Economic Commentaries



The European **Commission notes** in a report published in February 2012 that the private sector in Sweden. that is, households and corporations, has a high level of indebtedness. In this **Economic Commentary** we analyse more closely Swedish corporations' liabilities, which comprise the major share of private sector debt. Our analysis shows that loans from inter-group companies abroad have grown rapidly and contribute substantially to the high level of debt among Swedish companies. However, these inter-group loans should not be assessed in the same way as, for instance, bank loans, as the relationship between lender and borrower is entirely different with these loans. Tax planning provides one contribution to the high level of indebtedness among Swedish corporations in a European perspective. At the same time, we show that the Swedish corporations' level of indebtedness has fallen during the first decade of the 2000s, which would seem to contradict the claim that corporate debt levels are a problem.

Tax planning may have contributed to high indebtedness among Swedish companies

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The European Commission has identified in a survey of potential imbalances within the EU a number of European countries that are assessed as having excessive leverage. One of these countries is Sweden, which is alleged to have a high burden of debt in the private sector, which could make the economy vulnerable and entail risks to growth and financial stability. The Commission uses private sector debt as a percentage of GDP as an indicator of potential imbalances. However, this measure can to some extent exaggerate the risks as far as Sweden is concerned. This is because loans in the same corporate group, which are included in the European Commission's measures, comprise a large part of the total debt in the Swedish corporate sector. In this commentary we show that group loans should not be assessed in the same way as, for instance, loans from credit institutions, as the relationship between the lender and the borrower are different for these loans and they are often motivated by an endeavour to keep taxes as low as possible. We also discuss why non-financial companies' debts have increased substantially over the past 15 years. Our conclusion is that the adjustment to the tax regulations may have contributed to Swedish companies having a relatively high level of indebtedness, seen from a European perspective. Moreover, we show that the Swedish companies' level of indebtedness, in terms of debts in relation to equity, have fallen during the first decade of the 2000s, which would contradict the claim that company debt levels are a problem.

The private sector's debt ratio in Sweden is among the highest in the EU

During the spring, the European Commission published a report containing a survey of areas with potential imbalances among EU member states¹. The size of the debts in the private sector was one of the areas examined by the Commission. The report is the first step in an annual procedure to identify and rectify imbalances among member states at an early stage. The Commission points to areas where a more in-depth analysis is required. Only after this type of analysis has been made can the Commission issue policy recommendations to rectify problems in cases where imbalances are assessed to be profound and persistent.

With regard to indebtedness in a country's private sector, the European Commission has set an indicative threshold of 160 per cent for private sector debt as a percentage of the country's GDP. This indicative threshold has been determined on the basis of the upper quartile in the statistical breakdown of historical values for the debt ratios in the EU member states during the period 1995-2007. If the debt ratio in a country's private sector exceeds the indicative threshold, the country shall be subjected to an in-depth analysis.

The Commission defines the private sector as *non-financial corporations*, *households* and *non-profit institutions serving households*. The non-financial corporations include both private and public sector companies, as well as domestic and foreign-owned companies with activities in the country.

^{1.} European Commission, Alert Mechanism Report, 14 February 2012.



The private sector debt ratio is thus expressed as a percentage of the country's GDP and is a stock variable that consists of the total of all outstanding loans and outstanding securities liabilities (other than shares) held by non-financial corporations and households. The definition of liabilities does not include trade credits or the item known as "other liabilities". The data are reported by the respective country's financial accounts, which are part of the national accounts reporting system.

The Commission's measure refers to the *non-consolidated liabilities* in the respective sectors. This means that the debt measure includes the total of all individual companies' and households' loan liabilities, regardless of where the loans have been taken. This means that it includes not only loans from banks, securities markets or lenders in other sectors; loans from lenders in the same sector are also included in this concept. As we will show further on in this commentary, loans in the same sector have great significance for non-financial corporations, as lending within groups is very common. However, this does not apply to the household sector, as loans between households rarely occur and are not included in the statistics.

Figure 1 shows that the private sector debt ratio in Sweden is one of the highest in Europe. The private sector's non-consolidated gross debt amounted to 237 per cent of GDP in 2010. This puts Sweden in sixth place within the EU and is far above the indicative threshold of 160 per cent of GDP. It is primarily the non-financial companies that account for the large burden of debt, while household debt is not as large in a European comparison. Swedish household debt is nevertheless above the average relative to the other countries in Europe. What this entails for the Swedish economy has been analysed in various contexts, by the Riksbank among others.² We will therefore now focus mainly on corporate debt levels.

Measures of debt should be consolidated within each sector

The main advantage of the debt measure used by the European Commission is that it is based on comparable data that are available to all European countries. This enables an easy comparison of the EU countries' debt levels.

However, there is a substantial disadvantage with the European Commission's debt measure, and this disadvantage becomes clear with regard to inter-company loans. If a company takes out a bank loan and then lends this money to, for instance, its own subsidiary in the same country, these loans are included in both stages and thus taken up twice in the debt measure. However, if the subsidiary itself chooses to take out a corresponding bank loan, this loan is only counted once. The debt level in the corporate sector is thus lower according to this measure, despite the debt level actually remaining the same. The debt measure used by the Commission thus gives an exaggerated picture of the level of debt in the private sector in countries where intercompany loans within the country are common.

In an alternative measure that the Commission has also chosen to report, the debts between companies in the same country have been disregarded. This debt measure, the *private sector's consolidated gross debt*, shows the non-financial corporations' and households' loan liabilities towards other sectors in the same country and abroad.

However, this consolidated debt measure is not used for all countries within the EU and not is it clear how the consolidated statistics should be defined. Moreover, it is difficult to produce reliable and complete data sources for this measure, which means that different countries have chosen different methods and applications to produce the consolidated value of the gross debt in the private sector.

Despite the fact that there are problems in comparing the data from different European countries, consolidated debt is nevertheless a better measure for analysing the debt level in a particular sector. We therefore base our analysis of indebtedness in the Swedish private section on consolidated data. This consolidation means that we include as non-financial corporations' liabilities all the liabilities the companies have to other sectors, that is, the public sector, financial institutions, households and abroad. Liabilities in their own sector are thus not included. As liabilities abroad are included in

^{2.} The Riksbank's inquiry into risks in the Swedish housing market. Sveriges Riksbank, April 2011.



this concept of liabilities, we also include here loans from foreign companies within the same corporate group, that is, group loans from abroad. This is necessary to gain an overall picture of the domestic corporate sector's loan funding.³

The consolidated debt ratio is also high in Sweden

A consolidation of debts between non-financial corporations means that the Swedish private sector's total debt ratio falls from 237 to 221 per cent for 2010. Following the consolidation, corporate sector debt amounts to 139 per cent of GDP instead of 155 per cent. Household sector debt, which primarily comprises mortgages, is not affected by this, however, and still amounts to 82 per cent of GDP.

Table 1 shows that corporate debt mainly consists of ordinary loans and to a lesser extent securities loans. Inter-company loans within corporate groups (from parts of the group abroad) are common in Sweden, and account for almost one third of the corporate sector's consolidated debt.

The total debts for households and non-financial corporations in Sweden have increased rapidly as a percentage of GDP from the mid-1990s (see Figure 2). From 2005 the debt ratio has been higher than the Commission's indicative threshold of 160 per cent. However, the increase has slowed down and over the past three years the non-financial corporations' debt has declined slightly, while household debt has remained constant.

Inter-company loans have increased very substantially

As shown in Figure 2, corporate sector loans as a percentage of GDP (the blue field) have shown only a modest increase. Between 1995 and 2011 the increase was from 67.6 per cent to 72.2 per cent. This includes loans corporations have taken with financial institutions (banks and so on) abroad and in Sweden. Loans from Swedish banks are predominant.

Securities funding (the yellow field), which accounts for a small percentage of the corporations' total funding, has increased during the same period from 3.8 to 16.3 per cent of GDP. This covers funding through bonds and certificates, issued both in Sweden and abroad, and it is primarily large companies that have had the opportunity to obtain funding in this way. This only includes issues by the Swedish company and not issues made by, for example, foreign subsidiaries.

The part of the corporate sector debt that has increased most is group loans from abroad (the grey field). During the comparison period they have increased from 4.1 per cent of GDP to 46.8 per cent. This strikingly rapid increase means that foreign group companies are now funding more than one third of the Swedish non-financial corporations' debt.

A comparison of a sample of countries with comparable statistics also shows that Sweden is one of the countries in Europe with the largest loan liabilities within corporate groups to other countries in relation to GDP (see Figure 3).

So what lies behind this rapid increase and the high level of group loans from abroad in Sweden?

Foreign direct investment in Sweden an important explanation for the increase in debt

One important factor behind the growing group loan liabilities is that Sweden has had a rapid increase in foreign direct investment over the past 20 years. Direct investment, as measured in the balance of payments statistics, arises when a company buys or in some other way invests in a company abroad. A few years after Sweden abolished its currency regulation in 1989, foreign investment in Sweden accelerated, mainly

^{3.} A similar measure of debt - consolidated gross debt - is applied in the EU Stability and Growth Pact to measure public sector debt.



because an increasing number of Swedish companies were bought up by foreign investors. The stock of foreign direct investment assets thus increased substantially, which is shown in Figure 4.

A common form of foreign acquisition of Swedish companies has been for the foreign investor to establish a holding company in Sweden. The holding company has a relatively small equity capital, but at the same time has a very large loan from the foreign parent company. With the aid of this loan, the holding company can in turn acquire the Swedish company.

In Figure 5 the foreign group loans are divided into loan liabilities in foreign direct investment in Sweden and loan liabilities in Swedish direct investment abroad. The figure shows that around two thirds of the group loan liabilities abroad are to companies abroad who own the Swedish borrower. These loan liabilities have increased at a relatively substantial rate in recent years. Growing foreign investment in Sweden is thus the most important reason for the increase in Swedish corporations' debt in the form of group loans.

Positive net saving and lower debt/equity ratios in Swedish companies

Analysing the indebtedness of the Swedish corporate sector is a complex process. However, it does not appear as though Swedish companies have needed to take on larger liabilities in recent years because their operations have not generated sufficient profits. The corporate sector's financial saving (total income minus total expenditure) has been largely positive for the past ten years.

A common measure of companies' debt levels is the company's debt/equity ratio. This is a key ratio that shows how large the company's debts are in relation to its equity capital and it states the company's financial strength. Figure 6 shows that indebtedness in the Swedish corporate sector has fallen from 2.2 in the year 2000 to 1.7 in the year 2010, when measured in this way. The debt/equity ratio thus shows the opposite development to the development of corporate sector gross debt, which indicates that neither the level of nor developments in corporate sector gross debt appear to cause the companies any problems.

Company taxation and beneficial tax deduction opportunities may contribute to the high level of indebtedness

There may be several motives for foreign owners to draw up their ownership of Swedish companies so that their assets are held in the form of interest-bearing loans to a holding company in Sweden and not in the form of directly-owned shares in the Swedish subsidiary.

One probable motive is Sweden's relatively high company taxation in relation to other EU and OECD countries. This, together with the opportunities for tax deduction for interest and double taxation agreements with several countries make it more beneficial to hold assets in Sweden in the form of interest-bearing loans to wholly-owned holding companies. The reason is that the owner determines the interest cost of these loans and can thus affect, within certain limits, the size of the profits that can be recorded for taxation in Sweden.

An overview of the interest expenditure shows that foreign-owned subsidiaries in Sweden pay an interest rate of on average one percentage point higher on their loans from foreign parent companies than the interest rate they receive on their loans to foreign owners (see Figure 7).

The level of the interest in corporate groups flowing abroad is thus systematically higher than the interest flowing into Sweden from abroad. This is in line with our conclusion that foreign owners may choose for tax purposes to hold their assets in the form of interest-bearing loans, which means that the level of the group loans from abroad is high.



There is research pointing to differences in corporate tax rates to explain why and how multinational groups choose to divide loans between the group's different subsidiaries in different countries.⁴ In addition, the Swedish regulations on tax deductions for interest paid on loans makes it beneficial to report interest expenditure in Sweden, as the costs are tax deductible. Interest payments abroad have also increased substantially during the 2000s.

Access to foreign capital market important to Swedish companies

However, there are several factors that can explain developments. Figure 5 shows that group liabilities to other countries have increased, even in companies which invest directly in subsidiaries abroad (the red field). These cases concern Swedish companies, for instance, multinational groups, which then take out loans with foreign companies within the group.

Here there may also be tax motives behind the increase in debt. For example, companies use relatively aggressive tax planning to reduce or entirely avoid taxation in Sweden, which has been much debated in spring 2012. The debate concerns a large number of Swedish corporate groups with subsidiaries abroad, that is, companies with direct investment that is largely outward. By having extensive borrowing from their foreign subsidiaries, these companies can control the level of interest paid abroad and thereby also the level of profit reported in the Swedish company. This tax planning may thus have contributed to debts for outward direct investment having increased as shown in the red field in Figure 5.

There are also other possible explanations for this. Corporate groups with subsidiaries in several countries often use a central account to manage cash flows for the whole group. In the cases where such central accounts are held in Sweden, a debt arises to foreign subsidiaries when the group brings home liquidity to the Swedish operations. This process contributes to increasing the loan debt to the group companies abroad.

Another explanation for the growing foreign debt in the form of group loans is that some companies use their own foreign funding companies to issue securities on the international capital market. When the foreign funding company lends the funds it receives in issues to group companies in Sweden, the group debt to companies abroad also increases.

At present it is not possible to divide up group loan debts abroad on the basis of the purpose of the loan, as the available statistics do not show this.

How should intra-group loans be regarded from an imbalance perspective?

The scope of the lending within a corporate group mainly reflects how one tries to provide the companies within the group with loans and actually says nothing about the loan debts the group has in relation to other lenders. Inter-company loans within the same country thus have limited interest from the perspective of systemic risk or monetary policy.

When the analysis concerns the companies' funding, however, data on intra-group loans from other countries provide valuable information. The companies operating in Sweden are funded from abroad to a much greater degree than is shown in the statistics if we do not include inter-group loans. This means, for instance, that these companies are not affected as much by possible credit restrictions on the national market as companies dependent on loans from Swedish banks.

But by including intra-group loans from abroad in the definition of the debt measure, one also risks exaggerating a country's burden of debt. An economy that is more open and integrated with the international capital markets, and where it is common to have

^{4.} Ramb, Fred, Taxes and the Financial Structure of German Inward FDI, CESifo GmbH, CESifo Working Paper Series: CESifo Working Paper No. 1355, 2004.

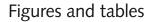


cross-border corporate ownership, may with this measure be allocated a larger debt ratio than a more closed economy. As we have illustrated by our earlier arguments, intra-group loans may arise as a result of several different activities related to liquidity management and funding and which can be managed on a global financial market, but these activities do not necessarily mean that the group has any problems with imbalances. It is common that companies both lend to and borrow from subsidiaries within their own group. When analysing corporations' indebtedness it may therefore be justified to regard the net result of group loans to and from other countries.

What conclusions can then be drawn with regard to the measure for corporations' debts as described above? A first conclusion is that the European Commission's measure with non-consolidated data gives an exaggerated picture of the level of the debts. We have therefore described in this commentary a consolidated debt definition, a measure which eliminated debt positions among units within the corporate sector in Sweden. We consider that this definition of the debts can also give an exaggerated picture of corporations' burden of debt. The level of intra-group loans from abroad is a consequence of how the group chooses to manage its funding and liquidity, which can over-inflate the gross debt. Instead, we need a statistic that for each group is based on the net result of intra-group loans to and from other countries. This type of statistic, which does not yet exist, would better illustrate the Swedish companies' dependence on funding abroad.

Intra-group loans should not be assessed in the same way as other credit market instruments (such as loans with credit institutions and interest-bearing securities) as the relationship between lender and borrower is different with these loans and their purpose can be to re-allocate tax expenditure within the group.

This means that one would obtain a fairer picture of the state of the Swedish nonfinancial sector with the aid of a different type of statistic than the traditional one used by the European Commission. The multinational corporations' global operations mean that group statistics are needed to be able to analyse their liabilities, assets and risks. The Bank for International Settlements has data on consolidated banking groups, their balance sheets and their exposures to various countries and sectors. This type of international group statistic that is used in the financial sector could also serve as an example for the non-financial corporate sector, and could contribute to a better analysis of systemic risk and the development of debt.



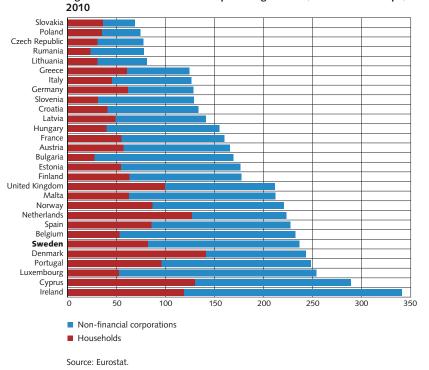


Figure 1. Private sector debt as a percentage of GDP, countries in Europe,

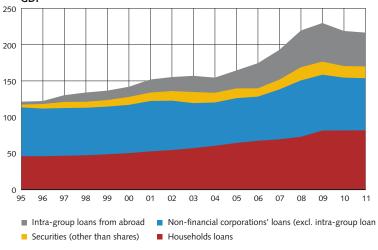
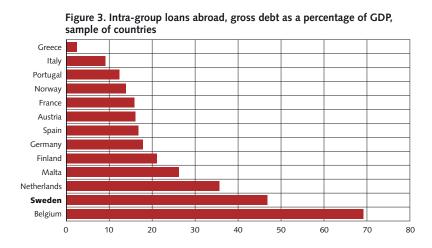


Figure 2. The private sector's consolidated gross debt as a percentage of GDP

Source: Statistics Sweden.



Note. Data refer to most recently-updated quarterly statistics for 2010 or 2011, according to the countries' reporting of interest-bearing Gross External Debt. Sources: IMF and Eurostat.

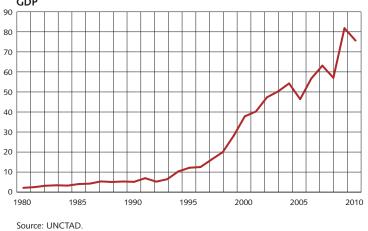
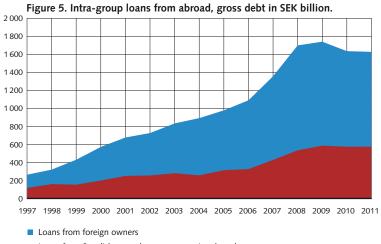


Figure 4. Foreign direct investment assets in Sweden as a percentage of GDP

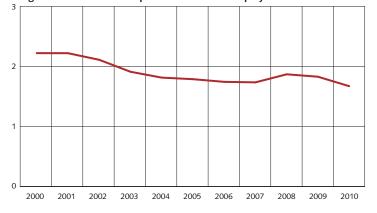


Loans from Swedish-owned group companies abroad

Source: Statistics Sweden.



Figure 6. The Swedish corporate sector's debt/equity ratio



Note. The figure is based on register data with balance sheets for all Swedish non-financial corporations. Source: Statistics Sweden.

and from other countries 6 5 4 3 2 1 0 2001 2002 2009 2010 2011 2003 2004 2005 2006 2007 2008 Implied interest revenue Implied interest costs -

Figure 7. Implied rates, foreign-owned companies' intra-group loans to

Source: Statistics Sweden and own calculations.

Table 1. Private sector debt as a percentage of GDP, Sweden, 2010

Private sector debt, non-consolidated data	236.9
Positions regarding own domestic sector	15.9
Private sector debt, consolidated data	221.0
of which households	82.2
of which non-financial corporations	138.8
loans	73.7
securities	16.1
intra-group loans abroad	49.0

Source: Statistics Sweden.