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Summary conclusions of DG-ECFIN workshop on "The effects of relocation on economic activity: An EU perspective"

21 June 2005, Brussels

BACKGROUND

DG ECFIN organised a one-day workshop on "The effects of relocation on economic activity: An EU perspective" on 21 June 2005 in Brussels. This workshop was attended by around 70 participants (academics, policy makers and staff of the European Commission) and produced a stimulating exchange of views on the definition, measurement and impact of relocation.

The main conclusions of this workshop are presented hereafter as a contribution to the debate to be held in the EPC on globalisation. Annex 1 provides more detailed minutes of the workshop, annex 2 a summary of the papers presented and the follow-up discussion and annex 3 the workshop programme.

MAIN CONCLUSIONS

The main **conclusions** of the workshop are the following:

- 1. There is no agreed definition and measurement of the relocation of activities.
- 2. The measured impact of the relocation on activities depends on many factors, such as:
 - The level of **aggregation** at which you work. Outsourcing does not seem to affect the aggregate level of employment. Nevertheless, the process of sectoral restructuring that it triggers is found to be associated with employment flows from one sector to another.
 - The **countries to which you outsource**. International outsourcing to central and eastern European countries seems to be associated with a decrease in employment of manual workers in Germany, while this is not the case for outsourcing to other EU15 countries.
 - The **characteristics of the firms**. Multinational and export-oriented companies that outsource inputs internationally benefit from productivity gains while this is not the case for non-exporting establishments.
 - The **type of outsourcing**: services or materials, with the benefits of services outsourcing being less obvious.
 - The **flexibility of labour markets**. In countries with more flexible labour markets like the US and UK the effect is likely to be felt in term of downward pressure on the wages of the manual workers, while in countries with less flexible labour markets (on the European continent, e.g.) the effect shows up in employments rates.

Finally, data availability limits country studies and it seems difficult to extrapolate the results from one country to another.

All of this shows that the empirical analysis is still fraught with many uncertainties which make it difficult to assess the extent of relocation and to draw general conclusions about its implications.

3. However, there was a general agreement that relocation can play a role in promoting the competitiveness of the EU as some outsourcing firms experience **productivity gains**. In the case of declining industries that face difficulties in maintaining competitiveness, relocation may allow EU firms to hold on to the higher value added stages of the production chain, thus preventing the whole industry from disappearing. Furthermore, the industrial restructuring triggered by relocation may contribute to a **better allocation**

of resources within the EU economy. Moreover, there is also evidence pointing to relocation as a means to facilitate technology transfer to the New Member States, which highlights its importance in the process of the modernisation of the productive sector. Finally, one cannot overlook the increased business opportunities for EU firms to be found in the home markets of the countries benefiting from relocation as these countries grow wealthier.

- 4. The relocation of economic activities also entails **risks in terms of employment losses** and increased inequality that are likely to affect specific regions, sectors and low-skilled workers. However, the risk of relocation accelerating the phenomenon of deindustrialisation seems to be exaggerated.
- 5. There are some **trends that are a cause for concern**. First, relocation is likely to increase in the future due to the emergence of new key players like India and China. Second, the services sector, being the largest employment provider in the EU economy, is increasingly affected. Third, more complex services, including R&D, are being moved abroad, implying that highly qualified white-collar workers are also affected.
- 6. While evidence shows that relocation is still a small phenomenon at the macro-economic level, it should not be dismissed and it is necessary to define an **appropriate strategy** to face the challenges raised by relocation. Such a strategy would have to include: first, measures to manage the transition and minimise the adjustment costs in the short term; and second, an offensive strategy to develop new areas of comparative advantage for the EU economy, in particular by developing the knowledge-based economy and improving the functioning of our labour markets.

ANNEX 1: Detailed minutes

Overview

Ilzkovitz gave the opening remarks of the workshop stressing that it is an opportunity for a timely discussion about an issue that is increasingly in the centre of the political debate and receives much attention in the media. The insufficient information about many issues related to relocation justifies the organisation of a workshop.

For good policy making a better understanding of the phenomenon is clearly needed. The phenomenon of relocation is particularly difficult to deal with as very often in the public debate only the risks associated with the process are highlighted. Ilzkovitz argued that the risks are often overestimated as the evidence shows that the macroeconomic impact evidence has been limited so far. The phenomenon remains concentrated in manufacturing and among developed countries. However, we should also not underestimate the challenges because relocation is increasing in importance, due to the size of some developing countries involved (China and India) and because services and more complex activities (including R&D) are moved abroad. Finally we should take into account the adjustments costs affecting specific regions, sectors and low-skilled workers.

While the many shortcomings in terms of the empirical analysis of relocation and the intricacies of the phenomenon often do not allow drawing definite and general conclusions, it is nonetheless possible to identify some important findings from the contributions provided by the speakers.

1. <u>Definition and measuring</u>

The different papers clearly illustrate the fact that in the literature there is no unique definition of relocation or methodology for measuring the phenomenon.

Amiti looks at relocation as the outsourcing of inputs from foreign-based suppliers, which she measures using trade data on intermediate goods as well as industry-level indicators that combine data from trade of intermediates and input/output tables. For services in particular, the focus of Amiti's paper, relocation is defined as the imports of business services and computing services, which captures both international outsourcing and offshoring as the data do not allow the distinction to be made¹.

Görg and Geishecker share Amiti's definition of outsourcing based on trade in inputs. Nonetheless, Geishecker introduces two distinct measures of outsourcing: a narrow measure of outsourcing that focuses on the imports of inputs of the same industry and a wide definition of outsourcing that includes the inputs that each industry purchases from all the others. For example for the sector "motor vehicles and parts" the narrow measure of outsourcing would include imports from that same industry while the wide measure would include also purchases of raw materials and other services. For example it would include imports of steel, textiles, etc...Such measures are sensitive to the levels of aggregation of the industries used for the analysis.

The data used do not identify the origin of the imports. Hence, it is not possible to tell whether we observe intra-firm imports led by multinational companies, which would be part of an off-shoring strategy or whether the imports are purchases from local independent foreign firms (what we commonly define as outsourcing).

In contrast, **Fontagné** adopts a wider indicator to measure outsourcing which is based on total imports (including both intermediate and final goods). Finally, **Damijan** explores the issue from the point of view of the host country and equates relocation to the concept of offshoring, i.e. the setting up of affiliates by foreign multinational firms.

In general, we may conclude that different indicators are adopted to empirically analyse the relocation phenomenon. While for measuring its precise extent the best sources of data would be at the level of the firm, firm-level data are not widely available. When the objective is assessing the impact of relocation, trade data combined with input output tables are widely used for empirical analysis.

2. Effects of relocation

Overall there are no general results and conclusions that can be drawn from the workshop in terms of the effects of relocation. The findings depend on many factors: the level of sectoral aggregation of the data used, the characteristics of firms, the type of outsourcing (goods or services), the countries to which you outsource, etc. Moreover, a lack of suitable data limits further multi-country studies leading to concerns about whether some of results may be generalised to other countries. However, the research work presented at the workshop allowed us to identify some interesting results with respect to the potential opportunities and risks for the EU economy.

2.1. Opportunities

Görg's analysis of the Irish economy, using firm-level data, shows that outsourcing can be associated with productivity gains for firms that choose to buy inputs from foreign suppliers. However, the type of firms and the nature of the inputs being outsourced seem to matter. Interestingly, in fact only outsourcing of material inputs is associated with such productivity gains. Moreover, only plants that are linked to international production networks, i.e. foreign-owned plants as well as domestic exporters seem to benefit from outsourcing. The lower search costs of suitable suppliers of material inputs faced by these firms in foreign markets is said to explain these results. The firms that are exporters usually have better knowledge of where to outsource.

The benefits of relocation from the point of view of the new Member States is analysed by **Damijan**, who provides evidence of direct positive effects on the productivity performance of affiliates of foreign multinationals. In terms of indirect or spillover effects, evidence shows that the local firms establishing backward and forward linkages with the foreign multinationals seem to benefit more than domestic competitors that fail to do so. Hence, evidence points to a greater importance of vertical spillovers vis-à-vis horizontal spillovers from foreign investment in the new Member States. Nonetheless, overall the direct effects on the multinationals' own affiliates seem to be by far the main channel through which foreign investment contributes to the technological upgrade of the industrial structure of new Member States.

2.2. Risks

With respect to potential risks, **Fontagné** shows that outsourcing is only a limited factor in the deindustrialization process. Moreover, **Amiti** presents evidence which contradicts the concerns about job losses due to outsourcing. Using UK data, Amiti does not find any

significant negative impact of outsourcing on the level of employment. Nevertheless, when the analysis is carried out at a higher level of sectoral disaggregation an effect on employment is indeed found. However, outsourcing does not seem to affect the aggregate level of employment, even if the process of sectoral restructuring that it triggers is found to be associated with employment flows from one sector to another.

Geishecker completes the analysis of the impact of relocation on the labour market by presenting evidence of potential risks in terms of increased inequality. He concludes that in Germany outsourcing to the new Member States has decreased the share of the wage bill of manual workers (similar to the impact of skill-biased technological change). Given the rigidity of the labour market regulation in Germany this has been associated with an important decrease in employment levels. In countries with more flexible labour markets like the US and UK the effect is likely to be felt in term of downward pressure on the wages of the manual workers. Nonetheless, labour market flexibility would contribute to make the adjustment process quicker as it facilitates the reallocation of resources across sectors.

3. <u>Policy implications</u>

The phenomenon clearly presents a challenge in terms of policy making as there are inevitable adjustment costs which are concentrated in certain sectors and regions as well as in particular social groups. There is evidence of a trade-off between outsourcing/relocation and income distribution. In the labour market there are losers and winners. This is a policy challenge which is to a certain extent similar that posed by technological change. However, **Fontagné** argues that while technological change is beyond the immediate control of policy makets, the extent to which an economy embraces outsourcing is not. The latter is therefore a matter of political choice.

Amiti highlighted the need to adapt the policy response in relation with the reasons why firms close down, i.e. to be closer to new markets or to avoid complex regulation.

Overall the participants in the discussion agreed that the challenge for policymaking is to define a strategy that ensures that relocation is a win-win situation for all parties involved. This means that domestically it is important to promote the benefits while not disregarding the welfare losses that the restructuring will cause in some social groups. However there was general agreement that this is a complex task that requires an integrated approach including initiatives aimed at managing the transition and minimise the adjustment costs in the short term and at developing new areas of comparative advances in the longer run.

ANNEX 2: Summary of the papers presented and of the discussion

SESSION I: Overview of the Phenomenon

1. "Fear of service outsourcing: Is it justified?" by M. Amiti and S.-J. Wei.

The paper explores the extent of relocation of services, which is a relatively new phenomenon. Although increasingly the cause for many concerns there is very little empirical research on the issue of services outsourcing. The paper explores the extent of the phenomenon in several economies. In the paper services outsourcing is limited to business services and computing and information services. The results show that services outsourcing has been steadily increasing but it is still at very low levels and is much less important that outsourcing of material inputs. It is also shown that many of the industrialised economies considered are simultaneously outsourcers and insourcers of services, which contradicts the claims of massive relocation of service activities to developing countries. The second part of the paper analyses the effect of services and material outsourcing on employment in the UK. The authors do not find evidence to suggest that outsourcing has led to employment loses in those sectors that increased their outsourcing intensity during the period 1995-2001 in either the manufacturing or the services sectors.

In the following **discussion, Veugelers** pointed out that Amiti's findings regarding the employment effects on the UK and US may not be relevant for many EU countries due to the differences in labour markets institutions. This is an issue of country specificity and therefore it is difficult to extrapolate the results from one country to another. Veugelers also stressed the difference in the quality of jobs created and jobs destroyed. She also pointed that the lag structure matters, concerning the dynamics of the process.

SESSION II: Impact on productivity and Employment

1. "International outsourcing, foreign ownership, exporting and productivity: An empirical investigation with plant-level data" by H. Görg, A. Hanley and E. Strobl.

This paper investigates the impact of international outsourcing on productivity using plant-level data for Irish manufacturing from 1990-98. The effect of outsourcing on firm-level performance is an issue that has been relatively under explored in the literature so far. The paper aims to distinguish between the effects of outsourcing of materials and of services inputs. Furthermore the data set allows the investigation of whether the impact on productivity is different for outsourcing plants that are engaged in exporting and for plants that are part of multinational companies. The results show that establishments that outsource inputs internationally benefit from productivity gains. However, while it is found that plants that are linked to international production networks, i.e. foreign-owned plants as well as domestic exporters benefit, no such productivity-enhancing effects are found for non-exporting establishments. The former may arguably face lower search costs in finding suitable suppliers when they decide to outsource abroad. Moreover, the effects are found to be different for the outsourcing of materials and of services inputs. In contrast with outsourcing of material inputs, services outsourcing according to the paper does not lead to short-run productivity benefits.

2. "Does outsourcing to Central and Eastern Europe really threaten manual workers' jobs in Germany?" by I. Geishecker.

The paper analyses how international outsourcing has negatively affected the relative demand for manual workers in Germany using a panel of 20 manufacturing industries over the period 1991 to 2000. The author finds a significant negative effect of international outsourcing towards Central and Eastern Europe that is comparable to the skill biased effect of technological progress. International outsourcing towards these countries is found to have lowered the manual workers wage bill share in Germany by 2.7 percentage points during the period considered, which is associated with a decrease in relative employment of manual workers, given the rigidity of relative wages.

In the **discussion, Altomonte** called the attention to the fact that there can be simultaneity between international outsourcing and productivity performance. He also asked that the question why there are productivity gains from outsourcing is not addressed in the paper. He suggested two possible answers: first, it is the last chance to cut costs in order to survive and second, the other more dynamic firms outsource. **Plasman** highlighted the difficulties of measuring the effects of relocation on employment and the need to distinguish short run and long run effects. He also called attention to the role of labour markets institutions and their characteristics in determining the employment effects of relocation

SESSION III: Impact on the economy

1. "Deindustrialization and the relocation of industries" by H. Boulhol and L. Fontagné.

The paper investigates the link between deindustrialization, the decline of manufacturing total employment, and relocation. Using a panel of selected OECD countries covering 1970-2002, it is found that net trade in goods with offshoring countries accounts for 15% on average of the observed decline in relative employment of manufacturing in the OECD countries in their sample. Hence, the conclusion is that deindustrialization is hardly driven by outsourcing.

2. "Transfer of technology through FDI to New Member States: How important are direct effects, horizontal and vertical spillovers?" by J. P. Damijan.

The main objective of the paper is to provide a comparative study of the importance of spillovers through FDI in a group of ten Central and Eastern European countries by using a common methodology to give an insight into the importance of multinational companies as channels for technology transfer. This is done using a large data set of 8000 firms in the period 1995-99. The study examines the direct effects from FDI (from the parent to the local affiliates) as well as the horizontal and vertical spillovers (also differentiating between backward and forward vertical linkages) from foreign affiliates to domestically-owned firms. The author finds that direct FDI effects are significant in five out of ten examined transition countries and that they provide by far the most important productivity spillovers. It is also found that in these economies vertical spillovers seem to be of greater importance that horizontal spillovers from FDI.

In the following **discussion Anderton** pointed that Fontagné focused only on trade within low-wage economies, the offshoring countries. There are other indirect effects on the trade flows between industrialised economies that should also be taken into account. Anderton also highlighted the importance of using micro data. **Dierx** pointed out the need to study more carefully dynamics when examining the role of foreign multinationals in the transfer of technology.

Keereman, discussing the paper of Damijan agreed that the distinction between vertical and horizontal FDI is important and stressed the idea that improvements in the regulatory environment may contribute to promote spillovers from FDI.

SESSION IV: Policy implications

Belet focused on the trade-off that exists, at least in short and medium term, between the gains from relocation and the increased social inequalities. Grice centred his intervention on the long-run economic gains.

Belet gave an overview of the increasing importance of North-South trade in recent years and highlighted the fact that China is now the first recipient of FDI. He then stressed the different impact on the skilled and unskilled workers and expressed concerns about the increasing inequalities in terms of income distribution. He warned that unskilled could be the losers of globalization in the rich countries, which represents an important political challenge. In his opinion on possible solution is to tax the winners of globalization to compensate the losers.

Grice pointed out that the fact that countries like China and India are becoming major world economic players should be seen as an opportunity. From his UK perspective labour markets are the main issue of concern in developed countries as they should be able to absorb job flows from declining sectors to the booming sectors while minimising the social costs. He also noted the importance of deepening the single market and increase economic growth to create jobs to compensate the employment lost in declining sectors.

In the **discussion Fontagn**é argued that policy wise there is an important distinction between changes in employment due to technological progress and due to outsourcing: technology progress is beyond the scope of political decision while outsourcing and relocation are not. **Geishecker** pointed out the importance of market flexibility for the gains from trade (and outsourcing) to materialise.

Kroeger closed the workshop by saying that while must have been learnt from the debate it is clear that further research is necessary to fully understand the phenomenon and its implications for the EU economy. He also highlighted that many issues, like the impact on employment, are still very uncertain and unpredictable.

ANNEX 3: Programme

EUROPEAN COMMISSION WORKSHOP ON

The effects of relocation on economic activity: An EU perspective

Programme

Date: 21st June 2005

Venue: Brussels, Beaulieu 5, room 0C

Morning session

Speakers will have 30 minutes to present. At the end of each session, discussants will have 15 minutes to comment on the papers and to introduce a general discussion.

9.15: Introduction and chair: F.Ilzkovitz (ECFIN)

9.30-10.15 Session I - Overview of the phenomenon

09.30 How to measure the phenomenon? What is its extent?

"Fear of Service Outsourcing: Is it Justified?"

M. Amiti (IMF)

10.00 Discussant

R. Veugelers (K.U.Leuven)

10.15 General discussion

10.30-10.45 Coffee Break

10.45-12.30 Session II – Impact on productivity and employment

10.45 Impact on productivity

"International outsourcing, foreign ownership, exporting and productivity:

An empirical investigation with plant level data"

H. Görg (U. Nottingham)

11.15 Impact on employment

"Does Outsourcing to Central and Eastern Europe really threaten manual

workers' jobs in Germany?

I. Geishecker (Free U. Berlin)

11.45 Discussants

C. Altomonte (U. Bocconi)

R. Plasman (ULB)

12.15 General discussion

12.30 Lunch

Afternoon session

13.45: Chair: J. Kröger (ECFIN)

14.00-15.45 Session III – Impact on the economy

14.00 Industrial restructuring and trade performance

"Deindustrialisation and the relocation of industries"

L. Fontagné (CEPII)

14.30 Impact on new Member States

"Transfer of Technology through FDI to New Member States: How Important are Direct Effects, Horizontal and Vertical Spillovers?"

J. Damijan (U. Ljubljana)

15.00 Discussants R. Anderton (ECB) F. Keereman (ECFIN) 15.30 General discussion 15.45-16.00 Coffee Break

16.00-17.00 Session IV - Policy implications

Lessons from experiences in some Member StatesG. Belet (Ministère de l'Economie, Finances et de l'industrie)

J. Grice (Office for National Statistics)

16.30 General discussion

16.45.-17.00 Concluding remarks: J. Kröger (ECFIN)