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ESS response to globalisation - are we doing enough in business and economic statistics?

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Globalisation evokes a number of challenges for policy makers on Community level. In the economic area, these relate to the impact of globalisation on job creation, competitiveness, financial stability, etc., extending to all economic domains. The scope of this paper is twofold: measuring the cross-border transactions of enterprises, and measuring the actors, the enterprises themselves. The paper provides a focused review of the most relevant individual statistical domains under those two areas, describing the current situation and ongoing developments in statistics provided by Eurostat. A general assessment of the sufficiency of the existing statistics is provided, key problematics related to globalisation are discussed, and development activities addressing the problems are highlighted as well as the outstanding challenges. The paper arrives at two main conclusions: Firstly, while there is a wealth of information in the individual statistical domains, the usefulness of the data could be considerably improved by better harmonising the different domains with each other. Secondly, specifically the data compilation on multinational enterprises as key actors in economic globalisation needs to be reviewed and enhanced.

1. What is the problem and which are the policy needs?

1.1 Defining the economic aspects of globalisation

Globalisation of the economy refers to the phenomenon of the opening up of economies and borders, resulting in an increase in trade and capital movements, movement of people and ideas, spread of information, knowledge and technology, and entailing a process of deregulation. This process, both geographic and sectoral, is not recent but has been accelerating in recent years. While

globalisation is the source of many opportunities, it remains one of the greatest challenges facing the European Union today. Globalisation has many economic impacts on the EU that have effects on the daily business of all European citizens and enterprises. At the same time, it produces a number of challenges for policy makers on the European level. In the economic area, these relate to the impact of globalisation on job creation, competitiveness, financial stability, etc., and cover all economic domains. This underlines the diversity of the challenges related to assessing globalisation in the economic sphere alone.

1.2 What are the policy areas particularly affected?

While there is not one official canon of economic policy areas most affected by globalisation, there are a number of obvious issues to be addressed. Given that the economic impacts of globalisation on the EU make themselves felt through some well-defined channels – the trade in goods and services, financial flows ranging from foreign direct investment to more short term forms such as portfolio investment, as well as the movement of people linked to cross-border economic activity, from workers remittances to the provision of services – the focus is on those policy areas most closely related to those channels. The most obvious are trade and investment policies. Macro-economic policies, involving monetary and fiscal policies, have to address the effects of globalised financial flows. At the same time globalised financial markets may penalise economies with inappropriate economic policies.

On a more sectoral or micro-economic level, enterprise policies (Lisbon strategy), competitiveness and R&D policies are also significantly affected by the increasing worldwide competition set in motion through economic globalisation. Then there are also certain sectors deemed of strategic importance to the EU, energy as a topical example, which are as well directly affected by globalisation trends in that sector.

The list of the affected policy areas could be extended and further detailed *ad libitum*, but the areas mentioned are certainly those that are most directly exposed to the repercussions of an increasingly integrated world economy.

1.3 Where does statistics, where does the ESS, come in?

It is in particular in the afore-mentioned areas that policy makers have to take well-informed policy decisions. The basis for such well-informed decisions are statistics, that accurately measure the developments that need to be analysed and responded to. So, the question has to be asked whether

the ESS is producing the official statistics needed. This question is particularly pertinent in light of the fact that globalisation poses some general challenges to the compilation of statistics regardless of the specific domains.

- Firstly, globalisation entails the emergence of cross-border economic transactions which might be more difficult to measure than more traditional transactions. This refers, for instance, to activities based on electronic means of communication, to transfer pricing or to the valuation of processed goods.

- Secondly, governments feel increasingly under pressure to help their national businesses to meet the challenges of global competition by easing the administrative burden on business. Cutting 'red tape', however, may lead to a loss of statistical information, either if this information is based on administrative sources or if reporting requirements for enterprises are lifted.

- Finally, determining the 'nationality' of the drivers of economic globalisation, namely the enterprises, becomes increasingly difficult. More and more frequently, companies operate from a different place than where their headquarters officially reside. Not to mention that the owners might have different nationalities from the location of management or registration and may reside in yet further countries. In a statistical system founded on the 'nationality' idea, these emerging complex structures pose a formidable challenge to the coordination of the different National Statistical Institutes (NSIs) and Central Banks (CBs) involved.

Obviously, the ESS is a crucial but not the only potential source of information for European policy makers. Other international organisations, most notably the OECD with its pioneering work in the field, including e.g. the handbook on globalisation indicators, are also important information providers. Thus, not all of the data needed has to be necessarily produced by the ESS. This may also refer to commercial data sources on economic globalisation. In particular in the economic area there has been a proliferation of private data providers (private databases, consultancies, etc). This confronts the ESS with a strategic choice, i.e. to take the private sources as competitors or to regard them as complementary to official statistics, enabling the ESS to focus on some key areas which are not of commercial interest.

1.4 The scope of this paper

The scope of this paper is twofold: measuring the cross-border transactions of enterprises, and measuring the actors, the enterprises themselves. Globalising enterprises and their activities are central when it comes to economic globalisation. This discussion paper provides a focused review of the most relevant individual statistical domains under those two areas, describing the current situation and ongoing developments in statistics provided by Eurostat. A general assessment of the sufficiency of the existing statistics is provided, key problematics related to globalisation are discussed and development activities addressing the problems are highlighted as well as the outstanding challenges.

Throughout the analysis this paper tries to build as much as possible on the work done for related events in the past, such as the CEIES conference on Statistics and Economic Globalisation in Copenhagen in 2003.

2. Current situation and the ongoing developments

This section takes a closer look at individual statistical domains that are key to the analysis of the impacts of economic globalisation. Conceptually, these domains can be grouped into three categories: The first one is statistical infrastructure of horizontal nature, serving the production of virtually all statistics dealing with economic globalisation involving multinational enterprises (MNEs). The second group consists of statistical areas measuring economic cross-border transactions of enterprises primarily on an aggregated level. All these have in common that they provide important information for macro-economic policy makers. The third group focuses on the behaviour and structure of individual businesses, hence primarily serving the needs of enterprise, R&D and competitiveness policies, etc.

2.1 Statistical infrastructure: Community Register of Multinational Businesses (EuroGroups)

In a number of statistical domains there is a growing need for information about the structure of internationally operating business groups. Indeed, a 'who-owns-whom' type of inventory is required to better measure and understand global trade and capital flows. The existing Regulation 2186/1993 of statistical business registers (BR) is outdated, because it doesn't provide the necessary infrastructure needed for globalisation statistics. Thus a new BR Regulation has been proposed and

is foreseen to enter into force in Q4 2007. It makes the (currently optional) recording of enterprise groups compulsory as well as the exchange of data on MNEs and their constituent units between Member States and Eurostat, for statistical purposes only. The exchange of data implies the creation of a Community register of MNEs, so called EuroGroups register (EGR).

A pilot project to study the feasibility of the creation of the EGR was carried out during 2006 with four NSIs. The pilot covered 600 MNEs with over 80,000 units. The results of the study were promising and the feasibility of the creation of such a register was clearly confirmed. The EGR builds first on data from private sources, which will be consolidated at Eurostat. The data will then be sent to the NSIs for checking and correcting the links between units, and improving the data on characteristics. The NSIs send the corrected and completed data to Eurostat, which composes the final global, European and truncated (national level) enterprise groups and transmits the final data back to the Member States.

The ongoing work builds on the results of the pilot project by further acquisition of data on major European MNEs and developing the IT environment. Implementing rules defining the detailed data exchange between Eurostat and NSIs are being drawn up. A voluntary exchange of data with ECB and NCBs is also foreseen, subject to national authorisation. The co-operation is essential to avoid duplicate registers in NSIs and NCBs, and to overcome inconsistencies between different data.

The EGR can improve various statistics related to globalisation (foreign affiliates, direct investment, foreign trade, etc.) at national level and it is the basic infrastructure needed for their harmonised production at European level (which units belong to MNEs, what is the controlling country, what is the employment impact, etc.). The EGR will be an indispensable source regarding the role of MNEs at national, EU and even global level, because knowledge of the global structures of the MNEs is a prerequisite for carrying out intra-group trade surveys.

The creation of the EGR is a very demanding project and its implementation is planned in stages during 2007-2009. The ultimate aim is to cover all MNEs which operate in Europe. Without complete coverage the emerging role of small and medium-sized MNEs cannot be monitored.

2.2 Cross-border transactions

2.2.1 Trade in goods

Foreign Trade Statistics (FTS) are by their very nature the oldest indicator of economic globalisation, and a wealth of traditional data and indicators are available. FTS have been built on the idea of nations trading with each other. Typically, a national enterprise would produce a good in its country of residence and then sell the finished product at the market price to an unaffiliated buyer in another country. In the globalised economy where barriers of trade have been reduced and a large share of trade is generated by multinational enterprise groups, this supposition of trade is not as valid as it used to be. Production and supply processes are globalised; inward&outward processing and intra-group trade represent a non-negligible part of total trade.

Processing trade leads to an overall increase of trade volumes. Trade data on EU customs inward&outward processing are available, serving as a partial indication of globalised production chains. Processing trade transactions are recorded at full value, not simply the added value, and therefore can form a substantial part of total trade, which makes it desirable to be able to distinguish processing trade separately. The valuation of goods in processing trade is controversial, but in FTS the current international recommendation is to use the total value.

An important globalisation related development project in FTS concerns intra-group trade. Transfer prices distort the recorded value of trade, and to be able to take the effect better into consideration when performing analysis, it is necessary to get to grips with the share of intra-group trade. As the needed intermediate step towards that goal, trade statistics have to be linked more closely with business statistics. This approach moves the focus from the traditional trade variables – products and partner countries – to the traders and their characteristics. The Eurostat project on linking trade data with business registers aims at establishing a linkage between trade registers/data and business registers, thus improving the general comparability between trade and business statistics. Combining enterprise characteristics from the business registers – most notably activity sector and size-class, measured in terms of number of employees – with typical trade variables such as product code and partner country, enables the compilation of new combined indicators. These indicators answer questions like what is the contribution of different economic sectors to trade or the share of total trade that SMEs account for. The method of linking existing register information can be further expanded. For instance, the foreseen development in business registers (EuroGroups project) would enable measuring the contribution of multinational enterprise groups to trade.

Since the introduction of the euro, the roles of different currencies in trade have been strongly evolving as the euro has been gaining ground. Information on the invoicing currency has further increased in importance. Currently the data is not available in FTS, but is being collected from bank settlements to the extent possible. Including invoicing currency in extra-EU trade statistics is foreseen in the planned revision of the legislation (Extrastat Regulation).

Another challenge facing FTS is the coming new Customs Code which entails centralised customs clearance procedures, serving the needs of multinational enterprises. It is foreseen that a customs declaration can be lodged in any Member State, breaking the current link between the Member State where the data is available and the physical movement of the goods. Member States may lose track of their own extra-EU trade when it is declared in another Member State. As regards intra-EU trade statistics, simplification of Intrastat is being planned and assuring data quality in a simplified system will be challenging.

2.2.2 Trade in services

The global competition in goods that has been under way for decades is now gaining momentum in services, as falling telecommunication costs and greater openness to FDI enable different parts of the services value chain to be in different locations around the globe. This has increased cross-border competition in services markets for a wide variety of activities; from low-skilled functions such as data entry, word processing and call centres to higher-skilled activities such as software development, consultancy, medical services, and R&D. A range of services previously thought to be non-tradable are now being provided electronically over large distances.

Together with the growing importance of international trade in services, the demand for relevant statistics has increased significantly. The extended classification of service items, developed by Eurostat and the OECD and published within balance of payments statistics, allows meeting the users' needs in a comprehensive way. However, there are still some challenges in the area of trade in services statistics that need to be addressed to retain their high level of relevance for users:

Firstly, due to globalisation and the emergence of specialisation and global production networks that come with it, there is an increased need to link in some way services trade data in the balance of payments with FDI and FATS (Foreign Affiliates Statistics) data in order to gain a more comprehensive picture of trade in services. Thus different classifications like EBOPS (extended balance of payments services classification), CPC (central product classification) and ISIC (international standard industrial classification of all economic activities) and its alternative

grouping ICFA (ISIC categories for foreign affiliates) need further scrutiny to see whether their links could be strengthened.

Secondly, statistics are also needed to support trade negotiations and the implementation of the trade agreements. The most well known and wide-reaching agreement involving services is the General Agreement on Trade in Services (GATS). However, trade negotiators quite often do not have all the necessary data at their fingertips that they would wish to. This is largely due to the fact that trade in services statistics are compiled within a balance of payments context as per economic activity categorisation, whereas negotiators would prefer 'by product' breakdowns. While this in itself is a 'traditional' problem, globalisation has aggravated it as more and more services are rendered in packages including services (and goods) spanning different industrial categories. There is a danger that the classification by economic activities therefore becomes increasingly misleading and decreasingly helpful for policy makers in the area of commercial policies.

Thirdly, globalisation has also led to an extensive mobility of persons and as a result to a significant increase in both business and personal travel. Currently the share of travel in the balance of payments has reached about 27%. A wide variety of surveys like household surveys, surveys in accommodation establishments, surveys of tourist intermediaries, border surveys, credit card information (not relevant in euro area because of the common currency), bank reporting system, administrative sources, etc. are necessary to get reliable estimates of receipts and expenditures due to travel.

As for the first and second issue listed above, there have been already some initiatives taken at international level. The Manual on Statistics of International Trade in Services (drafted by Eurostat in co-operation with other international organisations) analyses the links between different classifications and presents correspondence tables to ease transformation from one system to another. Moreover, the manual has broadened the statistical view of trade in services from a subset of the balance of payments to reflect the modes by which services are supplied in practice.

Finally, a special type of trade (in both goods and services) merits focusing on: e-commerce. As mentioned above, an increasing share of trade is conducted by electronic means, and special attention needs to be paid to measuring its development. The term e-commerce covers transactions over computer mediated networks in a broader sense, and over the internet in a narrower sense. By definition, services or goods are ordered over those networks, but payment and delivery may be conducted on or off-line. The most important implication of this definition is that the process of ordering is part of an automated business process. Considering globalisation, the flows of purchased

or sold goods and services in terms of spatial dimension as well as the geographic location of the business processes should be measured. This is a brief overview of the data Eurostat collects on e-commerce; there are other DGINS papers dedicated to the subject of measuring e-commerce.

Eurostat surveys on ICT usage comprise also e-commerce. The household survey contains questions on ordering goods and services over the internet, and on barriers to internet commerce. The 2008 survey will add a question on cross-border transactions; differentiating between the specific country, the EU and the rest of the world. The enterprise survey contains a module on e-commerce via internet and other computer networks**.** Statistics on sales and purchases via computer networks are available as a percentage of the total purchases or turnover. From 2003 to 2006, sales on the Internet are broken down by destination (specific country, European Union, World). Both surveys will have a special focus on e-commerce in 2009.

2.2.3 Transport

Globalisation of economies is changing the picture of commerce of goods and services, thereby having an important impact on transport, which is a sector of critical importance for the EU. People and goods circulate more and more across the world, in particular between the emerging economies and the developed ones. Naturally this impact is more visible in the 'non-inland' modes of transport (air and sea), which are not restricted by spatial or technical limitations existing in inland modes (road, rail, and inland waterways), and allow easy communication channels with emerging hubs. The increasing importance of the 'open skies' agreements to liberalise air transport between the EU and worldwide partner countries is a good example of this globalisation trend in the transport sector. In the last ten years EU ports have had as partners ports situated virtually in all the countries of the world. Annual extra-EU maritime transport accounts for about 60% of total seaborne transport of goods, in terms of gross weight of goods. Generally speaking, despite globalisation induced developments, transport statistics have maintained their relevance and still describe well the activities in the sector, not calling for any substantial adjustments.

European statistics on maritime and air transport, both formally regulated, are based respectively on port-to-port (port-to- maritime coastal area for extra-EEA countries) and on airport-to-airport data exchanges. Therefore the growing importance of extra-EU emerging hubs (Singapore, Hong-Kong, Shanghai, Seoul, Dubai) or traditional hubs (New York, Chicago, Los Angeles, Tokyo) is automatically taken into account in the data collected from their EU partner ports/airports. The

globalisation of maritime transport industry could be measured e.g. by the daily presence of ships of different nationality in the main ports of the world.

2.2.4 Energy

Sustainability, competitiveness and security of supplies are defined as the three dimensions of the EU energy strategy. The European Union depends heavily on imports of fuels; its energy dependency rate is growing significantly – oil dependency has risen from 76% in 2000 to 82% in 2005, while natural gas dependency has grown from 49% to 58% respectively. This fact combined with recent oil price volatility and disruptions in supply via pipelines of Russian gas have made energy re-emerge as a major pre-occupation of the European Union. Thus, monitoring the imports of the EU by ultimate country of origin is essential.

Energy statistics have been covering this important issue rather well concerning all major fuels – solid fuels, oil and gas. New developments have changed the situation especially regarding natural gas: the liberalisation of the gas market accompanied by the expansion and interconnection of the distribution network, emerging 'spot' markets and a growing churning factor (number of times the gas is re-sold) in the trade of this energy carrier has made it difficult for statisticians to cope with. Although currently only 6% of the natural gas imports into EU27 cannot be attributed to a specific third country, the fact that it has practically doubled within the past five years has raised the concern of energy statisticians. The GETS (Gas and Electricity Trade Statistics) project twins the efforts of energy and trade statisticians of the Member States with the goal of achieving full and correct attribution of imports and exports of natural gas to the ultimate country of origin/destination.

2.2.5 Foreign Direct Investment (FDI)

Complementing the expansion of trade flows and indeed fuelling them, the rapid increase of FDI by MNEs is another important cornerstone of economic globalisation. Analysis of capital flows forms an integral part of several types of analyses relating to e.g. monetary, trade, economic and internal market policies. Hence there are a multitude of users for FDI data. As regards monetary policy and examination of FDI data as a part of balance of payments statistics, the current data corresponds to the needs of the users. Additionally, given that bilateral data on FDI between the Member States is available on an annual basis, sufficient data is available for the analysis of free movement of capital and of the functioning of the internal market.

The breakdown of FDI data by partner country is done on the basis of the immediate counterpart country, irrespective of the final destination or the ultimate origin of the investment. However, due to the complexity of the structures of the MNEs, capital flows can be routed via companies in several countries. Often subsidiaries are created for the express purpose of routing capital between the various parts of the MNE. This kind of units, often called Special Purpose Entities (SPEs), have very little economic activity and hardly any employees in the country of residence. E.g. in 2006 Luxembourg was the third largest investor abroad among the EU countries, and received EUR 20 billion of the EU FDI inflows being second only to the United Kingdom as a recipient of FDI from outside the EU. This is explained to a very large extent by the predominance of SPEs in the Luxembourgish FDI flows. Capital in transit poses a problem for those users who wish to analyse the attractiveness of countries and regions in terms of 'genuine' FDI, or the economic impact of FDI in the recipient and investing countries.

A further aspect which analysts would like to study is the extent to which investments are new 'greenfield' type investments, as their impact on the economy in question can be quite different from mergers and acquisitions (M&As). At present, the breakdown of FDI into M&As and into greenfield investments is not available even though it is a highly demanded breakdown by users.

Another issue of concern for users is the fact that FDI and Foreign Affiliates Statistics (FATS) are difficult to compare. Users often wish to study the economic impact of FDI in the target economy by creating a link between FDI and data on foreign affiliates. However, this comparison is difficult given that some key definitions vary substantially between the two data sets (e.g. FDI takes into account all affiliates with a foreign share of more than 10% while FATS restricts it to 50% or more).

Within the revision process of the international manuals, in particular the OECD "Benchmark Definition of FDI", the analytical needs arising from increased globalisation are being addressed. Firstly, there are methodologies being developed to identify the SPEs and to produce data excluding capital passing through. Secondly, in order to allow for a better analysis of the ultimate FDI investing/receiving countries, the revised version of the OECD Benchmark Definition (4th edition) will include guidelines on how to identify the ultimate investor country on inward investment, and further research is being made on how to best identify the ultimate receiving country on outward investments. With the 4th edition to be adopted in 2008, it is intended to eventually produce data on 'genuine' FDI with a breakdown according to ultimate investor country in the first instance.

Furthermore, a methodology for distinguishing M&As in the FDI data is being developed, and production of FDI data with this further breakdown is foreseen once the implementation of the new manual starts.

2.2.6 Portfolio investment

Monthly portfolio investment is seen as particularly relevant for macro-economic, and more specifically monetary policy analysis. In particular, portfolio investment flows have been identified by the Executive Board of the ECB as a significant factor contributing to the monthly changes in the external counterparts to M3 as a key yardstick for the conduct of monetary policy. Portfolio investment statistics are one of the most challenging fields of economic statistics, and much effort has been devoted to it in the euro area statistical fora.

The compilation of portfolio investment statistics poses a number of challenges to the compilers as a result of factors including the fungibility and active trading of most instruments measured, the size and continuous further international integration of markets, the expansion of securities lending and repo markets, and the proliferation of new forms of trading (e.g. internet). While critical for the relevance of statistics, it is difficult to trace who are the actual holders (their residency and ESA sector) of negotiable instruments through the chain of intermediaries involved. Some examples of the most demanding challenges are:

- correct recording of portfolio liabilities,
- obtaining information on securities held by domestic investors and deposited with foreign custodians,
- reporting by respondents outside the financial sector,
- correct identification of the issuer (vital for a correct euro area/non-euro area split),
- consistency between stock and flow data, and
- need for flexibility to produce new breakdowns.

In order to tackle these challenges, several initiatives are under way. At European level, data are increasingly collected on a security-by-security basis, supported by the ESCB Centralised Securities Database, which will increase the accuracy and consistency of portfolio investment statistics, while reducing the reporting burden. Another important initiative is the IMF's Coordinated Portfolio Investment Survey, which helps to better identify holders of securities worldwide.

2.3 Behaviour and structure of businesses

2.3.1 Foreign Affiliates Statistics (FATS)

Closely related to FDI, FATS can offer key information on the globalisation process, with a particular focus on the internationalisation of businesses. It proves to be useful for many specific policy areas, such as in trade negotiations under General Agreement on Trade in Services (GATS), where commercial presence through affiliates in foreign markets is a key subject.

Inward FATS provides an insight into the role of foreign-controlled enterprises in the economy of the compiling country. Beside indicators aiming at measuring the contribution of foreign-controlled enterprises to the host country's economy, information on the countries where the parent enterprises are resident and which activities attract them is compiled. In addition, inward FATS can answer if the size, performance or productivity of foreign-controlled enterprises is comparable with that of the rest of the economy.

Outward FATS looks at it from the opposite perspective and shows how EU-enterprises 'perform' abroad. Similar to inward FATS, it shows e.g. the volume of jobs and turnover that EU foreign affiliates generate abroad, which economic sectors are most important and which countries are their preferred destinations.

Data which have been made available on a voluntary basis on inward, and even more so, on outward FATS, are not sufficient to answer to the users' needs. Only few Member States report this data (in case of outward FATS only 8 out of 27), and the data reported is often insufficiently detailed and difficult to harmonise. The Commission has therefore proposed a FATS Regulation, which will enter into force in 2007. The Regulation will ensure that in the future harmonised FATS will be available. A FATS Recommendations Manual (published in 2007) will provide guidelines and definitions for national compilers, and play a crucial rule in constructing meaningful EU-wide aggregates.

Since the information requested by users goes beyond the scope of the mandatory data required by the FATS Regulation, pilot studies are already foreseen in the Regulation to assess whether the collection of these data is feasible. Eurostat has launched these pilot studies and co-finances the costs of the Member States.

One question that is addressed in the pilot studies for both inward and outward FATS is the role of foreign-controlled affiliates in delivering/buying goods and services to/from international markets

(exports and imports), and the share of trade between affiliates and their parent enterprises (intra-group trade, this is closely related to the project in FTS but with a different scope). The importance of the size of an enterprise (measured by the number of employees) is another topic in the inward FATS pilot study, as results from the pilot studies have shown that foreign-controlled enterprises are generally much larger than nationally-controlled enterprises. This is especially important since one focus of the EU's enterprise policy are SMEs. Furthermore, the role of foreign-controlled enterprises in the non-traditional business economy sectors like education, and the role of R&D in service activities are piloted for inward FATS as users have reported that they have gained in importance. For outward FATS, for which currently only the number of enterprises, turnover and number of persons employed are foreseen as compulsory variables in the FATS Regulation, additional indicators like personnel costs, value added at factor costs and gross investment in tangible goods are piloted. The information on the variables described above will offer important insights into the ability of EU-businesses to penetrate and establish themselves in foreign markets, which in turn is critical information for the formulation of a number of policies, including trade and enterprise policies.

It should be noted though that it is too early to say whether all the information requested in the context of the regulation can eventually be compiled at the necessary quality levels, and the burden on the compiling institutes as well as on the businesses themselves justified. In this context, it is hoped that the EuroGroups register, once fully operational, will facilitate significantly the compilation of FATS data.

2.3.2 International sourcing

Relocation of European industry has been an important factor influencing the economic development within the EU in recent decades, especially affecting the manufacturing sector, and leading to real concerns among policy makers about a potential process of deindustrialisation in the EU. A more recent trend, further increasing concerns about the future employment opportunities in Europe, is the apparent increase in international sourcing, seeking the provision of services outside the EU. It has received a great deal of political and media attention, mainly based on anecdotal evidence. Although often viewed negatively, one has to acknowledge that international sourcing increases the profitability of EU businesses.

The objective of the international sourcing project is to provide policy makers at National and European level with relevant statistical evidence and information about factors driving international

sourcing of goods and services, e.g. the impact on the competitiveness, motivations and perceived benefits and barriers together with consequences for employment. 14 countries are participating in this ad-hoc survey linked to the Structural Business Statistics framework on a voluntary basis.

The project is expected to establish a coherent set of indicators on international sourcing based on the results of a new survey. The survey focuses on the relocation of domestic (or domestically sourced) production to producers located abroad as the result of a decision taken by a resident producer to reduce or stop production (or sourcing) of goods or services domestically. This includes both core and support business functions of the enterprise.

2.3.3 Research and innovation

In the context of the revised Lisbon Strategy, The Science, Technology and Innovation Statistics measure knowledge creation, knowledge flows, knowledge transmission and knowledge output. One of the main sources of information in that context is the Community Innovation Survey (CIS), which helps in measuring the competitiveness and innovative capacity of European firms.

At present, however, more work needs to be done to draw up more sophisticated CIS indicators for measuring innovation activities, and to develop policy relevant and internationally comparable indicators, addressing the need for collaboration between statistics and policy development in the area of innovation. Understanding the links between innovation performance and policies is becoming more critical as R&D and innovation globalise, and capturing 'national' benefits from innovation efforts becomes a challenge. The need for indicators has been commanding substantial efforts in data collection and interpretation in recent years. The nature of innovative activity is constantly changing, increasing the difficulty to base policies on meaningful and reliable indicators.

The recently released CIS 4 data enables studying innovation drivers and company behaviour towards innovation. Analyses of these data populate the European Innovation Scoreboard 2006, but may still offer much greater scope for analysis and exploitation. The next CIS (2008) will create new opportunities and a major challenge for the design of the CIS core questionnaire. This is due to the need to fully implement the recommendation of the third Oslo Manual on organisational innovation, marketing innovation and knowledge linkages while at the same time maintaining continuity with the preceding surveys.

3. Key findings and conclusions

3.1 Challenges related to measuring cross-border transactions

Apart from the specific issues in the individual statistical domains, what are the general lessons to be learnt from the discussion in section 2.2? What are the recurring issues across all the concerned domains?

The challenges linked to the measurement of cross-border transactions in the framework of globalisation comprise methodological, hands-on data compilation issues as well as the absence of some key data that is not yet compiled:

- Firstly, there are new types of transactions (e.g. e-commerce, ICT-based transaction) – as well as transactions that always existed but have gained in importance due to globalisation – that are difficult to capture with traditional compilation approaches which in turn may lead to significant statistical biases. Many of these transactions are located in the field of trade, but they do occur also in other areas. FDI through M&As, for example, had always existed, but it was only with globalisation and the pressure on corporations to rapidly expand their business operations that it started to interest policy makers. However, conventional FDI statistics are not able to present them as a separate item under the heading FDI.

- Secondly, the valuation of transactions becomes increasingly difficult. Again this is a problem most prominent in the area of trade statistics, but other areas are also affected by it. The reasons for this problem are manifold. One important factor is related to difficulties in measuring transactions within MNEs (e.g. transfer pricing or FDI via SPEs), in particular as regards intra-group trade. These transactions are seldom priced according to arm's-length market terms. Very often the prices for intra-group transactions are subject to transfer pricing whereby MNEs adjust their global profit accounting in a way that is minimising the tax burden for the entire corporation. While this phenomenon is not new, globalisation has accelerated its proliferation due to global spread of corporate networks – and with it intra-group trade – and the increasing possibility to take advantage of favourable tax regimes abroad. Often the problem is that the adequate measurement of these transactions hinges upon information that is only available within the company in question and not accessible to compilers of statistics. The valuation problematics are, however, not confined only to transfer pricing. The emergence of a new breed of trade and capital finance instruments over the recent years (derivatives, etc.) often leaves data compilers wondering about the

appropriate valuation method (e.g. book value versus market price). The issue of processing trade also fits in this context, as these transactions artificially inflate trade volumes biasing the statistics. A similar effect occurs in the FDI area due to SPEs and FDI flows which are channelled through them. They, too, inflate the respective statistics and tend to mislead uninformed users about the real economic activities behind these flows. Sometimes the problems are also due to methodological issues. To some extent, this latter brand of measurement problems bridges the gap to another set of challenges of measuring transactions which is related to methodological issues, as they partially result from methodological and definitional problems (definition of SPEs, etc.).

- In some areas the classic delineations between the types of transactions are no longer as clear-cut as they used to be. It, for instance, becomes increasingly difficult to assign certain products to the goods or service category. Likewise, the traditional dichotomy between short-term, speculative portfolio investment and long-term strategically oriented FDI is becoming increasingly blurred. Hence, it is increasingly difficult for compilers to adequately classify cross-border transactions with the help of the classic categorisation of transactions. In many areas, new or updated classifications might be needed to alleviate this problem.

- Finally, in some areas additional data is needed to further the understanding of emerging globalisation trends (in the form of additional variables, or breakdowns such as the distinction of greenfield and M&A-induced FDI); however, this problem seems to be somewhat less important than the other afore-mentioned areas.

3.2 Challenges related to measuring the structure and behaviour of businesses

As with cross-border transactions there is also in this area a list of common challenges. These are:

- Exchanging information on MNEs between different authorities at national level is not yet possible in a number of countries. The issue should be solved between the national authorities to avoid duplication and to secure consistency of different national data. MNEs by definition operate across borders and information on them is collected by various NSIs simultaneously. National legislation, however, in many countries forbids the exchange of information on a specific company with counterparts in other MS or an EU institution; as a result the risk of double-counting/under-reporting is elevated when it comes to aggregating the data to EU-level.

- Assigning MNEs operating in a multitude of locations with a complex ownership structure to one particular country has become more difficult. The determination of the controlling country of an MNE is of crucial importance for the harmonised statistical classification of information on the parent company and its constituent units, as well as for transactions emanating from them. What is the rightful controlling country of a globally operating MNE: Is it the location from where the top management devises the overall strategic decisions for the group, the head office? Or the country where the Ultimate Controlling Institutional unit (UCI) of the MNE is officially registered; in case of a natural person, the country where the majority owner resides? In the past, for most MNEs these different places were one and the same. Today, this is still true for a good part of MNEs, but it is obvious that their share has considerably decreased. Having said that, the key issue is to harmonise the currently different national practices. To achieve this, all compilers in all Member States should agree to use the harmonised information in the EuroGroups register.

- Creating the EuroGroups register does not suffice alone, actions should be started in the ESS to develop data collection methods for the groups. In order to fully exploit the register, European statistics will have to take a new perspective; it will become important to set up specific Community surveys on enterprise groups. To highlight new and emerging needs of Community statistics, specific Community surveys might be conducted on an ad hoc basis using the idea of European sampling.

- Another promising route to be explored is increasing the usage of the available balance sheet and consolidated accounts data. These are available also at international level from private providers, and they have been used on a test basis for the EuroGroups register. Certain key data, for instance for employment and turnover, are available in both consolidated and un-consolidated form for the units belonging to the MNEs. A further requirement is to produce business demography data on MNEs from the EuroGroups register, to monitor their growth, concentration and de-concentration on the global market and to know the share of the EU in that development.

3.3 Overarching challenges

One clear message emanating from this analysis is that the data from the different statistical fields does not lend itself easily for cross-comparisons. This is true for practically all statistical domains mentioned in this paper, be it trade/FDI, FDI/FATS, R&D/FATS and so on. Unfortunately, as economic globalisation continues to intensify, such comparisons are more and more needed to

better understand the effects of globalisation, since economic globalisation is not just confined to an increase in cross-border activities. It also entails that different types of transactions are increasingly linked with each other. The proliferation of worldwide FDI, for instance, has immediate consequences for global trade flows, given the increasing importance of intra-group trade. In the European context this means that the investment decisions of EU-businesses substantially impact trade flows from, within and to the EU. The same could be said for R&D, FATS, etc. While in individual areas, e.g. as with trade in goods and business registers, there have been already significant efforts to bridge methodological and technical differences with related statistical domains, what, on an ESS level, is yet waiting to be tackled is a comprehensive strategic approach aiming at harmonising all the herein mentioned domains with each other. A first step would be to reach an agreement within the ESS on which domains experience the most critical methodological and other technical differences, and define a timetable for resolving those issues to the extent possible. Work on defining priority areas and target sets of indicators for each area as well as harmonising definitions is planned to be undertaken in the framework of the Modernisation of European Enterprise and Trade Statistics (MEETS) programme.

The second issue spanning across all individual domains is the difficulties in compiling the transactions and structure of MNEs that are increasingly difficult to assign to one particular compiling country. The latter depend increasingly on the cooperation of other national compilers to ascertain important information on MNEs and their transactions. This bilateral cooperation is, however, severely limited by national legislations preventing information exchanges on a larger scale. It is vital that the ESS continues to look for ways out of this dilemma. There are several options available, including a reconsideration of the national legal frameworks and/or the concentration of data collection on MNEs and their transactions into one system. MEETS contains also actions to develop more efficient data collection methods for MNEs.

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