in employment	Number of cases	Announced cut in employment
2003	745	525,389	55	47,011	7	9
2004	745	662,986	89	45,241	12	7
2005	1,049	657,072	112	63,894	11	10
2006	936	600,346	100	38,144	11	6
2003–2006	3,475	2,445,793	356	194,290	10	8

Source: European Restructuring Monitor.

[15] It should be noted that the figures in the table and reported in the text are taken from the information contained in the ERM case studies but may differ from those included in the online resource because of some post-processing of the data to exclude, for example, some cases which are reported more than once and those where details of the number of jobs affected or the sector of activity in which the worksite is located are incomplete.

In 2003, 55 cases were reported involving offshoring, amounting to some 7.5% of the total cases involving job losses. The announced employment effects of these totalled just over 47,000, around 9% of all jobs lost as a result of restructuring. The number of cases involving offshoring increased markedly in 2004 to 89, 12% of the total cases of restructuring, but the number of workers affected declined slightly, which meant a fall to just under 7% of the total jobs lost. While there were more instances of offshoring, therefore, the average scale of the activity concerned was smaller.

In 2005, there was a further increase in the number of cases of offshoring to 112 across the EU as a whole, representing, however, a slight fall in the proportion of the total cases of restructuring. There was an even larger increase in the number of job losses announced as a consequence of offshoring to almost 64,000, amounting to just under 10% of the total announced reduction in employment resulting from restructuring.

In 2006, however, the number of cases of offshoring declined to 100 in line with the reduction in the overall number of cases of restructuring involving job losses. The number of workers affected declined at the same time, but by much more to under 40,000, only around 6.5% of the overall job losses from restructuring. According to the ERM, therefore, there was a decline in the relocation of activities from the EU15 to other countries outside the EU15 in 2006.[16] This is perhaps contrary to the popular belief that such instances are growing in number and importance. Despite the qualifications surrounding the data indicated above, however, there is little reason to suppose that these would be sufficient to alter the pattern of change shown by the data in a major way.

Moreover, the total number of jobs which appear to have been lost as a result of offshoring is a very small fraction compared to the total number employed in the EU, which amounts to over 200 million and to around 165 million if the new Member States are excluded. Of course, the number of jobs actually possible to relocate, i.e. excluding many public sector and service activities, is only a proportion of this, though manufacturing still employs almost 40 million people in the EU. Moreover, as indicated below, the incidence of offshoring across sectors varies markedly.

To summarise, the evidence indicates that the scale of offshoring is smaller than might be expected and there is no sign of an upward trend, let alone a major growth in cases.

Cases of relocation within the EU15

Before looking at the incidence of offshoring across Member States and sectors, it is of some interest to examine the relative importance of cases of relocation which do not involve a shift of activity out of the EU15, since from a worker's perspective the effects are much the same even if the implications for the EU economy differ.

The number of such cases is much lower than the cases of offshoring out of the EU15 and the number of jobs lost is equally smaller. Over the four years 2003 to 2006, therefore, there were some 150 cases of relocation across the EU15, defined as either a shift of activity from one region to another within

[16] To reiterate, 'delocalisation' is defined here as the relocation of activities from the EU, including the new Member States, to countries outside the EU15 (i.e. excluding the new Member States). In practice, virtually all the cases of delocalisation involve movement from the EU15 countries, but there are a few cases of movement from the new Member States, as noted below, some of which involve relocation to other new Member States.

a country or a shift from one country to another within the EU15. This represents around 4.5% of the total cases of restructuring involving job losses reported in the ERM (Table 5). These were associated with an announced reduction in employment of around 47,500, or just 2% of the total job losses from restructuring. Of these cases, some 30% involved moves to another EU15 country with an overall job loss of around 12,000, only 0.5% of the total jobs lost through restructuring.

Table 5: Offshoring of activity to another region or country in the EU15, 2003–2006

	Total cases of relocation		Cases where change of country		Relocation as % of total	
	Number of cases	Announced cut in employment	Number of cases	Announced cut in employment	Number of cases	Announced cut in employment
2003	14	3,327	2	288	2	1
2004	37	15,543	9	2,835	5	2
2005	52	15,866	13	2,896	5	2
2006	50	12,797	20	5,994	5	2
2003–2006	153	47,533	44	12,013	4	2

Source: European Restructuring Monitor.

Offshoring by Member State

The incidence of offshoring varies across the EU, as do cases of restructuring as a whole. Over the period analysed, announced reductions in employment from all cases of restructuring reported to the ERM amounted to just over 1% of employment in 2005 (Table 6, in which, as in the rest of the analysis, total employment is taken from the EU Labour Force Survey). This figure gives an indication of the relative scale of job losses from restructuring across the EU over this period, as do the figures expressed in the same way for Member States. These show a variation from only 0.2% of employment in Italy, partly reflecting the relatively small number of large enterprises compared with other countries, to 2% in the UK. The figures for the new Member States, it should be noted, cover only the period for which data are recorded in the ERM, typically from some time in 2004, so that they understate the job losses which occurred in these countries relative to those other parts of the EU.

The proportion of job losses attributable to offshoring ranged from over 25% in Portugal and just under this in Ireland, to 4–5% in Belgium and the Netherlands and under 4% in three new Member States: the Czech Republic, Hungary and Poland.[17] In the latter, much of the restructuring involving job losses has taken the form of plant closure and these countries, as indicated below, have been major destinations for activities relocated from elsewhere rather than the source of such shifts in activity.

Nevertheless, it is instructive to note that at least some offshoring from the new Member States to even lower-cost countries has already occurred. This is particularly the case in Slovenia, where job losses from offshoring – typically to other countries in eastern Europe, especially the Balkans but also to China and North Africa – amounted to some 14% of the total jobs lost from restructuring. It was

[17] The announced job losses are the focus here rather than the number of cases of offshoring to allow for the difference in scale of the cases concerned (i.e. the job losses can be regarded as a weight that can be applied to the individual cases in order to take explicit account of the variation in size). They are also, of course, the main point of interest in any individual case.

also the case, though to a lesser extent, in Slovakia, where job losses from offshoring, to China especially, represented almost 10% of the total.

Table 6: Job losses from restructuring and from offshoring in Member States, 2003–2006

	Total job losses from restructuring (% total employed)	Job losses from delocalisation (% total losses from restructuring)
BE	-1.2	4.4
CZ	-0.6	3.6
DK	-0.8	16.5
DE	-1.0	6.9
EE	-0.4	14.0
IE	-1.2	24.6
ES	-0.4	6.7
FR	-0.9	6.6
IT	-0.2	6.4
HU	-1.4	1.8
NL	-1.0	4.7
AT	-0.6	6.7
PL	-1.1	0.7
PT	-0.8	25.6
SI	-1.2	14.1
SK	-0.5	9.0
FI	-1.5	9.7
SE	-1.3	7.3
UK	-2.0	8.9
EU	-1.2	7.9

Source: European Restructuring Monitor.

Offshoring by sector

The cases of offshoring which have occurred over recent years have not been evenly spread across industries or sectors. Nor, however, have they been concentrated in low-skilled, labour-intensive parts of the economy. Moreover, their sectoral incidence has varied across countries.

Overall, in the EU, around a quarter of the jobs lost from offshoring were in banking and insurance, though these were relatively strongly concentrated in the UK. Almost 8% of the job losses occurred in computing, though as in the case of banking and insurance, the offshoring of the activities concerned took place only in a few countries, in Germany and Ireland in particular. Outside of these two sectors, which together accounted for a third of the overall reduction in employment from offshoring, the relocation of activities was concentrated in motor vehicles, which accounted for almost half the jobs lost from such relocation in Germany and over half in Portugal as well as significant proportions in Sweden, France and Italy, and in electrical machinery. Offshoring was particularly important in the latter industry in Finland, where it was responsible for almost a third of job losses from this form of restructuring, and France, Italy and Portugal, where it accounted for almost 20%.

Other sectors in which offshoring was comparatively important include chemicals, pharmaceuticals and oil refining and the manufacture of television, radio, telecommunications and other electronic equipment. A large proportion of the job losses resulting from relocation in the former sector were spread across Europe as a consequence of the decision of two large multinationals (Colgate-Palmolive and Unilever) to shift production from a number of locations across the EU15 to lower-cost, more efficient sites in Asia as well as in the new Member States. In television, radio and telecommunications equipment, job losses were concentrated in Finland, where this industry accounted for over half of the reduction in employment from offshoring over this period, as well as in France and Portugal.

Table 7: Division of reductions in employment from offshoring by sector, 2003–2006 (% total employment reduction)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.5
Food, drink, tobacco	2.6	2.3	0.0	0.0	0.0	0.0	0.0	3.5	4.2	3.4
Textiles, clothing, footwear	0.4	11.8	7.6	19.2	6.7	0.0	5.0	3.7	0.0	4.2
Wood, paper, printing	1.1	4.1	0.0	0.0	0.0	0.0	7.2	1.5	0.2	0.9
Chemicals, refining	3.2	14.5	0.2	0.0	0.0	0.0	0.0	1.4	18.8	7.9
Rubber, plastics, glass	0.0	3.4	0.0	5.7	0.0	2.1	6.7	3.7	0.0	2.0
Basic metals, metal products	0.0	0.0	4.8	6.3	1.0	0.0	9.3	0.9	1.5	1.6
Machinery + equipment	6.3	2.8	12.5	24.0	1.3	13.2	20.3	2.6	0.0	4.1
Office machinery	0.0	7.5	0.0	6.3	0.0	0.0	3.7	0.6	2.5	1.8
Electrical machinery	1.6	17.7	19.0	19.4	18.4	31.4	8.7	1.8	16.2	11.4
TV, radio, telecoms equipment	10.5	9.0	16.8	0.0	19.3	53.3	15.0	0.0	2.1	6.3
Instrument engineering	1.6	0.0	1.8	0.0	0.0	0.0	0.0	1.9	2.6	1.9
Motor vehicles	47.1	11.1	15.2	15.5	53.2	0.0	24.2	2.1	2.5	12.6
Other manufacturing	1.4	0.0	3.9	3.7	0.0	0.0	0.0	0.0	2.6	2.0
Electricity, gas, water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	1.0
Construction	4.9	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Wholesaling	1.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Retailing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4
Water transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Air transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1
Travel agents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1
Post and communications	1.6	0.0	0.0	0.0	0.0	0.0	0.0	4.2	2.8	2.2
Banking + insurance	2.7	0.0	11.4	0.0	0.0	0.0	0.0	59.2	27.1	24.8
Computing	13.6	15.9	0.0	0.0	0.0	0.0	0.0	0.0	17.0	7.7
Business services	0.0	0.0	4.3	0.0	0.0	0.0	0.0	4.0	0.0	1.4
Health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.2
Broadcasting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1

Note: EU is here defined as BE, DK, DE, IE, ES, FR, IT, NL, AT, PT, FI, SE and UK, where cases of delocalisation have been concentrated. The jobs lost in the cases where delocalisation has occurred from more than one country (under the 'multi-country' heading) are related to EU employment as defined here.
Source: European Restructuring Monitor.

In contrast, relatively few of the jobs lost from offshoring were in the more basic industries, such as textiles and clothing, wood, paper and printing or basic metals (iron and steel). In the first, however, job losses from shifting activities abroad represented almost 20% of the overall reduction in employment from such shifts in Italy and over 10% in Ireland, while the last accounted for almost 10% of the jobs lost in Sweden.

In the new Member States, however, much of the offshoring was in the textile and clothing sector. For example, in Slovakia, 75% of the job losses from offshoring were in this sector, which includes the leather industry, in which there was some shift of production to China (e.g. Samsonite luggage and handbags), while in Slovenia, such losses amounted to over a third of the total. In both countries, the other main sector in which offshoring occurred was electrical machinery, where production was shifted to Poland in the case of Slovakia and China in the case of Slovenia, in each case in search of lower costs.[18]

Overall, in the EU15 countries at least, cases of offshoring appear to have been much more important in the high- to medium-tech sectors across the EU than in the low-tech sectors. This does not mean that the search for lower labour costs has not been a major motivating factor, since many of the higher-tech sectors concerned are relatively labour intensive, at least in part. But it does imply that the seemingly widespread view of the activities concerned being concentrated in the low-tech sectors abroad needs to be revised, especially since the jobs being lost are in sectors where the skills required of the workforce are relatively high. This point is explored further below by examining in more detail the types of job within sectors which have been moved abroad.

Even though offshoring has tended to be concentrated in certain sectors of the economy, the relative effect on employment seems to have been relatively modest in most cases. Even in banking and insurance, the announced jobs lost over the four years 2003 to 2006 across the EU (or at least across the EU15 countries in which offshoring has largely occurred, or is reported to have occurred) amount to just under 1% of total employment in the sector in 2005 and in the UK to only around 2.5% of employment, which is only just over 0.5% a year over this period (Table 8).

Job losses from the relocation of activities abroad also represented around 1% of employment in motor vehicles and only marginally more than this in Germany, where much of the employment in the activities concerned was situated. In Ireland and Portugal, on the other hand, where the industry was smaller in size, these losses were more significant, amounting to 12–14% of employment. Job losses from offshoring were on a similar scale in television, radio and telecommunications equipment in Portugal, far exceeding the small reduction in employment in the textiles and clothing industry. Elsewhere, the scale of job losses from outward shifts of activity amounted to over 5% of employment only in a few instances – in textiles and clothing in Ireland, electrical machinery in Finland as well as Portugal and office machinery in Belgium.

[18] In Slovenia, it is instructive to note that Siteco, a German company, terminated its business operations in the country in 2005 for failing to satisfy profit expectations of a major shareholder, international investor JP Morgan. The company in Slovenia had been listed as one of the 100 most promising industrial units in the country, with a 20% average growth rate and a profit margin of up to 17% during the previous five years.

Table 8: Job losses from offshoring relative to total employment, 2003–2006 (% total employed in 2005)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	0.0	-0.2
Food, drink, tobacco	-0.1	-0.2	0.0	0.0	0.0	0.0	0.0	-0.4	-0.1	-0.2
Textiles, clothing, footwear	0.0	-7.6	-0.6	-0.1	-0.2	0.0	-2.0	-1.0	0.0	-0.4
Wood, paper, printing	0.0	-0.8	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0	-0.1
Chemicals, refining	-0.1	-2.2	0.0	0.0	0.0	0.0	0.0	-0.2	-0.6	-0.7
Rubber, plastics, glass	0.0	-0.8	0.0	0.0	0.0	-0.2	-0.7	-0.5	0.0	-0.2
Basic metals, metal products	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.3	-0.1	0.0	-0.1
Machinery + equipment	-0.1	-1.4	-0.5	-0.1	-0.3	-0.8	-1.0	-0.3	0.0	-0.3
Office machinery	0.0	-2.0	0.0	-0.9	0.0	0.0	-4.4	-0.3	-0.6	-1.4
Electrical machinery	-0.1	-9.6	-1.6	-0.3	-8.0	-6.1	-1.5	-0.5	-0.9	-2.0
TV, radio, telecoms equipment	-1.0	-4.5	-1.7	0.0	-14.5	-4.8	-3.3	0.0	-0.2	-1.6
Instrument engineering	-0.1	0.0	-0.2	0.0	0.0	0.0	0.0	-0.8	-0.2	-0.4
Motor vehicles	-1.2	-12.4	-0.6	-0.2	-13.9	0.0	-1.4	-0.4	-0.1	-1.1
Other manufacturing	-0.1	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2
Electricity, gas, water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	0.0	-0.2
Construction	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wholesaling	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retailing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Air transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-0.1
Travel agents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Post and communications	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.2
Banking + insurance	-0.1	0.0	-0.2	0.0	0.0	0.0	0.0	-2.4	-0.3	-0.9
Computing	-0.6	-2.7	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.6
Business services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Broadcasting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: EU is here defined as BE, DK, DE, IE, ES, FR, IT, NL, AT, PT, FI, SE and UK, where cases of delocalisation have been concentrated. The jobs lost in the cases where delocalisation has occurred from more than one country (under the 'multi-country' heading) are related to EU employment as defined here.
Source: European Restructuring Monitor.

Types of job delocalised

Examination of the information recorded in the ERM enables a more detailed insight into the types of activity and job which have been shifted abroad to be obtained. Unfortunately, this information

is not given for many of the cases of offshoring, but in almost half the cases, at least some details are reported.

Table 9 indicates that while most of the jobs effectively transferred abroad from EU Member States are in manufacturing or production, a significant proportion are in other areas of activity. These activities include administrative and financial operations, such as back-office tasks and accounting functions which these days are largely computerised. In the UK, they represented over 15% of the jobs lost as a result of offshoring and in the EU overall just over 8% of the total (Table 9). They also include IT support, which is a closely related activity, which accounted for a further 7% of the overall reduction in employment from a shift of activities abroad, and call centres, which were responsible for some 12% of the total reduction. The latter is a relatively low-skill activity which nevertheless requires some understanding of the process in question – and accordingly a minimum level of education – and an ability to communicate in the language of the company concerned, typically in English, though also in French and Spanish in particular cases. This ability, together with wage levels, tends to determine the countries in which it is possible to relocate this activity. The ex-colonial countries of the UK clearly have a comparative advantage in this respect.

Table 9: Job losses from offshoring by type of activity, 2003–2006 (% of total jobs offshored)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Administration + finance	2.1	4.4	2.3	0.0	0.0	0.0	0.0	15.7	10.5	8.3
Customer service + sales	4.9	0.0	20.5	0.0	0.0	0.0	0.0	5.6	0.0	4.6
Call centre	0.0	0.0	2.9	0.0	0.0	0.0	0.0	41.4	0.0	11.7
IT support	2.8	0.0	0.0	0.0	0.0	0.0	0.0	5.4	15.6	7.0
R&D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
Manufacturing	90.3	70.9	69.4	100.0	100.0	100.0	100.0	31.4	24.3	51.5
Operational activities	0.0	24.8	4.9	0.0	0.0	0.0	0.0	0.0	49.6	16.4

Note: EU is here defined as BE, DK, DE, IE, ES, FR, IT, NL, AT, PT, FI, SE and UK, where cases of delocalisation have been concentrated. The jobs lost in the cases where delocalisation has occurred from more than one country (under the 'multi-country' heading) are related to EU employment as defined here.
Source: European Restructuring Monitor.

In France, in addition, a significant amount of offshoring has occurred in activities relating to customer sales and service, which are similar to the tasks performed by call centres. Moreover, the shift in operational activities in a number of service sectors accounted for around 16% of the jobs moved abroad over the period. Multinationals with branches in a number of Member States were mainly responsible for this.

The offshoring of various kinds of administrative functions and customer support services has been particularly important in the banking and insurance sector, where advances in ICT have made it possible to locate many of the activities concerned in any part of the world, but it has not been confined to this sector. Instances of shifting such activities abroad have also occurred in oil and gas extraction (in the UK, as regards IT support) and in a number of manufacturing industries, including food, drink and tobacco (in Germany), textiles and clothing (in France) and electrical machinery (in

Ireland), as well as in a number of service sectors – in retailing, travel agencies, telecommunications and health care – though in this case, mostly from the UK.

Regions of destination of delocalised activities

From the information provided by the ERM, it is also possible in almost all cases to identify the country or broad region to which activities have been moved as a result of offshoring.[19]

For present purposes, these destinations are grouped into countries in Asia, including, in particular, India and China but excluding Japan (which is not a frequent destination, but a few Japanese companies have relocated some of their activities from the EU back to their home country over this period), the new Member States (which, as explained above, are distinguished from EU15 countries in the analysis because of their similarity in this respect to low-cost countries outside the EU) and all other destinations. The latter, in practice, includes many different countries, including non-EU eastern European countries, especially those in the Balkans but also Russia and the former Soviet republics, and countries in Africa, the Middle East, including Turkey, and Latin America, as well as, in a few instances, the US and Japan, where low labour costs as such have not been the motivating factor.

Table 10: Regions of origin and destination of offshored activities, 2003–2006 (% of total jobs shifted)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Asia (including to other places)	28.7	31.1	44.2	54.1	7.6	56.5	27.1	87.7	49.1	50.7
New Member States	86.6	46.9	61.7	59.1	74.7	48.4	77.8	10.6	58.0	51.2
Asia, excl. NMS	13.4	13.4	21.7	24.9	6.4	45.6	14.9	85.3	24.5	36.3
Other	0.0	39.7	16.6	16.0	18.8	6.1	7.3	4.1	17.5	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: The figures for each region include activities which have been offshored to that region as well as to other regions in some cases. No attempt has been made to divide the number of jobs involved in such multi-destination offshoring between the regions concerned. The figures for 'Asia, excl. NMS' include some instances of offshoring to Asia together with other parts of the world. The figures for the 'Other' category exclude all cases of offshoring involving moves to Asia and/or the new Member States as well as to other destinations.
Source: European Restructuring Monitor.

Overall, around half the jobs shifted as a result of offshoring recorded by the ERM from 2003 to 2006 have effectively gone to China, India or some other country in South and East Asia, mainly to the former two – or more accurately, around half the cases of offshoring weighted by the announced reduction in employment have involved moves to this part of the world (Table 10).

At the same time, marginally more jobs have been relocated to the new Member States either in combination with moves to Asia and other locations or as distinct from these. In practice, the

[19] There are only 20 of the 356 cases of offshoring reported in the ERM for which the destination is not identified. These have been excluded from the analysis here, though it can reasonably be assumed that the division of these between countries of destination are similar to the cases for which the relevant information is given.

relocation of activities by the same company to both the new Member States and countries in Asia accounted for just under 15% of the total jobs offshored across the EU over this period, while moves to Asian economies alone accounted for some 36% of the total. This leaves only around 12% of the jobs shifted going to other parts of the world.[20] This overall pattern of movement, however, conceals marked differences between Member States. In Germany, Portugal and Sweden, as well as in Denmark and Austria, most of the jobs delocalised went to the new Member States rather than to countries outside the EU (some 87% of cases in Germany involving moves to the former). Moreover, many of the cases of relocation of activities to Asia also involved some shift of jobs to the new Member States at the same time.

In the UK, in contrast, alone among the EU15 Member States, the great majority of jobs relocated went to Asia, most of them to India, and comparatively few (only around 10%) went to the new Member States.

Regions of destination by sector

The global regions to which jobs have been delocalised differ between sectors. In brief, the jobs relocated from EU Member States to Asia have been much more in service sectors than those which have been shifted to the new Member States, while the jobs relocated to the latter have been predominantly in manufacturing.

Almost 60% of the jobs offshored from the EU to Asian economies in the period 2003 to 2006 were therefore in sectors outside of manufacturing, and in the UK, the proportion was almost 90% (Table 11). Although the average proportion for the EU largely reflects the predominance of the offshoring of activities to Asia in sectors other than manufacturing in the UK, it is nevertheless the case that almost 70% of the jobs relocated from Germany to Asia were also in non-manufacturing sectors over this period, while in the Netherlands, the figure was around 65%. Elsewhere in the EU, however, the proportion was well below 10% and in most cases, zero.

In contrast, only just over a quarter of jobs delocalised to the new Member States over the period were in non-manufacturing sectors (Table 12). In Germany, France and even the UK, the proportion was only around 5–6% and in Italy, Portugal, Finland and Sweden, as well as a number of other Member States, all of the jobs relocated were in manufacturing. Only among multinationals with branches or subsidiaries in a number of the EU countries was there a substantial relocation of jobs in sectors outside manufacturing, mostly in banking and insurance and computing, which together accounted for almost 85% of the jobs delocalised by such enterprises to the new Member States.

Regions of destination by activity

A more detailed examination of the activities delocalised within sectors confirms the difference between the types of job relocated to Asia and those relocated to the new Member States within the EU. Just over 40% of the jobs delocalised from the EU to China, India and the other Asian economies were in manufacturing or production processes, while 21% involved the offshoring of call centres, 15%, the shift of administrative and financial operations and 13% the movement of IT support.

[20] More accurately, this refers to cases where offshoring has not involved moves to either Asia or the new Member States accounted for in this proportion of the overall jobs lost from offshoring in the EU. A number of cases of moves to these latter two broad regions, therefore, involved some jobs being shifted to other parts of the world as well.

These figures, however, are dominated by the shift of jobs to Asia out of the UK, especially in respect of call centres, where all of the jobs delocalised were by companies in banking and insurance and other sectors in the UK relocating this activity to India. Nevertheless, there was also significant offshoring of administrative and financial operations from companies in Germany to Asia, as well as of IT support from there and in the Netherlands. This was also the case in respect of multinational firms with branches in several EU Member States, which accounted for over 45% of the jobs relocated from the EU to Asia in these sectors. This emphasises the comparative advantage enjoyed by India in particular in computing, which, like many manufacturing activities, tends to be relatively labour intensive, as well as in activities which require the ability to communicate in an international language.

Table 11: Jobs offshored to Asia by sector, 2003–2006 (% of total jobs offshored to Asia)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.0
Food, drink, tobacco	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.1	2.4
Textiles, clothing, footwear	0.0	0.0	11.3	0.0	28.3	0.0	0.0	3.8	0.0	3.8
Wood, paper, printing	3.9	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Chemicals, refining	11.1	4.2	0.0	0.0	0.0	0.0	0.0	0.7	34.1	12.1
Rubber, plastics, glass	0.0	12.5	0.0	0.0	0.0	4.4	14.6	2.9	0.0	2.1
Basic metals, metal products	0.0	0.0	1.8	13.2	0.0	0.0	9.8	0.4	1.5	1.0
Machinery + equipment	3.0	10.4	4.0	8.6	17.6	0.0	15.6	0.6	0.0	2.2
Office machinery	0.0	0.0	0.0	13.2	0.0	0.0	14.6	0.0	5.1	2.0
Electrical machinery	3.7	16.2	34.9	40.8	27.1	51.5	34.1	0.0	0.0	5.6
TV, radio, telecoms equipment	0.0	0.0	28.3	0.0	0.0	44.1	11.2	0.0	4.4	5.1
Instrument engineering	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.9	5.4	2.3
Motor vehicles	6.9	0.0	9.1	16.5	27.1	0.0	0.0	0.2	2.7	2.5
Other manufacturing	2.1	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.8	0.8
Electricity, gas, water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	2.1
Construction	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Wholesaling	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retailing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2
Air transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3
Travel agents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Post and communications	5.6	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.9	4.3
Banking + insurance	9.4	0.0	0.0	0.0	0.0	0.0	0.0	69.9	33.4	41.8
Computing	37.0	41.6	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.9
Business services	0.0	0.0	6.3	0.0	0.0	0.0	0.0	4.8	0.0	2.4
Health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.4

Source: European Restructuring Monitor.

Apart from multinational companies with branches in different EU15 countries, hardly any of the jobs delocalised from the EU15 to the new Member States were in non-manufacturing activities – in most none at all. Accordingly, most of the manufacturing activities which have been delocalised from EU15 countries over recent years have gone to central and eastern Europe rather than to Asia or elsewhere, which tends to highlight the comparative advantage of proximity (as also underlined in the previous chapter) as well as low labour costs which these economies enjoy. For the EU, therefore, a process of regionalisation has been at least as important as that of globalisation.

Table 12: Jobs offshored to the new Member States by sector, 2003–2006 (% of total jobs offshored to new Member States)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Mining	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Food, drink, tobacco	3.6	0.0	0.0	0.0	0.0	0.0	0.0	19.1	5.3	5.8
Textiles, clothing, footwear	0.6	0.0	5.9	26.9	6.2	0.0	8.0	0.0	0.0	1.8
Wood, paper, printing	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.7	0.6
Chemicals, refining	0.0	0.0	0.6	0.0	0.0	0.0	0.0	10.5	0.0	1.7
Rubber, plastics, glass	0.0	0.0	0.0	21.7	0.0	0.0	4.8	0.0	0.0	1.9
Basic metals, metal products	0.0	0.0	10.6	0.0	1.4	0.0	0.0	0.0	0.0	1.4
Machinery + equipment	7.6	0.0	21.1	22.1	0.0	41.9	26.5	13.8	0.0	6.1
Office machinery	0.0	29.5	0.0	0.0	0.0	0.0	0.0	7.9	0.0	1.0
Electrical machinery	0.8	34.3	10.5	0.0	6.9	0.0	0.0	22.9	0.0	7.4
TV, radio, telecoms equipment	14.7	12.5	10.4	0.0	22.2	58.1	19.7	0.0	0.0	9.0
Instrument engineering	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Motor vehicles	63.3	5.2	26.0	29.3	63.2	0.0	35.3	20.9	3.7	30.0
Other manufacturing	1.1	0.0	10.1	0.0	0.0	0.0	0.0	0.0	6.7	4.4
Electricity, gas, water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Wholesaling	2.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Retailing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Travel agents	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.3
Post and communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Banking + insurance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.9	9.9
Computing	4.1	18.5	0.0	0.0	0.0	0.0	0.0	0.0	49.6	16.1
Business services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: European Restructuring Monitor.

Table 13: Division of jobs offshored to Asia by activity, 2003–2006 (% of total jobs offshored to region)

Asia	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Admin + finance	11.1	0.0	4.4	0.0	0.0	0.0	0.0	19.4	19.4	14.6
Customer service + sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	4.4
Call centre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.1	0.0	20.7
IT support	14.8	0.0	0.0	0.0	0.0	0.0	0.0	6.7	27.2	12.7
R&D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2
Manufacturing	74.1	100.0	81.4	100.0	100.0	100.0	100.0	16.3	39.7	40.7
Operational activities	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	13.6	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Member States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Admin + finance	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	13.6	6.6
Customer service + sales	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Call centre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.4
IT support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3
R&D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	95.0	76.3	100.0	100.0	100.0	100.0	100.0	81.1	85.6	89.1
Operational activities	0.0	14.8	0.0	0.0	0.0	0.0	0.0	12.7	0.0	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: European Restructuring Monitor.

Nationality of the enterprises that offshore

The final issue addressed is the extent to which there is evidence of the behaviour of companies differing as regards offshoring according to their nationality – whether, in other words, foreign companies are more involved in offshoring of activities than domestic ones. While this is difficult to answer from the details typically provided by correspondents in the different countries, it is a relatively straightforward task in most cases to identify the nationality of the enterprises involved in restructuring from the internet. The main difficulty comes not from company information being unavailable, but in determining the company's nationality from the details provided.

Increasingly, large enterprises are becoming truly international not only in the scope of their activities, but also in their ownership. A growing number of companies are effectively owned by shareholders spread around the world rather than in a single country or even region and their shares are quoted on stock exchanges in a number of different countries. In these cases, nationality has here been determined by the location of the company's headquarters. But in a few cases, companies have several headquarters, each in a different part of the world, and no effectively central point as such. For these, it is virtually impossible to determine their nationality and here it has been decided by their historical roots, which may no longer be particularly relevant.

Part of the process of globalisation, therefore, involves not only the organisation of production on an international scale, but also the globalisation of enterprises themselves in terms of both ownership and attachment. Multinationals therefore no longer need to have a home base as such and even if the major decisions are ultimately made in a particular place, this need not have any special significance as compared to anywhere else. This tendency is given added impetus by the growth of financial holding companies, such as hedge funds, which may have interests in a number of different sectors and which determine the allocation of investment finance between them in terms of the highest rate of return they can achieve.[21] Although these companies may be based in a major financial centre, such as London or New York, the decisions they make about which sites to expand and which to close down tend to be influenced not at all by where the decision-making centre happens to be located. This contrasts with the conventional large company based in a particular location with historical and cultural links to it, which, although it might be motivated by the search for greater profitability, tends to be influenced in the decisions it makes by its attachment to its home base.

The pattern of ownership, or nationality, of the enterprises responsible for the decisions to offshore activity from the EU to another country, i.e. taking the nationality of the group where the company directly concerned is a subsidiary of a multinational, over the four years 2003 to 2006 shows interesting variations across countries. Overall in the EU, just over a third of companies making such decisions, in terms of the jobs relocated, were nationally owned companies or at least had their headquarters in the country in question. Just under a third were companies from another EU Member State, while just over 20% were US companies, 6% were Japanese companies and only 4% were companies from another country (in practice, Korea, South Africa, Canada and so on) (Table 14).

Table 14: Division of jobs offshored by nationality of the enterprise concerned, 2003–2006 (% of total jobs offshored)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
National	29.8	12.2	45.7	63.5	13.8	51.9	70.3	81.4	0.0	35.8
Other EU	4.6	17.3	29.0	25.1	24.4	8.9	19.8	8.5	68.0	32.1
US	64.6	64.7	13.8	3.3	42.5	3.3	9.9	7.3	14.4	21.8
Japan	0.6	0.0	3.4	0.0	19.3	0.0	0.0	0.0	16.2	6.4
Other	0.4	5.8	8.1	8.1	0.0	35.9	0.0	2.8	1.5	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: European Restructuring Monitor.

In Germany, however, US enterprises were responsible for 65% of the jobs shifted abroad as a result of these decisions, mostly in this case in the motor vehicle industry, and the same was also the case in Ireland, while in Portugal the figure was over 40%. Elsewhere, however, US companies were involved in a relatively small proportion of the jobs which were delocalised – 10% in Sweden, only 7% in the UK and around 3% in Italy and Finland. In the latter four countries, domestic enterprises

[21] See the reference to Siteco in Slovenia above.

were responsible for over half of the jobs delocalised – in Sweden for 70% and in the UK for more than 80%.

Companies from other Member States accounted for a relatively small proportion of the jobs relocated, except in Belgium (45%), Austria (51%) and in some of the new Member States and with the exception of multinationals with branches in different EU15 countries (over two-thirds of those responsible for jobs delocalised being EU companies).

A further insight into the difference between companies of different nationalities in their behaviour in this respect can be gained by relating the jobs lost through offshoring to the jobs lost through restructuring as a whole. This takes into account to some degree the differing importance of US or EU companies in different countries, as well as throwing further light on the varying degree of readiness of the companies concerned to delocalise activities.

In the case of domestic companies across the EU as a whole, the jobs shifted abroad as a result of offshoring decisions represented only around 5% of the total jobs lost through restructuring over the period 2003 to 2006. Among the larger countries, only the UK showed a much higher proportion, at around 9% (Table 15). In Germany, the figure was below 3% and in France, only just over 4%. In smaller countries, however, the proportion was over 18% in Denmark and 12% in Slovenia.

Table 15: Jobs offshored relative to all jobs lost from restructuring by enterprise nationality, 2003–2006 (% of total jobs lost from restructuring)

	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
National	2.6	6.5	4.3	5.3	5.8	6.3	6.7	9.1	0.0	4.8
Other EU	4.3	30.0	12.2	20.3	49.3	7.9	14.3	7.1	13.0	11.4
US	54.1	50.3	11.7	2.1	56.7	29.9	8.8	14.2	5.3	14.6
Japan	8.2	0.0	59.8	0.0	100.0	0.0	0.0	0.0	28.2	25.8
Other	0.9	29.2	16.7	8.2	0.0	57.1	0.0	8.1	3.9	8.1
Total	6.9	24.6	6.6	6.4	25.6	9.7	7.3	8.9	10.7	7.9

Source: European Restructuring Monitor.

Among companies from other EU Member States, the jobs lost through offshoring accounted for a larger proportion of total job losses from restructuring in nearly all countries, the main exception being the UK. In the EU as a whole, therefore, just over 11% of the jobs lost were in non-domestic EU companies as a result of restructuring, well over twice the proportion compared to domestic companies.

Among US multinationals, the proportion was bigger still, with almost 15% of all job reductions from restructuring by such enterprises resulting from relocating activity outside the EU15. In Germany, over half (54%) of all job cutbacks by US companies took the form of offshoring and this was also the case in Ireland and Portugal.

The proportion was even larger among Japanese multinationals, at over a quarter of all job losses from restructuring, though these accounted for a relatively small share of cases of restructuring involving job losses over the period (just 2%).

Enterprise nationality by region of destination

Companies of different nationality also differ as regards the regions to which they have relocated jobs as a result of offshoring decisions, though this partly reflects the sectors in which they are operating. In the EU as a whole, therefore, domestic companies moved a larger share to Asia than to new Member States in central and eastern Europe, over 60% of the total, more than either other EU companies or US multinationals (Table 16). This, however, is largely a consequence of the relatively large number of jobs relocated by UK companies to India in particular and in other Member States there is not the same degree of difference.

Table 16: Regions of destination of jobs offshored by nationality of the enterprise, 2003–2006 (% of all jobs offshored by companies of each nationality)

National companies	DE	IE	FR	IT	PT	FI	SE	UK	Multi-country	EU
Asia	33.7	63.3	33.2	38.5	22.2	46.8	19.9	93.4	0.0	65.9
CEE	73.0	70.3	56.1	30.1	77.8	50.3	75.7	2.3	0.0	28.2
Asia, excl. CEE	27.0	29.7	13.9	28.6	22.2	36.4	9.3	93.2	0.0	60.8
Other	0.0	0.0	30.0	41.3	0.0	13.3	15.0	4.6	0.0	11.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0
Other EU companies										
Asia	69.0	19.4	50.9	77.3	10.0	42.8	38.8	67.1	56.2	52.1
CEE	89.4	50.2	66.7	100.0	94.6	42.8	68.9	37.9	69.5	68.9
Asia, excl. CEE	10.6	19.4	19.4	0.0	5.4	0.0	18.8	42.3	30.3	27.8
Other	0.0	30.4	13.9	0.0	0.0	57.2	12.3	19.8	0.2	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
US companies										
Asia	23.9	24.5	28.6	0.0	4.8	100.0	37.6	15.2	67.5	33.1
CEE	92.5	36.1	91.8	100.0	84.4	0.0	62.4	59.2	64.7	75.1
Asia, excl. CEE	7.5	7.2	0.0	0.0	4.8	100.0	37.6	15.2	18.0	12.2
Other	0.0	56.7	8.2	0.0	10.8	0.0	0.0	25.5	17.3	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: European Restructuring Monitor.

Among US companies, however, it is evident that by far the larger part of the jobs relocated have gone to the new Member States, either in combination with a transfer of activities to Asian economies or independently, and relatively few have been transferred to Asia alone. This may reflect the more regionalised nature of the operations of US multinationals in Europe as compared with EU companies, which may have a more global scale of operations. In other words, the US multinationals – or rather, the subsidiaries or branches of multinationals – in Europe might be limited to some extent to Europe when determining the location of activities.

Since, however, the great majority of the jobs relocated by US companies have been in manufacturing (almost 90% of the total were in this sector and around 92% were in either manufacturing or production activities) and since all companies, whatever their nationality – with the partial exception of UK companies – have tended to delocalise manufacturing activities to central and eastern Europe rather than further afield, this may also be an explanation.

Concluding remarks

The above analysis has demonstrated the value of the information compiled by the ERM in throwing light on both the scale and nature of the offshoring of activities from EU Member States to other countries. Although, as emphasised at the outset, the information is inevitably incomplete, it is nevertheless much less partial than any other source of information available.

It shows, in particular, that the jobs transferred abroad from EU15 countries were on a relatively modest scale, amounting to roughly 8% of jobs lost due to other reasons, in most cases over the four years 2003 to 2006 and have shown no discernible tendency to increase in number. It also shows that a substantial proportion of the jobs transferred have not been in basic industries but in medium- and higher-tech sectors and that a significant proportion have been in administrative, financial and customer support activities rather than in the manufacturing or production process itself. Many of the jobs, therefore, seem to require a certain level of education and skills on the part of workers.

A partial exception, however, concerns the new Member States, where there seem to be signs already of some outward movement of multinational companies in basic industries, which established themselves there fairly recently, to even lower-cost locations. Nevertheless, even in the EU15, the activities delocalised are relatively labour intensive so that the much lower wage levels in countries outside the EU15 appear to be a major factor underlying the shifts which have occurred (lower costs are cited as the main motivating factor in almost all instances of offshoring), especially if coupled with the transfer of modern technology, such as in motor vehicle manufacture or in the electronics industry.

In addition, many of the jobs concerned have gone to the new Member States in central and eastern Europe rather than to China, India and other countries in South and East Asia. Most of these jobs have been in manufacturing, which seems to indicate that production in this sector tends to be organised on a regional rather than a global basis.

On the other hand, a significant proportion of the jobs relocated to Asia has been in non-manufacturing activities, especially jobs relocated from the UK, with companies taking advantage of

both the English language ability of people in India and the substantial numbers of people with relatively high education levels.

With the partial exception of UK companies, domestic companies in the EU15 seem to have been less inclined to relocate activities abroad as part of restructuring than companies from other EU countries or US and Japanese companies in particular. Although US multinationals have transferred proportionately more jobs from EU15 countries to other places, the great majority of these have gone to the new Member States. They have therefore remained in the EU, potentially generating more income and employment across the Union, including in the EU15, than if they had been moved to Asia.

An important conclusion from this chapter is that offshoring accounts for a relatively minor percentage of all jobs lost due to restructuring. However, it must be emphasised that the number of jobs lost due to offshoring does not correspond to the total number of jobs lost in Europe due to competitive pressures from abroad. Most European companies are exposed to foreign competition and when they cannot successfully compete, they will often have to dismiss employees. These jobs are not offshored, they are simply lost for the company and the country. The clearest example of this was the fate of European shipbuilding in the 1970s and 1980s when, due to competition, largely from South-East Asia, a massive job loss was incurred. Presumably even today this is the major means by which foreign competition-induced structural change lowers employment in certain sectors.

Moreover, even within the context of the location decision of the firm (or parts of the firm), offshoring provides only a partial picture. Offshoring is the shift of existing jobs to other locations and does not capture the decision of where new jobs are to be created. Presumably the same factors that lead a company to offshore activities elsewhere also lead it to allocate new investment and create new jobs in these locations. The number of foregone jobs may well be considerable. The increased imports of intermediary goods from low- to middle-income countries into the EU, as presented in the previous chapter, is an indication of the shifting international division of labour. Thus while offshoring is one element of the shifting pattern of the international division of labour, contributing to the loss of some jobs in Europe, it is almost certainly only a rather minor one. Presumably the policy and media attention devoted to the phenomenon, compared to the other rather complex and abstract mechanisms of trade-induced job loss in traditional trade theory, as described in the previous chapter is because it is so concrete, so clearly related to foreign competition and affecting identifiable, possibly unionised, workers.

3 Future perspectives on globalisation and its policy implications

Practically all empirical evidence indicates that both the scale and nature of globalisation has not changed radically in the last decade. Chapter 1 reports the continuation of quite well-established trends and Chapter 2 shows that jobs lost to offshoring constitute a small proportion of all jobs lost. However, there are signs of the emergence of new dimensions to globalisation which, within the next few decades, may significantly impact on European labour markets and may in some respects require a somewhat different policy orientation.

Chapter 1 notes that despite some changes in the nature of trade, most economists still believe the central tenet of trade theory, i.e. that a nation benefits from trade. It would also appear that the entry of India and China, the two Asian giants, has benefited the world economy in the last decade. However, there are some concerns that if these countries continue to make significant inroads into European markets, the sheer scale of the structural adjustment would be at an unprecedented level. Furthermore, these very large low-cost economies have the potential to successfully compete in the high-tech activities in which Europe currently has comparative advantage. There is no doubt that if Europe does not succeed in maintaining this advantage, it may lead to lower average standards of living.

An emerging new globalisation paradigm?

Despite much debate on the issue of offshoring and outsourcing, Chapter 1 suggests that there is in fact very little that is conceptually new with these phenomena. It is basically just the fragmentation of the supply chain and trade in intermediary goods which has been a topic of analysis by international economists for decades. While some evidence was presented showing an increase of imports in intermediary goods to Europe in the last decade, and with higher skill content, it is not yet on a scale that motivates the announcement of a radically new form of globalisation. Similarly, the evidence from the ERM in Chapter 2 shows that offshoring is still a relatively minor source of job loss in Europe and has not shown any recent significant increase.

However, it has been argued that in the foreseeable future, the scope and scale of the global fragmentation of the supply chain will increase way beyond what is currently the case.[22] It will reach sectors that were previously untouched by trade and at an unprecedented level of task specialisation along the global supply chain. While most of the more serious proponents of this emerging new paradigm appear to concur with the basic tenet of trade theory, i.e. that in the long run all nations gain from trade, they argue that the impending structural adjustment will be so sudden, extensive and difficult that it will require a reorientation of the type and scale of accompanying policy measures.

The key enabling factors for this new globalisation are the same as in previous bouts of globalisation, regulation and technology. The continual development of information and communication technology (ICT) enables both a closer coordination of supply chain activities and more cost-efficient (digital) product delivery across national borders. This can occur either within the firm or when outsourced to another firm. Obviously it is very difficult to predict the future course of technological development. However, at the very least one can expect more of the same, i.e. more people to have

[22] See in particular Blinder (2007a) and Baldwin (2006).

access to digital communication and that both the audio and visual quality and capacity will continue to improve and thereby to better manage production in global supply chains. Moreover, at least as important is that firms will successively learn how to use these technologies better.

The potential opening up of large parts of the world to the market economy, taken up in the next section, is also important in understanding the potential scale of the coming bout of globalisation, as it has greatly facilitated the opportunity to do business in parts of the world previously excluded. Hence, business practices and behaviour will continue to become more widespread and standardised, thus making business relationships easier to handle. Property rights will become more secure, which will protect investment and increase the enforceability of contracts. Moreover, as modern management techniques and work organisation spread throughout the lower labour-cost world, both foreign subsidiaries and subcontractors will more seamlessly be able to fit into global supply chains and to successfully compete for functions or tasks that currently are performed in the higher-cost developed world.

The development of ICT is of particular relevance for services (whether classified as such in the NACE codes or not). Previously, the defining characteristic of services was that they were produced and consumed at the same time and in the same place and thus were almost totally isolated from foreign competition. However, the new ICT has eroded the geographical limitations to the provision of services somewhat and opened a wide range of service activities to international competition. Of course, some services are in principle not tradable at all. Whatever change may occur in the relative productivities of a taxi driver, dishwasher or nurse in Dublin compared to their counterparts in Bangalore, the Dubliners should not be concerned that international competition would be a threat to their jobs.[23] However, given that there are different relative productivities of tradable services in India and Europe, there is no reason to expect a different impact on jobs in tradable services to that which has been experienced in manufacturing.

If this occurs, then the welfare effects of trade in these activities will be in accordance with the well-known results mentioned in Chapter 1. The price of relatively more abundant factors will tend to rise and the price of the scarcer factors will tend to fall, with the usual winners and losers and temporary adjustment costs, but overall, Europe will gain. However, the point is that the scale of these adjustment costs may be unparalleled in recent history. In 2005, the distribution of employment in the EU25 was 5% in agriculture, 25% in industry and 70% in services. The shift to services has been the major change of employment structure in Europe in the last half century, with the service share of employment nearly doubling in some of the EU15 Member States since 1960. While the increase of social services jobs has accounted for the largest absolute increase in all service jobs, the largest relative increase has been in producer services, which has increased more than threefold in many EU countries.[24]

The rise of producer services is partly a result of domestic outsourcing of functions previously classified under manufacturing, and it is just these types of jobs that typically have been globally sourced, such as call centres and back-office functions. However, the fundamental reason for the shifting employment structure reflects the shifts in consumer demand and relative productivities between these broad economic sectors. Shifts in relative productivities in European countries will also

[23] Note, however, that it would be conceivable that related services such as telephone switchboards or restaurant booking services could be offshored.

[24] See Storrie (2002); the other two broad categories are distributive and personal services.

change comparative advantage and trade has obviously played a major role in the relative decline in European manufacturing.

The types of services that are not tradable are those that require face-to-face contact, such as care services. These are also the type of services where it is extremely difficult to introduce productivity-enhancing technology, and recent decades have seen slow productivity growth in these jobs. It has been expected for years that face-to-face service employment is likely to increase in Europe, as consumers are likely to continue (and possibly increase) their demand for these services. In addition, the new globalisation paradigm suggests that they may be among the few types of jobs that are not offshorable. Assuming that Europe will continue to have comparative advantage in some very high productivity sectors, this will lead to an even wider productivity gap between sectors of the economy.

Quantifying service jobs at risk

It is, of course, very difficult to predict how many service jobs will be offshored from Europe as a result of the improvements in ICT. It depends on the development of relative unit labour costs and the capability of firms to separate out particular tasks suitable for offshoring. In particular, it is difficult to obtain a good estimate of the latter, as it requires a detailed knowledge of the evolution of functions performed within the firm. In addition, the statistical classification of economic activity by occupation is much less well developed than the classification by economic sector.

Van Welsum and Vickery (2005) estimate an 'outer limit' of service employment that potentially could be affected by offshoring by examining the content of various occupations. The type of occupations that are susceptible to offshoring have the following characteristics: intensive use of ICT, an output that can be traded/transmitted by ICT and a high codifiable knowledge content which requires low face-to-face contact requirement. Using the European Labour Force Survey (for Europe), they find that the occupations listed in Box 4 are the likely candidates for offshoring.

They find an upper bound of just under 20% of all jobs in most developed economies. This is very similar to estimates in Blinder (2007b) for the United States, which uses slightly different selection criteria.[25]

While 20% of all jobs is a high figure indeed, roughly the same as the number of jobs currently in the industrial sector in many developed economies, van Welsum and Reif (2006) do not claim that this is the number of jobs that will be offshored. Indeed, a glance at the listed occupations suggests that many of these jobs would never be fully geographically removed from the customers. On the other hand, this analysis is confined only to the service sector. Evidence from the ERM and other sources shows that currently, offshoring still largely affects manufacturing jobs, although it did report significant offshoring in the financial services sector.

Perhaps the most striking feature of the list is that it includes not only typically low-skilled activities such as call centres and simple back-office functions, but also many higher-skilled activities. Concrete examples of higher-skilled services that have been offshored include remote doctors for specialist

[25] The OECD estimates performed in van Welsum and Vickery (2005) and Blinder are probably the most reliable upper bound estimates. There are others, and the somewhat alarmist Forrester Research estimate an upper bound of 44%; see Kirkegaard (2004). Bardhan and Kroll (2003) report an upper bound of 11%. Their lower estimate is largely due to them including only occupations for which it was known that some offshoring had already taken place.

consultations, Mumbai-based lawyers to prepare summaries of US court judgements and Reuter's use of Bangalore-based journalists for editorial work requiring 'selectivity and news judgement'.

Policy implications of a new globalisation paradigm

Perhaps the most concrete problem for making policy in response to the new challenges is the unpredictability of the type of job in Europe likely to be positively or negatively affected by the changed nature of globalisation. When global competitive pressures hit the northern Member States in the mid-1970s and 1980s, it hit specific sectors such as textiles, shipbuilding and iron and steel. It led to job loss in entire firms in identifiable fields of economic activity (sectors) with higher unit labour costs than those in, for example, parts of East Asia. In this sense, the identification of declining sectors was quite predictable. For example, it must have been fairly obvious that as wages in Portugal continued to grow, its textile industry would eventually experience the difficulties that it has encountered in the last decade. It was also rather clear that industrial policy should be geared to promote high-productivity, high skill content sectors where Europe had a comparative advantage. It also appeared equally obvious what type of sectors these would be. For example, much was made of the push towards the information society and equipping the labour force in ICT skills.

The previous focus on sectors may not be the most fruitful way to think about policy in the new paradigm. The increased feasibility of offshoring at stages in the supply chain, so fine that they are located within a single firm (tasks), is the key unit of observation. From this, it follows that policy should shift focus from the firm as a single unit (and by aggregation to sectors) to specific tasks within the firm.

The evolution of these tasks towards an increased propensity to be offshored is a highly complex and heterogeneous phenomenon, related to developments in technology and work organisation practices in the firm and how these relate to other units in the existing supply chain. When, in addition, the offshoring decision depends on conditions in the potential destination countries such as skills, costs, infrastructure and agglomeration effects, it becomes exceedingly difficult for an observer outside the firm (the policymaker) to identify the type of work in which Europe will have a comparative advantage and disadvantage. Moreover, the key variables that previously could be used to understand and predict trade, such as unit labour costs (i.e. the aggregate of unit labour costs in firms and sectors), are simply not available for tasks within a firm. This is not just an issue of the statistical authorities not collecting this data, it is conceptually problematic. The value of production is measured with market prices; there are no market prices within a firm.

As some tasks become more tradable at lower unit labour costs with foreign suppliers and as domestic comparative advantage shifts to other tasks within the firm, structural adjustments may occur, not between different sectors as before, but within the firm. This may occur in almost any firm in any sector (and region). In some respects, this is a promising development in terms of facilitating the necessary labour market adjustment, as this should be easier compared to the situation of the worker losing a job and suffering the costs of unemployment.

On the other hand, there are limits to what policymakers may be able to do for workers within the firm and some sort of partnership approach is required. An excellent example of how this can be done is the Danish system of adult vocational education and training, which is primarily addressed to employees. An important feature for the practical functioning of this system is the deep involvement

of the social partners at all stages of the training programmes. (This is taken up in more detail in Chapter 7.) The up-skilling of employees while still at the firm to equip them for tasks that have a future is surely something that is in the interest of all parties involved: the firm, the workers and the country. It is a policy response that will become increasingly relevant if the new globalisation paradigm does eventually take off on a grand scale.

The issue of unpredictability is further compounded by the fact that in the previous rounds of globalisation, it was primarily low-skilled jobs that were lost. The list of occupations in Box 4 suggests that this will not be the case in the future. In part, this is due to an increase in unit labour costs in Europe relative to low-cost countries, which in turn is primarily due to the increase in productivity in high-skill activities in, for example, India. However, it is primarily due to ICT which allows the coordination of such high-skill service tasks in the global supply chain and the transport of these 'intermediary products' (or rather, communication of services) at practically zero marginal cost. The primary driver of trade has previously been shifts in relative unit costs. These shifts are typically quite gradual changes. Changes in the tradability of a task, on the other hand, can occur very quickly. This suddenness may compound the volatility of structural change in the future.

Responses to risks

What, then, are the policy implications of unpredictability or uncertainty? The classic response to risk is to diversify. While it is hardly financially feasible to invest in a wide range of specific human capital investments, it would surely be very hazardous to invest in human capital for specific but only potential future jobs. For example, a major area of human capital investment in recent years has been in 'the information society'. Obviously if there is any credibility in this new globalisation paradigm, it is precisely in this area that many jobs will be offshored. Many of these jobs are highly skilled and have required significant human capital investment.

Generic skills such as problem solving and communication skills and the ability to quickly learn new tasks are the tools that will best equip the labour force to deal with structural change. This may suggest more focus on active labour market policy (ALMP) and other means of facilitating adjustment for individuals rather than on sector-based policy. While the provision of the necessary generic skills can be part of labour market policy, as is emphasised in Chapter 5, there is little doubt that this can be done more efficiently by providing good education for all at an early stage in life.

This focus on tasks which are performed in many sectors, as opposed to focus on particular sectors, should have some implications for industrial policy, which is traditionally very sector oriented. This orientation has never been particularly analytically based, but has rather been due to the organisation of workers and employers in sectors. Given the new paradigm, there is even less reason to base industrial policy on sectors. The task – as opposed to the sector-based unit of industrial change – is also likely to impact on how the social partners deal with the adjustment. Of particular importance is whether the adjustment occurs within a trade union (often organised by sector) or between different unions.

Another feature of current globalisation is that there are significant numbers of highly skilled workers even in the very low-cost countries; see Figure 1c. Again, this is not fundamentally a new phenomenon, but the full entry of China and India into world trade has made this more significant than ever. Furthermore, the digitalisation of many higher-skilled tasks (see Box 4) means that many

more high-skill jobs may be offshored than previously was the case. This may lead to quite different categories of workers, with other industrial relations practices being affected.

Given the great concern about offshoring among citizens and workers, some policymakers might be tempted to prevent it or in some way punish companies that offshore. This could be regarded as a serious mistake. This is a form of protectionism and so is generally not in the nation's interest. Moreover, offshoring provides the opportunity for firms to offload the activities in which they are relatively unproductive. If they were not able to do this, then it might put the viability of the whole firm at risk, including the activities in which they are productive. The type of structural adjustment to trade in the 1970s and 1980s (e.g. shipbuilding and iron and steel) did not have the opportunity to do this to any great extent and in some countries the entire sector was wiped out. Offshoring will reduce the number of some type of jobs, but can serve to maintain or even increase others. Not offshoring places the entire company at risk, leading not just to job but also capital destruction.

Limits to offshoring

It should be kept in mind that the new globalisation paradigm, as outlined in the previous section, has not yet arrived, but is, rather, speculation on a possible future. Both from the ERM and other sources, there is no evidence that the number of jobs lost due to offshoring constitute a significant share of all jobs lost.

Moreover, mention in the popular debate about a 'flat earth' or the 'end of geography' bear no relation to current reality. While transport and communication costs have declined in recent decades, it is a serious misconception that distance has ceased to be of importance in understanding the location of firms and the patterns of trade flows. Estimates reported in Venables (2006) find, for example, that an 8,000 km distance reduces trade that would have occurred at 1,000 km by 90%. One of the earliest and most successful econometric models of all is the gravity model of trade, which postulates a direct relationship between trade and the product of the size of two economies and an inverse relationship between the distances between them. Disidier and Head (2004) perform a meta-analysis of the gravity model over the last 50 years and find that the effect of distance on trade has not declined since the middle of the last century.[26]

Moreover, the economies of agglomerations or clusters can be considerable and proximity can appreciably enhance productivity. Venables (2006) also reports estimates that the doubling of city size yields a 3–8% increase in productivity. The sources of proximity productivity are of course related to transport and trade costs (both from suppliers and to consumers) in terms of direct costs, time and reliability. In addition, existing productive agglomerations are able to reap the productivity benefits of both economies of scale and competition. Large labour markets can generate more efficient matching processes and both workers and firms can better adjust to adverse shocks. Indeed, there are a number of very high value-added economic activities that require rather intense face-to-face interaction. Hollywood and the City of London constitute two important agglomerations that may continue to be very resilient to any form of foreign competition. Furthermore, it was underlined in Chapter 1 that distance continues to play an important role in patterns of trade between the various blocks of developed and catching-up countries, with EU15 countries trading in intermediary goods

[26] Of course, it is the case that there has been a recent increase in trade from some faraway places, e.g. China. This, however, is attributable to the other variable in the gravity model, and specifically, the increased size of the Chinese economy.

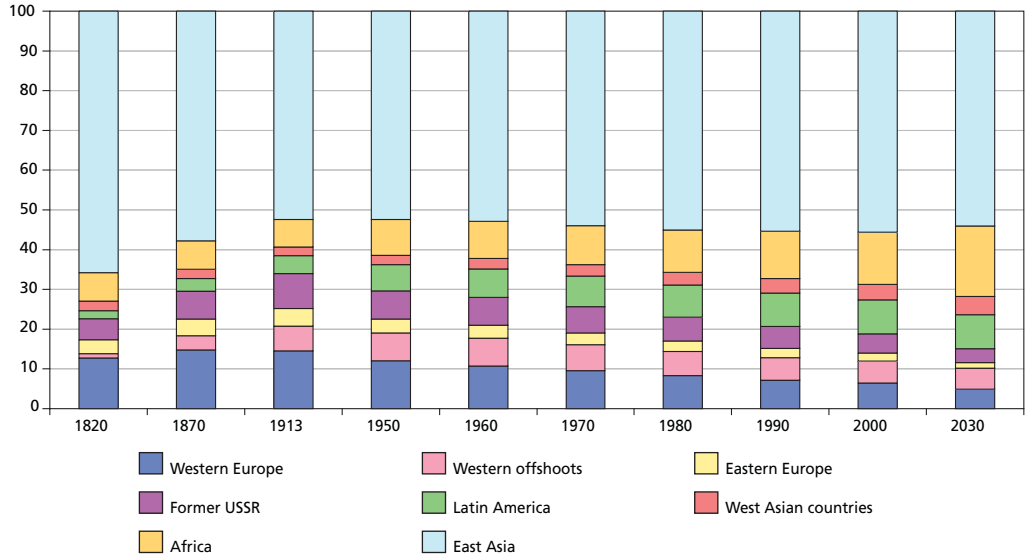
with the new Member States and the US with a relatively larger share of this trade in Central America and Asia.

Furthermore, even if one were to concede that distance has become less important for trade, due to the fall of transport and communication costs, it is far from obvious that these costs will continue to fall. International transport of goods and people is almost exclusively fuelled by oil. There are few indeed who would predict a medium- to long-term fall in the price of oil and there is no obvious substitute to oil for such purposes in the foreseeable future. Similarly, it is hardly likely that the price of digital communication will continue to fall in existing networks, as the marginal cost is currently almost zero.

The future scale of globalisation

Much of the concern about globalisation is not so much about its changing nature, but about its scale and is related to the size of the Asian giants of China and India. While over half the world's current population lives in East Asia (mainly China and India), this share was previously appreciably higher and is estimated to fall further (see Figure 5). In terms of share of the world population, the major decline in western Europe occurred earlier this century and its current world share is estimated to hold quite steady up to 2030. Moreover, while much has been made of the problematic development of the age structure in Europe, China's one-child policy is likely to lead to even greater imbalances in their age structure than is expected in Europe. The most striking future demographic development is the forecasted increase in the African population up to 2030, when a total of one person in five will be from that continent.

Figure 5: The distribution of world population (%), 1820–2000 and prognosis to 2030

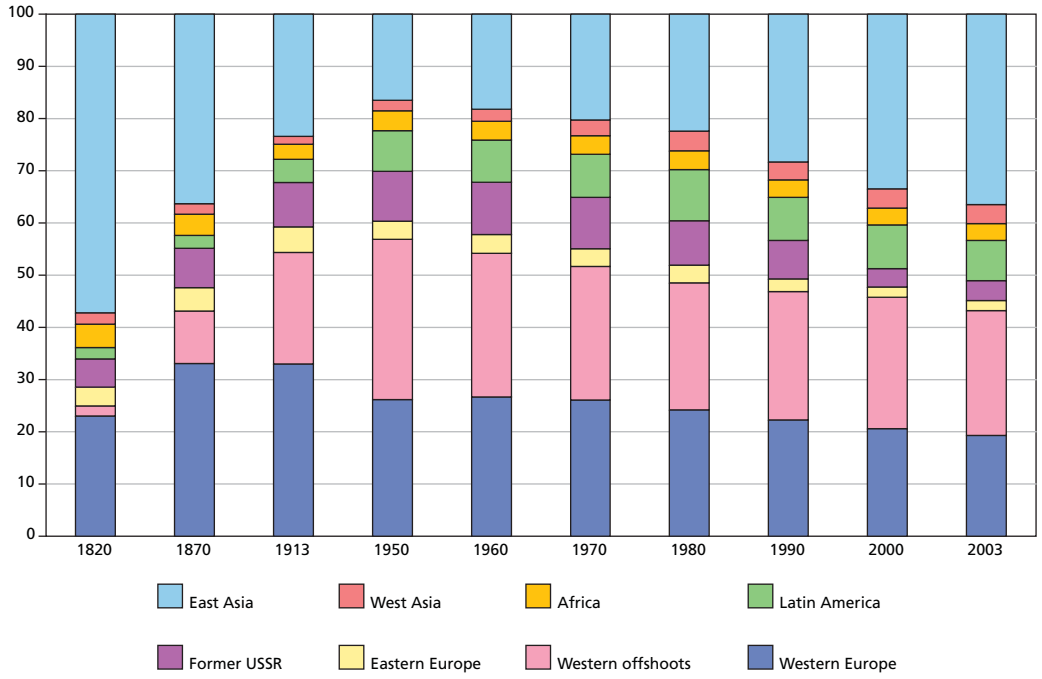


Note: 'Western offshoots' are largely previous British colonies and mainly the US.
Source: World Population, GDP and Per Capita GDP, 1–2003 AD (last update March 2007, as compiled by Angus Maddison).[27]

[27] The historical data were originally developed in three books: *Monitoring the World Economy 1820-1992*, OECD, Paris 1995; *The World Economy: A Millennial Perspective*, OECD Development Centre, Paris 2001; *The World Economy: Historical Statistics*, OECD Development Centre, Paris 2003. All these contain detailed source notes. See website: http://www.ggdc.net/maddison/.

The economic rise of East Asia started from the historical low point of 1950 when it accounted for only 17% of world GDP (see Figure 6). By this measure, 1950 also marks the high point of Western dominance of the world economy, while western Europe peaked just before the First World War. Even if East Asia's world share had been declining for several centuries, by 1820 it still accounted for almost 60% of world GDP. China's relative decline up to that point was largely due to its non-participation in global trade and subsequently the inefficiencies of the command economy. Thus, if as many predict East Asia will again become the predominant world economic power some time this century, it will be a case of 'back to the future'.

Figure 6: The distribution of global GDP, 1820–2000 (%)



Note: 'Western offshoots' are largely previous British colonies and mainly the US.
Source: World Population, GDP and Per Capita GDP, 1-2003 AD (last update March 2007, as compiled by Angus Maddison). In international Geary-Khamis dollars (purchasing power parity adjustment).

Recent developments

The full participation of India and China in the global economy is undoubtedly a historically momentous event. It may not be so obvious that it is also a problematic event. Indeed, some have argued that the excellent performance of the world economy for well over a decade is related to the participation of these countries in world trade.[28] The last two decades have seen a significant surge in the spread of capitalism throughout the world. The accompanying spread of technology, work organisation and modern management techniques has the potential of raising world living standards to an unprecedented level and significantly reducing the poverty that has been prevalent in subsistence farming communities for thousands of years. Freeman (2007) considers that the most salient feature of the new globalisation is the recent doubling of the potential world labour force. Almost simultaneously, around the early 1990s, a number of political decisions led to the potential

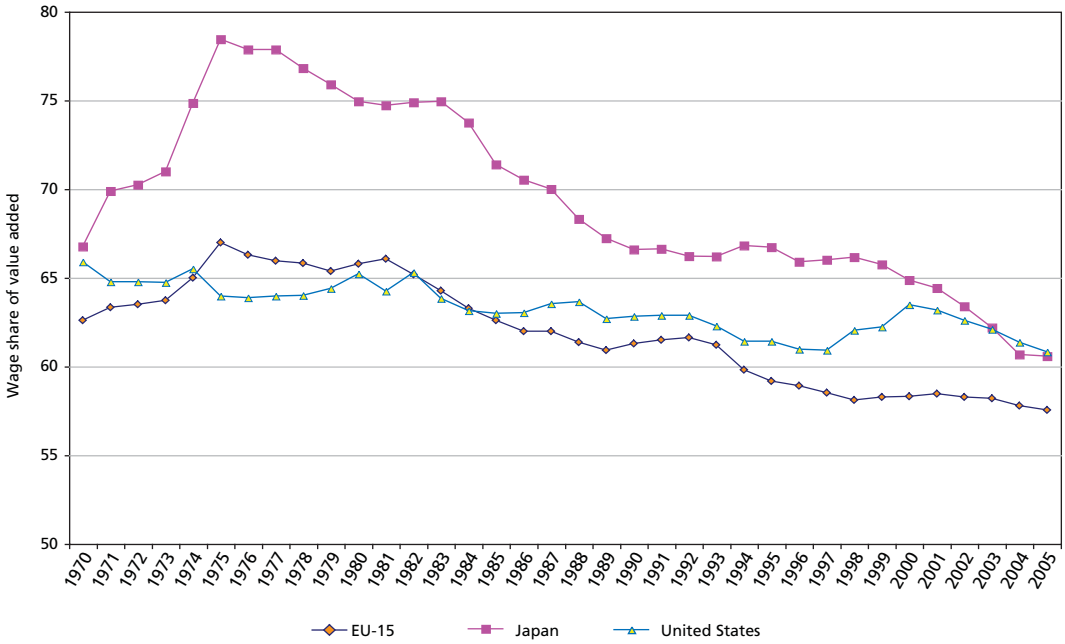
[28] China's recent economic growth is highly export driven, with the share of exports in China's GDP rising from 9% in 1985 to 34% in 2005.

entry of 1.4 billion workers. This resulted from the dismantling of the command economy in the Soviet Union, which contributed 260 million; China's adoption of markets and entry into the World Trade Organization added another 760 million; and when India deregulated their product markets, this added another 440 million workers.

Simple economics suggests that this may pose problems for well-paid labour. If there is a significant increase in the supply of one factor of production, i.e. labour, without a corresponding increase in capital, then the returns on labour will be expected to fall relative to capital. Freeman (2007) shows that the new entrants to the world labour force did not bring much useful capital with them (only some savings) and that the capital/labour ratio was thereby reduced by between 55% to 60%, which represents quite a significant shift in the balance of bargaining power between capital and labour and places pressure on labour markets throughout the world. Even countries like Mexico or South Africa cannot compete with current Chinese wages. A good example of this was the severe competition that such countries experienced in the aftermath of liberalisation of the textile trade.[29] But as was made clear in earlier chapters, the new entrants are not only competing in low-skilled jobs, but may even impact on the functional distribution of income (relative capital and labour income shares) in the developed parts of the world, including Europe.

Figure 7 presents data on the returns on labour and capital in most of the developed world and shows a continual decline in labour share, particularly in Europe and Japan.

Figure 7: The labour share of income in developed countries



Note: The data refer to total labour compensation, including employers' social security and pension contributions and imputed labour income for self-employed persons.
Europe is defined as a GDP-weighted average of the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Spain, Sweden and the United Kingdom.
Source: OECD estimates using the OECD Economic Outlook database.

[29] Leamer (2007) argues that, in fact, it is the mid-skill range countries that have been most negatively affected by the emerging Asian giants. He also provides a highly articulate response to the alarmist advocates of the new globalisation paradigm.

The data presented in Figure 7 are hardly firm evidence of the impact of globalisation and the trend has been apparent since the early 1980s.[30] However, the opportunity to transfer production to cheaper alternative locations obviously does give the firm some increased bargaining power over labour in Europe. Even if this option is not exercised (and thus not apparent in FDI data or relocation case study evidence), its existence could change the relative bargaining power in favour of employers. The precise impact of this bargaining leverage is likely to depend on the nature of the bargaining process. If bargaining is only over wages, then it is likely to result in lower real wage growth. If, on the other hand, both wages and employment levels are negotiated, then the impact would be on wages, employment or both.

There is some empirical evidence that various indicators of globalisation are negatively correlated with both union bargaining power (Dumont et al., 2006) and with union membership (Dreher and Gaston, 2005) in several OECD countries. Moreover, Gopinath and Chen (2003) find that the labour income share in 11 OECD countries over the period 1975 to 1995 is negatively related to the outward FDI stock but positively related to the inward FDI stock. IMF (2007) finds that globalisation has had a negative impact on the labour share of income in developed economies between 1982 and 2002. Globalisation is measured with three variables: imported intermediate goods, trade prices and the share of the foreign-born in the total labour force. Together, these account for an average annual decline in the labour share of about 0.1 percentage point per year. This corresponds to just under half of the average annual decline. However, it is the immigration variable that makes the largest single contribution to this result.

Is Chinese and Indian growth sustainable?

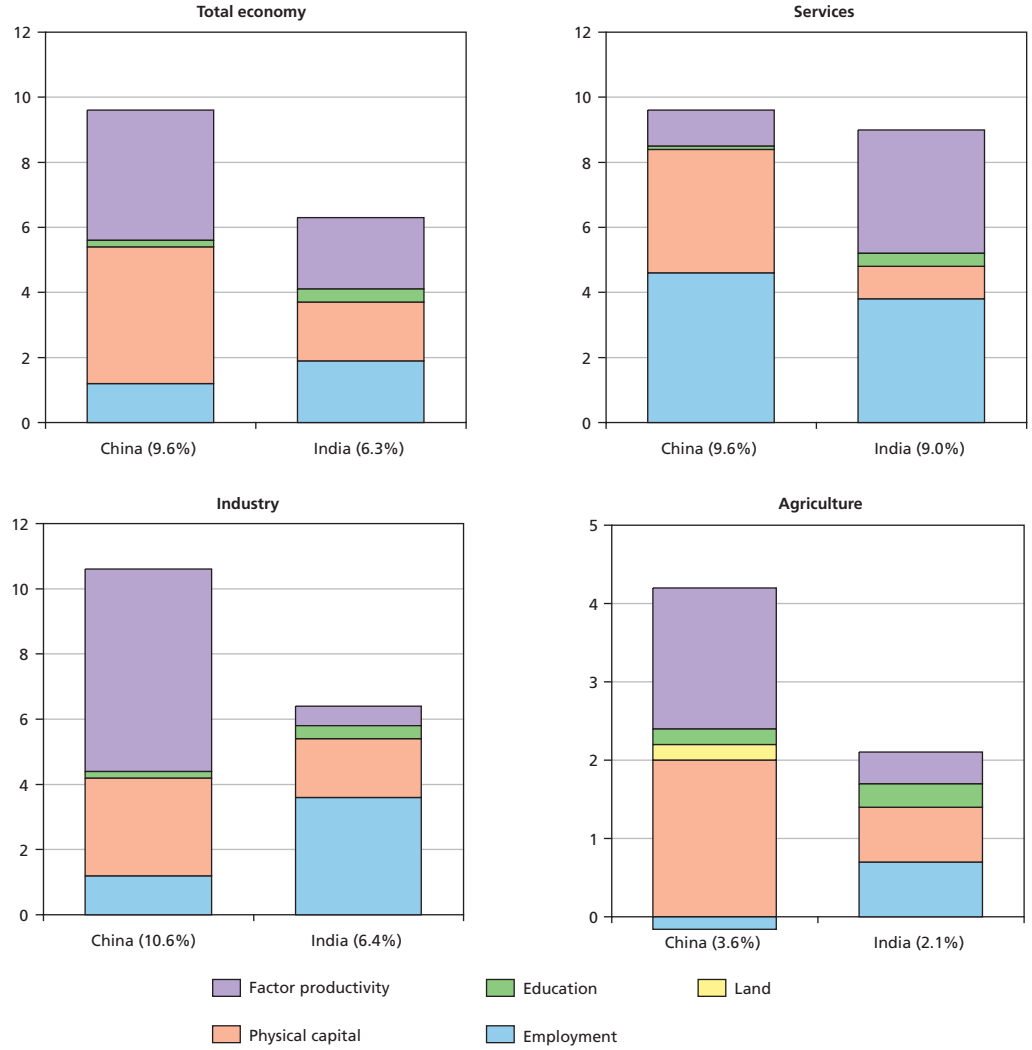
The doubling of the world labour force is primarily attributable to India and China. Both countries have shown rapid growth in the last few decades and a larger share of world trade. The question is whether their remarkable recent economic performance is likely to continue and make further inroads, particularly in the high-productivity sectors of the European economy.

From a purely economic perspective, this is perhaps best addressed by examining the sources of recent growth. Figure 8 breaks down the sources of growth in terms of a greater use of the factors of production (land, labour and capital) and a more productive use of these factors. In the total economy, almost half of the Chinese growth and roughly a third of the Indian growth is due to improvements in total factor productivity (TFP). This is an important result, as it shows that growth in these countries is not just due to a more extensive use of the factors of production but that these factors are being used in a more productive way. In particular, it is ultimately TFP growth that will increase GDP per capita.

The Chinese industrial performance has been spectacular, exhibiting a growth rate of 11% per year. More people being employed contributed just 1.2 percentage points to this figure, while output per worker rose by 9.8% a year. Of this, all of 6.2 percentage points was due to rising factor productivity. India's industrial growth was lower, at 6.7% a year, with factor productivity contributing only 1.1 percentage points a year. In services the growth rates are quite similar. However, rising factor

[30] Longer time series are available in some countries. For example, in the US the labour share rose from around 50% in 1930 to 60% in the early 1970s.

Figure 8: Sources of growth in China and India



Source: Calculation from Bosworth and Collins (2007).

productivity contributed 3.9 percentage points to Indian growth and just 0.9 percentage points to China's growth.

Bosworth and Collins (2007) argue that supply-side factors suggest that both economies should be able to sustain their growth. They still have a considerable reserve of underused labour, though India faces greater challenges of raising the educational attainment rates. Both have high rates of private saving, although China stands out as exceptional and India still devotes much of its saving to finance the large fiscal deficit. The growth prospects for both depend on continued integration with the global economy. India, in particular, will need to broaden its trade beyond the current emphasis on services. Only an expansion of goods production and trade can provide employment opportunities for the current pool of underemployed and undereducated workers. China has done well in the international arena and now needs to focus on the development of domestic markets and a more balanced trade position. There are also still millions of people who do not yet participate in the export economy and the labour reserve in the countryside should ensure that competitive pressures do not push wages significantly higher.

However, while the authors conclude their growth-accounting exercise with the words that 'the supply-side prospects for continued rapid growth in China and India are very good', both countries do face problems of another nature that could seriously hinder and possibly reverse their current progress. Sustainable economic growth cannot be simply assumed by an analysis of low relative unit labour costs or an extrapolation of current growth trends. There are considerable political, security and environmental risks in both countries. Many observers have advanced such concerns, most recently Will Hutton (2007), who focuses on China.

Particular Chinese issues

The political situation in China, while apparently currently stable, faces the contradiction of an entrenched Maoist political system alongside a dynamic capitalist economy. As the economy continues to develop, one must ask whether this highly unusual situation is sustainable. Companies are accountable only to the Communist Party. There is no civil society, independent public institutions or independent media to channel pressure for many necessary actions, such as for companies to become more environmentally efficient. Not least, the development in the post-communist Soviet countries has shown that such institutional matters are of vital importance for capitalist societies. The lack of what Hutton terms 'enlightenment infrastructure', i.e. of respect for individual and property rights, is difficult to reconcile with the market economy and will be increasingly so as basic material needs are satisfied. The Chinese government-controlled banking system is a case in point. Massive saving funds finance the extensive infrastructure and industrial investment. Interest payments are paid out irregularly and there is no certainty that debt will eventually be repaid. Foreign reserves are massive and increasing by around US$200 billion annually, and the central bank holds the exchange rate low to promote competitiveness.

The country is currently experiencing very serious environmental problems. According to Hutton (2007), one-fifth of China's cities face extreme water shortages, even more have problems with water pollution and 500 million rural Chinese still do not have access to safe drinking water. Illegal pollution, highly inadequate sewage treatment facilities and chemical pollutants continue to degrade China's waterways. Some 25% of the land area is desert, and the pace of desertification has doubled in the last 20 years.

While it was shown in Chapter 1 that a large proportion of Chinese exports to the EU are finished goods, there are few well-known Chinese brand names. Moreover, according to Hutton (2007), nearly three-fifths of its exports and nearly all its high-tech exports are made by non-Chinese, foreign firms. China's future is shrouded in uncertainty and Hutton believes that change cannot occur under the current leadership. Whatever political course China takes, its path to becoming a world economic power is not going to proceed as a simple extrapolation of current trends.

Finally, the fact that the success of China's economic growth is highly export driven (the share of exports in China's GDP rose from 9% in 1985 to 34% in 2005) may have some trade policy consequences in the near future.[31] In 2006, China displaced the United States as the largest source of EU imports. Chinese exports to the EU totalled approximately EUR191 billion, representing a year-on-year increase of almost 21%. Likewise, EU exports to China increased by 22.5% to approximately EUR63 billion. While the EU had a trade surplus with China at the beginning of the

[31] All data referred to in this paragraph are from Eurostat.

1980s, there is now a sizeable EU deficit with China (approximately EUR128 billion in 2006). This represents the EU's largest bilateral trade deficit. However, EU trade relations with China, while not without conflict (property rights and access to markets), are relatively good and there is no strong European lobby for protectionist measures. This is not the case in the US, where the current annual trade deficit is around US$230 billion. And there is considerable support, for example, within the Democratic Party for punitive anti-dumping duties to persuade China to revalue its currency, which many analysts estimate is undervalued by roughly 10%. Protectionism is dangerous and infectious. It is highly likely that any serious trade dispute between the US and China would also have serious repercussions for Europe.

Concluding remarks

Finally, it should be pointed out that the key concern in Europe is not offshoring or the rise of India or China as such, but rather that if Europe loses comparative advantage in high-tech activities, it will suffer a loss in average economic welfare. One can rephrase the conventional wisdom on trade theory in terms of two countries: China, with comparative advantage in goods using relatively low-skilled labour, and Europe, with comparative advantage in relatively high-skilled labour. It states that free trade, through the exploitation of comparative advantage, yields net welfare gains for the world as a whole. In individual countries there are winners and losers (at least in the short term), but in terms of average GDP per capita, Europe will gain. Some jobs will be lost, but trade will create other jobs in Europe. Moreover, the cheap manufacture of goods now produced in China and sold to European consumers will increase the average real wage and the net result will be positive in Europe. However, Paul Samuelsson (2004) underlines that an increase in productivity in China in goods where Europe has a comparative advantage (high-tech activities) can induce 'permanent lost per capita real income'. Samuelsson bases his analysis on Ricardo's theory of comparative advantage, i.e. the very model that has provided the basis for economists' optimistic view on the benefits of trade for all countries. He concludes that this 'deals some weighty blows against economists' over-simple complacencies about globalisation'. Thus welfare can be maintained in Europe only if it continues to maintain a productivity gap with China in high-productivity activities. As China is continually increasing productivity even in the high-tech sectors, the only viable strategy for Europe is to ensure that it remains ahead of the high-tech pack. The only other alternative is protectionism, which yields other losses. Thus, one should be clear about this: globalisation can pose problems and, through their size, India and China can pose big problems.

Currently, research and development investment in the EU corresponds to 1.84% of GDP (2005 figures from Eurostat). This is substantially less than the US, Japan and South Korea. China spends 1.34%, but is forecast to catch up with the EU by 2009. However, there are EU countries that do invest appreciably more. Finland and Sweden spend more than the Union's target of 3% of GDP on research. Germany, Denmark and Austria also have relatively high levels of R&D spending. Obviously more is required to maintain the high road to global competitiveness and remain ahead of the pack. The high road never ends:

Your once great trade in sugar refining is gone; all right try jam.

Your iron trade is going; never mind, you can make mousetraps.

Your cotton trade is threatened; well what does that matter to you?

Suppose you try dolls' eyes.

But for how long is this to go on? Why on earth are you going to suppose that the same process which ruined the sugar refinery will not in the course of time be applied to jam? And when jam is gone? Then you will have to find something else. And believe me, that although the industries of this country are very various, you cannot go on for ever. You cannot go on watching with indifference the disappearance of your principle industries.

The writer makes a powerful attack on the high road to global competitiveness for high-productivity developed nations. He calls for protectionism. These words were written by Joseph Chamberlain in 1903 when the UK was the 'workshop of the world' and was beginning to experience severe competitive pressure, mainly from the emergent US and Germany.[32] This is somewhat similar to the situation that the European Union (and the rest of developed world) is now facing with the arrival of the Asian giants on the global competitive stage.

In some respects, 100 years of history proved Chamberlain wrong. While much of the British industry did continue to disappear, living standards did not decline over the 20th century. On the other hand, productivity did decline appreciably compared to, for example, Germany, and this was synonymous with Britain's subsequent relative economic decline. The lessons from the British experience are not that one should protect non-competitive industry – this only postpones its inevitable demise – but rather of the consequences of not keeping on the high road to global competitiveness. The ambitious Lisbon goal to make Europe the most competitive knowledge-based economy in the world is surely the only viable option. The European Globalisation adjustment Fund is just one modest indication of what the 'social market economy' can be. But just like achieving the Lisbon goal itself, it is action taken by Member States that is the key to ensuring that the positive effects of globalisation are spread among all Europeans.

[32] Joseph Chamberlain; businessman, Lord Mayor of Birmingham, leader of the Liberal Unionist Party and campaigner for protection. Cited in Robert Skidelsky, 'The Chinese Shadow II', *New York Review of Books,* 1 December 2005.

4 Mitigating negative effects of globalisation

The following chapters focus on how to deal with some of the problems of globalisation mainly at the individual level, and primarily after they have arisen. As such, it deals with the issues that the recently introduced European Globalisation adjustment Fund (EGF) is to address. As the EGF has yet to assume a definite profile in terms of concrete measures, the next two chapters explore what type of measures could be most appropriate for EGF funding and consider an appropriate evaluation approach.

However, it first must be emphasised that an appropriate policy response to meet the challenges of globalisation involves almost every field of EU economic policy. Most economists believe that while there are winners and losers from free trade, on balance, the economy as a whole benefits. Thus an important policy focus is to ensure free trade and enable domestic companies to access foreign markets. This is a central element in the approach of the European Commission, and was recently reiterated in the communication from 18 April 2007.[33] Much of the Single Market and competition policy legislation aims to create a free European market and continues to mould the structure of the European economy and promote the competitive position of European firms in the international arena. The fundamental economic rationale of the Single Market programme is to enlarge the market and thus allow firms to both be big enough to reap economies of scale and be of sufficient number to promote competition. This process is, in legislative terms, far from complete and the issues raised in the debate surrounding the Services Directive are an important recent example of the potential and difficulties of this approach. Industrial policy is also often framed against the backdrop of globalisation, as exemplified by the policy document *Fostering structural change: an industrial policy for an enlarged Europe,* which underlines the Commission's perspective of restructuring in terms of globalisation and enlargement.[34]

The fact remains that however much access is gained to foreign markets and however well industrial and other policy can successfully promote structural adjustments to high-productivity economic activities in response to globalisation, some jobs will be lost and some individuals will incur substantial and long-term losses as a result. How to deal with this, either through the institutions of industrial relations or policies addressed to individuals, is the theme of the following three chapters.

Particular emphasis is placed on active labour market policy (ALMP). ALMP has been a central element of the European Employment Strategy from the outset and much spending on ALMP is co-financed by the European Structural Funds. However, most relevantly, the emphasis on ALMP in this report is motivated by the introduction of the EGF. It is used to finance ALMP exclusively when jobs are lost as a consequence of adverse trade developments. Chapter 5 deals with ALMP for displaced workers in general as, in fact, the issues for trade-displaced workers are almost identical to those for workers displaced for any other reason.[35] Chapter 6 proceeds to examine ALMP and trade-induced displacement drawn from the general conclusions of Chapter 5, some of the experiences from the US

[33] COM (2007) No. 452, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Global Europe: a stronger partnership to deliver market access for the European Exporters*, 183 final, Brussels, 18 April 2007. {SEC(2007) 453}

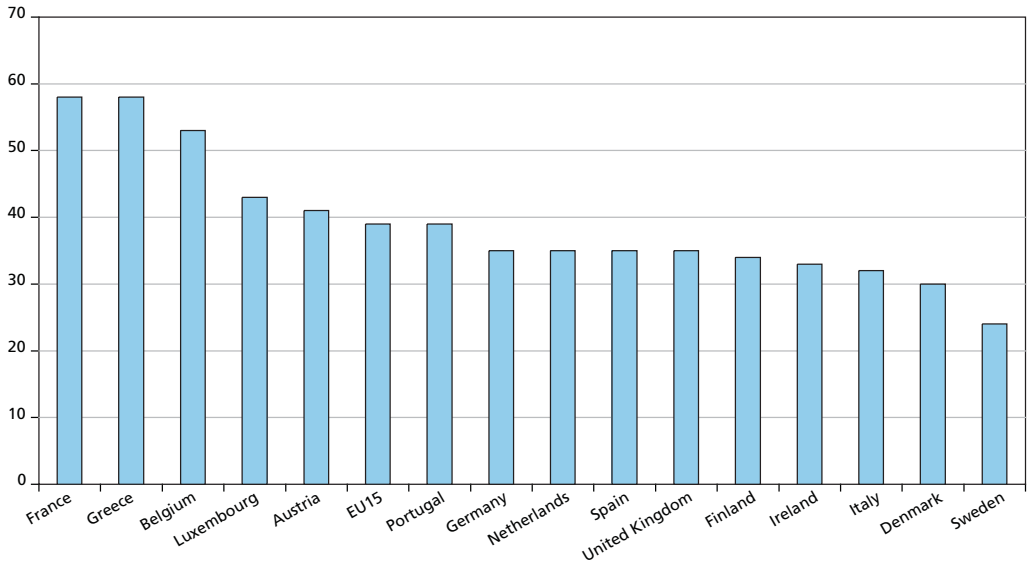
[34] COM (2004) No. 274, *Communication from the Commission. Fostering structural change: an industrial policy for an enlarged Europe*.

[35] The term 'displacement' is used throughout this report to mean the termination of an employment contract on the initiative of the employer due to economic or organisational reasons or some other reasons not related to the conduct of the individual employee. In some countries, this may be legally termed 'dismissal due to lack of work' or 'dismissed for economic reasons' or 'collective redundancies' or 'collective dismissals'. These terms often have a precise legal definition, for example in terms of number thresholds and time frames and may trigger certain procedures. The term 'displacement' used here is more generic and has no legal basis.

with the Trade Adjustment Assistance programme and the fact that this is to be an EU-financed measure.

The EGF was introduced to address the valid concerns of European employees about the impact of globalisation on their job security. Figure 9 presents data on expressions of such concerns from employees in the EU15 Member States. They vary from nearly 60% in France and Greece, expressing widespread concern, to under 30% in Denmark and Sweden.

Figure 9: Perceptions of the threat of globalisation for jobs (%)



Question asked: Does globalisation represent a threat to employment and companies in your country?
Source: Eurobarometer (2003).

As Sweden and Denmark are small open economies with a high exposure to the forces of globalisation, it is natural to inquire why workers in these countries believe that globalisation does not present a more serious threat to jobs. Interestingly, they are also countries with a very large public sector. For example, tax revenues as share of GDP are the highest (approaching 50%) in the entire OECD.[36] A question often posed in the globalisation debate is whether footloose capital, faced with increasing competitive pressures, will allow countries to raise sufficient tax revenue to finance an ambitious welfare state. As Denmark and Sweden are ranked third and fourth in the World Economic Forum's 2006 Global Competitiveness Index (after Switzerland and Finland), it is obviously possible to have both a large public sector and maintain global competitiveness.

The role of the government in labour market adjustment

Indeed, there appears to be a very important role for social insurance and publicly financed services in promoting and facilitating labour market adjustment to structural change. Global competitive environments are risky. One view of the public sector (broadly defined to include social insurance,

[36] OECD (2005), *Revenue Statistics 1965–2004*.

public employment and labour market policy) is that it functions as an insurance device to cope with this risky environment and there is some empirical evidence suggesting a positive relationship between the trade share of GDP and the size of the public sector; see Agell (1999), Agell (2002), Auer et al. (2005) and Rodrik (1998).

This role of policy to promote structural adjustment and ameliorate the negative consequences of the ensuing labour market adjustment has been recently popularised in some versions of 'flexicurity'. The Danish version is seen to be based on the three pillars of weak employment protection, generous unemployment insurance and active labour market policy. This is backed up by a high level of basic education and policies to promote lifelong learning. Indeed, even the classic Swedish model which originated in the early 1950s was a socially acceptable means to effect a rapid structural transformation of the economy, and all the Nordic countries still maintain significant elements of such a system today. One could argue that much of the economic and social success in the Nordic countries is related to how they have been able to deal with restructuring. In this context, the relatively consensual nature of Nordic industrial relations and the state's refusal to extensively subsidise unprofitable firms and sectors is also important.

In somewhat simplified terms, the behavioural explanation of the Danish (or Nordic) flexicurity model is that workers can accept labour market adjustment to structural change because social security can cushion a temporary spell of unemployment and the market, together with ALMP, can provide good prospects of getting a new job soon.[37] Perhaps this explains the positive opinion of globalisation in Denmark and Sweden, as expressed in Figure 9.

Eurobarometer (2006) asked the following two questions that can neatly capture this version of flexicurity:

'If you were to be laid off, how would you rate, on a scale of 1 to 10, the likelihood of you finding a job in the next six months?' The data in the figure below reports the response 'very likely'.

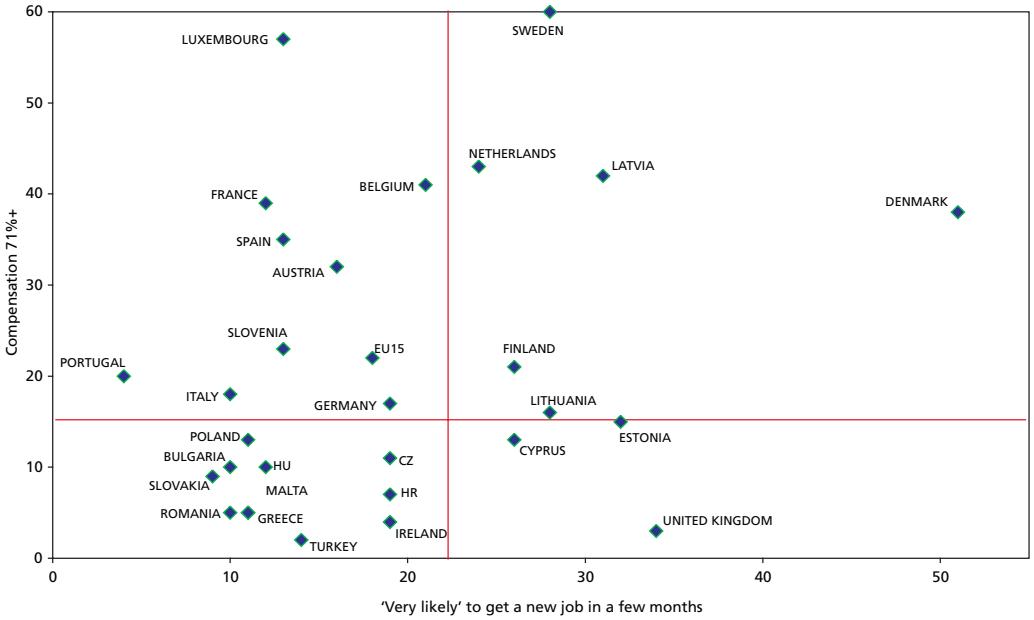
'If you were to be laid off, how much do you think the unemployment insurance and the welfare system will compensate you for the loss of income during the first six months as a percentage of your current income?' The data in the figure below reports expected compensation rates greater than 70% of current income.

Figure 10 cross plots the results of these two questions. With only a few exceptions, they fall into four intuitive clusters. The continental EU15 Member States fall into the high compensation–low chances of a new job (north-western quadrant). The south-western quadrant, which is low in both dimensions, is mostly comprised of new Member States. The UK, Estonia and Cyprus, located in the south-eastern quadrant, exhibit a high re-employment probability but low levels of compensation.

The Nordic countries and the Netherlands, together with two Baltic states, are located in the north-eastern flexicurity quadrant, with Denmark and Sweden as the high flexicurity outliers. Workers in

[37] Or, as expressed in the *Joint contribution from the Employment Committee and the Social Protection Committee on flexicurity*, presented with a view to the session of the Council (EPSCO) on 1–2 June 2006: 'Social protection systems should equip people to adapt to change during their life-cycle so that they feel more secure and see globalisation and labour market changes as an opportunity and an acceptable part of one's working life rather than a threat.'

Figure 10: The (external) flexicurity quadrant (%)



Source: Eurobarometer 2006.

these countries believe that if they were to lose their job they would receive high levels of social security compensation and also expect to get a new job quite soon.

Thus in many respects Denmark and Sweden are exceptionally interesting countries, as they have a high exposure to foreign competition, a positive attitude towards globalisation, a high level of competitiveness and a highly developed welfare state. For these reasons, Denmark and Sweden figure quite prominently in this part of the report. They are not necessarily presented as models to be followed, and indeed many positive features are deeply institutionally and socially rooted, but to show that it is actually feasible to combine these apparently irreconcilable trade-offs.

Much Swedish evidence and experience is provided in the following chapters on active labour market policy.[38] In addition, Chapter 7 on social partners and globalisation illustrates how high-skilled white-collar unions in Sweden approach relocation issues. Chapter 7 also presents the important but often underestimated ingredient in the Danish flexicurity model, namely the role of the social partners in the design and implementation of adult vocational education and training. Finally, when examining the role of social partnership, some mention should be made of social dialogue at European level, where the most obvious forum for dialogue when considering the relocation of firms are the European Works Councils.

[38] This is also motivated by the long tradition of ALMP in Sweden and the high quality of the data and expertise for evaluation studies. For more information, see various studies conducted or financed by the Institute for Labour Market Policy Evaluation (www.ifau.se).

5 Active labour market policy and displaced workers

The European Globalisation adjustment Fund (EGF) is to finance active labour market policies (ALMPs) for workers displaced due to the negative consequences of globalisation. It would thus be useful to consider what type of measures should be applied to support these workers. In most Member States, ALMP is an important policy tool when dealing with unemployment. It consists of measures such as job-matching services, retraining and temporary employment subsidies and is often co-financed by the Structural Funds. However, these policies are general strategies for combating unemployment and few are specifically designed for displaced workers and fewer still for those who were displaced due to the negative aspects of globalisation as opposed to other factors, such as the introduction of new technology or a general decline in product demand.

Moreover, while there is extensive literature on the impact of ALMPs throughout the European Union applied to the unemployed, there are considerably fewer reliable studies on the use of these measures for workers displaced through restructuring. As the available policy tools, the circumstances of the displaced workers, the implementing actors and sources of funding available at restructuring are quite different to ALMP for the unemployed, one could expect different results of these measures when targeted at displaced workers.

This chapter draws some conclusions on the potential efficiency of active labour market policy (typically addressing the unemployed in general) when applied to those threatened with displacement at restructuring. The next chapter takes up what the appropriate measures could be when displacement is due to foreign competition and provides some guidelines on the orientation of the EGF. An important point here is that while there are excellent reasons to provide some type of ALMP measures at restructuring, the type of measures to be applied should be somewhat different than those directed towards the unemployed in general. However, as the nature and size of the costs of trade-induced displacement is similar to displacement in general, there is little reason to design ALMP differently for these two groups of displaced workers. As the potential and limitations of ALMP are often misunderstood, this chapter discusses first what ALMP can achieve and what it cannot.

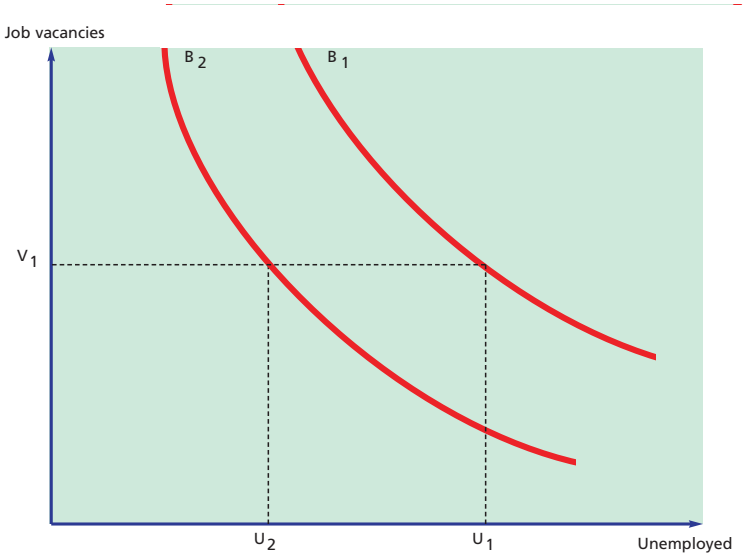
Potentials and limits of active labour market policy

The fundamental purpose of active labour market policy is to assist the efficient working of the market by addressing problems that may be particularly severe in the labour market. A classic problem with markets in general is the lack of information and asymmetry of information between buyers and sellers on the quality of the commodity. This is particularly acute in the labour market. For example, job vacancies may not be filled as they may not be known to the job seekers and suitable applicants may not be known by employers. This information mismatch, sometimes referred to as frictional unemployment, is the motivation for public employment services and their activities in providing information on vacancies and the provision of some types of geographical mobility grants. However, mismatch may also be due to the available job seekers not having appropriate skills for the available vacancy, thus motivating expenditures on labour market training.[39]

[39] One important reason why the market cannot provide this training is that it may not be a sound investment for the employers to invest in human capital, as the freedom of the worker to quit the job would mean that the firm cannot reap the returns of this investment. Moreover, unemployed workers may be financially constrained and so could not raise the necessary capital themselves.

Thus, the main role of ALMP (and historically almost the exclusive role) is to address mismatches on the labour market. ALMP and mismatch can be illustrated graphically with Beveridge curves.

Figure 11: The potential of active labour market policy



A Beveridge curve – as seen in Figure 11 – plots the relationship between unemployment and job vacancies. Looking along B_1, the more vacancies generated in the economy, the lower is the rate of unemployment. However high the level of vacancies may be, some level of unemployment will remain. If the point of departure is that there are V_1 vacancies, then with the matching efficiency represented by the B_1 curve, the corresponding level of unemployment is U_1. However, not all vacancies are filled; perhaps the unemployed job seeker is not aware of the suitable vacancy or lacks the skills to fill the post. The role of ALMP is, through job search services or training, to improve the matching efficiency of the labour market as represented by a shift in the Beveridge curve down towards the origin. With higher matching efficiency – as represented by B_2 – the corresponding level of unemployment is reduced to U_2. A key point in this context is that the level of vacancies is determined outside this framework by the level of labour demand and cannot be influenced by improving matching efficiency through active labour market policy.

ALMP has increasingly included various types of subsidised job placements, either to gain work experience or to provide an opportunity for the employer to view at first hand the capabilities of a job seeker.[40] In some respects, this can also be seen as a matching measure when directed towards individuals who the employer may not consider suitable due to the fact that they belong to a group commonly believed to have a lower than average productivity. This attempt to overcome 'statistical discrimination' may provide an efficiency motivation for temporary wage subsidies to, for example, the long-term unemployed, immigrants, youths and the disabled. These groups may, of course, also be targeted due to equity reasons.[41]

[40] The degree of subsidy may vary greatly and, of course, it is possible to simply create jobs in the public sector, but this is not typically viewed as ALMP.

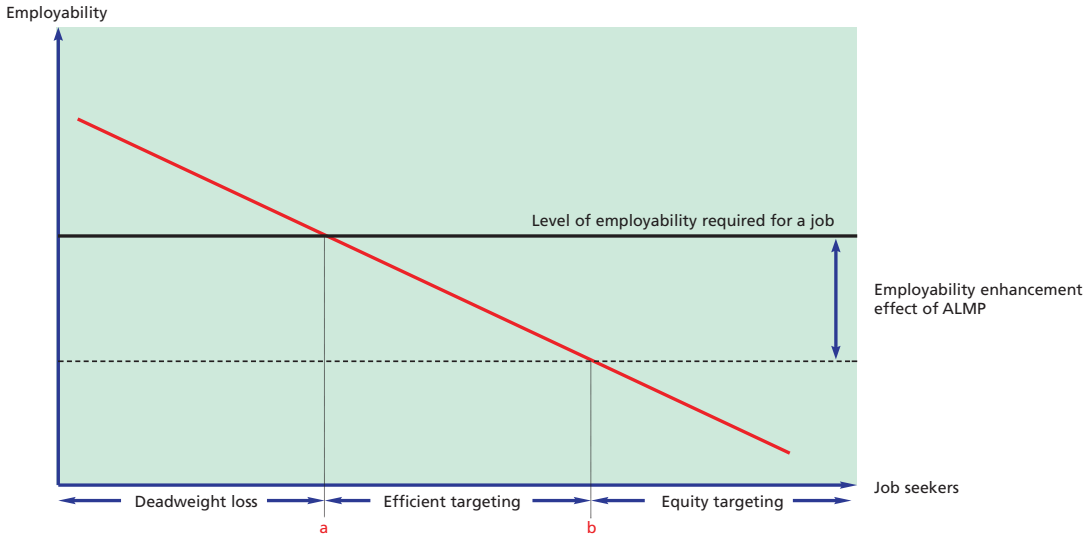
[41] These are the main motivations for ALMP in general and temporary employment subsidies in particular. Other motivations include the use of such spending in terms of Keynesian demand management.

Targeting active labour market policy measures

As the discussion of ALMP in this report concerns three target groups, namely, the unemployed in general, displaced workers and workers displaced due to adverse conditions of trade, it is necessary to clarify some issues in ALMP targeting. There are two main reasons to target active labour market policy: efficiency and equity. Perhaps the equity reasons are the most obvious, i.e. to target the particularly disadvantaged.[42] Those with disabilities, the long-term unemployed, immigrants and young people have been targeted in many Member States due to their particular difficulties in the labour market.[43]

Figure 12, which ranks the employability of displaced workers, can serve to illustrate some important issues. The solid horizontal line represents the level of employability necessary to obtain a job. Given that the objective of the policy is to secure a job, then, for both reasons of equity and efficiency, those with an employability level above that line, i.e. individuals to the left of *a,* should not receive policy measures, as they are the most advantaged of the unemployed. Neither would it be an efficient use of scarce resources, as their employability is sufficiently high anyway. When such individuals receive policy resources, the ensuing inefficiency is termed 'deadweight loss'.

Figure 12: Equity and efficiency targeting of active labour market policy



How, then, to allocate resources among those individuals located to the right of *a*? If the equity criterion is applied, i.e. prioritising the most disadvantaged, then policy should start targeting those from the far right of the job seeker axis. However, assume that the employability enhancing effect of the ALMP measures corresponds to the distance between the horizontal dotted line and the solid

[42] Equity is closely related to justice or fairness. Note that while the compensation of the most disadvantaged is perhaps the most common understanding of equity, it is not the only one.

[43] The targeting of the disadvantaged is most specifically implemented through the profiling exercise in the United States, where the probability of a newly registered unemployed staying unemployed for the duration of the unemployment benefit period of 26 weeks is estimated using multivariate statistical techniques. The local authorities are then obliged to direct some of their ALMP resources towards those most likely to reach the end of the benefit period before finding a new job. This orientation of targeting only the most disadvantaged is in line with the view of the US as a 'residual' welfare state, as termed by Titmus (1974), where welfare payments are almost exclusively directed to the most disadvantaged.

employability line.[44] With equity targeting, the measures will not be sufficient to lift the most disadvantaged, located to the right of point *b* on the job seeker axis. If, on the other hand, impact efficiency is the main criterion, those job seekers located between points *a* and *b* should be targeted.

A proper scientific evaluation of the impact of policy is very difficult.[45] It requires first measuring the value added of policy interventions for the participants (a micro evaluation), then the impact of the measures on others (a macro evaluation) and finally a judgement of whether the cost of the measures was worth the money (a cost-benefit analysis).

Evaluating active labour market policy measures

In order to identify the policy effect on the participants, it is necessary to observe the actual outcome (with policy measures being applied) compared to the alternative outcome (without policy measures). Obtaining a measure of the alternative outcome is the key to a proper micro evaluation. This requires a control group to represent the counterfactual case and is typically comprised of a group of other unemployed not receiving policy measures. Once the two samples are identified, multivariate analysis is used to control for differences in factors that influence the labour market outcome for the two groups, such as different individual characteristics and different conditions of local labour demand. Ideally, this should ensure that the difference in labour market outcomes between the two groups is solely attributable to the policy measures. The main methodological problem is that the selection process into a programme, either on the initiative of the participant or a policy administrator, may be due to factors that are very hard to measure, such as motivation, health or capability, and thus difficult to control for.[46]

However, as micro studies are limited to the impact on participants, they miss a number of wider, macro effects. Macro studies, which examine the impact of measures on the wider economy and other members of the labour force, are rarer.[47] This is, however, an important perspective. In particular, crowding-out effects may occur, i.e. when ALMP was decisive for the policy participant getting the job that otherwise would have been given to another job seeker and is especially serious when this other person was unemployed.[48] The importance of crowding-out effects depends on why the policy group was targeted. For example, measures that are addressed to particularly disadvantaged groups on the labour market, such as the disabled or immigrants, may crowd out other members of the labour force, but equity considerations may allow policymakers to accept such effects.

It was previously mentioned that most of the ALMP evaluation literature does not specifically address workers who lose their jobs at restructuring or to the restructuring process itself. There are, of course, innumerable follow-up studies of workers displaced at restructuring where active policy measures

[44] This assumes also that the employability enhancement effect of ALMP is the same for all individuals. This may not be the case, but the thrust of the argument remains the same.

[45] See Martin and Grubbs (2001) for an accessible exposition of evaluation issues. Heckman (1999) provides a more detailed and technical presentation.

[46] This sample selection problem has led some evaluations to be based on a randomised allocation of participants into programmes. With a random study group, one may choose a random control group and the difference in outcomes is the policy effect. While, in principle, such a genuine experimental evaluation is ideal, in practice it is very difficult to implement.

[47] Cost-benefit studies which evaluate the impact in relation to the costs of the measures are even rarer.

[48] Crowding-out is sometimes termed 'substitution' or 'displacement'.

have been applied. However, there are exceptionally few such studies that have any possibility, even in principle, of determining the added value of policy on labour market outcomes, due to the difficulty in identifying an appropriate control group. While there are registers or other sampling frames of unemployed people from which to extract a control group of non-participants, there is no obvious and easily accessible sampling frame for displaced workers. The selection problem is also typically more problematic; see Eliason and Storrie (2006). Moreover, ALMP measures at restructuring are applied very differently, by different actors and with widely varying degrees of support in various restructuring cases, thus making generalisations difficult.

Evidence of the impact

There is extensive research literature on the impact of active labour market policy measures. Most of the European research consists of micro evaluations of the impact of measures for the participants on the probability of subsequently obtaining a job and, to a lesser extent, the impact on future earnings.[49] This research seldom addresses the specific issue of ALMP for displaced workers or, when such studies are performed, they are not usually conducted in a fashion that provides reliable findings for policy decisions. Thus, this section examines the results of ALMP policy in general, i.e. mainly to the unemployed. Following sections examine how these general results could be applied to ALMP for displaced workers.

Kluve et al. (2007) provide a good recent review of the literature.[50] While it is of course difficult to generalise the results of evaluations based on different institutional settings, macroeconomic conditions, implementation details and evaluation methodology, some general conclusions do emerge and the results of their meta-analysis of over 100 micro evaluation studies show quite clear cut results. Evaluation techniques and data have improved significantly in the last decade and the studies reviewed in Kluve et al. (2007) are relatively recent and, at the very least, attempt to address the important methodological problems mentioned above.

Most ALMP evaluations study training programmes. Many studies find modest positive effects, particularly for those with better labour market prospects and adult women, though this is by no means the case for all.[51] A particular weakness of the evaluations in general is the relatively short follow-up period. This may be expected to be particularly serious for training measures, as it can take considerable time to reap the returns to the initial human capital investment. However, as reliable long-run data becomes more available, several recent studies appear to confirm the importance of a long follow-up period in identifying positive effects for training.

Probably the most positive and robust impacts are found for intensified matching or job search services (sometimes in combination with unemployment benefit sanctions). There is some indication that these measures work best for the higher-skilled and those with better labour market prospects. Moreover, as these are quite cheap measures, the cost-benefit results are also more likely to be

[49] Earnings are the main focus of US evaluation studies.

[50] See also Martin and Grubb (2001) and Heckman (1999), which present the ALMP evaluation results in a somewhat more negative light.

[51] Note that some studies find negative impacts. This occurs due to the so-called 'locking-in' effects which imply that participants could have used the time they participated in the ALMP better by looking for a job instead. This may be the case for almost all types of ALMP measures. Wunsch and Lechner (2007) find no positive impact of all forms of recent German ALMP. The lack of effects is attributed to poor targeting of participants among different measures.

positive. One disappointing result of micro impacts generally, including search measures, is the poor results found for youths.

Temporary wage subsidies in the private sector have become an increasingly common ALMP measure and the micro evaluations often find positive effects in terms of the participant securing a non-subsidised job after the temporary employment subsidy has expired. However, there is much evidence of considerable deadweight loss, i.e. that if the employer had not received the subsidy, the vacancy would have been filled anyway. Temporary employment in the public sector, sometimes referred to as 'relief work', generally does not yield a positive impact.[52]

Crowding-out effects

Macro studies which examine the impact of measures on the wider economy and other members of the labour force are rarer.[53] However, there is little doubt that crowding-out effects do exist empirically. Sweden has a long history of ALMP and with considerable evaluation expertise and very good data. Calmfors et al. (2002) provide a general overview of Swedish evaluation studies and devote serious attention to the crowding-out problem.

There are two methods of obtaining an estimate of the extent of crowding-out. One is to ask the opinion of programme administrators and Calmfors et al. (2002) examined the results from 35 such Swedish studies. They found that the provision of a position at an establishment (either a temporary subsidised job or various types of job experience schemes) meant that the employer refrained from taking on someone else in between 10% to 84% of cases. Crowding-out was most prevalent for temporary wage subsidies and appreciably lower for job experience type of schemes, which usually involved some sort of training and at an appreciably lower wage than in the collective agreement. One should have quite serious reservations on the ability of the respondents to gauge whether crowding-out has occurred, as the question is necessarily highly hypothetical and there are reasons to suppose they may underestimate the effects.

Econometric studies cited in Calmfors et al. (2002) indicate much higher crowding-out effects, sometimes up to 100%, but with a somewhat similar ranking among the different types of ALMP measures.[54] While acknowledging concerns about the reliability of precise estimates on the size of crowding-out effects, Calmfors et al. (2002) are reasonably confident as far as the ranking of the extent of crowding-out among different types of programmes is concerned. Their conclusion is that the effects are appreciably larger the more ALMP measures 'liken a job'. Thus, various types of temporary wage subsidies have the highest crowding-out effects. It would appear likely that 'pure matching measures' such as intensified job search measures and training have much lower effects. This is because job searches and labour market training address what is really feasible with ALMP, namely, increasing employment by reducing the mismatches on the labour market. For example, econometric studies in Forslund (1996) and Dahlberg and Forslund (1999) find no significant crowding-out effects for training measures, while various forms of subsidised jobs crowded-out other members of the labour force in 65% of the cases. Martin and Grubb's (2001) overview of ALMP measures in OECD countries reaches the same broad conclusion. They refer to evaluations from

[52] The only caveat to these results would be that as these measures are usually directed to those with poor labour market prospects, this may not be fully reflected in the control group.

[53] Cost-benefit studies which examine the microeconomic impact in relation to the costs of the measures are even rarer.

[54] These studies estimate the effect of ALMP on the number of non-subsidised jobs in the local labour market.

Austria, Belgium, Ireland and the Netherlands that find combined deadweight loss and crowding-out effects of around 90% for temporary wage subsidies. An OECD report (2004) finds no significant crowding-out effects for training measures. The conclusion is that to the extent that ALMP measures 'create vacancies' through temporary wage subsidies, they primarily only reallocate jobs among job seekers.

Efficiency and equity when targeting displaced workers

It was mentioned above that the ALMP evaluation literature has very few reliable evaluations of ALMP addressed to workers who lose their jobs at restructuring, due to severe methodological problems, and Kluve et al. (2007) mention only one such evaluation. However, it may be possible to use some of the lessons from the general ALMP evaluations together with an examination of the particular circumstances of displaced workers to draw some implications for ALMP directed to the displaced.

The policy efficiency potential of targeting displaced workers

There are a number of reasons to suppose that, from the micro perspective, ALMP measures applied at restructuring could be more effective than generally is the case. The reasons are related to the composition of the target group, the circumstances of the restructuring event and the availability of other policy tools and actors.

The brief overview of the ALMP research based on the target group of all unemployed persons mentioned that results were poor for young persons (this is commonly believed to be due to their lack of labour market experience) but better than average for women, higher-skilled and others with relatively good labour market prospects. Displaced workers obviously have some labour market experience. It is more difficult to generalise on the skills and their labour market prospects compared to the unemployed in general, but the fact that many do get a job immediately after displacement – see for example Kuhn (2002) – indicates that they probably do make a more promising target group in this respect.[55]

The key difference in the circumstances of displaced workers and the unemployed in general is, of course, that the soon-to-be displaced workers currently hold a job. The period of notice, formal or otherwise, before loss of job is a vital window of opportunity for the implementation of ALMP measures. Job search activities were seen to be a particularly efficient tool and may be particularly effective during the notice period. Job search during notice combines the positive features of on-the-job search and unemployed job search. While still employed, they can utilise on-the-job contacts and do not suffer from the discouragement of unemployed job search, nor from the unemployment stigma that may be interpreted as a signal of low productivity by a prospective employer. On the other hand, the knowledge of impending job loss may provide the same incentive to search intensively as that experienced by the unemployed.[56] While looking for a new job may be particularly efficient during notice, it may not be very obvious to the employee that this is the case and surely there is a potential high return in encouraging and assisting job searches at this early stage of the restructuring process.

[55] A caveat here is that the selection of a worker for displacement might imply lower than average productivity. However, that is a comparison with other employees and here the relevant comparison is with the unemployed.

[56] However, this presumes that the restructuring process is well defined in advance and that employees are informed with a high degree of certainty that they will in fact lose their job.

Thus there are good reasons to not only allow a long period of notice with the possibility of obtaining time off to search, but also to provide intensified job search services, including occupational guidance, during this period.[57]

Another possible way to increase implementation efficiency is the involvement of the social partners. They are well placed to start this work early and the adage that prevention is better than cure certainly applies to unemployment. Moreover, as information is the key to efficient matching on the labour market, the involvement of the social partners (the company personnel department and the unions) will be much better placed to know about the skills and personal characteristics of their employees than any body external to the firm, either a public employment office or a private outplacement agency.

Thus the search capabilities of the worker during the notice period and the matching competences of the social partners should be conducive to efficient matching. This argument also applies to deciding training needs and when awarding temporary wage subsidies. The social partners are also well placed to start matching activities much earlier in the restructuring process than any outside actor, public or private.[58] While in some Member States, the trade unions are prepared to become involved in the administration of a displacement process, this is not the case when the trade union views the process to be the sole responsibility of management and may not want to be associated with it all.

Policy efficiency and equity problems

While there are a number of reasons to suppose that from the micro perspective one could expect better results of ALMP measures targeted at displaced workers than for the unemployed in general, there may also be some problems and, in particular, the crowding-out effects are appreciably more problematic when the policy target group is comprised of workers displaced at restructuring.

One of the major sources of ALMP inefficiency is deadweight loss. As explained in the discussion on Figure 12, this occurs when measures are awarded to people with such a high level of employability that they would find a job anyway. There is arguably a greater probability of this occurring to job losers than to the unemployed. To the extent that unemployment is involuntary, the very fact that the unemployed have no job demonstrates that, at least temporarily, they lack employability and thus could gain from employability-enhancing ALMP measures. This is not the case with job losers as, even without ALMP measures, a significant proportion of them move on directly to a new job; see Kuhn et al. (2002).

Of course, one could argue that the re-employment rate is too clumsy a measure of labour market outcome and that employability-enhancing measures should be applied in order for displaced workers not just to get a job, but a high-quality job.[59] But however one views this matter, the basic

[57] The proposal to introduce advance notice on a federal basis in the United States and its implementation in the early 1990s generated much research on this topic. See for example Addison and Portugal (1987), Nord and Ting (1991) and Swaim and Podgursky (1990). Most of this research found that longer periods of advance notice increased the probability of obtaining a job immediately after job displacement. There is very little research on this issue from Europe. However, Storrie (1993), Jans (2002) and AMS (2003) all found the same results in Sweden as were found in the US.

[58] See for example the EMCC case study *Managing large-scale restructuring: Danish Steel Works* at http://www.eurofound.europa.eu/emcc/publications/2005/ef0548enC6.pdf.

[59] Note, however, that the re-employment rate of displaced workers is the recommended measure for measuring the impact of ALMP measures by the European Commission. See EU Commission (2002).

point still remains valid, and unless special attention is paid to careful targeting, deadweight loss is likely to be a significant source of ALMP inefficiency at restructuring. On the other hand, if the social partners at the firm are involved in the matching process, as proposed above, their knowledge of the capabilities of the workforce should be helpful in this respect. Moreover, there are other sources of funding, such as the firm and collective agreement insurance funds. A possible demarcation of social responsibilities between the government and other firm or sector actors could be that the government should provide resources sufficient to bring a displaced worker above the employability threshold (see Figure 12) and that assistance above that level should be borne by other funds.

However, the most serious problem is probably that of crowding-out effects. This macro problem of ALMP directed at displaced workers is best expressed by critically examining the most common measure of success in micro studies, namely the re-employment rate of the job losers. Expressed perhaps somewhat provocatively, the re-employment rate of the displaced workers is a measure of the extent to which the consequences of the job losses at restructuring were passed on to other members of the local labour force. If ALMP measures targeted at the displaced workers were instrumental in securing this competitive advantage, this is surely a matter of concern in terms of equity. While there may be good grounds for some disadvantaged groups receiving special treatment, such as the disabled, young persons, long-term unemployed or immigrants, it is exceedingly difficult to find such equity reasons for awarding preferential treatment to a group of individuals purely on the basis that they happen to lose their job at a particular, often large, firm. That this occurs at all is presumably due to political reasons, either in terms of these workers having the political means to secure funding for the measures or that the publicity of a large closure leads to policy funders being more amenable to requests for additional support.

Not only is crowding-out less acceptable when targeting ALMP at displaced workers, but the phenomenon is also likely to be more prevalent than generally is the case. As pointed out above, crowding-out is more significant a problem when there are a large number of other job seekers in the local labour force without a job. Thus, if the restructuring case is large relative to the local labour market (including knock-on effects to subcontractors and the consequences of lower effective demand) and leads to high local unemployment, then crowding-out will be even more problematic.[60] Thus, if there is no net job creation, active measures that have positive effects for the displaced impact negatively on, for example, youth unemployment. This simple but usually neglected insight calls into question some aspects of social responsibility at restructuring and indicates that some versions of social responsibility may in fact only be an expression of preference for the welfare of insiders at the expense of outsiders. At the very least, this crowding-out phenomena must be considered in evaluations of policy at restructuring. Policymakers should also take account of the research results on the ranking of the extent of crowding-out effects among different types of ALMP, as outlined above, and design measures accordingly. Obviously, it questions the appropriateness of temporary employment subsidies, but ultimately it underlines the obvious: jobs lost at restructuring cannot be addressed by ALMP and policymakers must also engage in job creation in general and regional and industrial policy in particular.

[60] There are very few studies that examine the prevalence of crowding-out at restructuring. Storrie (1993) interviewed the first employer of the worker after being displaced. In 90% of the cases the employer stated that they could have found other roughly equally suitable workers in the local labour market and in 83% of the cases the employer received some sort of economic advantage when hiring the displaced worker, usually a temporary wage subsidy.

Empirical evidence of the costs of job displacement

Before drawing conclusions on the lessons to be learned from ALMP for the unemployed that could be applied to displaced workers, it is first necessary to examine empirical evidence on the extent and nature of the loss incurred by displaced workers, as it differs somewhat from the situation of the unemployed. [61]

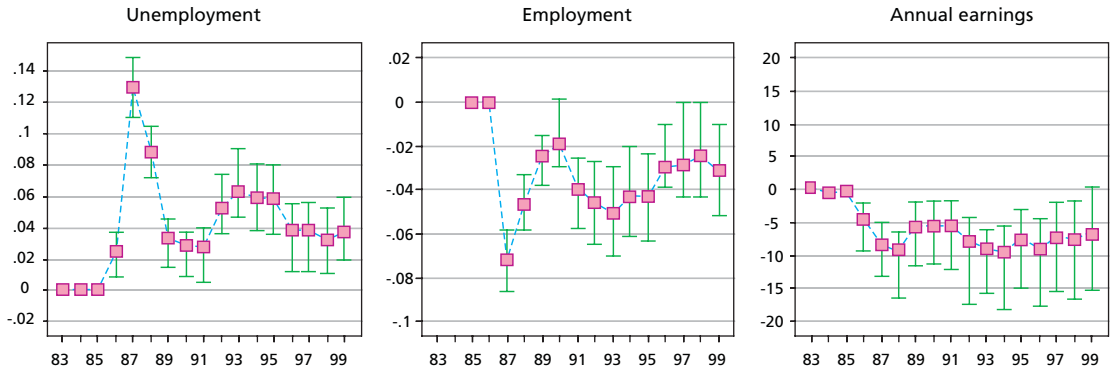
Research in the US and Europe finds convincing evidence of significant economic losses due to displacement in the short term; see for example Hamermesh (1987), Kletzer (1998) and Kuhn (2002). Indeed, it should be obvious that even in the most vibrant of labour markets, the temporary adjustment required would lead to some unemployment and lower earnings. In almost all the OECD countries examined by Kuhn (2002), the costs of displacement are largest for women, the unskilled and those with long tenure (or seniority) at the firm and, to a lesser extent, older workers.[62] More importantly, there is also convincing evidence of long-term losses in earnings, at least in the US – see Jacobsen et al. (1993), Stevens (1997), Sullivan and von Wachter (2007) and Kodrzycki (2007). While the evidence from Europe is sparser and is somewhat inconclusive, it has been claimed that the losses in Europe are smaller – see for example Gregory and Jukes (2001). The lack of convincing evidence in Europe is mainly due to the lack of large panels that can follow individuals and can handle sample attrition (survey non-response over time) over, say, a 10-year period. Indeed, the most convincing evidence from the US is based on register data, albeit with partial geographic and sector coverage; see Jacobsen et al. (1993) and Sullivan and von Wachter (2007).

Register data, which links workers to firms and where attrition is due mainly to death or emigration, has recently become of such high quality and coverage in several European countries that, for the first time, it provides a reliable basis for this type of long-run research. These registers can also be used to extract large suitable control groups. In the Nordic countries in particular, other registers may be merged to obtain a host of variables that can be used to hold constant other factors that may lead to a different labour market outcome for the displaced and the non-displaced control group and thus isolate the impact of displacement. Eliason and Storrie (2006) identify all workers displaced due to plant closures workers in Sweden in the mid-1980s, extract a large control group of employees not displaced at that time and follow both groups up to the end of the century. Controlling for previous health, earnings and wealth, family circumstances, education levels, regional labour market conditions, sectors, various establishment characteristics, etc., they find evidence of long-lasting, negative effects on earnings and employment levels; even 12 years after the displacement, the earnings differential compared to a control group of similar non-displaced workers is as large as up to 26%. The time profile of the effects is informative, as it indicates some reasons for these long-term effects (see Figure 13).

[61] The extent of this loss cannot be measured by simply observing the labour market outcome of the displaced workers without obtaining some estimate of the labour market outcome had the worker not been displaced. For example, assume that two years after displacement the worker becomes seriously ill and this would have happened even if displacement had not occurred. A simple 'before and after' comparison of earnings would exaggerate the loss due to displacement. In fact, it may be somewhat unclear what the counterfactual case should be and it is often difficult in practice to identify a group corresponding to an appropriate counterfactual. The longer the follow-up period, the more important it is to have a counterfactual case.

[62] These are results from multivariate regressions, so that while descriptive statistics show that older workers experience high costs of job displacement, this is mainly due to their long seniority on the job. Note that while women and senior workers experience higher costs of displacement, they are less likely to experience displacement in the first place.

Figure 13: Difference in labour market outcome for all workers displaced due to plant closure in 1987 compared to non-displaced employees, aged 21 to 50, in 1987



Note: Annual earnings are expressed in thousands of Swedish Kronor (SEK) and deflated by the 1999 consumer price index with 95% (bootstrap) confidence intervals.
Source: Eliason and Storrie (2006).

Immediately after displacement, the difference in the probability of experiencing unemployment increased to 13 percentage points, with similar negative effects for employment and earnings. In the following two years, there was major recovery among the displaced workers in terms of decreasing unemployment and employment differentials. The negative impact did not vanish, but by 1990, the differentials were down to two and three percentage points. Shifts in the macroeconomic environment appear to coincide with the time profile of the estimated effects. In the early 1990s, Sweden experienced a macroeconomic downturn unparalleled in the post-war period.[63] Obviously, this was reflected by increased levels of unemployment and lower levels of employment among both the displaced and non-displaced workers alike, but more interestingly, the previously observed diminishing of the differentials ceased abruptly and was reversed for all three outcome measures. When the trough of the recession was reached in 1993, the difference in annual earnings was actually larger than in the year of displacement. The impact on the unemployment and employment measures was not that large, but nonetheless the differentials had increased to 6.3 and 5.1 percentage points.

After 1993, the economy continued to experience several years of deep recession and it was not until the end of the decade that signs of sustained recovery appeared. However, even if the impact of the initial displacement seemed to have diminished again, the differentials were no less in 1999 than they were nine years earlier.

Thus the results indicate that during 'good times', displaced workers might be able to return to similar levels of employment and unemployment as non-displaced workers within four or so years, while there is less of a recovery in earnings. However, displaced workers seem to be more vulnerable to subsequent shocks. This vulnerability is an important factor behind the long-lasting effects of job displacement. Although the differences between the estimated effects for 1990 and 1993 are not statistically significant, the larger impact of the recession on the previously displaced workers seems

[63] GDP fell by 6% from the cyclical peak in the first quarter of 1990 to the trough in the first quarter of 1993. By that year, unemployment had risen from under 2% to over 8% and total employment had fallen by 13% between the first quarters of 1990 and 1994.

unquestionable considering the similar time profiles of the estimates for all three outcome measures. Some research from the US – see Stevens (1997) – also suggests that recurrent job displacement lies behind the longer-term effects.

Eliason and Storrie (2006) argue that the vulnerability of the recently displaced to subsequent displacement is due to their relatively low level of firm-specific capital on the new job. When the firm is to lay off workers, this low level of firm-specific capital means that they are of less relative value to the firm and so more prone to being selected for displacement. Indeed, the economics literature attributes the main reason behind the extent and distribution of the costs of displacement in the short run to the destruction of firm-specific human capital at displacement; it would appear that this is also behind the longer-term effects. Further evidence of this is that Eliason and Storrie (2006) find that it was the older age group, i.e. those between 41 and 50 in 1987, and with shorter tenure that incurred the largest losses. The other important point that emerges is the impact of macroeconomic conditions for the labour market outcome of the displaced workers relative to other workers. This holds true even if they did initially get a new job and continues to exert an influence on their relative labour market outcome for many years.[64]

Thus the key difference between the situation of the displaced workers and the unemployed in general is the loss of firm-specific capital of the former. The four points below identify the nature of the loss incurred by the displaced worker; the first three can be viewed in terms of firm-specific capital.

- A job may be the outcome of a long process of searching for and trying out various jobs before finding one that matches the worker's competencies and personal preferences. Thus when this job is lost it may require another lengthy matching process. This may be particularly problematic for older workers.
- The competencies of the displaced workers may be linked to the lost job and be specific to that place of work, i.e. contain much firm-specific human capital which is not marketable on the external labour market. This firm-specific capital may be acquired by on-the-job training or experience at the workplace and so is likely to be strongly correlated with the length of service at the firm.
- Employees with long service may have accrued seniority rights that will be lost upon losing the job. These include job security rights and seniority wages.
- The loss of a job can be a very stressful event both in financial and social terms.[65] This is a problem itself and may impact negatively on the chances of getting a new job. This may also be particularly serious for older workers with long seniority.

Appropriate types of active labour market policy for displaced workers

So far, this chapter has suggested reasons why ALMP at restructuring could be expected to yield both higher and lower than average returns to participants and the previous section identified the

[64] Kodrzycki (2007) provides some recent evidence of this for the US.

[65] The loss of a job is one of the most stressful events that a person can experience (Miller and Rahe, 1997). An important finding for policy at restructuring is that stress is manifested very early on in the restructuring process; see for example De Witte (1999) and Angelöw (1986). This time profile is in contrast to the unemployment problem, where the wider socio-psychological problems manifest themselves only after some time has elapsed.

specific nature of the problem faced by displaced workers and the reasons for the loss incurred in the long term. What, then, are the implications for the orientation of active labour market policy measures for displaced workers?

Job search and counselling measures

As job search, matching and counselling measures are probably the most effective of all ALMP measures, they should be provided as part of any policy package to address job loss at restructuring. Indeed, it was argued above that there are some reasons to suppose that they should be particularly effective when addressed to displaced workers. This is due to the potential search efficiency during the period of notice, the potential of the social partners to contribute to efficient job matching, not least due to their possibility to start this work early in the restructuring process and their intimate knowledge of the capabilities of the workforce. Particularly to workers with long tenure at the firm, the importance of an early start to job search may not be obvious and their lack of recent experience of external job search suggests that assistance may be necessary. Thus all involved parties (the appropriate public administrations, the social partners and the workers themselves) should grasp the window of opportunity that the notice period offers. In order for this to function properly it is vital that clear and early information on the impending job loss is provided.

The discussion on the nature of loss incurred from job displacement further underlines the relevance of matching and counselling activities for displaced workers. The restructuring process is a very stressful time for workers and may diminish their ability to act in accordance with their long-term interests. The need for a coherent and transparent restructuring process, as mentioned above, is helpful in this respect, but even a well-administered process may still lead to problems for individual workers which should be addressed with dedicated counselling services. Moreover, the evidence from research in both the US and Europe shows that recurrent job separations explain much of the long-run negative effects of the initial displacement. This suggests the importance of making concerted efforts to obtain a high-quality match of the worker to a new job as opposed to just a 'quick-fix' match, and that these efforts may have substantial long-term benefits. This would entail something different to the services typically offered by public employment services to the unemployed, such as aptitude tests and career guidance, and may imply that the provision of such services could be obtained from other, possibly private sector actors.

Given the positive role that the social partners can play in this process in terms of implementation efficiency, there is surely some logic that they take a lead in matching activities as early as possible in the restructuring process, either with own funding or possibly with contributions from public bodies. To some extent this approach is currently being applied in Sweden. Previously, up until the 1990s, the government responded to large restructuring cases with massive and immediate extraordinary publicly financed ALMP; see for example Ohlsson and Westerlund (1987) and Storrie (1993). Currently, the government engages in the process at a later stage, after the firm and the bipartite job security organisations have carried out a first round of intensified job search and other matching activities.[66] This is partly motivated by wanting to avoid deadweight losses; see Ohlsson and Storrie (2006) and AMS (2003). One could also argue for a division of responsibilities between the social partners and public bodies where the latter guarantees a certain level of funding for all

[66] In many cases, these services are financed by bipartite job security funds as established by collective agreements. They are increasingly being implemented by private sector outplacement agencies.

displaced in order to attain a certain level of employability. The social partners could then devote further resources to those with firm-specific capital that is not marketable on the external labour market. Presumably it is just this category of worker, i.e. those with long tenure, for whom the social partners would be inclined to adopt social responsibility.

Temporary wage subsidies

The previous section emphasised that the distinctive nature of the loss to displaced workers was the loss of firm-specific capital. It is difficult to envisage how policy, at least in the short term, can help to recuperate some of these losses as seniority rights and benefits (including wages) are obtained only by long tenure on a job. It might appear that the most obvious way to promote the re-establishment of firm-specific capital is to apply measures that directly and quickly get the displaced worker a job, and for this reason use temporary wage subsidies. This chapter has argued strongly against the use of temporary wage subsidies for displaced workers, due to the severity of deadweight loss and crowding-out effects. If, despite these arguments, they are to be used, they should only be one element in a broader strategy to place individuals with particularly low employability and should include some commitment in return from the employer to provide training and thus to help guard against subsequent displacement.[67] But arguably the only motivation for them at all is, as was argued above, when they are addressed to particularly disadvantaged groups of displaced workers and thus make the crowding-out effects acceptable for equity reasons. Given that this would appear difficult to accept in the case of displaced workers, the package of measures implemented should be designed to minimise these effects. Thus, from this perspective, temporary wage subsidies should be avoided and more traditional ALMP matching measures, such as mobility grants and training, should be prioritised.

The role of training

The underlying policy approach is self-evident, namely to provide the platform for the displaced worker to accumulate human capital that will be useful for jobs in other firms. In this context, the career guidance mentioned earlier is in many cases only a first step and training and education are the key policy tools. It is difficult to generalise about the orientation of this training, as much depends on the state of the local labour market. If there are skill mismatches in the local labour market, then customised training courses appropriate for such jobs should be made available. More generally, however, concerted efforts should be made to adapt the firm-specific skills of the displaced worker to become marketable on the external labour market. This may include the validation of skills learned on the job but not documented.

What must be avoided is job-specific training for jobs that do not exist. The activating role of ALMP in general and training in particular may be useful as such in ameliorating the permanent scars on individuals and society that may result from long-term unemployment. These active individuals may then be able to return to work when times improve.[68] However, with no jobs in sight, participants may experience training as meaningless or even punitive and endless rounds of training for a job that

[67] Evidence in OECD (2004) suggests that this may provide positive results from a micro perspective.

[68] The Swedish Institute for Labour Market Policy Evaluation overview of experiences of Swedish active measures in the 1990s suggests that the presence of an unemployed, but still activated, labour force was an important factor in translating the sustained growth towards the end of the decade to a rapid decrease of unemployment. Between 1994 and 2001, the unemployment rate was halved from 8% to 4%. For some evidence in English, see for example Johansson (2001).

will never appear can be just as demoralising as long-term unemployment. As it may often be the case that restructuring occurs in depressed local labour markets, this scenario may be quite common.

Again, some Swedish experiences may be instructive. In the mid-1990s, Sweden experienced mass unemployment for the first time since the 1930s and it became obvious that training the unemployed to fill non-existent jobs did not make sense. The biggest single individually-oriented policy response was the Adult Education Initiative (*kunskapslyftet*), which at one point had as many participants as there were schoolchildren in upper secondary school. This provided formal school education for poorly educated adults and there was not even an implicit promise of a subsequent job. It was presumably interesting and meaningful for participants, or at least more so than training that obviously would not lead to a job. Evaluations of this massive programme have shown mixed results that are difficult to generalise.

Evaluating active labour market policies

The review of the recent literature in Kluve et al. (2007) cites only one study which examines the impact of ALMP on displaced workers.[69] Winter-Ebmer (2001) finds relatively large positive effects of a special ALMP programme for displaced steel workers in Austria. The policy intervention was intensive and expensive and included a contribution from the participants themselves. Retraining programmes focused on requalification and occupational reorientation (included personality and orientation training). It also included a significant amount of formal education and long training periods, rather than marginal skill upgrades. Evaluations showed that five years after the programme, employment was significantly higher for participants compared to non-participants; see also Winter-Ebmer (2006).

Ohlsson and Storrie (2007) use the same data set described above in Eliason and Storrie (2006) with the addition of two large case studies that received funding for intensified ALMP; these were the cutbacks at the LKAB iron ore mines in 1983 and the closure of the Uddevalla Shipyard between 1985 and 1987. The labour market outcome of these displaced workers was compared to all other workers displaced due to a plant closure but who did not receive extraordinary measures until 2000. There was no evidence of the extraordinary measures having any significant short-term effect.[70] However, after five to seven years, significant policy effects did emerge in terms of higher employment and higher earnings than in the comparison group. It may not be immediately obvious why positive effects were found only in the long term. However, there was a large increase in the level of upper secondary school education among those receiving extraordinary measures compared to the comparison group. Indeed, a distinguishing feature of these measures was a much broader orientation of the types of educational programmes available to these workers compared to more traditional narrow labour market training. Ohlsson and Storrie (2007) interpret the results as showing that it was the opportunity to avail of more general education that yielded the positive long-run results.

[69] There are, however, a number of studies from the US. See Kodrzycki (1997).

[70] This is in accordance with previous survey evidence on the same cases studies in Ohlsson and Westerlund (1987) and Storrie (1993). These studies also provide information on the type of measures applied. The public employment services moved into offices on the company site, and in close cooperation with the social partners performed intensified job search activities. They also provided funding for a wide range of education programmes, including general education up to the university level.

These are two of the very few studies that evaluate intensified ALMP measures in Europe addressed at displaced workers that use an appropriate control group. Both show positive results and both included significant elements of intensified job search activities and general education measures. They were also very expensive. Ohlsson and Storrie (2007) argue that the lack of short-term effects of policy indicate that the quick fix of a limited set of new job skills is not sufficient to compensate for the loss of firm-specific human capital that may have been built up over many years. This is particularly the case in depressed labour markets with few available vacancies. General, non-specific human capital takes time to yield benefits, both due to the duration of the education programme itself and to the time required to find an appropriate match for skills that are not so obviously related to a particular occupation or match with a particular employer.[71]

Given that it was argued that the nature of the loss of the job is attributable to the loss of firm-specific capital, it may appear paradoxical that two reasonably reliable studies suggest positive effects for more general human capital creation. One possible explanation is that public policy is seldom the appropriate means to address the creation of firm-specific capital. Public policy is more suited to the provision of general capital, which in turn may provide a solid platform for the individual in re-establishing a secure position on the labour market.

There is still not enough European research for policymakers to make an evidence-based decision to adopt the general education approach in order to improve the employability of displaced workers. Moreover, the positive results from the three cases cited occurred in combination with other measures, resulted from extensive policy interventions and were expensive. However, regardless of whether it does in fact have a significant impact on future earnings or not, at the very least the provision of, for example, upper secondary school education does provide something of value to the individual in terms of self-esteem, maintaining activity, etc. and surely it is the preferable option when there are no jobs in the short term in the local labour market to train for anyway. If this approach were to be adopted more generally for displaced workers, it probably should entail some reorganisation of the institutional framework for the implementation of ALMP. For example, responsibility for the adult vocational education and training system in Denmark, which is addressed primarily to employed workers, was transferred from the Ministry of Employment to the Ministry of Education. This was to allow for a better coordination with other educational programmes, including the provision of upper secondary schooling.

Concluding remarks

To conclude there are strong arguments for intensified job search measures including career orientation and counselling for displaced workers. There are very few reliable studies of the effects of training for displaced workers and as the type of training that should be implemented is so dependent upon the state of the local labour market, it is difficult to arrive at firm general conclusions. Some of the few existing European evaluations suggest that positive effects may be obtained from more general schooling measures. Only under exceptional circumstances should temporary wage subsidies be used. Apart from the well-established deadweight loss effects, the equally well-documented crowding-out effects are unacceptable from an equity perspective.

[71] Note, however, that the somewhat more extensive US research on the impact of training for displaced workers does not seen to substantiate the claim that more general education is more effective than specific training; see Kodrzycki (1997).

6 Active labour market policies for trade-induced displacement

The previous chapter drew upon conclusions from the extensive ALMP evaluation literature to make the case for active measures or social plans at restructuring with some suggestions on the particular orientation such measures should take specifically for displaced workers. This chapter narrows the target group even further to jobs displaced due to the negative effects of trade or job relocation (trade-induced displacement). This focus is due to the recently announced European Globalisation adjustment Fund (EGF).[72] According to the Regulation, 'globalisation may also have negative consequences for the most vulnerable and least qualified workers in some sectors. It is therefore opportune to establish a European Globalisation adjustment Fund (the EGF), accessible to all Member States, through which the Community would show its solidarity towards workers affected by redundancies resulting from changes in world trade patterns.' (Point one in the preamble.)

The EGF was a political initiative from President Barroso, who proposed a Globalisation Fund in a letter on October 2005 before the Hampton Court Summit. It was stated that this fund would provide a European response to those adjusting to the consequences of globalisation, acting as a sign of solidarity from those who benefit from open trade to those who face the sudden shock of losing their job.[73] The proposal was endorsed at the December 2005 European Council, where there was general agreement among European leaders on the need to address the adverse effects of changing trade patterns on workers. There is an obvious political logic in the EGF. As trade agreements are practically the sole prerogative of the European Union, then the negative consequences of trade liberalisation agreements should also be dealt with by the Union.

The EGF was passed by the Council on 20 December 2006 and the fund applies from 1 January 2007. It has yet to finally approve any applications. The purpose of this chapter is to suggest what could be the most fruitful orientation of these measures. This is based on the conclusions of the previous chapter, with regards to the fact that it is an EU-financed policy, and by drawing upon the experiences of Trade Adjustment Assistance in the US, which was set up in 1962 and designed for precisely the same reasons.[74]

Experiences from the United States – Trade Adjustment Assistance

The United States has a relatively modest policy response to unemployment in terms of labour market policy. Unemployment benefits are low, strictly limited in duration and with very low eligibility rates, with roughly only one-third of all unemployed receiving benefits. Expenditure on training is also limited. However, it is unique among developed countries in providing special assistance to workers who lose their jobs due to foreign trade. When introduced in 1962, President Kennedy stated that:

When considerations of national policy make it desirable to avoid high tariffs, those injured by that competition should not be required to bear the full brunt of the impact. Rather, the burden of economic adjustment should be borne in part by the Federal Government… there is an obligation to render assistance to those who suffer as a result of national trade policy.

[72] Regulation (EC) No 1927/2006: On establishing the European Globalisation adjustment Fund.

[73] No mention is made in the Regulation of a quid pro quo for trade liberalisation. It only motivates the legislation with the following: 'Since the objectives of the action to be taken cannot be sufficiently achieved by the Member States and can therefore, by reason of their scale and effects, be better achieved at Community level …'.

[74] Research assistance from William Court, Cornell University and trainee at the EMCC is gratefully acknowledged.

Trade Adjustment Assistance (TAA) is a federally funded programme which is to 'provide assistance to workers in companies affected by imports from foreign countries, shifts in production to certain foreign countries, and to certain secondary workers'. It is to do this by facilitating re-employment, and its main measures include public training programmes, income support for those partaking in training programmes, job search allowances, relocation allowances and career counselling. The most significant reform of the TAA was passed in 2002 and many observers believe this was crucial to passing the bill that re-established the Trade Promotion Authority.[75] It introduced wage insurance (termed Alternative Trade Adjustment Assistance) for those over 50 years of age who take up a new job that pays significantly less than the wage in the job that they lost. It also provided a tax credit on health care insurance and attempted a more consistent administrative integration of the programme into other unemployment and labour market policy schemes. Roughly 40,000 workers per year receive TAA.

The TAA award criteria and measures

The award of TAA funding is a two-stage process: first, the case of job losses due to trade-induced displacement must be established (certified) and then individual workers may apply for support.

Certification

To become 'certified' for TAA benefits, a petition must be filed with the Division of Trade Adjustment Assistance (DTAA) of the Department of Labor and the TAA coordinator in the state where the establishment affected is located. A petition can be filed by a union representing the affected workers, by any group of three or more workers, by a company official, by a state employment security agency or by a 'local one-stop centre'. When filing a petition, the applicant is to put forward the reasons and provide evidence of why their group is eligible for support. If the petition is successful, the DTAA usually grants a certification for those laid off within one year prior to the petition and for workers made redundant in the two years following the petition.

Certification requires that the company 'produces a product', which excludes practically all of those working in the services sector.[76] The size requirements require that a minimum of the workforce has been laid off in the 12 months preceding the date of the petition or is threatened with layoffs (three workers in groups of fewer than 50, or 5% of the workforce in groups of 50 or more).[77] While the trade disruption criteria do include relocation events, this applies only when the relocation is to certain countries[78] and some important ones are in practice excluded, for example, China and India. However, the criteria include 'secondary workers', i.e. those who lose jobs from plants producing inputs into goods that experience significant import competition.

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[75] This is commonly referred to as the 'fast-track', which allows the President considerable powers in negotiating trade agreements. Another interesting recent political deal struck in the US Congress was the agreement of two bilateral free trade agreements with Panama and Peru which were linked to the observance of environmental and labour standards. The labour standards are those contained in the ILO Declaration on Fundamental Principles and Rights at Work. They include freedom of association, the right to collective bargaining, elimination of all forms of forced labour, abolition of child labour and the elimination of discrimination in employment. In addition, mention is made of 'acceptable conditions of work'. The matter is somewhat complicated, as parts of the declaration are based on ILO standards that the US has not ratified. See *Washington Post,* 'Sticking points on trade turn into tipping point' by Steven Pearlstein, Friday, 11 May 2007.

[76] http://www.doleta.gov/tradeact/petitions.cfm.

[77] There are additional criteria related to the age of the workforce to obtain certification for the ATAA.

[78] Workers laid off as a result of a shift in production to a country that is party to a free trade agreement with the United States, or a country that is named as a beneficiary under the Andean Trade Preference Act, the African Growth and Opportunity Act or the Caribbean Basin Economic Recovery Act, may satisfy TAA certification criteria.

The eligibility criteria for individual workers are those typical for ALMP measures. For example, in order to receive training, it is required that the participants have no job, that the particular training is seen as useful and is expected to lead to a job.[79]

Training

TAA training is limited to 104 weeks. The types of training include classroom training, on-the-job training, customised training designed to meet the needs of a group of employers and basic or remedial education, which may include training in literacy or English as a second language.[80] There is a cap on funds appropriated for training and the problems in assessing worker skills have clogged the administration process. Under-funding is another problem. It appears to be acute in many states and, according to a Government Audit Office survey, 19 states temporarily discontinued enrolling TAA-eligible workers in training at some point between the fiscal years 2001 and 2003 because they lacked adequate training funds, and six states took this step during 2004.

Trade Readjustment Allowance (Income Support)

Income support is an entitlement and if a worker is eligible, then funds must be provided. The primary criterion for income support is participation in full-time training. There are two forms of Trade Readjustment Allowance (TRA): Basic TRA and Additional TRA. Basic TRA lasts for 26 weeks and follows on after unemployment insurance has expired (which also typically lasts for 26 weeks). Additional TRA is payable if the worker is still participating in TAA-approved training after the 26 weeks of Basic TRA have been exhausted. Additional TRA may be paid for a maximum of 52 weeks.

The Department of Labor may issue waivers to the training requirement for income support. Waivers are quite common, as training is often not available due to under-funding and administrative problems. In addition, the 2002 reform introduced the Health Care Tax Credit. It is commonly believed (as reported by the Government Audit Office) that worker-friendly state TAA officials quite frequently issue waivers so that workers do not lose their health insurance tax credit.

Wage insurance (ATAA)

The 2002 reform introduced the Alternative TAA (ATAA), which is a wage insurance programme for trade-displaced workers older than 50 years of age. As of April 2007, eligible workers aged 50 or older who obtain new, full-time employment at wages of less than $50,000 within 26 weeks of losing their job may receive a wage subsidy of 50% of the difference between the old and new wages, up to US $10,000, paid over a period of up to two years. There is currently some discussion on extending this system to workers displaced for other reasons.[81] Indeed, a bill is currently being discussed which proposes to extend support to service workers and for those at the lower age threshold.

Job search and relocation allowances

Search allowances may be payable to cover expenses incurred in seeking employment outside an eligible worker's normal commuting area if a suitable job is not available in the area. Job search allowances reimburse 90% of the total costs of allowable travel, up to a total of US$1,250. Relocation allowances cover '90% of the reasonable and necessary expenses of moving workers who have

[79] This was taken from the US Department of Labor: http://www.doleta.gov/tradeact/benefits.cfm#1#1.

[80] See http://www.doleta.gov/tradeact/benefits.cfm#1#1).

[81] See *The Washington Post,* 'Making up for lower pay: Lawmakers seek to expand insurance for wage drop-offs', 6 March, 2007.

secured employment outside of their normal commuting area, their families and their household goods' and 'a lump sum payment equal to three times the worker's average weekly wage (but no more than US$1,250) to help them get settled.' The worker must apply for the allowance before they relocate.[82]

A critical assessment of Trade Adjustment Assistance

The major impact evaluation of the TAA was conducted by Decker and Corson (1995). They examined the earnings effects of the programme both before and after the 1988 amendment that mandated training for all recipients who did not receive a training waiver. Earnings of the TRA trainees were compared with those of the TRA recipients who did not train. They found statistically insignificant effects and concluded that 'given this uncertainty about the returns to training, we believe that training participation should be voluntary rather than mandatory for TRA recipients.' A major evaluation of the post-2002 TAA is underway but has yet to be completed.

There are two basic problems with the TAA: the unequal treatment of displaced workers and administrative problems. Regarding equal treatment, a prominent researcher in the field, Lori Kletzer, stated the following to a Senate committee:[83]

For most displaced workers, what matters is the kind of job lost and the kind of job regained. Why the job was lost does not matter much at all. If workers and consequences are alike, across differing causes of job loss such as increasing foreign competition, technological change, downsizing, then policymakers should consider adjustment policy for all displaced workers, and broaden eligibility beyond 'trade-displaced workers'.

Research in the US finds that the economic costs of job loss do not vary by industry – specifically, when comparing those subject to foreign competition to those that are not. Those costs vary mostly by individual characteristics and local labour market conditions.[84] While individual characteristics and local conditions can be correlated with economic sector, there appears to be little substantive reason to target assistance in this manner. There are, of course, quite valid political reasons – see the quote from President Kennedy above. TAA started out, and continues to be seen by some, as the quid pro quo for trade liberalisation.

Given the low level of training provided and short duration of unemployment benefit in the US generally, together with the health insurance tax credit available to trade-displaced workers, the unequal treatment of displaced workers is striking and has been viewed as grossly unfair. It is viewed as unfair with respect to the unequal treatment not only between those displaced due to trade and those who were not, but also between those displaced by trade working in the services compared to the manufacturing sector, as only the latter qualify. Indeed, among those who formally should qualify for TAA, the administrative difficulties have compounded these problems. This is indicated by the large number of cases brought to court concerning the certification rules. One judgement reads, 'There is something fundamentally wrong with the implementation of the nation's trade adjustment

[82] http://www.doleta.gov/tradeact/benefits.cfm#1#1).

[83] Hearing before the Committee of Finance, United States Senate, 19 July, 2001.

[84] Kletzer (2001) does, however, find that sectors open to import competition have a higher proportion of women and ethnic minorities. They are similar in terms of age, job tenure and prior earnings.

assistance programs … workers often must appeal their cases to the courts to secure the thorough investigation that the Labor Department is obliged to conduct by law.'[85]

There have been clear indications of other problems in the implementation of the TAA. The 'take-up' rate is surprisingly low. This is generally attributed to insufficient knowledge about the programme. Many of the administrative problems have been in incorporating the TAA on top of the usual unemployment insurance and ALMP measures. The reform in 2002 has tried to address some of these problems. Kletzer and Rosen (2005) also report problems in allocating funds among the states.

The major administrative problem is determining whether workers are displaced due to trade effects. This is hardly surprising, as it conceptually very difficult to determine whether jobs lost are in fact lost to foreign competition or not. Indeed, one message from the first part of this report is that the combined expertise of economists throughout the world has difficulty in determining this. According to the political logic of the quid pro quo for trade liberalisation, the most obvious inconsistency in TAA is the exclusion of non-manufacturing workers. With the increasing tradability of services, this inconsistency becomes more and more problematic.

The problems of TAA might create serious doubts as to the continuation of what could be seen as an inefficient and unfair system. However, this is certainly not the opinion of many experts in the field. Much of the criticism raised against the TAA in the domestic debate about unequal treatment is summarised by Kletzer and Rosen (2005) in their position: 'Short of reforming and expanding the system of labour-market programmes designed to assist all displaced workers, regardless of cause of dislocation, the next option would be to continue expanding TAA'.

The European Globalisation adjustment Fund

This section introduces the European Globalisation adjustment Fund (EGF), examines some evidence on which type of workers are displaced due to adverse conditions of trade and then, drawing upon this and the previous chapter, suggest the possible orientation of the EGF measures.

EGF criteria, measures and procedures

The Regulation on establishing the European Globalisation adjustment Fund[86] stipulates two sets of criteria for receiving EGF funding: trade criteria and labour market impact criteria. A financial contribution from the EGF shall be provided where major structural changes in world trade patterns lead to a serious economic disruption, notably a substantial increase of imports into the EU, or a rapid decline of the EU market share in a given sector or a delocalisation to third countries, which results in:

- at least 1,000 redundancies over a period of four months in an enterprise in a Member State, including workers made redundant at its suppliers or downstream producers;
- at least 1,000 redundancies over a period of nine months, particularly in small or medium-sized enterprises, in a NACE 2 sector in one region or two contiguous regions at NUTS II level.

[85] *Former Employees of Ameriphone, Inc, Plantiffs v United States Court No. 03-00243*, US Court of International Trade, 288 F. Supp. 2d 1353, October 24, 2003. Cited in Kletzer and Rosen (2005).

[86] Regulation (EC) No 1927/2006.

However, funding may also be obtained for small labour markets or 'in exceptional circumstances' when redundancies have a serious impact on employment and the local economy. The level of funding in these cases may not exceed 15% of the EGF each year.

The EGF funds are to be used for active labour market policy, whereas the financing of passive social protection measures is explicitly excluded. The types of measures envisaged in the Regulation are to be 'part of a coordinated package of personalised services designed to re-integrate redundant workers into the labour market, including:

(a) job-search assistance, occupational guidance, tailor-made training and re-training including ICT skills and certification of acquired experience, outplacement assistance and entrepreneurship promotion or aid for self-employment;

(b) special time-limited measures, such as job-search allowances, mobility allowances or allowances to individuals participating in lifelong learning and training activities; and

(c) measures to stimulate in particular disadvantaged or older workers, to remain in or return to the labour market.'

As opposed to the TAA, it is the Member State alone that may apply for support from the EGF. This application shall be submitted within a period of 10 weeks from the date on which the conditions mentioned above are met. The application is to provide a reasoned analysis of the link between the planned redundancies and major structural changes in world trade patterns and a demonstration of the number of redundancies and an explanation of the unforeseen nature of those redundancies. It must also provide details of the services to be funded and their costs. Further requirements include details of the procedures followed for consulting the social partners and the intended response of the Member State, the region, the social partners and the enterprises concerned by virtue of national law or collective agreements, including any possible actions funded by the European Social Fund.

This report interprets the EGF as not including workers displaced due to a decline in exports. If the logic for the EGF is the quid pro quo for trade liberalisation, then there is a good case for the inclusion of workers displaced in this fashion. The multilateral nature of trade rounds means that trade liberalisation may reduce the competitive position of EU firms for some products in some parts of the world. For example, the admission of China into the WTO has presumably lowered the competitiveness of European manufacturers in other parts of the world in which China is now successfully competing.

The costs of trade-induced displacement

Research in the US (Kletzer, 2001) showed that there were minor differences in the costs of displacement between workers displaced in import-competing sectors and other sectors. The small differences that did exist were attributable mainly to characteristics of the displaced workers and conditions of local labour demand rather than the reason of being displaced per se. There is appreciably less data and research on this issue in Europe. Table 17, however, aggregates some relevant descriptive data from 14 EU countries. Those displaced in high international competing manufacturing sectors are slightly older than average, with longer tenure on the job and fewer women. They have a lower share of blue-collar workers than other manufacturing employees. While the re-employment rate two years after displacement is quite clearly lower than for other groups, the earnings effects show no consistent difference compared to other groups. On the basis of this evidence, OECD (2005) concludes that there is 'quite strong evidence that a worker's characteristics

and how well they match with local labour demand are much more important for determining post-displacement costs than is the precise reason for the layoff'.[87] Other evidence presented in OECD (2005) shows that trade-displaced workers can be a very heterogeneous group in terms of personal characteristics.

Table 17: Differences in trade-displaced workers: A comparison for 14 European countries, 1994–2001

	High international manufacturing competition	Medium international manufacturing competition	Low international manufacturing competition	All manufacturing	Services	All sectors
A. Workers' characteristics						
Age at displacement (years)						
15–24 (%)	10.4	13.1	11.6	11.8	12.2	11.4
25–52 (%)	75.1	75.8	78.1	76.4	78	76.9
55–64 (%)	14.5	11.2	10.3	11.9	9.8	11.7
Mean age	40.9	38.8	39.4	39.7	37.9	39.2
Share female (%)	31.7	44.9	26.2	34.8	43.2	38.2
Pre-displacement 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 (years)						
Greater than 10 (%)	32.1	30.4	27.7	30.0	18.6	21.5
Mean job tenure	7.0	6.6	6.2	6.3	4.7	5.0
Hourly earnings on old job						
Mean (euro)	9.51	9.15	9.08	9.43	9.15	9.08
B. Adjustment costs						
Share re-employed two years later (%)	51.8	58.7	59.6	57.0	57.2	57.3
For re-employed						
Mean change in log earnings	0.001	-0.038	0.028	-0.001	0.073	0.040
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 per cent (%)	5.4	7.0	6.8	6.5	8.4	7.5

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

Measures that could be financed by the European Globalisation Fund

As the effects of trade-induced displacement appear to be the same as for displaced workers in general, the issue of reason for displacement does not suggest the advocacy of any particular ALMP

[87] OECD (2005), page 46.

measures or forms of implementation other than those proposed in the final section of the previous chapter. These conclusions were that there may be a strong efficiency case for ALMP at restructuring, and suggested above all job search, matching and counselling services. The type of training to be provided depends on the state of the labour market. If there are skill mismatches, then obviously traditional firm-specific training should be implemented. There is also some research evidence of the effectiveness of more general schooling measures than typically is the case for ALMP.

In reference mainly to North American experiences and research, both the OECD (2005) and Wasmer and von Weizsäcker (2007) have advocated that wage insurance – a type of temporary wage subsidy (see the section on the TAA above) – should be considered as a useful part of the EGF. There are a number of reasons to question this advice. It is commonly believed that the costs of labour market adjustment in the US are through lower wages, while in Europe the cost is borne by the unemployed. The equity argument for wage insurance, i.e. that it compensates for the wage adjustment loss, is presumably more relevant than when the problem is to find any job at all, as is the case in many parts of Europe. Furthermore, the high replacement rate of unemployment benefits in many Member States, relative to the US, would presumably require an appreciably higher level of wage insurance in Europe to have the job acceptance incentive that proponents of wage insurance see as the logic behind their proposal.

However, the main problems of wage insurance are the deadweight loss and crowding-out effects associated with temporary wage subsidies discussed in the previous chapter. While the ALMP evaluation literature showed these effects to be very large, both OECD (2005) and Wasmer and von Weizsäcker (2007) make no mention of crowding-out effects at all.

If the wage subsidy leads to deadweight loss, i.e. if there was no wage insurance then the employer would have employed the worker anyway, then the EGF spending goes to the new employer of the trade-displaced worker. This is obviously not the purpose of the EGF. If the wage subsidy leads to crowding-out, then the cost of trade-induced displacement is shifted from the trade-displaced worker to the person who was crowded-out i.e. the person who the employer would have otherwise employed had not the labour cost-reducing wage subsidy been available. Neither is this the purpose of the EGF. Thus, wage insurance or temporary wage subsidies generally, or indeed any ALMP that results in crowding-out, totally negate the valid political rationale of the EGF as a quid pro quo for trade liberalisation. When those who are crowded-out or a wider public become aware of these effects, this may have negative political consequences for the European Union.

Another important consideration when thinking about which type of measures the EGF should finance is that it is financed by the European Union. A classic problem in implementing, for example, the Structural Funds, termed 'the additionality problem', is that EU funding may be used merely as a substitute source of funding on expenditure that would have otherwise have been forthcoming from other, national sources. The usual requirement of co-funding (50%) stipulated in the EGF Directive is helpful to some extent. Similar issues arise in the administration of the TAA in the United States between the two jurisdictions of the federal and state governments. Whether intentional or not, there is one significant feature of the TAA that addresses part of this problem. Income support in the TAA is awarded after the usual unemployment insurance has expired after 26 weeks. Thus, it appears that TAA income support is not just a potential substitute for the usual unemployment or other welfare funding. While the subsidiary principle probably limits the possibility of specifying in detail

the type of measures to be applied in Member States, there may be some benefit in pursuing the idea of a clearly identifiable unique policy measure that is not part of a national system for the EGF.

One such possibility would be the introduction of an intra-EU mobility grant for trade-displaced workers. As no such measure exists in the Member States, this would avoid the additionality problem. An intra-EU mobility grant could be clearly identified as an EU measure providing obvious evidence of the EU's contribution to active labour market policies and, of course, the free movement of labour is fundamental to the Single Market. Moreover, as the migrant would be likely to move to countries where jobs are plentiful, it would reduce the likelihood of crowding-out effects. Though not motivated in these terms, mobility grants are also suggested by Wasner and von Weizsäcker (2007). They propose a grant amounting to two months' previous gross pay for job-related moves of more than 50 kilometres and an additional two months when moving outside their Member State. Given that there are very high costs (broadly defined) of moving outside a Member State, it might take a larger grant than this to have a significant impact on the migration decision. Thus there is an obvious risk of deadweight loss, i.e. that individuals who have already decided to move, regardless of the mobility grant, get the grant anyway. However, while one could be somewhat sceptical of the incentive effect of such a grant, it does compensate the trade-displaced workers who are actively trying to improve their situation, and unlike a temporary wage subsidy, is not likely to lead to crowding-out effects.

Thus the argument here is that there are no reasons to propose different ALMP measures to trade-displaced workers other than the detailed proposals for displaced workers in general in the previous chapter. The only aspect of the EGF relevant for the choice of measures to be implemented is that it is funded by the European Union. Consequentially, the additionality problem must be addressed and an inter-EU mobility grant could be proposed as a sensible measure for this and other reasons. Finally, the political motivation of the EGF provides an even stronger argument for designing measures that avoid crowding-out effects.

Evaluation of the EGF

According to the Regulation establishing the EGF, the Commission shall present a report on the activities to the European Parliament and to the Council every July, starting in 2008. These reports shall focus mainly on the submitted applications and decisions adopted, with particular reference to complementarities with activities financed by the Structural Funds, notably the European Social Fund. A full impact evaluation is to be conducted by the Commission in cooperation with the Member States in two stages with a mid-term evaluation of results obtained by 31 December 2011 and then an ex-post evaluation by 31 December 2014.

It may appear premature to discuss a mid-term impact evaluation that is to occur in four years' time, but in fact proper evaluation usually requires that evaluation mechanisms are set up before the start of a programme. As mentioned previously, a proper microeconomic impact evaluation requires a control group of non-participants. While the TAA programme in the US is hardly a model to follow in many respects, much could be learned from their approach to microeconomic evaluation that is currently underway. It will hardly be possible for the Commission to obtain such an ambitious impact evaluation due to the lack of mandate to collect the necessary data. However, the Commission may have the opportunity to raise such issues at this early stage. In addition, they could point out that if the crowding-out problem is not addressed, it could defeat the political intention of the entire exercise.

Social partners and relocation

7

There are many possible employee representative responses to the firm's intention to relocate abroad, which could broadly be classified as total opposition with possible industrial action, full acceptance of the managerial prerogative or to seek to engage in consultation and negotiation.

A basic foundation of rights is laid down by EU-wide legislation on informing and consulting employees and their representatives in matters such as collective redundancies in general. National legislation may then build upon this foundation. These legal rights usually permit only information and consultation and the decision to restructure, with or without relocation, is generally not negotiable by law. Consultation generally deals with the procedures and the consequences of restructuring, usually seeking to ameliorate the negative effects for the employees.

This chapter makes mention of three interesting social partner approaches relevant to the issue of globalisation. Firstly, it is appropriate to briefly examine the role of European Works Councils, which due to its multinational dimension is, in principle, an appropriate forum to deal with such an issue. The following section examines the approach of a high-skilled Swedish white-collar union to relocation of jobs abroad. This is particularly relevant as the increased tradability of services and the offshoring of more high-skilled tasks has made such workers increasingly liable to face relocation. The approach taken by this union is somewhat similar to that taken by some other white-collar unions in Europe and is a very concessionary one. The final section in this chapter takes up the much-vaunted Danish flexicurity model. An under-estimated element of this model is the system of adult vocational education and training. It could be argued that the proactive approach to skill upgrading in this system is the appropriate way to conduct labour market training, as it is obviously beneficial to firms and can serve to avoid the public and individual costs of unemployment. The social partners play a key role in the design and implementation of this system.

It must be underlined that the topics taken up in this section are highly selective. Much other relevant research has been conducted on this matter, not least by the European Foundation for the Improvement of Living and Working Conditions. Other recent Foundation research which provides a broader account of social partnership and relocation and restructuring can be found in Weiler (2004), Carley (2006), Carley and Hall (2006) and Voss (2006), which also provide extensive references to other research.

Relocation and European Works Councils

As relocation involves more than one country, there is an obvious role for institutions with employee representatives from the involved countries. While EU-wide collective agreements are of negligible importance, European Works Councils are potentially an important forum in this context.

The main aim of the European Works Council Directive from 1994 was to provide a channel for information and a forum for consultation on transnational company restructuring, relocation and mergers. The Directive allows the social partners to achieve this aim through collective agreements. However, in most cases the social partners have created European Works Councils (EWCs) along the lines proposed in the Directive. EWCs should be kept informed and consulted on the activities of companies so that they may assess the possible impact on employees' interests in at least two different Member States. When decisions may have a significant effect on the interests of employees, the EWC must be informed and consulted 'as soon as possible'. Consultation, in this context, means

'the exchange of views and establishment of dialogue between employees' representatives and central management or any more appropriate level of management.'

The time frame for information and consultation and the content of information reports by the management are not specified in the Directive. Some EWC agreements go beyond the text of the requirements of the Directive on restructuring-related issues (Carley and Hall, 2006). However, Weiler (2004) and others argue that one cannot draw conclusions on the practices of EWCs in restructuring and relocation processes simply by analysing these agreements. Case study research on EWCs shows that practices can and do go beyond not only the Directive, but also the letter of the relevant collective agreement. A striking example of this is the brief and very general agreement for the Volkswagen EWC and the comprehensive involvement of the EWC in practice.[88]

According to Kerckhofs (2006), in June 2005 there were 2,204 multinationals that met requirements for coverage in the Directive, i.e. they employed at least 1,000 employees within the European Economic Area, with at least 150 employees in at least two of these countries. Some 35% of these companies had an EWC, most of which were are based in Germany (123), followed by the US (120), the UK (109) and France (79). Most EWCs are found in metalworking and chemicals, followed by food, hotels and catering, building and woodworking, textiles and transport. In all, they covered firms with 14.5 million employees.

Case study research and investigations by the European social partners (CEEP, ETUC and UNICE/UEAPME, 2005) reveal that the views of management and employee representatives on the timeliness and scope of consultation tend to differ considerably. This reflects the different views on what form of consultation should take place. Empirical evidence shows that information is predominantly provided retrospectively, with consultations taking place when issues are being decided or already have been decided by management (Weiler, 2004).

Based on survey responses of employee representatives, Waddington (2003) finds evidence of some dissatisfaction with the current practices of EWCs, in particular regarding the quality of information and consultation. In the context of relocation or transfer of production, 39% of the EWC employee representatives stated that the issue was 'not raised'. Some 8% of respondents said the issue was raised but the information was useless, while 21% received useful information but no consultation took place. However, 32% report useful information and consultation.

Weiler (2004) finds a wide diversity of roles and involvement of EWCs in company practices. This is not only due to the general language of the EWC Directive, but also to the different corporate cultures and industrial relations traditions and practices in the multinational companies. Gilson and Weiler (2007) emphasise the structure of management decision-making in general as the main factor explaining the operation of EWCs. Specifically, they see the degree of centralisation of management and strategies of international human resource management as a key factor for the opportunities of EWCs to develop. They argue that while trade union federations attempt to support EWCs, they do not have the necessary influence at the company level. Thus, under current legislation, the development of EWCs depends on the strategic role of the EWC for the company, which in turn

[88] This report will not present case studies in any detail. There are, however, a large number of case studies conducted by the European Foundation for the Improvement of Living and Working Conditions that are available on the website. The Volkswagen case can be found at: http://www.eurofound.europa.eu/pubdocs/2005/7146/en/1/ef057146en.pdf.

depends on the human resource management and transnational strategies and not on the 'strength' of an EWC as such; see also Marginson et al. (2004).

In companies with a decentralised management structure, local managers can often be less well informed than the EWC worker representatives on developments in the group and employee representatives in the subsidiaries are sometimes in a better position to anticipate relocation than local managers. As internal competition for investment within groups is a fundamental question for location decisions, coalitions often develop between EWC members and the local management (Weiler, 2004). It is interesting to note that the EWC Directive also requires that local management shall be informed, in the same way as the EWC is informed on the progress and the prospects of the company. In exceptional cases, such as relocation, there is an explicit right of EWC members from the locations concerned to participate in a meeting between the central management and the select committee. For local management, a corresponding involvement is not mentioned in the Directive. In cooperative industrial relations environments, EWCs often play an important informal role in conflict resolution in the subsidiaries concerned. For example, in the Electrolux case,[89] management chose to actively involve the EWC in the large-scale restructuring process of the group. In particular, the CEO clearly perceived the potential of involving the EWC in the processes and creating a transnational arena for information and the exchange of views on the change process.

Carley and Hall (2006) describe roughly 50 joint texts on restructuring. An examination of these texts also shows that they focus on the handling of restructuring and the social consequences, the impact of restructuring on employment and working conditions, but not on the involvement of the EWC in the processes of decision-making. However, there are examples of more proactive EWCs which develop their own concepts, proposals, alternative scenarios or innovative solutions in the context of large-scale cross-border relocation of production sites of production lines. Useful examples of this are Volkswagen,[90] Bosch,[91] GM Opel[92] and ABB[93].

Cases of relocation are a crucial strategic test for any EWC. Key issues for the employee representatives are difficulties within the EWCs to openly discuss different situations due to the potential conflict of interest in obtaining investment. One interesting approach to dealing with relocation and the competition issue had been developed in the Kraft Foods EWC. A 'code of conduct' for the employee representatives in the EWC sets out quite detailed rules of conduct in the event of production relocations for the mutual exchange of information and for negotiations at the local level.[94]

Voss (2006) underlines the different perception of the issues in the EWC activities between members from the 'old' and the 'new' Member States. For EWC members from the EU15, issues like relocation, cross-border restructuring and company-wide competition of locations rank high on the agenda and accordingly they strive for the development of joint Europe-wide positions and strategies. EWC members from the NMS place more emphasis on working conditions, wage levels and other issues related to work organisation. In the context of relocation, it might be hypothesised that enlargement

[89] http://www.eurofound.europa.eu/pubdocs/2005/7120/en/1/ef057120en.pdf.
[90] http://www.eurofound.europa.eu/pubdocs/2005/7146/en/1/ef057146en.pdf.
[91] http://www.eurofound.europa.eu/pubdocs/2005/7144/en/1/ef057144en.pdf.
[92] http://www.eurofound.europa.eu/pubdocs/2006/659/en/1/ef06659en.pdf.
[93] http://www.eurofound.europa.eu/pubdocs/2006/651/en/1/ef06651en.pdf.
[94] http://www.eurofound.europa.eu/pubdocs/2005/7117/en/1/ef057117en.pdf.

intensified EWC internal conflicts. However, Voss (2006) challenges this assumption and presents case study evidence that there has been no increase in EWC internal conflicts between western European and central or eastern European EWC members. The controversial issues and conflicts in relocation or cross-border restructuring (reported in the above-mentioned GM Opel case and Sanofi-Aventis[95]) are rather similar to those already experienced within the EU15 EWC practice and history.

A particular problem in this context is that some national union representatives may be better and earlier informed than others due to the national employee participation rights on supervisory boards or works councils. For example, some EWC members may be informed on relocation decisions at an early stage, but due to confidentiality requirements may not be able to communicate this information to the EWC members of the locations concerned. This situation is a potential source of tension and mistrust within EWCs. For example, in the case of the recent restructuring at Volkswagen, there were complaints from the Belgian employee representative on the bilateral agreement at the company headquarters concerning the relocation of production from the Brussels to German production sites.

The still rather weak EWC Directive, together with the divisive competition for the location of investment and jobs, makes this a difficult forum for trade unions to secure much influence in relocation issues. From the perspective of the employee representatives, it would appear that the national forum is still of great importance. Typically, much of the employee influence in these matters is how the consequences for employees are to be dealt with in terms of compensation, retraining, etc. This is seldom a transnational issue. The important role of the national industrial relations forum for relocation issues is further exemplified by the two legal recommendations issued at the European Court of Justice on 23 May 2007.[96] The two legal opinions backed trade unions from Sweden and Finland regarding their right to take collective action to pressure companies from other EU countries to pay their workers according to the domestic collective agreements.

Relocation and trade union response in some high-skilled white-collar unions

Given that the new forces of globalisation now permit the relocation of some rather high-skilled occupations, it is of interest to observe examples of approaches in this segment of the labour market. The approach of the Swedish white-collar union SIF is an interesting case. Not only is Sweden the base of many large multinational companies of long standing, but it also has a strong tradition of social dialogue. In addition, Swedes are the most optimistic of all EU15 citizens as regards the impact of globalisation on jobs. Similar guidelines and approaches as in the Swedish case have been taken by other trade unions, for example LBC-NVK in Belgium, HKJ-Privat in Denmark, CFDT-Cadres in France, Verdi in Germany and FNV-Bondgenoten in the Netherlands. See De Bruyn and Ramioul (2006).

Relocation of white-collar jobs in Sweden

With 364,000 members, SIF is Sweden's largest white-collar union with a major presence in the technology and knowledge-based sectors. Its members work in the private sector in areas such as IT, telecoms, construction, manufacturing and R&D. Many of the members work for the major Swedish

[95] http://www.eurofound.europa.eu/pubdocs/2006/653/en/1/ef06653en.pdf.

[96] Opinion of the Advocate General Mengozzi, delivered on 23 May 2007, 1(1)Case 341/05.

multinationals such as Ericsson, Astra-Zeneca, Skanska and Volvo, but also in small and medium-sized companies. Members include managing directors, middle managers, engineers, economists, technicians and administrative staff in 43 different industrial sectors. In fact, often all of the white-collar workers at a workplace can be members of SIF, irrespective of the level at which they work. It is not affiliated to any political party.

The largest concentration of high-skilled jobs is located in the Stockholm-Mälar region, which accounts for a third of the population of Sweden.[97] The headquarters of many of the Swedish multinationals are located here and almost one-quarter of those employed in the region are employed in firms with a significant foreign ownership. Private services constitute 48% of all jobs in the region.

In 2005, SIF conducted a survey of their local union branches throughout the region (published in SIF, 2006a). They found that 23% of the interviewed branches had experienced the relocation of jobs abroad in the previous five years.[98] This amounted to 3,000 jobs in 44 companies, of which 1,500 were white-collar jobs. The large companies dominated, with the largest cases being in Ericsson, IBM and ABB, but 20% of the relocated jobs were from establishments of fewer than 50 employees. Many of the companies relocated several types of jobs. Table 18 shows the distribution of the types of relocated jobs.

Table 18: Distribution of relocated jobs by type of job (%)

Type of job	%
Manufacturing	38
Research and development	33
Sales and marketing	27
IT development	27
Construction	24
Clerical work and personnel	16
IT support	13

Source: SIF (2006a).

While more relocation cases were to the US and western Europe than to Asia and eastern Europe, the moves to Asia and eastern Europe involved more jobs. Germany was the main western Europe destination and among eastern European countries the Baltic states, Poland and the Czech Republic dominated. The two most common motives for the relocation were lower labour costs (cited in 50% of cases), followed by proximity to the market and the need to concentrate activities. Some 18% of the interviewed companies planned to relocate abroad in the following two years.[99]

The results of the relocation, as analysed by the union respondent, were that labour costs were reduced in 40% of the cases. However, in 30% of the cases it was reported that costs had increased

[97] It includes the counties of Stockholm, Uppsala, Södermanland, Västermanland and Örebro.

[98] This similar percentage is found in similar surveys carried out by SIF in other southern Swedish regions. In Skåne and Halland, the corresponding percentage was 22% and 18% in Västragöteland.

[99] The survey also asked questions about the creation of new jobs abroad that had not entailed the relocation of jobs out of the region. This amounted to 17,300 jobs. Many of these jobs were created by multinationals with the view to accessing and serving new markets. It is of course possible that there was an implicit relocation decision in that they were not created in the Stockholm region.

and that profitability had decreased (23%). Only 7% reported improvements in quality, while 29% reported that it had deteriorated. Improvement of delivery had occurred in 10% of cases but had declined in 40% of the cases. In sum, half of the respondents stated that the company goals had been achieved.

This study encapsulates SIF's understanding of the relocation process and is the point of departure for an important element in their response, which is that while relocation may be a successful venture for the company, it is not necessarily so. SIF (2006b) clearly states that relocation may in some cases be necessary for the competitiveness and long-term survival of the firm. However, the union also points out that there are cases when the decision taken may not be in the best interests of the company. Moreover, in the SIF survey, in 15% of the cases the enacted relocation decision was reversed.

The SIF approach to dealing with relocation

The point of departure for the union is an understanding of the great difficulty and uncertainty facing management when making rational relocation decisions. Consequentially, an important part of the union's approach is to engage in dialogue with the firm in order to ensure that the decision to relocate is indeed based on sound economic thinking. It is well known that the first step to ensure successful social dialogue is to provide early information on the proposed action. This is not always forthcoming. SIF considers the following guidance for employees to estimate the probability of an impending relocation.

When the company has started to consider outsourcing or offshoring, the trade union should participate in the process as early as possible. Initially, it is important to ascertain at what level within the company or group the decision is to be taken and to make contact with employee representatives in any other parts of the group that may be involved. If these units are located outside Sweden, but in the EU, then the appropriate forum is the European Works Council.

SIF suggests that the union representatives should initially be very open to the possibility of relocation and underlines that it may be necessary to maintain competitiveness and secure jobs in the long term. Thus, the initial phase focus is to be placed upon gaining as much information as possible and to secure a position in any steering or project group involved in the process. In order to be able to understand and evaluate the economic rationale of the relocation, the unions should then strive to obtain all the necessary material, such as economic calculations, a description of the number and type of jobs to be relocated and the project implementation and communication plans. In addition, the local unions are advised to request management to perform a risk analysis of the economic calculations. During this analytical stage, the unions have the right to call upon expert advice (*löntagarkonsulent*).

A full understanding of the rationale of relocation is important not only to possibly challenge the management's decision, but also to be able to inform the union members why this is being undertaken. The experience of the union suggests that the company can make errors of judgement concerning the economic rationale of the relocation decision. According to SIF (2006b), the following factors are important to pay particular attention to:

- when the firm has a strategic reason for relocating, not enough emphasis is placed on the impact on profits. This is incorrect, as even a well-motivated strategic decision should be profitable;
- the comparison between the relocated and existing domestic activities may neglect the potential of productivity improvements in the domestic activities;
- there may be many relocation costs not taken up in the economic calculations;
- the economic calculation may be only based on current costs and may not take account of differential cost development, for example, in wages;
- it is common that no risk analysis is undertaken. As relocation is intrinsically risky, a careful risk analysis must be presented;
- a common mistake is that tasks performed in-house go beyond those that can, and typically are, specified in a contract with a subcontractor.

Only after a careful analysis of this material should the union take a decision on whether to support the decision or not, which should be based on the expected impact on the long-term viability of the firm. There is no mention in SIF (2006b) of what action should be taken if the union disagrees with the management decision. It is highly unlikely that any industrial action would be taken, as there are no previous cases of such action. If the relocation is to proceed, then regardless of whether the union supported the decision or not, the next step is to lobby for the use of the purported savings resulting from relocation to finance the adjustment process and to develop the remaining in-house activities. If the relocation is to lead to redundancies, then the union should participate in designing labour adjustment measures.

This envisages a consensual process where the decision to relocate is indisputably the prerogative of the management and is in fact typical of restructuring in general in Sweden. Industrial action to try to reverse a decision to restructure is extremely rare. In return, the unions are to be provided the opportunity to discuss and question management decisions and the information necessary to do so in a meaningful way. Once the decision is taken, union efforts are then devoted to ameliorate the negative consequences for the workforce. Of course, not even in Scandinavia is there always sufficient opportunity provided for meaningful social dialogue and there are cases, though not in the last five years, when the Labour Court has ruled against the employer for not observing information and consultation obligations.

This approach is deeply embedded in the consensual culture of Swedish industrial relations and is not obviously transferable to other countries even though the legislative basis for information and consultation does not differ greatly from those in many other Member States. It is noticeable that the main focus of the unions at restructuring in general in Sweden is not about the decision to shed jobs, but the process after the decision is taken in order to ameliorate the negative consequences of job loss.

Employment protection legislation allows liberal grounds for the employer to enact redundancies, but the law stipulates that these are to occur in accordance with seniority.[100] However, the unions may negotiate derogations on seniority and this is crucial in understanding the bargaining power that the

[100] See for example EMCC case study *Innovative restructuring: Ericsson microsystems* at http://www.eurofound.europa.eu/emcc/publications/2005/ef0548enC4.pdf.

unions have both at restructuring and when exerting pressure on the employer to finance measures to ease the transition to a new job or some other form of compensation. In most collective bargaining areas, the co-determination law is complemented by a development agreement on such issue. Indeed, the primacy of the collective bargain is still a distinguishing feature of Swedish industrial relations and collective agreements regulate almost every issue and area of the labour market. One can view the co-determination law as being mainly designed to support the process of obtaining a collective agreement.

Collective agreements in the entire private white-collar sector have established bipartisan bodies to facilitate restructuring for the employees. These activities are financed by the participating firms, which pay a fee in proportion of the firm's labour costs. Transition support activities are organised by the Job Security Foundations, established by the social partners. In the private white-collar sector (organised in the TRR Foundation), the measures apply to workers over 40 years old, with five years' seniority and working more than five hours per week. Compensation, together with unemployment benefit, guarantees up to 70% of previous wage income for a period between 18 and 30 months. The TRR also actively assists the employees in searching for new work and can finance a wide range of active labour market policy measures. The support programmes may take different forms. Normally the programme starts with counselling and reorientation activities. Then, according to the needs of the individual, some form of activity is initiated to support job search, training or assistance in starting up a new firm. 'Protect workers, not jobs' is a slogan that could be used to encapsulate the Swedish, and indeed the Scandinavian, approach to restructuring in general and which also applies to job loss at relocation.[101]

The Danish approach: Social partnership, vocational education and training

Chapters 5 and 6 were concerned with the use of ALMP when job loss was imminent or had occurred. As prevention is generally better than cure, it is useful to examine some approaches to training on the job. This may serve to maintain the competitive advantage of the firm and avoid the individual and social costs of unemployment. Denmark provides one interesting approach of such a 'proactive labour market policy'.

On 12 April 2006, the Danish government set up the Globalisation Council to advise the government on globalisation strategy.[102] Unions, businesses, education and research communities have high-level representation in the Council. In the founding policy document, the titles of eight of the 14 chapters indicate the central role of education at all levels in this strategy.[103]

The Danish system of adult vocational education and training (VET) is an essential, but often under-emphasised, element of the Danish flexicurity model. According to the Ministry of Education, one of the main characteristics of the system is the active participation of the social partners at all levels. Ideally, the system is designed to adapt and upgrade competencies of workers while employed. Adult vocational education and training is publicly financed, mainly by central government, and is implemented on a large scale. Table 19 shows some basic data on participation levels in 2005.

[101] Bergstrom and Storrie (2005) provide a fuller account of recent changes in the approach of the social partners at restructuring in Sweden.
[102] A similar council was set up in Sweden in December 2006.
[103] *Fremgang, Fornyelse og Trygghed: Strategi for Danmark i den Globale Ekonomi*.

Table 19: Participants in adult vocational training in Denmark, 2005

Number of participants in adult vocational training programmes*	614,000
Of which women	263,000
Number of persons participating in one or more programmes	308,000
Average number of courses per participant per year	2.0
Number of full-time equivalent participants in adult training programmes	11,000
Number of full-time equivalent participants in all adult education and training	95, 000

Includes all participants, of which 534,000 (9,100 full-time equivalent) were financed by the Ministry of Education and about 80,000 (1,925 full-time equivalent) financed by the local communities, the job centres, by the employers or by themselves.
Source: Danish Ministry of Education.

The adult vocational education and training system is primarily designed for the low and medium-skilled workers, and mainly for those who have a job in either the public or private sector. In 2005, roughly one-third were classified as low-skilled, 50% medium-skilled and the remainder with higher education. Special courses are designed for immigrants and even the non-employed can participate, though they do so under somewhat different funding arrangements.

In 2001, the responsibility for these programmes was transferred from the Ministry of Employment to the Ministry of Education, which enabled a better coordination with other educational programmes. Tripartite cooperation exists at all levels. The social partners are involved in identifying the training needs, the development of the content of training programmes as well as training of teachers. The programmes are developed by the social partners and then approved by the ministry.

There are over 2,500 different courses which may be combined in a flexible manner. In 2005, roughly two-thirds of the courses were technical, commercial, social health and service programmes, 14% were ICT related and 12% were in management, social communication and languages.[104] The programmes are provided by roughly 140 schools throughout the country. These are mainly, but not exclusively, public institutions. The education and training institutions may combine short training programmes with great flexibility so that the resulting courses correspond to the specific needs of the users. The courses may be provided at education and training institutions, at the enterprise or as distance learning, during all hours of the day and seven days a week. The flexible opening hours mean that the training programme may be organised to avoid conflicts with working time.

Competence training to improve employability

A central feature of the system, introduced in a major revision of the approach to vocational training in 2004, was to focus on delivering competencies for the labour market as opposed to merely completing a course. The introduction of 'the joint competence description' was central to this approach. The competence description is defined in terms of three core elements: a description of the typical workplace at which the competence is required, the competences required at that workplace and a list of the programmes or courses that will provide this competence. Once the competence has been obtained, a certificate which documents the competence is provided. While each training

[104] All this data is expressed in terms of full-time equivalent participants in 2004.

programme has a recommended duration, the focus on competencies implies that the participant may leave the programme as soon as the required competencies have been obtained. Many programmes are held in an 'open workshop', which means that several different programmes are being held at the same time and in the same room. In this way, the participants may start a programme at any time without having to wait for the institution to establish an entire class.

This system exhibits an impressive adaptability in terms of rapid response to the needs expressed by the social partners. Each year the tripartite continuing training committees develop or change approximately 500 adult vocational training programmes reflecting the new competencies required due to changing training and education needs. The joint competence descriptions set the framework for education and training development and new or updated programmes can be approved within six weeks.

The impressive economic performance and social cohesion found in Denmark show that the high road to global competitiveness is possible. There are many factors behind this success, but the continual upgrading of the competencies of the labour force plays a vital role. Many observers of the Danish model of the labour market have come to the conclusion that it is not the policy design that is the most important or influential element, but the way that policy is implemented.[105] In this context, the key factor is the corporatist structure as described above, with the presence of tripartite bodies in both policy formulation and implementation. The administrative flexibility and efficiency of the Danish system of adult vocational education and training, together with the deep involvement of the social partners, would appear to further substantiate this claim. This obviously raises questions as regards its transferability to other institutional contexts. However, it must be judged the case that a proactive approach to skill upgrading is highly desirable and other institutional settings may be able to achieve this same outcome by other means.

The social partners continue to develop the Danish system. The first new collective agreement for 2007 between the Central Organisation of Industrial Employees and the Confederation of Danish Industries emphasised that a greater effort towards continuing training should be a high priority of the agreement. The employee representatives cited increasing competition pressure in companies on a day-to-day basis due to economic globalisation. Continuing training was seen as a means to develop the competitiveness of companies. The agreement provides for the establishment of a Competence Development Fund of Industry to which the employers pay EUR35 per employee each week, increasing to EUR70 over the agreement period. These funds will be used to finance the employees' wages while they are on two weeks of continuing training.[106]

Main policy conclusions

The last three chapters have all addressed ways of facilitating labour market adjustment to structural change, and in particular when the change is driven by global competitive pressures. These were active labour market policy financed at European level (the EGF), consultation within European Work Councils (EWCs), firm-level negotiations when offshoring is imminent in Sweden and vocational training in Denmark.

[105] See for example Larsen (2005) and Madsen (2007).

[106] See EIRO, 'New industry agreement marked by innovatory elements', 22 May 2007 at http://www.eurofound.europa.eu/eiro/2007/03/articles/dk0703029i.html.

In principle, the Danish approach of upgrading skills before redundancies are necessary is one of the most promising ways to deal with labour market adjustment. If successfully conducted, it avoids other redundancy costs not only for the firm and the employee, but also the monetary and social costs for society as a whole that are associated with unemployment. Moreover, such an approach may well become more appropriate than ever in the decades to come. In the new globalisation paradigm, as described in Chapter 3, it was argued that with trade occurring between ever finer slices of the supply chain, labour market adjustment will occur not primarily, as before, between firms and sectors, but within firms, so that measures to facilitate redeployment within the firm become increasingly relevant. Significant public investment in the human capital of employees within the firm is a challenging political exercise. For example, it must be arranged so as not to disturb ongoing operations and cannot be used to only serve the short-term interests of the firm. In Denmark, the deep involvement of the social partners in both the design and implementation of this policy is the key to its success.

The proactive approach inherent in the Danish vocational training scheme is also key for a well-functioning social dialogue when the firm is considering the offshoring of jobs. It was very clear from the description of the EWCs and the Swedish trade union that early information of impending offshoring is the essential prerequisite for meaningful social dialogue. While the information issue is always conducive to good social dialogue, it is particularly important for offshoring decisions. It was underlined that the offshoring decision is an exceedingly difficult one for management and many mistakes have been made. Responsible unions can make an important contribution to the evaluation of the economic rationale of the offshoring decision when given the proper opportunity to do so.

However, the major policy theme of this report was the European Globalisation adjustment Fund (EGF). It is, at least symbolically, a very important measure upon which both the political feasibility of the Union's liberal trade policy and the credibility of 'Social Europe' may partially depend. The strongest policy recommendation for the EGF to emerge from research is what not to do. Despite some recommendations to the contrary, the EGF should not be used to finance temporary wage subsidies. Deadweight loss, when the measures had no effect on the hiring behaviour of the new employer of the trade-displaced worker, simply means that the EGF funding is allocated to the new employer. This is obviously not the purpose of the EGF. If the wage subsidy leads to crowding-out, i.e. the trade-displaced worker is hired at the expense of some other member of the labour force, then the cost of trade-induced displacement is shifted from the trade-displaced worker to the person whom the employer would have otherwise employed had not the labour cost-reducing wage subsidy been available. Neither is this the purpose of the EGF. Thus, temporary wage subsidies or indeed any ALMP that results in crowding-out negate the valid political rationale of the EGF as a quid pro quo for trade liberalisation. When those who are crowded-out or a wider public become aware of these effects, this may well have negative political consequences for the European Union.

The limited proper research evidence on the efficiency of active labour market policy for displaced workers suggests that job matching and career counselling activities should be an important element in any adjustment package and there is some indication that the orientation of training measures should be of a more general schooling nature than typically is the case for active labour market measures.

Finally, the idea of an intra-EU mobility grant is promising. As only very few Member States have such a measure, it would largely avoid EGF funding simply replacing national funding. Moreover, an

intra-EU mobility grant could be clearly identified as an EU measure providing obvious evidence of the EU's contribution to labour adjustment policies and, of course, the free movement of labour is fundamental to the Single Market. Given that there are very high costs of moving outside a Member State, it might require a prohibitively high grant to have a decisive impact on the migration decision. However, it does compensate the trade-displaced workers who are actively trying to improve their situation, and unlike a temporary wage subsidy, is not likely to lead to significant crowding-out effects.

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Appendix 1:
The European Restructuring Monitor

The European Restructuring Monitor (ERM), located within the European Monitoring Centre for Change at the European Foundation for the Improvement of Living and Working Conditions, collects and presents cases of restructuring based on media reports in a systematic format. These cases provide much useful information on restructuring at the establishment level.

The ERM defines job loss at restructuring in a similar fashion to the European Directive on Collective Redundancies in that it refers to intended redundancies. However, the intended redundancies do not have to be notified to any public authority but rather 'announced' either in the media or some other public domain. The thresholds are at least 100 jobs or involving sites employing more than 250 people and affecting at least 10% of the workforce. Unlike the Directive, however, there is no stipulation of time within which the intended job loss is to occur. The ERM also monitors cases of job creation which announce at least 100 jobs.

The major advantage of the ERM is that as it occurs very early in the dismissal process, it will include those who come to leave very early in the dismissal process. It will, however, probably overestimate the actual number affected by the restructuring.[107] The early warning feature of the ERM is one of its major strengths, as information is usually available long before the reduction of the workforce is enacted. Another strength of the ERM is that it is based on information in the public domain. There are no issues of privacy and the identification of specific cases allows the process of structural change to be observed at the company level.

The major problem with the ERM is whether the macro picture that it paints is representative of job loss in general. There is currently some work being conducted within the European Monitoring Centre for Change to ascertain the extent to which the ERM is indeed representative of job loss at restructuring in general. This will be done by comparing the data in the ERM with other sources. How then can we expect the ERM to be biased with respect to job loss in general? A priori, there is reason to suppose the following.

Firm size bias occurs by definition due to the ERM thresholds. Moreover, even within the firm size definitions there will almost certainly be an over-representation of big firms and large workforce reductions, as these are more likely to be reported in the media. As firm size is correlated with a number of important factors, such as economic sector, size bias will lead to many types of bias. For example, the big firm bias probably leads to a higher reporting rate in the ERM for manufacturing relative to services. The manufacturing bias may in turn lead to bias as regards region and gender. The fact that the sampling error will be greater when firms are small may lead to inconsistencies over time (if firm size varies over time) and between countries with differing firm size distributions.[108] The most obvious impact of big firm bias impacts on small Member States such as Malta and Cyprus, as they have very few firms of the size that fall under the ERM thresholds.

[107] Note that while the ERM does require the correspondents to update any subsequent revisions of announcements, it is likely that these revisions will be less well covered in the media.

[108] In the European context, one may have reason to believe that in the years to come, the main current small firm bias will be the ongoing restructuring of agriculture in the new Member States. In terms of employment consequences, this is an extremly important issue and one that is typicallyl not dealt with when the general public, academics and policymakers consider restructuring.

Regional bias, apart from that which follows from the big firm bias mentioned earlier, is likely to occur when media coverage is not evenly spread throughout the country. While most of the designated newspapers are formally national, there may well be some national or regional capital city bias.

Country size bias is also likely. In absolute numbers there is obviously much greater job loss in big countries. In terms of national impact, restructuring involving, for example, 100 employees will be a less frequently occurring and more media-prominent event in Portugal or Greece than in Germany or the UK. This suggests that the reporting frequency will be higher in small countries than in big ones. This could seriously flaw comparisons between countries (but not over time). Note that because there are more big firms in big countries, this leads to better coverage in the ERM. Thus there are likely to be conflicting tendencies to bias as regards country size, leaving us with little indication on the size and direction of the bias.

Type of restructuring bias (in terms of internal restructuring, relocation, closure, etc.) may also occur if public and media focus is more concentrated on certain types of restructuring.

The ERM also reports cases of job creation. As the major part of ERM cases are identified in newspapers, one could presume, in accordance with the journalist adage that 'the best news is bad news', a higher rate of reporting of job loss relative to job creation.

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The nature of trade is changing and becoming increasingly global in its outlook. While this is undoubtedly having far-reaching repercussions on labour markets across Europe, the precise nature of the impact is hard to quantify. This report provides some perspectives on the effects of trade liberalisation on the European labour market. For its analysis, it draws on data from the European Restructuring Monitor (ERM), the only EU-wide monitoring instrument available. The 2007 ERM report identifies some of the recent and emerging trends in the current phase of globalisation and provides suggestions on how policy should be re-oriented to address these new circumstances. In this context, the recently adopted European Globalisation adjustment Fund is the main focus of attention. The report also discusses how policymakers and the social partners can best offset some of the negative consequences of globalisation.

The European Foundation for the Improvement of Living and Working Conditions is a tripartite EU body, whose role is to provide key actors in social policymaking with findings, knowledge and advice drawn from comparative research. The Foundation was established in 1975 by Council Regulation EEC No 1365/75 of 26 May 1975.

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