Poster Session #2

Time: Thursday, August 9, 2012 PM

## Paper Prepared for the 32nd General Conference of The International Association for Research in Income and Wealth

## **Boston, USA, August 5-11, 2012**

## **How to Capture Multinationals in National Accounts**

Monica Nelson Edberg

For additional information please contact:

Name: Monica Nelson Edberg Affiliation: Statistics Sweden

Email Address: monica.nelsonedberg@scb.se

This paper is posted on the following website: http://www.iariw.org

## **PAPER** IARIW 2012

Paper Prepared for the 32st General Conference of The International Association for Research in Income and Wealth Boston, USA, August 5-11, 2012

# How to Capture Multinationals in National Accounts

For additional information please contact:

Monica Nelson Edberg

Statistics Sweden Karlavägen 100 Box 24300 10451 Stockholm, Sweden firstname.lastname@scb.se

#### **Abstract**

The structure in the Swedish economy is time-glass-shaped, i.e. many large companies and many small companies. This medium size companies are few due to historical reasons. The sensitivity in the economy increases as the large companies usually works on an international basis, with a minor part of the business based in Sweden.

For National Accounts, it is of outmost importance to know the largest companies very well, not only the Swedish part of the company but also the international part of business. Therefore, a special unit for the 50 largest companies has been established at Statistics Sweden for some years.

Since 2011, the unit for larger companies has started to work in closer cooperation with National Accounts. Special areas will be studies to have a better understanding for what data that is of high importance to national accounts. The goal is that all-important data/events for these companies will be available before calculation begins. This paper will report for the ongoing work in this area and show some methods planned for special areas.



#### Introduction

Sweden has many very large multinational enterprises and many small enterprises, while there are fewer medium size companies. This structure is a challenge for national accounts, as the multinational companies must be thoroughly watched, as their influence on the Swedish economy is very high. An organizational change in one of the multinational enterprises may cause significant changes in national accounts. Therefore, it is essential to know the behavior of multinationals to secure quality of national accounts calculations.

Statistics Sweden has introduced a unit for Large Enterprises. Their responsibility is to watch the 50 largest multinational companies on a daily basis. The unit analyzes all data that are collected. Information in media and otherwise are presented in a newly developed IT-solution. There is also an archive of past news for each company. During the last years, employees from the unit are working closely together with national accountants during the calculations periods. This cooperation has been very successful.

Based on the conclusions from an IARIW paper from 2012 "Global manufacturing in Sweden 1995-2008" written by Göran Svensson this paper discuss different approaches to be able to develop this cooperation further with the aim to understand the behavior of multinationals. With a better understanding, national accountants will be better prepared to meet the challenged coming of multinationals deciding to move production or change strategies over time.

Göran Svensson's paper concluded that:

- 1. Statistics Sweden shall have close contact with the large enterprises to be able to understand global transactions and changes in corporate behavior.
- 2. Large corporation's data must be translated into the SNA context, which is not compatible with ordinary business accounting.
- 3. A unit for Large Enterprises can be a way forward.
- 4. Measurement of merchanting is needed for both income and cost.
- 5. Transfer price adjustments are difficult and should be avoided if possible.
- 6. Changed behavior among large enterprises must be watched, as it has an impact on GDP/GNI-calculations.
- 7. Some information may not be available in the country of production and must be searched elsewere.
- 8. Productivity is not possible to measure if merchanting is excluded
- 9. For small countries large companies can have a big impact and the issue of "secret data" can cause problems.

This paper will discuss point 1), 3), 6) and 7).

#### Role of the unit for Large Enterprises

Statistics Sweden has a process based organization were collection of data is performed by the collection department. Data transfers to the department of economic statistics for data processing. Finally, data transfers to the department for national accounts. To be able to understand, and analyze, data thoroughly it is important that national accountants have a very good cooperation with both

statisticians in primary statistics as well as the collection unit for Large Enterprises.

The unit for Large Enterprises was created with the aim to analyze data from the 50 largest enterprises and have regular meeting with these enterprises. A special focus has been set on the largest, and most complex, companies, with a big impact on national accounts. The employees at the unit of Large Entreprises gather all data and information regarding the enterprise and try to find the most precise data. Several contacts and visits to the companies are an essential way to understand and interpret ate the data.

Until now, focus has been set on data collected by Statistics Sweden and within the national borders of Sweden. During the last years, it has been clear that this is not enough to be able to understand the behavior of these enterprises. Even though contact with the Swedish parts of the enterprise may be very good, it is essential to know what is going on in the units outside Sweden. It has been an important aim that the unit of large enterprises must have a better understanding for the TOTAL enterprises business, both in Sweden and abroad.

From the point of view of national accounts, it would be beneficial if the unit has a better understanding of how larger strategic changes in the enterprises might affect national accounts. A closer cooperation between national accounts and the unit for Large Enterprises is planned. A more structured way of information on news from the largest companies has been put in place.

Picture 1. Summary of the weekly newsletter from the unit of Large Enterprises regarding business news.

DFO/SF - Samordning och stora företag  Nyhetsbibliotek - Veckosammanfattning		
Ändra mina aviseringsinställningar	Y	
Rubrik	Ändrad Ändrad av	

<u>Volvo minskar biltillverkningen</u>		2012-06- 26 15:20	Broberg Monica DFO/SF-S	Nytt!
Rubrik	Volvo minskar biltillverkningen			
Brödtext	Volvo Personvagnar har efter en kraftigt minskad försäljning under maj månad beslutat att dra ner på tillverkningen under juli och augusti. Antalet tillverkade bilar kommer att minskas med 3600. Det görs genom att man drar in sju arbetsskift.			

PeOrgNr	16556074-3089			
Företagsnamn	VOLVO PERSONVAGNAR AKTIEBOLAG			
NgS	29101			
FENr	175943			
Koncern	Shanghai Geely Zhaoyuan International Investment			
Nyckelord	Sysselsättning/löner; Produktion/intäkter/leveranser			
Ansvarig	Broberg Monica DFO/SF-S			
Referensperiod	2012; 2012 q3			
Publicerad	2012-06-26			
SKF ser en något s	svagare volymut	2012-06- 27 09:50	Kurt Edmund DFO/SF-Ö	Nytt!
Rubrik	SKF ser en något svagare volymutveckling under det andra kvartalet 2012			
Brödtext	Med anledning av en svagare utveckling i Väst Europa och Asien förväntar sig SKF en något svagare efterfrågan på sina produkter och tjänster under andra kvartalet i år, jämfört med motsvarande kvartal föregående år. Efterfrågan förväntas hamna på samma nivå som första kvartalet i år. Tillverkningsnivån justeras därför i enlighet med detta för att motsvara efterfrågan.  Nedgången för SKF speglar den bild som resen av tillverkningsindustrin ger.  Länk till nyheten			
PeOrgNr	16556240-8301			
Företagsnamn	SKF SVERIGE AKTIEBOLAG			
NgS	28150			
FENr	594945			

Koncern	SKF, AB
Nyckelord	Produktion/intäkter/leveranser
Ansvarig	Kurt Edmund DFO/SF-Ö
Referensperiod	2013; 2012
Publicerad	2012-06-27

The role of the unit for Large Enterprises is to:

- Watch the most important enterprises on a daily basis.
- Make a news archive to be able to follow development over time.
- Perform comparisons of data collected from different sources to be able to make quality judgments of primary data, primarily for annual data.
- Develop methods for mapping the enterprises (see below), to be able to understand the behavior within the enterprise.
- The map of the enterprise will then perform be a base for further analysis of the flows of goods and services including merchanting.
- Forming networks for coordination with statistical offices in other countries regarding "missing figures" for the company, if possible.

As the mapping process is implemented further areas for analysis may be developed, i e the search for primary data adapted to the demands and definitions of national accounts.

#### Mapping as a method for analysis of multinationals

The introduction of the unit for Large Enterprises has been successful. The challenge is now to develop cooperation between this unit, economic statistics, and national accounts. Understanding of the company's behavior and these implications at national accounts and other statistical areas is essential to be able to improve statistics.

To be able to compare data from different sources a suitable IT-tool has been developed, called GÖSTA. By using this tool, it is possible to compare data from different surveys to be able to find the most appropriate data. During the last years, this work has made it possible to measure the quality of different data sources, especially for the annual accounts.



This method is not applicable for quarterly accounts, as data are scarce on a quarterly basis. The most essential information for the quarterly accounts is whether there has been any significant changes of any kind within any of the large companies. This can be changes in new orders, production breaks, and cutdowns in labor force or strategic decisions such as movement of R&D abroad. This information is essential to be able to interpret the indicator data set for the quarterly accounts.

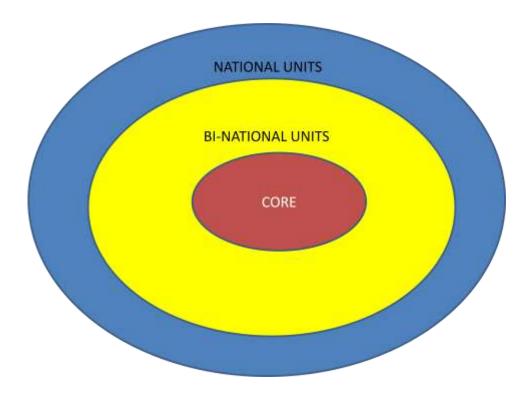
#### Mapping methodology

To be able to meet the requirement made for the quarterly accounts, development of the largest enterprises has to be closely watched. One method for this is to map the companies' och follows them at a closer level. This method is described below.

#### 1. Mapping of the enterprise units

To map the company a simple sketch is drawn based on the data of the annual report. This should then be adapted to the special needs that come from the users, i.e. national accounts. Each part of the company should be analyzed from a input-output perspective. All interrelations between different parts of the company should be drawn; this may be both real and financial relations. An example is shown below:

Picture 2: Mapping plan



The **National units** are the parts of the company that is situated in only one country and has a simple structure, with few contacts abroad.



The **Bi-national units** are the units of the companies that either are situated in several countries or have a many contacts with units in other countries, i e back-office units or service units.

The **Core unit** of the company is usually the Head-office and units for research and development or treasuries with many contacts with the within the whole enterprise.

#### 2. Mapping of flows

After having mapped the enterprise, further analysis is needed for flows of goods and services in-between the units. These flows are of highest importance in the bi-lateral part of the company.

Country A

Country B

Country C

Country C

Picture 3: Mapping of flows

#### 3. Measurement of flows

Measurement of flows within the enterprise can be difficult, especially if these flows are complex. Examples of this are merchanting or transfer prices that might be difficult to measure.

Usually larger companies do not pay attention to what country they are have production in, but use a organizational approach. Therefore, it might be necessary to educate the enterprise of the statistical importance of these data.

A special survey might be a useful start but the most efficient way to attract data would be to form a direct contact with the company, were real accounting data from the company could be used. This requires a very good knowledge of the enterprise and the statistical office must be a trustworthy part of cooperation.



4. Analysis of present strategy for the company

The core of the map represents the strategic approach of the enterprise. This should be followed closely, as strategic decisions might change the company structure completely. Areas of interest here are investment decisions, placement of new units, merger, and acquisitions strategy and financial decisions.

To analysis this behavior is an proactive approach that make us able to detect large changes at an early stage and be able to understand their impact on national accounts in advance.

#### Networks between statistical agencies

Mapping as a method is useful but need a lot of information. The enterprise has all information from its business records, but this must be adapted to statistical definitions. For very large multinational enterprises, it might be useful to form networks inbetween the statistical agencies to be able to compare and share data for these companies. On example of this is the European Group Register (EGR) that is developed by Euro stat. This register contains the largest business groups in Europe.

For small countries, there might be other enterprises, outside the EGR, that needs this kind of analysis as they have an important role for a special country. Networks among statistical agencies in several countries can be of use to have a better understanding of the flows within these enterprises.

#### Conclusions and future challenges

Introducing a unit for large enterprises is a successful way to follow the largest enterprises more thoroughly and form an information base of them. Comparison of data is an important task for this unit but it is even more essential to be able to understand the behavior of these enterprises and give important input to economic statistics and national accounts.

The Mapping approach is a method that may be developed aspart of a process for better understanding. This method has several steps.

The first step is to draw a map of the whole enterprise and all units and make a classification in national, bi-national or core units.

The second step is to define the relations between these units and find the flows of goods, services or financial flows.

In the third step methods for measurement of these flows must be defined, i e for merchanting etc

The fourth step might also be very important as it represents the strategy of the enterprise. Big strategic changes might affect national accounts considerably and needs to be watched.



## Future challenges;

Forming a unit for Large Enterprises and introducing a method of mapping for these enterprises are the first steps for capturing the role of the multinationals in national accounts. Further work needs to be done, such as;

- Develop methods for withdrawal of data with SNA-definition directly from the company-level.
- Develop more suitable methods for merchanting and transfer prices, and be able to explain their details for users.
- Find ways for forming networks and cooperate in-between statistical agencies, and keep data secure.
- Understand financial behavior of larger enterprises and its impact on national accounts.