



Poznań, Poland

3–5 June 2008

Global competition and European companies' location decisions



Background paper



Introduction



What factors determine where a firm will locate? Has the increased scale and changing nature of economic globalisation changed the rationale of the firm's decision? How can policymakers attract and retain investment and jobs within their jurisdictions? These are the fundamental questions to be addressed at the conference, 'Global competition and European companies' location decisions', in Poznan on 3–5 June next. These issues are of paramount importance not only for the economic development of the European Union but also for its social cohesion. Enlargement has accentuated the importance of the spatial dimension of the Union. The territory now stretches from the shores of the Atlantic Ocean to the Black Sea and from above the Arctic Circle to the borders of Africa and Asia. Furthermore, this Single European Market now encompasses many stages of economic development, with communities ranging from pre-industrial agrarian to the emerging knowledge society. While such an immense diversity of economic conditions, in terms of, for example, labour

costs and resources, opens up immense possibilities for mutually beneficial trade and, ultimately, economic convergence, it also risks a Europe stratified into an affluent influential centre surrounded by weaker, dependent peripheries.

Recent enlargements of the EU have been part of a wider, intensive globalisation process. 1990 marked a significant watershed, not only in the political but also the economic development of the world. Almost simultaneously, political decisions led to the potential entry of 1.4 billion workers into the global labour force. This resulted from the dismantling of the command economy in the Soviet Union, which contributed 260 million; China's adoption of the market economy and entry into the World Trade Organisation added another potential 760 million to the labour force; and when India deregulated its product markets, this added another 440 million workers.

These markets have not only been opened up for increased trade: the liberalisation of many of the previously highly regulated economies has greatly

facilitated the establishment of companies and the opportunity to conduct the daily business of the market economy, to all intents and purposes, throughout the entire world. Property rights have become more secure, thus protecting investment and increasing the enforceability of contracts. Moreover, as modern management techniques and work organisation spread throughout the lower labour cost world, both foreign subsidiaries and sub-contractors will be able to fit into global supply chains more seamlessly and to successfully compete for functions or tasks that currently are performed in the higher cost areas of the world.

The development of Information and Communication Technology (ICT) is, along with deregulation, the other key enabling factor for the changed nature of globalisation. It enables both a closer coordination of supply chain activities and more cost-efficient delivery across national borders. The other important implication of technological advances in ICT is that it has eroded some of the geographical limitations to the provision of services and opened up a wide range of service activities to international competition that were previously confined to national markets. Some services are, of course, 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.¹ 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. One of the most prominent recent trends is trade in services and as many of these tradable services are high value-added and are expected by many to constitute the comparative advantage for Europe in the global trading area in the future, the location decision of global service providers is of particular importance for this conference.

This background paper will outline some of the main issues concerning global competitiveness and the location of firms in Europe. It will provide some of the fundamental ideas of economic geography, present some relevant data and define some key concepts. The conference itself, which brings together representatives from companies, the social partners and policymakers, aims to contribute to a deeper understanding of what is required from all parties to ensure a competitive and socially cohesive Europe.

¹ Note, however, that it would be conceivable that related services such as telephone switchboards or restaurant booking services could be offshored.

The location of economic activity

Economic globalisation is sometimes taken to indicate that borders lack economic importance. In the same way, the term 'flat earth' suggests that distance no longer matters for economic decision-makers. And while transport and communication costs have declined in recent decades, it is a very serious misconception that distance has ceased to be of importance in understanding both the location of firms and trade flows. For example, econometric estimates find that a distance of 8,000 kilometres reduces the trade that would have occurred at 1,000 km by 90%. Gravity models of trade, which postulate a direct relationship between trade and the product of the size of two economies and an inverse relationship with the distances between the two, show that the effect of distance on trade has not declined since the middle of the last century.²

The location decision of the firm depends, of course, on a multitude of factors, not all of which are rational in a narrow economic sense. Before considering the specific global context, it must be underlined that the vast majority of firms are firmly rooted in their home country without affiliates or partners

abroad and that, even within national borders, the dispersion of economic activity is decidedly uneven in many countries. The location of firms in general hinges upon three main sets of factors: market access, production factor costs and the trade-off between distance and proximity, where the importance of economies of scale and agglomeration are of great importance.

While the reduction of transport and communication costs could be thought to lead to a geographical dispersion of firms, in reality it often leads to the opposite. This occurs when geographically dispersed units, serving different local markets, can be consolidated at a single location when economies of scale more than compensate the cost of transporting to the local markets. Obviously, this is increasingly likely to be the case as transport costs fall.³ The attraction of large locations, clusters or agglomerations, is further enhanced by access to pools of skilled labour and the availability of high quality infrastructure and other collective resources. However, the fundamental reasons for the economies of agglomerations are quite narrowly economic and intrinsically related to the existence of economies of scale in locations that are big enough to host many

² Of course, it is the case that there has been a recent increase in trade from some faraway places, for example, China. This, however, is attributable to the other variable in the gravity model, i.e. size and particularly, the increased size of the Chinese economy.

³ Note, however, that the report from the European Monitoring Centre on Change on the transport and logistics sector (Eurofound, 2008) shows that for many companies it is not so much transport tariffs that are of primary importance, but rather the reliability and connectivity of the transport system that is of concern. When managing a network of supply firms and partners, the proximity to the hub of a reliable transport network is particularly crucial.

other firms at the same time, not only suppliers and partners but also, apparently paradoxically, competitors.

The economies of scale are well understood by economists and business people alike. While it is certainly recognised that economies of agglomerations exist, the precise source of the productivity gains of proximity are more difficult to understand and explain.⁴ There are numerous case studies on the successful agglomerations (or clusters) of our times, some of which emphasise the importance of a cooperative and others of a competitive environment. Most, however, emphasise the importance of face-to-face contacts in generating high rates of business creation and innovation. Probably the prime examples of modern successful clusters are Silicon Valley, Hollywood and the City of London. While these are highly competitive environments, companies do benefit from the proximity of competitors. There are 'knowledge leakages'. This was famously exemplified when Apple's Steve Jobs visited the Xerox plant in Palo Alto, California and understood the commercial potential of their research, which inspired the development of the Apple Macintosh. Moreover, the local mobility of labour between firms and the creative atmosphere in such locations also contribute to the success of such clusters.

Other clusters place more emphasis on explicitly cooperative environments. The classic illustration of such clusters is the Industrial District of northern Italy, as exemplified by Prato (textiles), Modena (machine tools), Santa Croce (leather and tanning) and Sassuolo (ceramics). The flexible specialisation generated in these areas was based on networks of small firms and much of the success was attributed to the cohesive nature of the local culture for creating trust based cooperation. This trust enabling social fabric was often ideologically based, i.e. catholic in Veneto and socialist in Emilia-Romagna.

Japan and the 'Tiger economies' of south-east Asia are the most successful examples of the role of public policy in their economic development, having introduced innovative public policies (industrial policy, education policy, competition policy, export promotion, R&D policies) to promote rapid growth. More recently, Ireland's Industrial Development Agency (IDA) has conducted a sector-based location policy. Over 170 companies are engaged in the pharmaceutical and associated medical activities. Nearly all the top pharmaceutical multinationals, including Pfizer, GlaxoSmithKline, Bristol-Myers Squibb, Schering-Plough, Wyeth and Merck, have companies in Ireland and many blockbuster drugs such as Lipitor and Zocor are produced there. Similarly, many

⁴ Econometric estimates show that the doubling of the size of a city increases productivity by between 3 to 8 per cent.

high-profile companies in the ICT sector have also been attracted to Ireland. It is difficult to evaluate the importance of the IDA in the location of firms in Ireland but most observers do attribute significant importance to it. It is clear the IDA did pursue a coherent strategy of focusing not on individual winners but rather on expanding industrial sectors. Targeting of individual firms such as Intel and Microsoft and a market-sensitive understanding of modern multinationals were also important factors.

Michael Porter is the primary advocate of the importance of clusters for the location of firms in business literature. Porter (2000) emphasises the dynamic benefits of clustering in facilitating innovation as well as their role in the learning processes to promote growth and competitiveness. Krugman (1998) provides a broader and more theoretically grounded account of the new economic geography, while Pavlinek (2004) explores the implications of the location of foreign firms for the regional development of countries in central Europe.

Towards a new international division of labour

The central concepts of the new international division of labour and current patterns of international trade and investment flows originated in the economic cooperation between the Japanese export industry and the emerging

economic tigers in the 1980s. This 'Triangle trade' entailed Japanese firms producing the hi-tech parts in Japan with the labour-intensive processing being sourced to the cheaper tiger economies and then exported to the West. Closely related to this phenomenon were the advances in managerial practices which enabled the efficient use of supply firms, particularly in car manufacturing. Both these developments were key to maintaining Japanese competitiveness in manufacturing.

Thus began the concept which came to dominate thinking about international trade and the global location of firms, i.e. the potential of 'vertical differentiation and integration' through international production networks (IPNs). Furthermore, the integration of financial and product markets and the reduction of entry barriers which facilitates cross-border corporate integration (e.g. through mergers and acquisition) led to the renewed importance of foreign direct investment (FDI).

IPNs have developed considerably and are now extensively used even in European companies. Their development has been facilitated by the remarkable developments in ICT over the last two decades which has permitted both a detailed coordination of the supply chain and 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)

However, it is the case that while in many respects the location decision of firms is in principle the same in the international context as it is in the national, the huge variation in labour costs means in practice that the labour cost issue is of more importance.

Growth of foreign direct investment and the location of companies in Europe

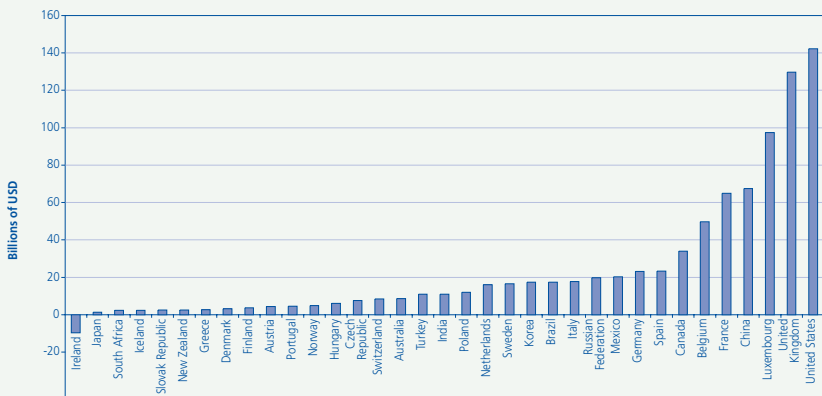
Foreign direct investment (FDI) has played a key role in recent economic development. It was vital for the success of the Asian Tigers in the 1980s, and was the key factor behind the big European success story of recent decades, namely the phenomenal economic development of Ireland. It may well come to play a similar role in the development of central and eastern Europe.

a century. The United States is the source country of 21% of the world's FDI stock. The UK is the main European source (15%) followed by Germany and France (8% each). The importance of China in FDI inflow statistics is a more recent phenomenon and it currently has a similar level of FDI inflow to France. Poland attracted on average USD11.962 billion annually, which placed it in first place among eastern European countries. Slovakia is the only other central European country to occupy a top FDI inflow position. FDI flows are very sensitive to the business cycle and are highly influenced by merger and acquisition activity in particular. If the current downturn in global economic activity continues, FDI flows are then also likely to fall.

Recent developments in foreign direct investment

Figure 1 shows that the United States and the UK were the main recent destinations for FDI in the OECD area. These two countries are by far the most important global FDI players, and have been for over

Figure 1: Inflows of FDI Billion US dollars, average 2004–2006

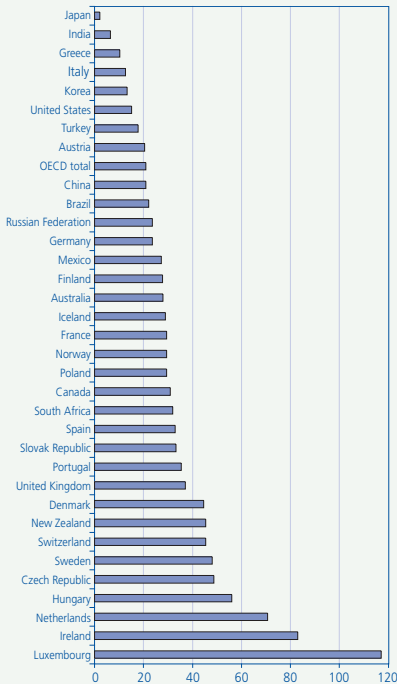


Source: OECD (2007), *International Direct Investment Statistics Yearbook*, OECD, Paris.

In order to gauge the relative importance of FDI for an economy it is necessary to standardise the stock of FDI to Gross National Product

Figure 2 shows that despite the recent net outflow of FDI from Ireland noted in the previous figure, the stock of inward FDI as percentage of GDP in Ireland is second only to Luxembourg. Set in relation to the size of the economy, the central European

Figure 2: Inward FDI Stocks (*% of GDP, 2005 or latest available year*)

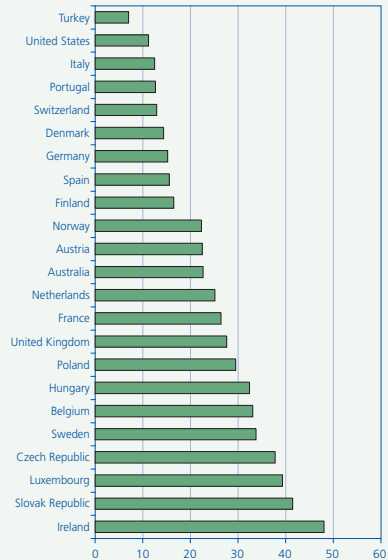


Source: OECD (2007), *International Direct Investment Statistics Yearbook*, OECD, Paris.

countries are led by Hungary, followed by the Czech Republic.

Perhaps the best single measure of the extent to which national labour markets depend on the location decision of foreign-based firms is the share of employment in affiliates under foreign control as shown in Figure 3. The shares in manufacturing employment vary considerably across OECD countries, ranging from under 15% in Denmark, Italy, Portugal, Switzerland, Turkey and the United States to more than

Figure 3: Employment in manufacturing and services in affiliates under foreign control (*% of total employment, 2005 or latest available year*)



OECD (2007), *OECD Science, Technology and Industry: Scoreboard 2007*, OECD, Paris

35% in the Czech Republic, Luxembourg, Slovakia and Ireland.

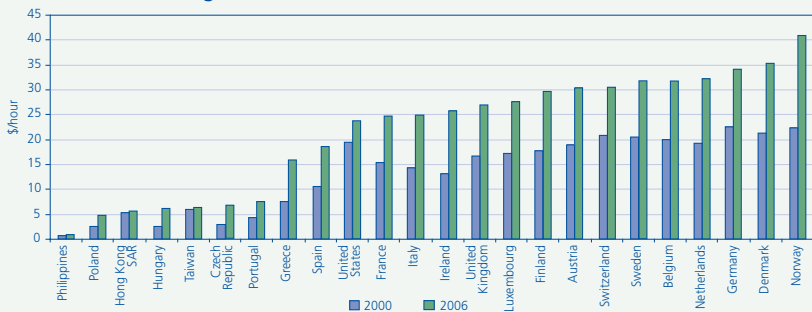
Between 1999 and 2005, employment in foreign-controlled manufacturing affiliates grew or remained stable in all countries for which data are available except Spain and Ireland, where the rate fell slightly, and in Belgium, Luxembourg and the United States where the shares have remained fairly stable. Particularly sharp increases were recorded by the Czech Republic, Norway, Poland, Sweden and the United Kingdom.

The diversity of countries occupying the top FDI positions indicates that there is no simple, single factor that explains FDI flows. However, as about 65% of foreign investment flows are between the world's most developed economies, this suggests that the bulk of FDI is not primarily related

to labour costs but rather attributable to market access.

Nevertheless, given great divergence of labour costs throughout the world and the increased ease with which business can be efficiently performed in many of these low-cost countries, it is obvious that they are of increasing importance. Figure 4 shows hourly compensation for labour in several countries expressed in US dollars. It shows the enormous cost differences between various parts of the world.⁵ The percentage increase in labour costs in this period was highest in Hungary, the Czech Republic, Greece, Ireland, Norway and Poland. The lowest relative increases were noted in Taiwan, Hong Kong, the US and the Philippines. This is almost entirely due to the recent fall in the value of the US dollar.

Figure 4: Hourly compensation costs in US dollars for production workers in manufacturing in 2000 and 2006.



Source: *International Comparisons of Hourly Compensation Costs in Manufacturing*, Bureau of Labor Statistics, United States Department of Labor, Washington DC, January 2008.

⁵ The US Bureau of Labour Statistics does not regularly publish data for China, due to methodological problems. However, the reference in the source in figure 4 reports on an *ad hoc* study on Chinese labour costs. It reports very low labour costs, at around half of the Philippine level.

Attracting foreign direct investment: lessons from the Irish economic miracle

In less than 20 years, Ireland has moved from being one of the poorest Member States of the European Union to the richest, in terms of GDP per capita, after Luxembourg. Between 1995 and 2005, GDP grew at an average of 7.5% per year.⁶ Between 1985 and 1987 unemployment averaged 17%, falling to 4.2% by the end of 2007. Most spectacularly, employment grew from 1,090,000 in 1987 to 2,120,000 in 2007. In a European context this has been a truly unique success story, fully deserving of the ‘economic miracle’ tag. Figures 2 and 3 above indicated the very significant presence of multinationals and the high amount of FDI that has come to Ireland in recent times. To understand something about Ireland’s success is to understand much about the location decisions of multinational firms.⁷

By 2006, there were 1,167 foreign-owned plants with 153,400 employees. The majority of these workers, around 100,000, are employed at US-owned firms. A significant number of these firms are engaged in a few high-tech activities. Over 170 companies are engaged in the

pharmaceutical and associated medical activities and practically all the leading ICT multinationals have a significant presence, such as Microsoft and Intel with 40,000 employees.

Why then did these companies start to locate in Ireland from the end of the 1980s? In the opinion of Peter Sutherland, it was Ireland’s membership of the European Union that was the fundamental reason behind the success.⁸ This was not primarily due to aid from the structural funds, the bulk of which was paid out in the 1970s and early 1980s, and which, according to Sutherland, was badly allocated. The main importance of EU membership was access to markets, which became a reality with the 1992 Single Market initiative, making Ireland a feasible location for foreign, primarily US, multinationals to access the European market. A low corporation tax rate was also a vital factor. Ireland’s adoption of the Euro (and the fact that the UK did not) was also, in Sutherland’s opinion, significant, as was the fact that the population was English-speaking and reasonably well educated. Finally, the fiscal consolidation in 1987 was important in creating a stable macroeconomic environment, as were the several very encompassing social partner agreements.

⁶ In the same period, Luxembourg ranked second at 2.7% followed by South Korea at 4.4%, and the OECD average was 2.5%.

⁷ The account of Ireland’s recent economic history is largely based on Sweeney (2008).

⁸ Peter Sutherland is Chairman of BP and Goldman Sachs International. He was founding Director of the World Trade Organisation and Chairman of Allied Irish Banks between 1989 and 1993. He has also been Attorney General of Ireland and Competition Commissioner in the first Delors Commission (1985-1989). His account of Ireland’s success summarised above is based on his contribution to Sweeney (2008).

Costs, and particularly labour costs, have not been mentioned as important factors and given that costs in Ireland were previously in the middle range of EU countries (see Figure 4), this could never be a very convincing argument. However, labour and other costs have increased significantly recently and are a growing cause for concern. In consequence, there is certainly some indication that recent trends to relocate out of Ireland are strongly related to increasing labour and other costs.

Evidence of offshoring from the European Monitoring Centre on Change

In the public debate on globalisation and the location decisions of firms in EU15 countries, no issue has raised more controversy than that of offshoring. This often involves some degree of outsourcing and there is confusion about these concepts. Offshoring is more specific than just the loss of jobs due to international competition.

Offshoring and outsourcing

Outsourcing occurs when some economic activity ceases to be performed within the firm (in-house) and is purchased from another firm. The issue is whether the firm obtains intermediary goods or services through hierarchical control within a single organisation or through the market. Extensive literature exists on the boundaries of the firm, on when it is rational to produce in-house and when to purchase on the market.⁹

An appropriate definition of offshoring is when domestic (European) production is replaced by foreign production due to a decision by a producer to cease or reduce producing domestically (in Europe) in order to purchase or outsource production abroad. The definition underlines the continued presence of the original producer firm in Europe.

Table 1 lists the various dimensions of offshoring and outsourcing. Whether offshoring is defined as occurring when moving activities between EU Member States or only when relocation shifts to countries outside the EU depends on both context and perspective.¹⁰

⁹ The literature concludes that outsourcing may be profitable when inputs are standardised (can be specified), when there are several competing suppliers, if there are economies of scale in the supply firms that are too large to be duplicated by the buyer, when there are economies of scale that would force the procuring firm into unrelated business and when there are no specific investments on the part of either the buyer or seller. It is a significant recent trend in work organisation and to some extent the decline in manufacturing employment is due the reclassification of economic activities that were previously done within a manufacturing firm which become outsourced to a firm classified as being in the services sector.

¹⁰ For example, relocation of call centres from EU15 to EU10 is a similar phenomenon (from the perspective of the workforce in the EU15) to that of the activities being moved out of Europe entirely. On the other hand, the European Commission would rightly not view these two events as equivalent.

Table 1: Offshoring and outsourcing: dimensions of location and control

Change of location	Change of ownership	
	No change – own company	Change to another company
Same country	Internal relocation	Outsourced
Other EU country	Offshored	Offshored and outsourced
Outside the EU	Offshored	Offshored and outsourced

Offshoring may or may not lead to the outsourcing of the offshored activity. However, the distinction of whether an offshored activity is outsourced or not may be blurred and it is not uncommon that an offshored activity can entail joint ownership between the original domestic producer and a partner in the host country. Moreover, from the perspective of the domestic workforce, the distinction may not be of any relevance.

Recent trends in offshoring in Europe

This offshoring phenomenon is captured at EU level by the European Restructuring Monitor (ERM).¹¹ The ERM provides evidence of offshoring and other restructuring trends in Europe. In the 2007 ERM annual report, *Restructuring and employment in the EU: The impact of globalisation*, an analysis was made of ERM offshoring cases in 2003–6 in order to

study recent developments. Table 2 shows that offshoring accounted for approximately 10% of cases of restructuring involving job loss (356 out of 3,475 cases in 2003-6) and 8% of announced job losses. Total jobs offshored and captured by the ERM amounted to just less than 200,000 jobs over the four-year period and there was no indication of an increase in offshoring over the period.

However, there was considerable variation among countries. It accounted for around 25% of total job loss in Portugal and Ireland and less than 5% in the Netherlands and Belgium. The jobs offshored from the EU15 are largely in the medium to high-tech sectors. The sector accounting for the highest proportion of EU jobs lost through offshoring (one in four of the total) was banking/insurance, a service sector with a generally high skill profile. Relatively few of the jobs lost from offshoring were in more basic industries such as textiles/clothing. Again, however, there is some variation by country in the sector concentration of offshoring job losses. Around 50% of offshoring job losses are in the automobile sector in Germany and Portugal, over 30% are in electrical machinery in Finland while 60% of UK offshoring job losses are in banking/insurance. Overall, however the manufacturing sector still dominates and accounts for one in two offshored job losses. The service activities that are

¹¹ Located at the European Foundation for the Improvement of Living and Working Conditions: <http://www.eurofound.europa.eu/emcc/erm/index.htm>.

Table 2 Cases of restructuring involving job losses and delocalisation in the EU, 2003–2006

Total cases involving job losses			Cases involving delocalisation		Delocalisation as % of total	
Announced cut in			Announced cut in		Announced cut in	
Number	employment		Number	employment	Number	employment
2003	745	525,389	55	47,011	7.4	8.9
2004	745	662,986	89	45,241	11.9	6.8
2005	1,049	657,072	112	63,894	10.7	9.7
2006	936	600,346	100	38,144	10.7	6.4
2003–2006	3,475	2,445,793	356	194,290	10.5	7.9

Source: European Restructuring Monitor, 2007

offshored are largely in call centres, operational activities, administrative and financial operations and back-office and accounting functions.

The main destination of offshored jobs from the EU15 is either Asia or the new Member States with broadly equal proportions going to each area. However, there are, again, differences between Member States: 85% of UK jobs offshored were relocated to Asia, mainly to India, while a similar percentage of German jobs offshored were relocated to the new Member States. A majority of service sector jobs have been offshored to Asia while manufacturing jobs are overwhelmingly offshored to the new Member States.

Thus while offshoring certainly is an empirically significant phenomenon, evidence from the ERM indicates that it is not occurring at a level that should be of great concern to the workers of Europe. However, it must be underlined that offshoring probably accounts for a relatively minor share of the total number of jobs lost due to the negative effects of

globalisation. Most jobs lost are not offshored, they are simply destroyed, as was the case for example in large parts of Europe in the 1970s and 1980s in heavy industry. Moreover, in the new international division of labour, the main negative impact for jobs in Europe is probably the foregone job creation due to the investment and job creation of new activities by European firms somewhere else in the world.

Evidence in the ERM suggests that offshoring is increasingly becoming a more significant phenomenon even in the NMS10. A recent example is the offshoring of KLLT, a Hong Kong owned textile manufacturer which moved the jobs from its Latvian plant to Macedonia and Vietnam. A 'lack of workforce' in the region was cited as the reason for this. Several other cases share the common motivation of relatively high labour costs and the shift of jobs to even lower cost European countries or south-east Asia.

The textile sector has figured prominently in offshoring from some EU15

countries and several NMS10. The EMCC report on the textiles sector (Eurofound, 2008) takes up the location decision process in this sector in some detail. The study documents very precisely the cost disadvantage that even eastern European countries have vis-à-vis China and notes that for many market segments, productivity levels are very similar. On the other hand, it demonstrates that some factors do mitigate in favour of European producers and in particular the increased importance of short turnaround times due to shorter fashion cycles which demand increasingly higher degrees of flexibility and speed from suppliers.

Another EMCC sector study analyses location issues in the biomedical healthcare sector (Eurofound, 2008). This is a sector that is typically seen as engaging in high value-added activities that should constitute European comparative advantage. The report highlights the poor general performance of European companies compared to their US competitors, particularly as regards innovation. This is partly due to the lack of investment in research and development, both in terms of the R&D intensity of companies and public investment. There has been a significant trend for European biomedical companies to locate their research outside Europe. In 1990, biomedical companies spent 73% of R&D

expenditure in EU countries. By the turn of the millennium, this had declined to 59%. There are also instances of companies placing major R&D investments in less developed parts of the world. For example, Novartis, created in 1996 through the merger of Ciba-Geigy and Sandoz, has recently decided to invest over USD100m in a new research facility in China.

Given the fact that the source of European competitive advantage is supposed to be in such high-tech activities, this is a somewhat worrying development. Currently, R&D 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 just 1.34 %, but is forecast to catch up with the EU by 2009. Obviously more is required to maintain the high road to global competitiveness and remain ahead of the pack.¹²

Competitiveness in the global economy

Little mention has been made of the concept of competitiveness or the relative position of global competitiveness of European countries. Table 3 lists the competitiveness environment in the first 79 countries as ranked by the World Economic Forum. The rankings are based on a composite index comprised of 12 pillars:

¹² 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.

1. Institutions
2. Infrastructure
3. Macroeconomic stability
4. Health and primary education
5. Higher education and training
6. Goods market efficiency
7. Labour market efficiency
8. Financial market sophistication
9. Technological readiness
10. Market size
11. Business sophistication
12. Innovation

It is notable that the top five European countries are not low-wage countries. They all score highly in macroeconomic environment, institutions and technology. The US position is primarily due to its very high technology and innovation score. Most of the EU15 countries lead the European pack. The major exceptions are Portugal, Italy and Greece.

The main difference between the central and eastern European countries and the older Member States is the lower level of 'business sophistication' (this includes the availability of local suppliers, marketing

Table 3: Global competitiveness index 2007–2008

United States	1	Estonia	27	Indonesia	54
Switzerland	2	Thailand	28	Cyprus	55
Denmark	3	Spain	29	Malta	56
Sweden	4	Kuwait	30	Croatia	57
Germany	5	Qatar	31	Russian Federation	58
Finland	6	Tunisia	32	Panama	59
Singapore	7	Czech Republic	33	Mauritius	60
Japan	8	China	34	Kazakhstan	61
United Kingdom	9	Saudi Arabia	35	Uzbekistan	62
Netherlands	10	Puerto Rico	36	Costa Rica	63
Korea, Rep.	11	United Arab Emirates	37	Morocco	64
Hong Kong SAR	12	Lithuania	38	Greece	65
Canada	13	Slovenia	39	Azerbaijan	66
Taiwan, China	14	Portugal	40	El Salvador	67
Austria	15	Slovak Republic	41	Vietnam	68
Norway	16	Oman	42	Colombia	69
Israel	17	Bahrain	43	Sri Lanka	70
France	18	South Africa	44	Philippines	71
Australia	19	Latvia	45	Brazil	72
Belgium	20	Italy	46	Ukraine	73
Malaysia	21	Hungary	47	Romania	74
Ireland	22	India	48	Uruguay	75
Iceland	23	Jordan	49	Botswana	76
New Zealand	24	Barbados	50	Egypt	77
Luxembourg	25	Poland	51	Jamaica	78
Chile	26	Mexico	52	Bulgaria	79
		Turkey	53		

Source: World Economic Forum, 2007

and production process sophistication) and to a lesser extent the quality of public institutions and, at least in most newer Member States, innovation capacity. Estonia, ranked in 27th place, is by a significant margin the most globally competitive economy among recent EU member countries. The main factors behind this relatively high ranking are the efficiency of its public institutions, the management of public finances and its ability to adopt new technologies. This stands in sharp contrast to Poland, which has slipped five places in its global

competitiveness index ranking from last year. Its poor competitive advantage is due to a low ranking for the quality of its institutions and major problems are associated with its taxation system. Poland does, however, rank quite well as regards higher education and training and the size of the Polish market is an advantage. While Hungary ranks very poorly in terms of availability of scientists and engineers, the Czech Republic does quite well in this indicator, as do Hungary, Romania and Slovakia.

Conclusions

International trade and investment has accompanied the historic development of Europe over four centuries, making it the predominant economic power of the industrial revolution. First Portugal and Spain, then the Netherlands, followed by the UK were the leading global traders of their time. Even today, Europe's biggest economy, Germany, is the largest exporter and the EU is the largest trading bloc in the world.

There is little doubt that trade and foreign direct investment does enhance economic welfare and therefore 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, this will necessarily lead to a loss in European living standards.

The often cited 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 a globalised world. Delivery of this high road to global competitiveness lies primarily with the Member States, first by fully adopting national ownership of the Lisbon Strategy and then by implementing it by the most appropriate means within their national contexts.

References

- European Monitoring Centre on Change, *Trends and drivers of change in the biomedical healthcare sector in Europe*, Dublin, European Foundation for the Improvement of Living and Working Conditions, 2008, <http://www.eurofound.europa.eu/pubdocs/2007/28/en/1/ef0728en.pdf>
- European Monitoring Centre on Change, *Trends and drivers of change in the EU transport and logistics sector*, Dublin, European Foundation for the Improvement of Living and Working Conditions, 2008, <http://www.eurofound.europa.eu/pubdocs/2008/16/en/1/ef0816en.pdf>
- European Monitoring Centre on Change, *Trends and drivers of change in the EU textiles and clothing sector*, Dublin, European Foundation for the Improvement of Living and Working Conditions (to be published in 2008).
- Dicken, P., *Global Shift: Mapping the changing contours of the world economy* (5th edition), Thousand Oaks (CA) US, Sage, 2007.
- Krugman, P., 'What's new about the new economic geography?', *Oxford Review of Economic Policy* 14: 7-17, 1998.
- Palmisano, S. J., 'The globally integrated enterprise', *Foreign Affairs*, 85 (3): 127, 2006.
- Pavlinek, P., 'Regional development implications of foreign direct investment in Central Europe', *European Urban and Regional Studies* 11: 47-70, 2004.
- Porter, M. E., 'Clusters and the new economics of competition', *Harvard Business Review* December, 77-90, 2000.
- Sweeney, P., *Ireland's economic success*, Dublin, New Island, 2008.
- Storrie D. and Ward, T., *Restructuring and employment in the EU: The impact of globalisation* (ERM annual report), Dublin, European Foundation for the Improvement of Living and Working Conditions, 2007, <http://www.eurofound.europa.eu/publications/htmlfiles/ef0768.htm>
- World Economic Forum, *The global competitiveness report 2007-2008*, World Economic Forum, Geneva, 2007.



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