### Economic Commentaries



Sweden has had a substantial surplus on its current account, and thereby also a corresponding financial surplus, for a long time. Nevertheless, Sweden's international wealth has developed very slowly. This Economic Commentary indicates some potential causes of this.

Changes in the prices of financial assets have contributed during certain periods to a poorer value trend in wealth. Another explanation is that the reported net international investment position has probably been underestimated as a result of the accounting principle used for direct investment. Finally, we point to gaps in the statistics. This includes Swedes' cross-border assets not being adequately captured in the statistics. There are strong reasons to improve the statistics in this field.

# Sweden has had a stable financial surplus for many years – but where did the money go?

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#### Summary

For a period of more than 20 years, Sweden has had a stable current account surplus corresponding to the financial surplus in relation to other countries. Despite the financial surplus, there has been no improvement in Sweden's net international investment position since 2007. Why is this?

It is natural to expect an international financial surplus to result in a corresponding accumulation of wealth internationally. However, a number of factors contribute to wealth in relation to other countries not always evolving at the same pace as the accumulated net financial surplus.

One such factor is the trend in financial prices. Changes in the krona exchange rate, in share prices in Sweden and internationally and in interest rates have a considerable impact on the value of Swedish assets and liabilities internationally. During the years 2008 to 2013, economic development in Sweden was more favourable than in many other countries, with healthy Swedish growth and competitiveness and strong national finances. As a result, the krona exchange rate appreciated and we experienced a relatively rapid upswing on the Swedish stock market. It may seem paradoxical, but Sweden's positive economic development has had an adverse impact on the net international investment position.

During 2014, however, a shift occurred and the value of the Swedish krona declined, thus resulting instead in an advantageous value trend for Swedish net wealth internationally.

Another factor contributing to the difference between the financial surplus and the accumulation of wealth internationally is the low valuation assigned to direct investment assets in other countries. The statistics are based on the corporate sector's own cautious valuations in their financial accounts of, inter alia, subsidiaries in other countries. These valuations are normally significantly lower than the market value.

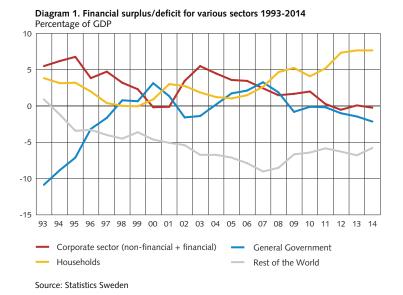
Finally, there are gaps in the statistics that need filling in. This applies, inter alia, to information on household assets held directly in other countries, like deposits in overseas banks or securities in overseas depositories. The need to have reliable statistics regarding Sweden's cross-border assets has increased, since the considerable assets and liabilities held by Sweden in relation to other countries entails that we are becoming more sensitive to global financial disturbances. Due to this, the Riksbank plans to introduce new, more comprehensive statistics on holdings of securities.

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#### Long-term and stable financial surplus

For a long time, the financial surplus in the Swedish economy has been stable in relation to other countries. Since the end of the 1990s, all sectors of the Swedish economy – the general government sector, the corporate sector and households – have shown a financial surplus. The sum total of domestic financial savings is identical to the net financial surplus internationally<sup>1</sup>.

In total, this is resulting in a significant financial surplus internationally, which corresponds to the Swedish current account and capital balance surplus<sup>2</sup>, see Diagram 1. In the diagram, this is shown as the financial deficit of other countries in relation to Sweden.



#### Mirror image of the financial surplus – Swedish assets abroad

In an article from 2006<sup>3</sup> an analysis was made of how the net international investment position correlates with the accumulated net financial surplus. In the remainder of this report, the terms "net international investment position" and "international investment position" are used as synonyms. The conclusion arrived at in this article is that, in the short-term, changes in the value of foreign assets and liabilities are the principal explanation for fluctuations in the international investment position. The reason for this is that Swedish participants have considerable liabilities in other countries but also substantial assets there. For example, both banks and companies have large amounts of borrowings, at the same time as the households' financial surplus in, for example, pension savings is to a great extent invested abroad. The article shows that this creates considerable values for both assets and liabilities internationally; as a result, changes in prices and value have a major impact on the international investment position. The financial prices that have the greatest impact are the krona exchange rate in relation to foreign currencies, the stock market trend in Sweden and internationally and bond prices.

2. In the balance of payments statistics, the financial net surplus corresponds to the sum total of the current account and capital account balance, whereby the current account balance reflects the exchange of goods, services, incomes and current transfers. The capital account balance is normally a minor item that includes acquisitions of rights and capital transfers.

<sup>1.</sup> See, inter alia, the National Institute of Economic Research's report from March 2011 which, in an in-depth study of household savings, provides a detailed account of relationships between the current account balance, savings, investments and consumption.

The Riksbank, Monetary and Currency Policy 2006:1, How do large current-account surpluses co-exist with a weak international investment position? (Gunnar Blomberg, Maria Falk).



In the article, it is stated that the current account which, together with the capital account balance reflects the international financial surplus, continues to be a factor affecting the international investment position (IIP), but that its relative significance to individual years has diminished since the early 1990s. Nevertheless, a sustainable current account surplus should ultimately impact on the international investment position.

#### Growing gap between net surplus and IIP

The question that then arises is how the correlation between the financial surplus and net assets in other countries has developed since the article was published in 2006. The answer is found in Diagram 2 which shows the accumulated value of current account surpluses since 1993 and Sweden's net international investment position. As shown in the diagram, the IIP trend improved up to 2007, although the improvement does not keep pace with the accumulated current account surpluses.



After 2007, there was a significant deterioration in the correlation. Despite the fact that substantial current account surpluses were shown during the period 2008 to 2013, Sweden's IIP remained negative with a net debt that varied at around 10 per cent measured as a percentage of GDP. If the net IIP in 2008 is compared with 2013, Sweden's net debt has even increased.

In 2014, a shift occurred however, and the international investment position improved. Despite this shift last year, a growing gap has been shown since the end of 2007 between, on the one hand, Sweden's financial surplus and, on the other, growth in net worth in relation to other countries.

### Significant value losses in IIP according to balance of payments statistics

The changes in the value of foreign assets and liabilities that have occurred represent one important explanation for the unfavourable trend in the net IIP. From the balance of payments statistics, it is possible to see the relationship between savings, financial transactions, the change in the net IIP and changes in value. The correlations are illustrated below, where we show how value changes in the IIP can be calculated with the help of the published statistics. The description is made for the period December 2007 to December 2013, the years during which Sweden's net financial surplus and the size of the net international assets moved in different directions. See Table 1 below.



During the period 2008 to 2013, Sweden had current account and capital account surpluses amounting to SEK 1,430 billion, which is matched by the net financial surplus in relation to other countries. These surpluses lead to corresponding international investments and should therefore by rights result in an equally large financial outflow. The financial net flow reported in the financial balance, Item d, amounted to SEK 753 billion during the same period<sup>4</sup>. The difference, which is due to shortcomings in the sources used for balance of payments statistics, is reflected in what is known as errors and omissions.

Between December 2007 and December 2013, the change in Sweden's net IIP simultaneously led to an increase in net debt, from SEK 46 billion to SEK 681 billion.

If the deterioration in the net IIP is placed in relation to the financial surplus, i.e. the current account and capital account balance, losses of SEK 2,065 billion arise in relation to other countries.

It is this difference that is shown in Diagram 2. The gap between the financial surplus and the change in the net IIP is shown as a percentage of GDP. Accordingly, the growth in this gap during the years 2008-2013 corresponds to slightly more than SEK 2,000 billion in nominal figures.

### Table 1. Balance of payments 2008-2013 and international investment position, billion SEK

a. Financial surplus (= b + c)	1,430
b. Current account	1,467
c. Capital account	-37
d. Financial account	753
e. Errors and omissions (= - ( a + d))	-677
f. International investment position Dec. 2007	-46
g. International investment position Dec. 2013	-681
h. Change of international investment position	
(iip) from 2007 to 2013 (= g – f)	-635
i. Explained value changes of iip (= h - d)	-1,388
j. Total difference between financial surplus och	
increase in assets (= h – a)	-2,065

Note. The method of using signs to describe the direction of transactions in the balance of payments has been adapted to a new international standard. A financial net outflow that encompasses both assets and liabilities is currently designated with a plus sign.

Source: Statistics Sweden

Due to shortcomings in the statistics, as expressed by the large residual item, it is not possible to describe or analyse the component parts in this total difference in greater detail.

In the following section, we will instead analyse the change in the value of Sweden's financial wealth by calculating the difference between, on the one hand, financial net flows and, on the other, the change in the net IIP. By comparing the change in the various net assets with the financial net flow, it is possible to see how the value changes are allocated among the various asset classes; see Table 2.

Table 2. Change in net position, net transactions and value changes in the various items	in
the net IIP 2007-2013	
SEK billion	

	NET INTERNATIONAL INVESTMENT POSITION		CHANGE OF POSITION	TRANSACTIONS, NET	VALUATION CHANGES
	Dec 2007	Dec 2013		2008-2013	2008-2013
Direct investments	242	195	-47	587	-634
Portfolio shares	688	789	101	471	-370
Debt securities	-992	-2,776	-1,784	-1,455	-329
Other, excl. Reserve assets	-185	691	876	939	-63
Reserve assets	201	420	219	211	8
Total	-46	-681	-635	753	-1,388

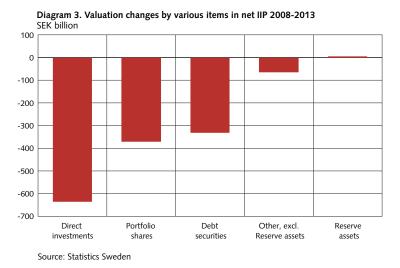
Source: Statistics Sweden

In Diagram 3, the results of this calculation are summarised by dividing up the value changes in the main items in the IIP. The value changes consist largely of value losses. Direct investments account for the largest part of the value losses, slightly less than half, while portfolio shares and debt securities each account for about one fourth. Other investments gave rise to minor value losses. On the other hand, a minor increase in value was shown for reserve assets during the period.

<sup>4.</sup> The method of using signs to describe the direction of transactions in the balance of payments has been adapted to a new international standard. A financial net outflow that encompasses both assets and liabilities is currently designated with a plus sign.



The balance of payments statistics thus indicate that the value changes had a highly unfavourable impact on Sweden's IIP. The question that arises is whether the Swedish players have been poor investors, by letting the value of the investments diminish while the value the liabilities in relation to other countries has grown, or whether there are other explanations.



A review of the factors that have impacted the value changes in the balance of payments items is presented below.

### Direct investments: Cautious valuation and SEK appreciation affect the value

One factor that has contributed to the value loss for the stock of direct investments is that the transactions and the stock of assets have been valued according to different principles in the statistics. While direct investment transactions – mergers, acquisitions of companies or interests in companies, etcetera – occur at market price, the acquired company is usually recognised in the balance sheet at the book value of the acquisition, which is a lower amount. Accordingly, the value of the asset is reported at a lower price than the transaction, i.e. at the purchase price of the acquired company.

This cautious valuation also affects the accounting of Sweden's IIP, since the value of direct investments is based on the valuation in the companies' balance sheets<sup>5</sup>. Assets in the form of direct investments acquired during 1998-2013 are recognised in the IIP at an amount that on average corresponds to only 80 per cent of the transaction value. This cautious valuation affects both the direct investments made by foreign countries in Sweden and the corresponding Swedish investments made abroad.

Since Sweden is a net exporter of direct investments, with a net outflow of SEK 587 billion during the period 2008 to 2013, this cautious valuation leads to Sweden's net IIP not improving to the extent that could be expected on the basis of the large net outflow.

Another factor that has affected the asset value of the direct investments is the way the Swedish exchange rate has developed. In December 2013, the value of Sweden's direct international investments was about SEK 2,700 billion and this value is affected by the krona exchange rate in foreign currency. On the other hand, international direct investments in Sweden are not impacted by fluctuations in the value of the Swedish krona in relation to foreign currencies.

<sup>5.</sup> Also included in the balance of payments is the IIP whereby the market value of direct investment positions has been calculated with the help of model calculations. We have decided to use book value in the comparisons, which is the value used in Sweden's official IIP and is an internationally accepted method for estimating the value of direct investment stocks.



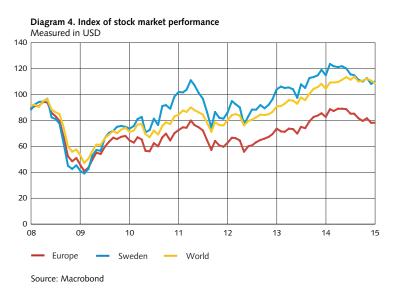
During the period 2007 to 2013, the krona exchange rate fluctuated substantially, with a depreciation during the crisis year of 2009, followed by a powerful appreciation up to 2013. In total, the krona exchange rate, according to the trading-weighted KIX index, strengthened by just over 7 per cent from the end of 2007 to the end of 2013.

Consequently, Swedish direct investment assets in other countries have lost value to a corresponding extent, when calculated in SEK. Accordingly, the krona appreciation contributed to the loss in wealth attributable to direct investments, as shown in Diagram 3. Based on a rough calculation, the contribution represented by this loss can be estimated at around SEK 150 billion.

### Portfolio shares: Strong Swedish stock-market performance has increased the value of Sweden's debt in relation to other countries

Widespread cross-border ownership of portfolio shares, normally in the form of publicly traded shares, is a prominent feature of the statistics on Sweden's international investment position. Both Swedish ownership of foreign shares and foreign ownership of Swedish shares represent significant amounts, SEK 2,577 billion and SEK 1,788 billion, respectively, at the end of 2013. Accordingly, the price trend on the Swedish stock market in relation to the trend on foreign stock exchanges has a major impact on Sweden's net wealth internationally.

A comparison of the price trend for Swedish and international shares during the years 2008 through 2013 shows that the Swedish stock market developed significantly better than stock exchanges in other countries, measured in the same currency (USD)<sup>6</sup>, see Diagram 4. From the end of 2007 to 2013, the Swedish stock market rose 19 per cent. The stock exchange trend on a global basis was much weaker. During the same period, the global index rose by 8 per cent. If we look at the European index alone, stock exchanges declined 14 per cent during the same period.



## The effect of this is that foreign investors generated considerable earnings during this period from the price increases on the Swedish stock market, while the price trend for Swedish investors in international stock markets has been less favourable, with declining share values in many cases.

Accordingly, the trend in stock market prices is a significant explanation for the wealth losses of SEK 370 billion that have arisen for portfolio shares, since in value terms the Swedish liability internationally, in the form of foreign holdings of Swedish shares, has risen more than the value of assets, i.e. Swedish holdings of foreign shares.

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<sup>6.</sup> For both Swedish and foreign investors, an index expressed in a common currency is the most relevant way of showing the differences in return that have arisen between Swedish and foreign stock markets.



Alongside the price trend for shares, the krona appreciation during the period also contributed to the losses incurred on portfolio shares. Foreign shares are denominated in foreign currency and when the SEK has appreciated this has contributed to a decline in the value of these shares, expressed in SEK. Since there is no information available about which foreign shares are held by Swedish investors, and vice versa, it is not possible to calculate in any greater detail how large a portion of the weakened net position is due to share price performance and the way krona exchange rate has developed. However, based on simplified assumptions, the loss can be estimated at about SEK 100 billion.

### Debt securities: Declining interest rates and krona appreciation impact valuations

When it comes to the item debt securities, issues of securities in foreign countries dominate the borrowing of Swedish banks and companies in foreign currency. This item is affected by two opposing tendencies: On the one hand, the fact that long-term interest rates have fallen sharply throughout the period, both in Sweden and internationally, has contributed to raising the market value of the debt. On the other, in terms of SEK, the krona appreciation has contributed to reducing the value of the borrowing of foreign currency abroad.

According to the summary in Table 2, the value losses for this item amounted to SEK 329 billion during the period 2008 to 2013. Due to the statistical base, it is not possible to describe in greater detail how the krona appreciation and the decline in interest rates have contributed to this loss. Current statistics on holdings of securities lack the level of detail that would be required for this. See more below.

### Reserve assets: Result of rising gold price and falling interest rates was favourable

The Riksbank's reserve assets are the only item to have shown a positive value trend during the period. A rising price of gold and falling interest rates contributed to raising the value of the reserve assets, at the same time as the stronger SEK worked in the opposite direction. The value appreciation during the period totalled SEK 8 billion.

### Strong Swedish economy contributed to IIP losses from 2008 to 2013

From Sweden's perspective, having assets abroad may generally be viewed as helping to spread risks for Swedish savers and investors on a macroeconomic level.

During the period 2008-2013, the relatively strong Swedish economy contributed to the losses incurred in the IIP. From a global perspective, this period was characterised by a financial crisis that was followed by a crisis in public finances that has affected countries in Europe in particular. During this period, the Swedish economy has fared well, with healthy growth, competitiveness and orderly government finances. This has contributed both to the krona appreciation and to stronger growth in Swedish share prices, compared with the rest of the world. As a result, Sweden's net IIP has developed negatively.

In an opposite situation, the spread of risk functions so that if the Swedish economy were to develop in an unsatisfactory manner with a decline in the krona exchange rate and a weakening of Swedish purchasing power, then the assets held in other countries would develop more favourably. Such assets, which are held in currencies that have appreciated in relation to the krona, are not impacted by the weakening of Swedish purchasing power. In fact, the value of such savings expressed in SEK would rise.

If there is simultaneously a decline in the Swedish stock market in relation to stock markets globally, the same effect arises; the Swedish savers who have chosen to spread their holdings to also include foreign shares gain from the favourable development in the global economy. Meanwhile, the value of foreign holdings of



Swedish shares, which constitutes Swedish debt in relation to other countries, would rise more slowly.

Accordingly, an unfavourable Swedish economic trend has a positive effect on Sweden's net wealth internationally.

### Decline in SEK exchange rate in 2014 contributed to improving the IIP

During 2014, there was a reversal of trends in respect of the Swedish IIP. Due to the expansionary monetary policy, which entailed a reduction in the policy rate to a historically low level, zero per cent, the krona exchange rate has weakened. Calculated according to the KIX index, the SEK has depreciated nearly 7 per cent and is thus approaching the level prevailing at the end of 2007.

Similarly during 2014, the Swedish stock market, see Diagram 4, weakened compared with the global index calculated in a common currency.

Since Sweden has significant currency exposure, with net assets in foreign currency exceeding SEK 4,600 billion and considerable cross-border ownership of portfolio shares, all of this combined has resulted in Swedish exchange-rate gains on foreign assets. During 2014, the net position strengthened by SEK 525 billion and, since the financial outflow amounted to SEK 112 billion, the value appreciation was SEK 413 billion after translation to SEK. Accordingly, the value appreciation on the net financial surplus corresponded to just over 10 percent of GDP during 2014.

#### Gaps in the statistics need filling in

Although there are explanations for why Sweden's IIP has developed unfavourably for a number of years, they are not sufficient for explaining the gap that has emerged between our international financial surplus and the size of our net assets (see Diagram 2). The negative residual item indicates that there are significant flows, probably mainly in the form of financial investments in other countries, that are not captured by the balance of payments statistics. One example is the assets directly held by Swedish households in other countries. Securities that households keep directly in foreign depositories and deposits in foreign banks are examples of assets that are difficult for the statistics to capture. As a result of the information-exchange agreements that the Swedish Tax Agency has reached with international counterparts, there is now a possibility to start studying and estimating the size of these assets.

The Riksbank has also implemented a feasibility study in order to prepare a basis for making decision for improved statistics on holdings of securities. The methods used for collecting data on cross-border securities portfolios and transactions have actually not been changed since the 1990s at the same time as the markets have expanded sharply. With new methods, it should be possible to achieve a significant upgrade in the supporting base for economic statistics, including statistics on the balance of payments and the IIP, as well as increased coverage and possibilities to calculate with greater precision the impact of changes in prices and exchange rates.

The increasing demands for reliable and detailed information are the main reason for the inquiry made by the Riksbank. Due to the considerable assets and liabilities that Sweden holds in relation to other countries, we are becoming increasingly sensitive to global financial shocks. The financial assets and liabilities of the Swedish participants are currently considerably impacted by variations in international exchange rates and financial prices. This is also resulting in an increasing need to be able to assess or anticipate the effects that such shocks could have for Swedish investors, inter alia for the Riksbank's work in the field of financial stability.



#### Where did the money go?

In this commentary, we have pointed to three factors that have contributed to the growing gap between Sweden's financial surplus and Sweden's net IIP.

Variations in financial prices, such as the krona exchange rate, share prices and interest rates, represent the principal factor. During the period 2008 to 2013, a relatively robust Swedish economy impacted financial prices in a way that adversely affected Sweden's net IIP. A shift in this trend occurred during 2014 and a weakening of the SEK instead generated large-scale exchange-rate gains in foreign assets. Since Sweden has considerable amounts of both liabilities and assets abroad, including considerable private borrowing and substantial investments of private savings in other countries, the variations in financial prices are of major importance to the financial wealth of the Swedish participants. Due to dependence on the price trend in various markets and on how the assets and liabilities are distributed internationally in terms of the various asset classes, the wealth effects will also vary over time.

The principles used for the valuation of direct investment assets constitute another factor. The prudence principle in corporate accounting usually leads to a low valuation of cross-border direct investment assets. For a considerable period of time, Sweden has been a net exporter of direct investment capital and, due to the valuation principles that have been applied, this has long contributed to a weakening of Sweden's net IIP.

A closely related question is whether Swedish investments in other countries, inter alia in the form of corporate acquisitions or purchases of foreign shares, have been particularly unprofitable, in which case this may have contributed to the growing difference between our financial surplus and the size of Swedish net assets abroad. However, balance of payments statistics do not provide a sufficient supporting base to answer such questions. Using the current statistics, it is not possible to see whether the price trend for the Swedish holding of foreign shares has been weaker than the average price trend for international shares. In respect of direct investments, it is also very difficult to determine whether individual acquisitions have been profitable or led to losses.

A third factor takes the form of gaps in the statistics, resulting in our having insufficient coverage of net assets abroad. The lack of data on the assets directly held by households in other countries is one aspect of this. In addition, the Riksbank has conducted an inquiry concerning a new way of collecting statistics on securities holdings. A decision in line with the proposals made in the inquiry would modernise and improve the underlying data for statistics on securities holdings and thus also data on the IIP. The proposals would also provide opportunities for analysing price and currency effects and would align Sweden with what many European countries have already implemented.

Accordingly, the money has not gone up in smoke. A weaker value trend during certain periods can be explained by price changes for financial assets, which was the case between 2008 and 2013. There is also reason to believe that the reported IIP is underestimated since Sweden, which is a net exporter of direct investment capital, tends in statistical terms to be adversely affected by the accounting principle used for direct investments. The study has also indicated inexplicable discrepancies in the statistics, particularly in the securities area and in respect of household assets abroad, which also tend to systematically underestimate Swedish assets in other countries. Accordingly, there is a need to refine the statistics on Sweden's balance of payments and IIP in order to improve coverage and opportunities for analysis.