Staff Memo

Merchanting and multinational enterprises – important explanations for Sweden's current account surplus

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In a staff memo, Riksbank staff can publish slightly longer advanced analyses of relevant issues. It is a publication produced by staff and is free from policy conclusions and individual standpoints on current policy issues. Staff memos are approved by the relevant Head of Department.

This staff memo has been produced by staff at the Statistics Division in the Monetary Policy Department of Sveriges Riksbank. The Riksbank is responsible for Sweden's balance of payments statistics. Staff at the Statistics Division have been tasked with analysing and interpreting the development of the economic activity that forms the basis of the statistics and with communicating the analysis to users. The aim of this staff memo is to contribute information that can provide guidance to statistics users when analysing the balance of payments statistics.

Summary

Sweden's current account balance has been positive for a long time. An important explanation for this is the revenue from so-called "merchanting", which now makes up 1.8 per cent of GDP or almost 40 per cent of the current account surplus.

Merchanting is the trade margin that arises between the purchase price and the sale price when Swedish companies buy and resell goods abroad, without the goods crossing the Swedish border. In Sweden, merchanting has become increasingly important as multinational enterprises have moved their production abroad but retained their headquarters, research and development and other key functions and assets in Sweden.

Merchanting is recorded in the statistics as part of goods exports despite it differing from what we normally associate with the export and import of goods. For example, the goods are not manufactured in Sweden and the transactions that give rise to merchanting often occur within multinational enterprises. Merchanting's special properties not only affect the interpretation of Sweden's current account surplus but also other economic indicators such as GDP and productivity.

We draw the conclusion that Swedish net exports are currently made up of goods that have been produced abroad. This means that Sweden's positive net exports are, to a certain extent, due to the competitiveness in the foreign operations of multinational corporations rather than the competitive conditions for domestic industry. This can mean, for instance, that the current account surplus is relatively insensitive to fluctuations in the Swedish krona exchange rate. Instead, receipts from merchanting and a positive current account balance are the result of competitive advantages that incentivise multinational enterprises to retain their headquarters and other key functions in Sweden. Consequently, Sweden's current account surplus is sensitive to reorganisations and changes in the conditions for large multinational enterprises.

Merchanting can be difficult to interpret as it has properties that bear resemblance to goods, services and income. It is therefore important that statistics producers are transparent about the data collected and the type of economic activity that underpins the figures so that users can make a correct interpretation of the statistics.

Merchanting and multinational enterprises – important explanations for Sweden's current account surplus

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Over the last 20 years, Sweden has had a current account surplus, but the factors generating the surplus have changed over time. Merchanting, which is part of goods exports, is an example of an item in the current account that has increased in significance as a result of greater globalisation and new corporate business models. Merchanting is not just on the increase in Sweden but also in other countries. In an international comparison of merchanting as a share of GDP, Sweden came sixth, after Hong Kong, Panama, Luxembourg, Switzerland and Ireland. This makes merchanting in Sweden particularly interesting to study.

Merchanting is the trade margin that arises between the purchase price and the sale price when Swedish companies buy goods and resell them abroad, without the goods crossing the Swedish border. Merchanting differs therefore from what we normally associate with the export and import of goods, for example in that the goods are not produced in Sweden and the cross-border transactions often occur within multinational enterprises. The merchanting phenomenon is therefore of significance for how we should interpret the Swedish current account surplus and ultimately for the relationship between the current account and other economic indicators.

In this article, we explain the concept of merchanting and why the phenomenon occurs in Sweden. We show that it is not obvious how merchanting is to be recorded in the statistics and analyse how its occurrence affects GDP, productivity growth and the relationship between the current account and the exchange rate.

Globalisation and statistics

Globalisation and technological developments have created new opportunities for companies to organise their operations. They can choose to produce goods in countries where costs are comparatively low or where they have easier access to new markets. They can also choose to structure their operations so that invoicing and liquidity management take place in the country that is most suitable and so that profits are distributed within the group and tax is paid in the country that offers the most favourable terms. Laws, regulations and customs tariffs can restrict their options but it is quite clear that globalisation has created new opportunities for companies to search for more efficient processes regarding their trade in goods and services and their financial transactions.

Globalisation is particularly apparent in the balance of payments statistics, which measure a country's total real and financial transactions with the rest of the world. As far as Sweden is

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concerned, we can see how exports and imports of goods and services are increasing, as are Swedish direct investment abroad and the proportion of companies in Sweden under foreign ownership. The measurement principles for both the balance of payments statistics and the National Accounts are, however, based on national borders, while companies can have operations all over the world. This means that the data we study do not necessarily describe the economic activity that actually takes place inside the country, as national measurements are also affected by the global activities of companies. Merchanting is just one of several examples of this.

Merchanting and the current account

The balance of payments is divided into the current account, the capital account and the financial account. The current account shows a country's real flows with the rest of the world and presents the balance of exports minus imports. The trade margin that is recorded as merchanting is included in the trade in goods, but only occurs in the statistics on the export side in the country where the merchanting company is resident.

In this article, we study the current account based on the real activity, i.e. exports and imports, and discuss what drives the development based on the underlying components of the current account. The current account can also be defined as the difference between a country's savings and investment. The current account (and the capital account[2]) is, in this context, seen as a country's financial surplus or deficit in relation to the rest of the world and can be explained by the development of financial savings in various sectors, e.g. companies, households and the public sector.[3]

Change in the current account components

The current account balance is often interpreted as the difference between exports and imports of goods and services, and a current account surplus as a country exporting more goods and services than it imports. Sweden's current account does consist largely of foreign trade in goods and services, but a change has occurred in its components over the last ten years, see Figure 1. The changes in the underlying components in the current account surplus provide important information to be able to interpret the current account and its significance for the Swedish economy.

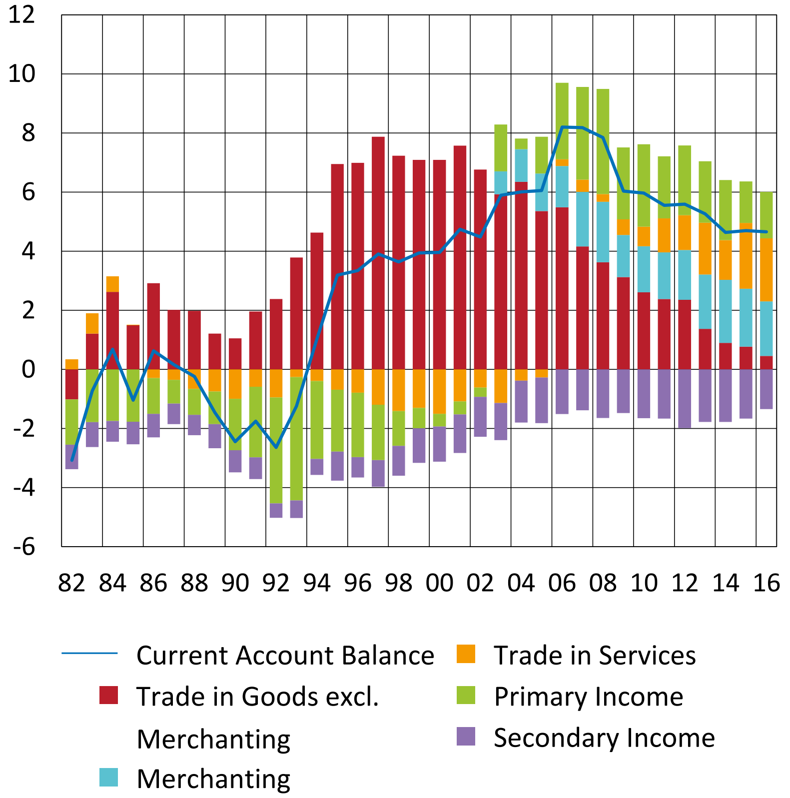
Foreign trade in goods has previously been responsible for a large share of the Swedish current account surplus but the contribution of trade in goods to the surplus has declined over the past ten years. The current account surplus comprised 4.7 per cent of GDP in 2016 while net trade in goods, adjusted for merchanting, only comprised 0.5 per cent of GDP. It has been possible to separate goods sold under merchanting from trade in goods since 2003 and it has quadrupled since then. In 2016, merchanting contributed SEK 81 billion, which represents 1.8 per cent of GDP. From 2003 to 2008, merchanting increased more rapidly than both goods and services exports, but in connection with the reduction in global trade in goods during the financial crisis, merchanting revenue to Sweden also decreased. This suggests that merchanting is influenced by the economic situation and international demand.[4]

The reduced net exports of goods have also been partly replaced by services exports as industrial companies have gone from exporting goods to also exporting services associated with them. In terms of gross trade, i.e. total exports and imports, the trade in goods is still more than twice the size of the trade in services. The trade in services is becoming increasingly significant, however, as changes occur in the Swedish manufacturing sector. Net exports of services now comprises 2.1 per cent of GDP. Between 2003 and 2016, primary

[2] As the capital account in Sweden is normally very small, it is often ignored for simplification purposes.
[3] Through the system of national accounts, the current account can be derived from the difference between a country's savings and investment. For such a derivation, see, for instance, the Swedish Ministry of Finance (2015).
[4] After the financial crisis, however, the value of merchanting (not as share of GDP), has shown steady positive growth while net exports of goods (excluding merchanting) have exhibited a downward trend.

income, most of which is made up of investment income, increased and amounted to 1.6 per cent of GDP in 2016, see Figure 1.[5]

Figure 1. Components of the current account
Per cent of GDP



Source: Balance of Payments Statistics and the National Accounts, Statistics Sweden and the Riksbank.

Note: In the current account, which is part of the balance of payments, exports and imports of goods and services are recorded, along with primary and secondary income. Primary income consists of compensation of employees and investment income on financial assets and liabilities abroad, while secondary income consists of transfers without anything of economic value supplied in return, for example contribution to the EU budget and development aid. The figure shows net exports and imports per year.

The current account and multinational enterprises
One explanation for the fact that traditional goods exports have decreased while merchanting has grown over the past 10-15 years is that Swedish companies have moved production to subsidiaries abroad. Investment income is also affected to a large extent by dividends from multinational enterprises to and from other countries. International trade in services also contains intra-group services and intra-group merchanting but these are not separately identified in current statistics, see below. Further investigation is therefore needed to understand the extent of these. Multinational enterprises therefore contribute to Sweden's current account surplus in the form not only of merchanting, but also of trade in services and dividends from foreign subsidiaries. We therefore draw the conclusion that an ever-increasing share of Sweden's current account surplus is made up of multinational companies' production and sales abroad.

What is merchanting?

Merchanting arises when companies buy (import) goods from abroad and resell (export) them abroad without the goods crossing the borders of the country where the company is resident. The goods are not modified, but are resold in the same condition as they were

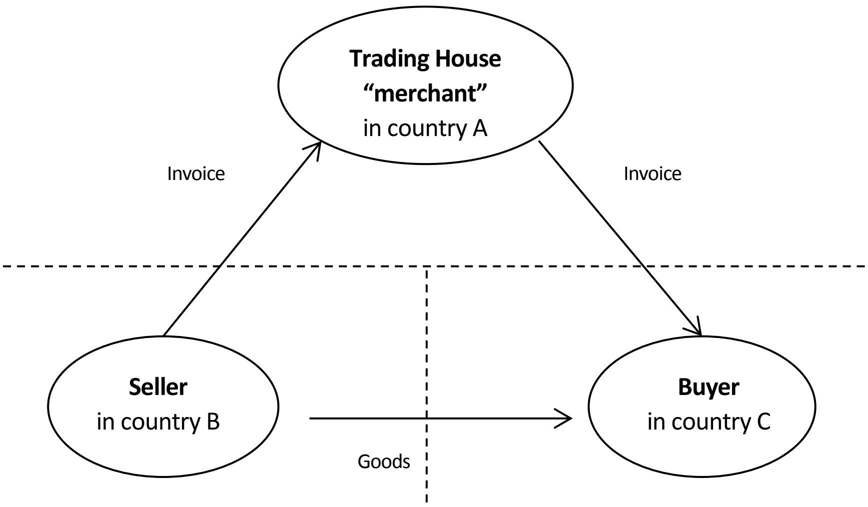
[5] Primary income consists of compensation of employees and investment income on financial assets and liabilities abroad. Investment income consists in turn of income on direct investment, dividends and interest on portfolio investment as well as interest on loans.

purchased (IMF, 2009).[6] Merchanting is calculated as a trade margin, i.e. the difference between the purchase price and the sale price. The statistics only show this trade margin and not the gross value of the merchanting transactions. Merchanting generates revenue and contributes to the country's current account as it is recorded in the statistics as part of trade in goods. This type of reselling of goods abroad can take place in different forms (United Nations, 2011).

Traditional merchanting

Traditionally, merchanting occurred in the statistics when so-called "merchants" or trading houses bought, for example, commodities from a foreign company and resold them to companies in other countries. The goods were transported from the seller to the buyer in the different countries without entering the country where the trading house was resident. This type of traditional merchanting still exists and is common among Swiss companies, for example. This is recorded in the statistics as ordinary foreign trade in goods in the countries between which the goods are physically transported, i.e. as goods exports in Country B and as goods imports in Country C, see Figure 2. The trade margin is, however, entered as merchanting in the merchant's country.

Figure 2. Traditional merchanting

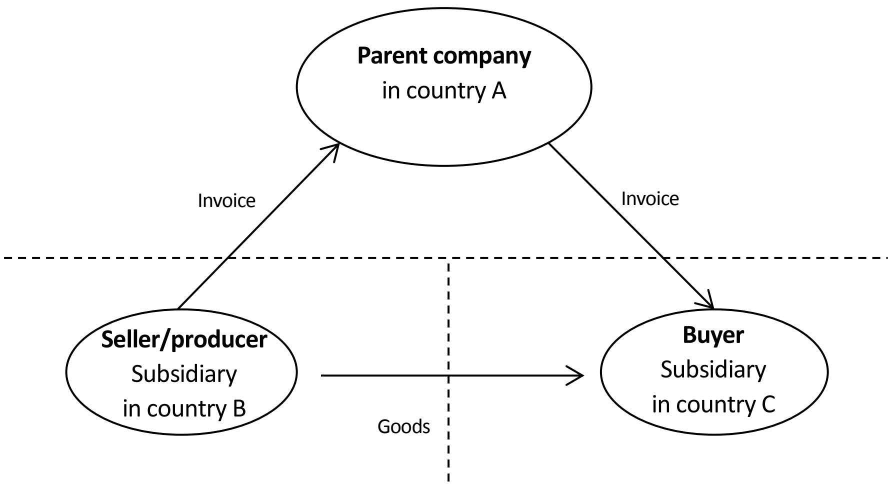


Intra-group merchanting

Another form of merchanting takes place when companies locate production in foreign subsidiaries. It is common for the goods to be exported directly from a foreign manufacturing company to a foreign sales company within the same corporate group.[7] If the invoicing for the purchase and resale of the goods is handled centrally by the parent company, so-called "intra-group" merchanting is generated in the parent company's country of residence, see Figure 3. Intra-group merchanting is recorded in the same way as traditional merchanting in the balance of payments statistics, but differs in that the prices are not market prices but so-called transfer prices. Transfer pricing gives companies some latitude for determining prices which in turn affects the extent of the merchanting.

[6] Apart from packaging and the like. Some processing of goods may occur in the statistics, however, due to difficulties in separating these from pure merchanting.
[7] Companies also locate production in companies that are independent from the group.

Figure 3. Intra-group merchanting



Merchanting in Sweden

Intra-group merchanting is the dominant form of merchanting in Sweden and originates from companies' trade in goods between subsidiaries abroad. The merchanting that can be seen in the Swedish statistics is therefore a direct effect of globalisation and the fact that the Swedish business sector consists of many multinational enterprises.

Specific to Sweden is the high concentration of companies that generate merchanting. Ten or so large multinational enterprises are responsible for almost 90 per cent of the trade margin that is recorded as merchanting in the statistics. These merchanting companies have certain common traits in their corporate structures, which explains why Sweden has such large revenues from merchanting.

Production abroad, but key functions in Sweden

One common characteristic of these large Swedish companies is that they have located parts of or their entire production to other countries, either in manufacturing companies within the group or in independent companies. They have sales in both Sweden and abroad, in many cases via their own subsidiaries. Because large parts of both manufacturing and sales take place in other countries, they also have the majority of their employees abroad. On the other hand, they have retained key functions, assets and risks in Sweden. Virtually all the large merchanting companies have their headquarters in Sweden, despite some of them being foreign-owned. Key functions located in Sweden include group management, finance and marketing. This also means that the group's risk-taking, e.g. funding risks and risks associated with investment, is placed in the Swedish companies. Most of them also conduct research and development (R&D) in Sweden as well as product development and design, albeit to a varying extent. Research and product development have generated large intangible assets that are owned in Sweden.

Companies that generate merchanting extract high margins on intra-group merchanting transactions. The margin amounts to an average of 25 per cent of the purchasing costs. Some companies have margins of over 100 per cent, however.

In accordance with new OECD guidelines for transfer pricing, companies in each country shall record revenue that corresponds to the value created in each country respectively (OECD/G20, 2015). The merchanting revenues reported by companies in Sweden can thus be compensation for the value of the group management and for the research, product development and marketing that take place in Sweden and underpin the goods that are eventually manufactured.[8] The high trade margins collected by Swedish companies in the form of merchanting revenue suggest that they consider them as valuable in their operations and assets in Sweden. It is common, however, for foreign manufacturing and sales companies to be compensated at a standard rate and for the company that owns the intellectual property rights, in this case the Swedish company, to be accredited the residual revenue. From an economic perspective, it is therefore difficult to say for certain where in the world the revenue of multinational enterprises is generated.

Merchanting depends on favourable conditions for large companies

It is thus the corporate structures of companies, i.e. their location of key functions, assets and risks, that determine how transfer pricing is set and where merchanting revenue is generated. The companies' choice of corporate structure is in turn affected by, for example, taxation rules and other business climate aspects. It is thus the competitive conditions that incentivise companies to retain central functions in Sweden that are important for Sweden's current account.

Historically, Sweden has had favourable conditions for large companies. For a long time, we have had beneficial regulations regarding holding companies, double taxation agreements with other countries, tax relief on loans and the right to deduct capital losses from tax, as well as relatively low corporate tax. [9] It is therefore possible that companies choose to build their corporate structures so that the revenue from foreign operations occurs in Sweden. It can also be noted that other countries with a high degree of merchanting, see Figure 4, are countries that are associated with favourable taxation framework conditions.

The high concentration of companies that contribute to merchanting means that the current account is sensitive to changes in these companies. At present, corporate groups are often organised so that the subsidiaries only provide services to the Swedish parent company. If multinationals choose to change the role of their subsidiaries, however, by moving functions, assets and risks to the subsidiaries, they can start to trade with each other. In this scenario, no merchanting revenue would be generated in Sweden. As long as the companies choose to keep the parent company in Sweden, however, revenue from abroad can come back to the parent company in the form of profit dividend from the subsidiary. The dividend, which is part of the investment income, continues to contribute to the current account balance but would probably constitute a different amount, since merchanting is an untaxed revenue while dividend has already been taxed in the country where the subsidiary is resident. The current account surplus would probably decline if companies chose to replace merchanting revenue with dividends from subsidiaries. If just a few large multinational enterprises move key assets or functions abroad, it would probably cause a sharp reduction in merchanting revenue and have a major impact on the current account otherwise.

We do not, however, see any tendency on the part of companies to start moving central functions abroad. Until now, major Swedish companies have retained their headquarters in Sweden, along with some production and key assets, which generate merchanting revenue. Even companies that were originally Swedish but have become foreign-owned continue to generate merchanting revenue to Sweden as they still have R&D operations in the country. Revenue from merchanting has therefore been consistent and has varied between 1.5 and just over 2 per cent of GDP during a ten-year period.

Moving assets, functions or indeed the entire headquarters of a company is associated with major costs. But a less favourable business climate could nevertheless incentivise a company to take such measures. For example, the decision to locate functions that generate merchanting revenue in Sweden could be influenced by changed tax regulations. In recent years, OECD and G20 countries have joined forces to develop guidelines on transfer pricing and to renew international taxation standards (OECD/G20, 2015). [10] Member countries are

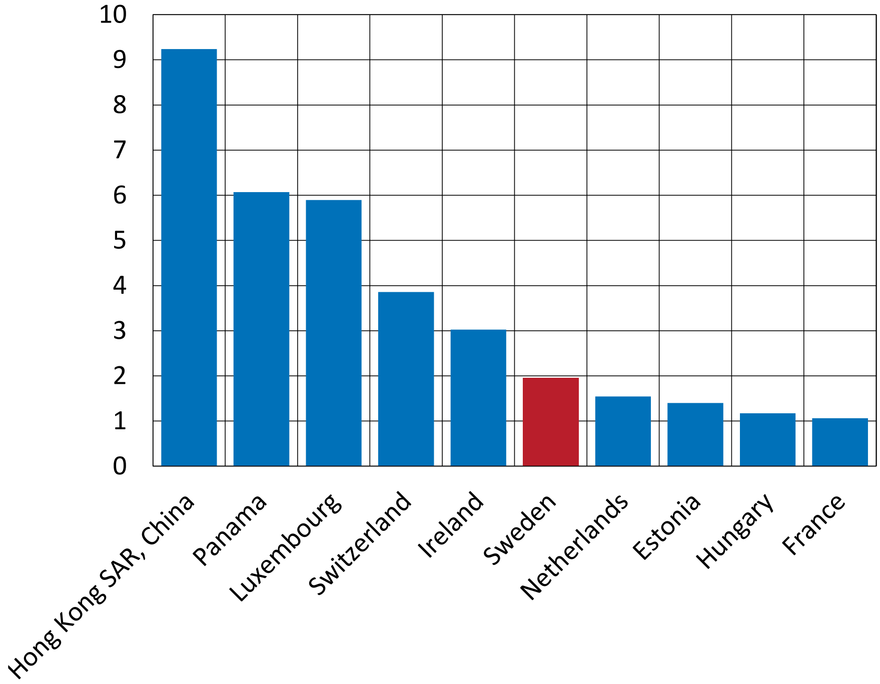
[8] A few companies have their headquarters abroad but conduct R&D in Sweden and merchanting revenue in these companies can therefore be interpreted as repayment for R&D.

[9] Since 2013, there have been limitations on the amount of tax relief on loans (see Swedish Tax Agency, 2017).

[10] Cooperation takes place within the so-called "BEPS Project" (Base Erosion and Profit Shifting), the aim of which is to prevent tax bases from being undermined and stop profits being transferred between countries as part of aggressive tax planning schemes.

expected to incorporate the new proposals in their national legislation. If this has an impact on the options of large companies to move revenue, costs or profits to other countries, intra-group transactions in the balance of payments statistics will be affected. Time will tell whether this will have consequences for Sweden’s current account surplus.

Figure 4. Countries with the largest share of merchanting in 2015
Per cent of GDP



Source: IMF and World Bank

A comparison: merchanting in Switzerland[1]

As in Sweden, merchanting in Switzerland has become increasing significant for the country's current account surplus. Receipts from merchanting has doubled over the past ten years and amounted to almost 4 per cent of GDP in 2015, see Figure 4. The large impact of merchanting on Swiss goods exports means that the country's authorities are finding it more relevant to discuss goods exports excluding merchanting in certain contexts.

Unlike Sweden, where merchanting companies consist of multinational enterprises, Swiss merchanting companies are largely traditional trading houses. The phenomenon has a long tradition in Switzerland and the merchanting companies that are based here are largely active in the commodities sector. They buy primarily energy commodities, such as oil, natural gas and coal, as well as metals on the world market and resell them abroad, without the goods ever crossing Swiss borders. In recent years, several new actors in these branches have become established in Switzerland. Despite these companies trading for large sums of money, they usually have few employees in Switzerland and invest most of the revenue abroad to develop their operations. This contributes to a difference between savings and investment, i.e. a current account balance, that is independent of the domestic economy (Beusch et al, 2015).

Many Swiss merchanting companies are not listed on the stock exchange and they do not issue public annual reports, which also makes them relatively unknown. The dominant Swedish merchanting companies, on the other hand, are well-known Swedish companies that have been in Sweden for a long time and gradually built up their operations with production, research and development, which has led to a corporate structure that generates large merchanting revenue for Sweden.

The demand for Swiss merchanting goods is not affected by domestic demand, nor by the exchange rate for the Swiss franc. Trading is largely in foreign currency, and primarily driven by demand from abroad for raw materials, and linked to this, the price of the commodities, which is determined by the international commodity market. This is very different from the Swedish merchanting trade, where trading is within the group and prices are determined internally.

Merchanting varies among different countries and sectors and it can therefore be difficult to compare merchanting and its impact on different national economies, as the corporate structures of the companies generating merchanting are different in different countries. Merchanting in Switzerland and Sweden are two clear examples of this.

[1] This section is mainly based on Swiss National Bank (2011) Swiss National Bank (2015), and State Secretariat of Economic Affairs (2015).

Merchanting – goods, services or income?

Merchanting was previously considered to be a service export but is now classified as goods export. This reclassification shows that it is not entirely clear how merchanting should be recorded in the statistics. This is due to merchanting having properties that bear resemblance to a service, a good and investment income from abroad. Prior to future updates of international statistics manuals, it may be worth discussing alternative ways of recording different types of merchanting transactions.

Merchanting of goods could be a service

Until 2014, merchanting was recorded in the statistics as part of foreign trade in services. This is because it was considered as intermediation of goods. In accordance with international statistics standards, merchanting was then reclassified to be part of trade in goods.[11] In the statistics, merchanting has therefore gone from being equated with a service to being equated with trade in goods. Merchanting differs from other goods exports, however, mainly because the goods are produced abroad.

As regards traditional merchanting, some service production does take place in the merchanting country in that a company intermediates goods from one country to another. Today, these companies also offer financing and insurance services linked to merchanting. One can therefore ask the question whether traditional merchanting should nevertheless be equated with a form of intermediation service.

[11] The adjustment was made to improve consistency between countries as goods that generate merchanting revenue will be reported as goods in all countries, and not as services in the mechant's country and as goods in the countries between which the goods are exported and imported.

Merchanting of services exists, but is invisible

Services can also be traded in the same way as companies buy and then export goods abroad (United Nations, 2011). An example of this is a parent company in Sweden that buys telephone switchboard services from a supplier in another country and then resells the same services to a subsidiary abroad. This represents a form of merchanting of services that differs from normal trade in services in that the service is performed abroad and consumption largely takes place within the group.

There is reason to believe that the intra-group merchanting of services also takes place in Swedish companies, but this is not recorded separately in the statistics in accordance with international manuals. Only the merchanting of goods is recorded in the statistics. Any merchanting of services is currently recorded as ordinary imports and exports even if the service is resold directly. Exports and imports of services therefore risk being "inflated" in that they include intra-group merchanting services that should instead be registered as a trade margin to the Swedish parent company in the same way as the merchanting of goods.[12] Separate reporting of the merchanting of services would therefore be desirable as the reasoning below on the interpretation of the current account surplus also applies to the merchanting of services.

Merchanting can be perceived as income from abroad

Today, merchanting is part of foreign trade in goods and is thereby included in GDP. As merchanting in Sweden largely takes place as a result of companies' production and sales in foreign subsidiaries, this form of merchanting resembles profit generated in their operations abroad. From this perspective, it would be better to treat merchanting as a form of primary income, i.e. as part of income from abroad rather than earnings from domestic production. Primary income is included in the gross national income (GNI) but not in the gross domestic product (GDP).

Because merchanting is reported separately, the user of the statistics can choose how it is to be treated in analyses and calculations. This choice can have consequences for the interpretation of economic variables and relationships.

Merchanting and the Swedish economy

We have seen that the operations of multinational enterprises make it difficult to measure the production taking place and what revenue is generated within a particular country's borders. This means that traditional interpretations of the current account, and also of the National Accounts, may need to be reconsidered. Moreover, Aydjiev, McCauley and Shin (2016) and Central Statistics Office Ireland (2016) point out that new forms of indicators, which are not based on national borders, are needed to measure economic activity. In this section, we describe how merchanting affects the interpretation of GDP, productivity and the relationship between the current account and the exchange rate.

Merchanting and GDP

In the National Accounts, merchanting revenue is interpreted as a compensation for research and development and thus corresponds to economic activity that has occurred in Sweden (United Nations, 2015 and Statistics Sweden, 2005). During the period 1994-2015, the contribution from merchanting to Swedish GDP growth was on average 0.2 percentage points a year. However, this contribution has varied between a positive contribution of around 0.35 percentage points in 2004 and 2013 to a negative contribution of -0.5 percentage points in 2009, see Figure 5.

However, GDP growth can be tangibly affected if companies choose to move key functions and assets to or from the country. For instance, Ireland's GDP growth in 2015 was measured as 26 per cent after foreign companies had relocated their balance sheets there.

[12] It is the gross figures for trade in services that risk being inflated as a result of merchanting transactions being recorded as ordinary service imports and exports. The net contribution of trade in services to the current account surplus is unaffected, however.

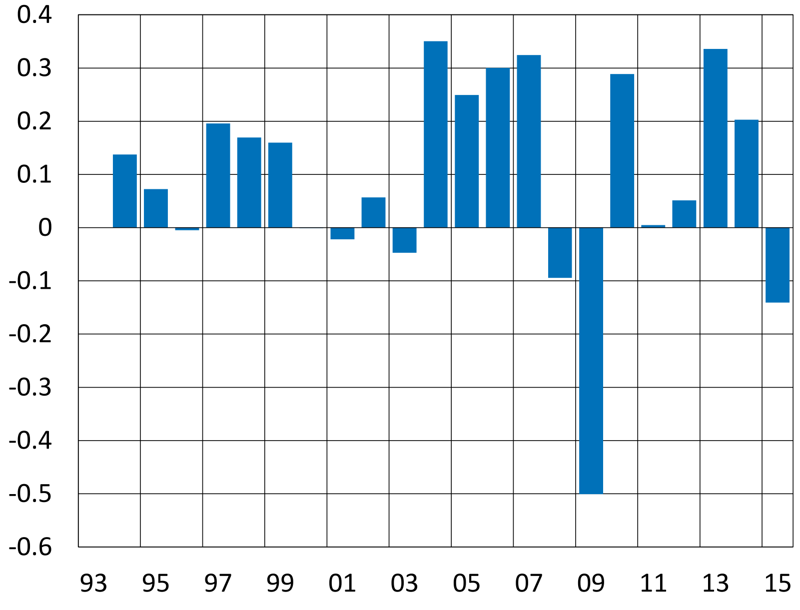
An expert group has therefore recommended the Irish statistics authority to produce alternative indicators of domestic production that are less sensitive to the multinational enterprises' activities (Central Statistics Office Ireland, 2016). It cannot be ruled out that a relocation of multinational enterprises' assets may have a substantial impact on GDP in Sweden.

The fact that merchanting is included in GDP means that it also affects productivity growth when measured as production per number of hours worked. However, merchanting revenue can be dependent on whether the companies' intellectual property rights, for instance patents and trademarks, are registered in Sweden. Intellectual property rights can be regarded as a form of capital that generates substantial revenue in Sweden, which, in the statistics, leads to a high recorded level of productivity. However, there is not always a direct link between merchanting revenue and the number of hours worked in Sweden.

Firstly, the intellectual property rights may arise through researchers in Sweden having worked on developing a patent. Revenue in the form of merchanting based on these patents may be generated much later. This means that productivity will be underestimated and overestimated in different time-periods. However, this is not unique to merchanting, but can also occur due to normal exports that are based on valuable intangible assets.

Secondly, revenue from merchanting may arise through a division of labour that entails the capital being held in Sweden while the work required to create the final product is done abroad. The revenue generated from the capital in Sweden is thus dependent on the labour input in the production abroad. When multinational enterprises locate value-generating assets in Sweden, it can thus lead to the traditional measure of productivity overestimating the productivity of employees in Sweden.

Figure 5. Merchanting, contribution to GDP growth.
Per cent of GDP



Source: National Accounts, Statistics Sweden

Current account and exchange rate

A common perception is that there is a relationship between a country's current account and its real exchange rate. A traditional point of view is that the real exchange rate is an important competitive factor to generate trade in goods and thereby a current account surplus. A weaker real exchange rate is assumed to lead to higher exports and a stronger current account surplus, while the reverse applies when the real exchange rate is strengthened.

In a globalised world, however, this relationship does not necessarily exist. We have seen above that Sweden's current account surplus largely arises from merchanting and investment income from foreign subsidiaries. This revenue is thus due to the competitiveness of the Swedish companies' foreign production rather than to competitive terms for domestic production. This means that at least parts of the current account are relatively insensitive to fluctuations in the real krona exchange rate.

Later economic theories focus on the current account as a change in net claims on the rest of the world (see, for instance, Obstfeld and Rogoff, 1996). According to these theories, both the current account and the real exchange rate are determined by underlying macroeconomic variables, such as demography and productivity growth. Even later theories focus instead on the exchange rate as a mechanism that facilitates adjustment of the country's net external asset position towards long-term equilibrium (Gourinchas and Rey, 2007).[13]

However, this does not exclude a short-term relationship between the exchange rate and the capital flows that correspond to the current account (see, for instance, Gyntelberg, Loretan and Subhanij, 2012). For example, foreign buyers of Swedish goods need Swedish krona to pay for them. Increased exports can thereby lead to increased demand for the Swedish krona, which in turn increases the price of the Swedish krona.

In a globalised world, however, this short-term relationship between the current account and the exchange rate does not necessarily exist either. Firstly, the balance of payments measures transactions and not payments, as the name perhaps suggests. This means that the transactions that form the basis for the balance of payments can take place at a different point in time than the actual payments. Secondly, it is not certain that a payment from the foreign company to the Swedish company has a link to the Swedish krona. Pricing in many markets is in foreign currency. This means that Swedish companies with production and sales abroad can face both purchasing prices and sales prices in foreign currency. For instance, a company that purchases goods abroad and sells them on unchanged receives revenue in the form of merchanting in foreign currency. The foreign currency can be used in other parts of the group, for instance to pay for investments abroad. Today's liquidity management systems allow foreign currency to be managed centrally from Sweden via foreign currency accounts in Swedish banks. It is only when the company has costs in Swedish krona, for instance relating to the operations of its headquarters, that it needs to exchange the foreign currency for Swedish krona. Thus, it is not certain that a stronger current account gives rise to greater demand for the Swedish krona and thereby to a stronger krona exchange rate.

Conclusions

We have shown that Sweden's current account surplus is no longer due to the traditional trade in goods. Instead, it is merchanting that explains almost all of the contribution made by the trade in goods to the surplus. This means that Swedish net exports are largely made up of goods that have been produced abroad by multinational enterprises.

A further factor that explains the current account surplus is investment income from the companies' foreign subsidiaries, as well as intra-group trade in services, which has only been mentioned briefly in this article. This means that Sweden's current account surplus is largely driven by the multinational enterprises' production and sales abroad. This can mean, for instance, that the current account surplus is relatively insensitive to fluctuations in the Swedish krona exchange rate.

It is instead the competitive advantages that make multinational enterprises retain their headquarters and other key functions and assets in Sweden which lead to revenue in the form of merchanting and investment income. It means therefore that Sweden's current account surplus is sensitive to reorganisations and changes in the conditions for large multinational enterprises. An interesting area for future studies is to investigate how multinational enterprises affect Sweden's total current account.

[13] The net external asset position is the net of a country's total assets and liabilities in relation to other countries.

Merchanting is one example of globalisation having clear consequences for producers of statistics, who then face a challenge with regard to their collection methods, and for users of statistics who may need to reconsider their interpretations of common macroeconomic indicators and relationships. Statistics producers thus need to be more transparent when reporting the various sub-items to statistical aggregates. Users of statistics may need to be more observant of new interpretations of the statistics.

Sources

Aydjiev, Stefan, McCauley, Robert N. and Shin, Hyun Song. 2016. Breaking free of the triple coincidence in international finance. *Economic Policy* Vol. 31 Number 87 pp.409-451.

Beusch, Elisabeth, Döbeli, Barbara, Fischer, Andreas M. and Yesin, Pinar. 2013. Merchanting and current account balances. *The World Economy*.

Central Statistics Office Ireland. 2016. *Report of the Economic Statistics Review Group*.

Swedish Ministry of Finance 2015. Bytesbalans och finansiellt sparande [Current account balance and financial saving] *Report from the Economic Affairs Department at the Ministry of Finance.*

Jordan, Thomas. 2013. Reconciling Switzerland's minimum exchange rate and current account surplus. *BIS Central Bankers' speeches.*

Gourinchas, Pierre-Olivier and Rey, Héléne. 2007. International Financial Adjustment. *Journal of Political Economy,* vol. 115, no. 4.

Gustavsson, Kurt and Forss, Lars. 2006. Merchanting – a growing item in services exports. *Sveriges Riksbank Economic Review*, 2006:3, Sveriges Riksbank.

Gyntelberg, Jacob, Loretan, Mico and Subhanij, Tientip. 2012. Private Information, Capital flows and Exchange rates. *IMF working paper* 12/2013.

Federal Department of Foreign Affairs, Federal Department of Finance, Federal Department of Economic Affairs, Education and Research. 2013. *Report of the interdepartmental platform on commodities to the Federal Council*.

Economic Council of Swedish Industry. 2016. *Industrins förutsättningar - i tider av lågräntemiljö, globalisering och digitalisering [The conditions for Swedish industry - in times of low interest rates, globalisation and digitisation].*

International Monetary Fund. 2009. *Balance of Payments and International Investment Position Manual (BPM6).*

Obstfeld, Maurice and Rogoff, Kenneth. 1996. *Foundations of international macroeconomics* (Vol. 30). Cambridge, MA: MIT Press.

OECD/G20. 2015. Measuring and monitoring BEPS Final report, *Base Erosion and Profit Shifting Project.*

Swedish Tax Agency 2017. *Skatteplanering med ränteavdrag i företagssektorn [Tax avoidance with tax relief on interestexpenditure in the corporate sector]. Uppföljning av tillämpningen av 2013 års regler samt externa lån [Follow-up of the application of the new regulations in 2013 and external loans]. Memorandum 12 January 2016.* http://www.skatteverket.se/download/18.3810a01c150939e893f1befb/1452584548532/R%C3%A4nteutredningen20160112.pdf. (Retrieved 30 March 2017)

State secretariat for economic affairs. 2015. *Gross domestic product in the 2nd quarter 2015.* https://www.seco.admin.ch/seco/en/home/seco/nsb-news.msg-id-58483.html
(Retrieved 3 April 2017)

Swiss National Bank.2011. Swiss Balance of Payments 2011, *SNB Publication.*

Swiss National Bank. 2015. Swiss Balance of Payments and International Investment Position 2015, vol. 2, *SNB Publication*.

United Nations. 2015. *Guide to measuring Global Production*, United Nations Economic Commission for Europe.

United Nations. 2011. *Guide on the Impact of Globalisation on National Accounts*. United Nations Economic Commission for Europe.

Öhrn, Nina. 2010. Huvudkontorens lokalisering i Sveriges 500 största företag år 2010 [Location of headquarters of Sweden's 500 largest companies, 2010], *IFN Policy Paper* no. 39.

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