

Why are Swedish import prices so low?

Inflation is currently low and below the Riksbank's target level. There are several reasons for this. One is that import prices have fallen in recent years. This is partly due to subdued price trends in consumer goods on the international market. In addition, the krona appreciated more or less continuously during the period 2001 to 2004, which has had a time-lagged effect on prices. The fall in import prices is also due to the fact that there is a continuous shift in imports towards cheaper producer countries. Preliminary estimates indicate that this shift may have contributed to bringing down import prices paid by Swedish importers by a couple of percentage points in 2004.

Introduction

There are many reasons why inflation in Sweden has been so low in recent years. For instance, the Riksbank's interest rate cuts affect mortgage costs, which comprise an important item in the consumer price index (CPI). The relatively substantial easing of the monetary stance that began at the end of 2002 and continued during 2003 and 2004 has thus contributed to keeping down households' interest costs and thereby to the low CPI inflation rate. Another contribution

comes from the rise in electricity prices to record-high levels at the end of 2002/beginning of 2003 and the subsequent fall in these prices. Although even when adjusted for these transitory effects, inflation has been very low since the beginning of 2003 (see Figure B5).

By analysing the development of different sub-indexes of CPI, it is possible to examine more closely what lies behind the low inflation rate. CPI can be divided into prices of goods and services, adjusted for oil, electricity and mortgage rates. It then becomes clear that the primary explanation for the low CPI inflation rate is the trend in goods prices (see Figure B6).

Consumer goods are either domestically produced or imported from other countries. Price trends for both of these groups have been subdued. Prices of domestically-produced goods have fallen since mid-2004, with the exception of a couple of months at the beginning of the year. Import prices have been even weaker, with a falling trend since mid-2003 (see Figure B7).

Consumer prices for imported goods are determined partly by the importers' costs for the goods and partly by events in the sectors mediating the goods from the importer to the consumer. The following article contains a discussion of what determines the development of import prices in the producer segment.

Several factors affect import prices

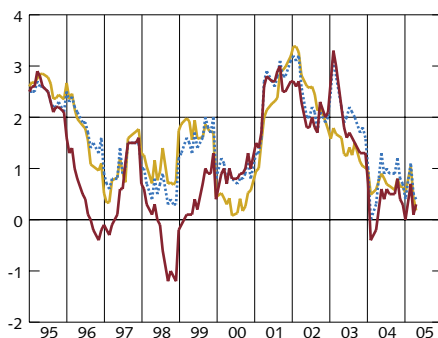
Developments in Swedish import prices in foreign currencies depend on the rate of price increase in the countries from which Sweden imports, as well as the change in these countries' share of Sweden's total imports. An increased share of imports from countries with a low inflation rate or lower prices will subdue the rate of price increase for Swedish imports. The impact on import prices in SEK is also affected by exchange rate developments. If the krona strengthens, an increase in international export prices will have less effect on import prices in Swedish kronor, while the effect will be greater if the krona weakens.

Figure B5. Inflation according to CPI, UND1X and UND1X excluding energy. Annual percentage change

— CPI
..... UND1X
— UND1X excluding energy

Note. The inflation measures are calculated according to a new method.

Sources: Statistics Sweden and the Riksbank.



In recent years price trends in consumer goods on the international markets have been subdued. At the same time, the krona appreciated more or less continuously during the period 2001 to 2004. This has contributed to a fall in import prices in Swedish kronor. During the first half of 2004, the krona weakened again, while prices of imported goods continued to fall. This may to some extent be due to a delayed impact from exchange rate fluctuations. As world trade has increased and countries like China and India have been integrated into the world economy, there has also been a continuous shift in Swedish imports towards cheaper countries. This has also had an impact.

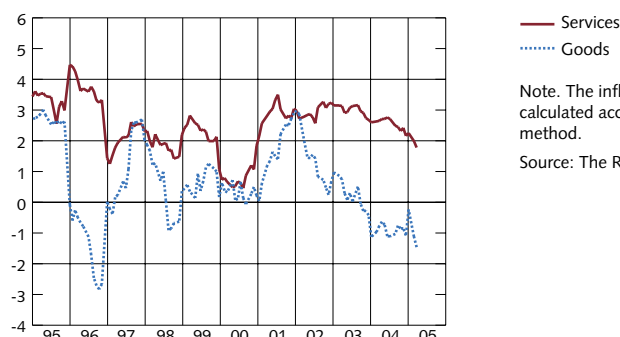
Problems with the current methods of measurement

When measuring price trends in the world market in foreign currency and making forecasts of international price trends, the Riksbank has until now used a trade-weighted⁵ index of producer prices for manufactured goods in 11 countries, known as international producer prices. One problem with this index is that the producer and export price indices used for the different countries usually show price trends for the country's total export of manufactured goods and not developments in the price of the particular goods that Sweden imports. In addition, the weights that provide the base for this index were set in the early 1990s and no longer reflect current import weights. This measure therefore fails to capture the effect of the shift in imports to cheaper import producer countries, as the weights remain constant.

An estimate of the substitution effect

How much of an effect has this shift to cheaper countries had on the prices paid by Swedish importers? The assumption is that the Swedish import price in foreign currency can be measured as a weighted average of the export prices in the countries from which Sweden

Figure B6. Inflation on goods and services adjusted for oil, energy and mortgage interest rates.
Annual percentage change

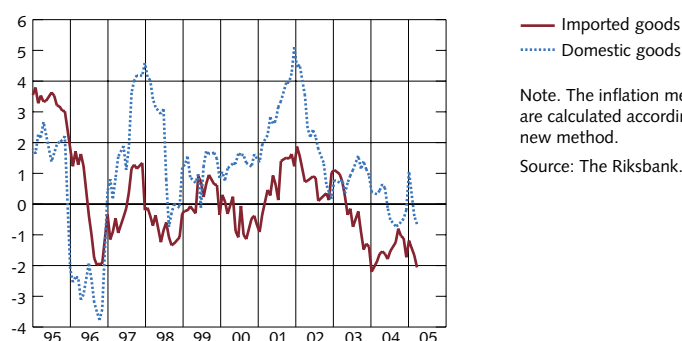


— Services
..... Goods

Note. The inflation measures are calculated according to a new method.

Source: The Riksbank.

Figure B7. Goods prices in the consumer segment.
Annual percentage change



— Imported goods
..... Domestic goods

Note. The inflation measures are calculated according to a new method.

Source: The Riksbank.

imports. The import price then consists of two parts; a weight and a price:

$$P_t = \sum_i w_{it} P_{it} . \quad (1)$$

P_t is the average price level (expressed in logarithms), P_{it} is the respective country's export price and w_{it} is each country's share of the total imports into Sweden. The interesting factor is the change in the average import price. This change can be divided up into a price effect, i.e. the contribution to the change in the import price given a change in the export price, and a weighted effect, which shows how the change in the import price depends on the changed import weights:

$$\Delta P_t = \sum_i w_{it} \Delta P_{it} + \sum_i \Delta w_{it} P_{it-1} . \quad (2)$$

The first term on the right side in equation 2 calculates the contribution to the total price

⁵ See the note to Table 4 in Chapter 2.

change of the change in prices in the respective country, while the other term calculates the contribution to the price change due to changes in the trade pattern, i.e. the substitution effect.

Calculations according to equation 2, which is based on import statistics from Statistics Sweden for Sweden's 25 largest export countries for consumer goods and producer and export price series from the respective countries, indicate that the shift of imports towards cheaper countries may have helped bring down prices Swedish importers pay by a couple of percentage points in 2004.⁶ This is illustrated in Figure B8, which shows an alternative import price in the national currency where the substitution effect has been taken into account.

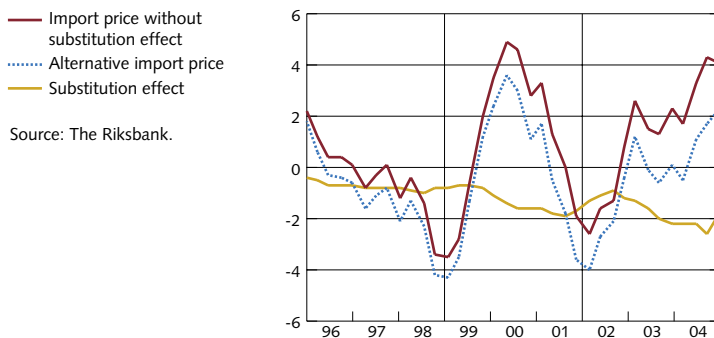
When corresponding calculations are made for import price trends in Swedish kronor, the substitution effect is roughly the same (see Figure B9). However, the total import price expressed in Swedish kronor fell more during 2003 and 2004 than is expressed in foreign currency, which confirms that the stronger exchange rate had a considerable effect then.

Sources of uncertainty

However, making this type of estimate is hazardous and the results are uncertain. This is partly because of the problems of finding reliable and usable statistics on other countries' export prices. In most cases there are no data on how the various trading partners' export prices for individual recipient countries develop; only data on their average export prices. This means that the export prices from one country represent an average of the prices of all goods that country exports. However, this does not mean that Sweden imports all goods that the country exports, and the price may therefore be misleading. A further factor that makes the export price misleading is that exporters often adapt their prices to the recipient country's competitive situation, i.e. conduct pricing-to-market.

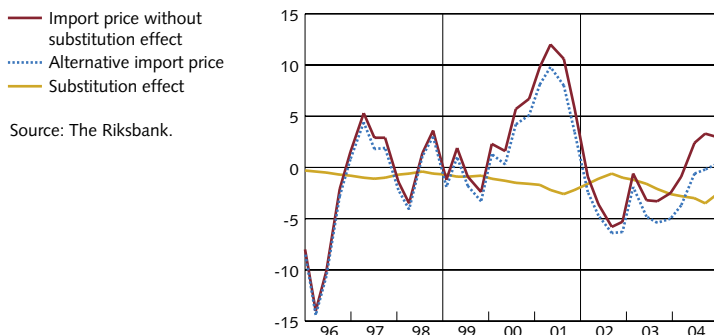
Moreover, there are considerable problems with import statistics that make it difficult to correctly estimate different countries' import weights. There are no data on Sweden's total imports from countries outside of the EU, as all imports from these countries that reach Sweden via another EU country are registered in the statistics as imports from the EU. If, for instance, Sweden imports cars from Japan but they are freighted via Rotterdam in the Netherlands, they become registered as imports from the Netherlands. This means that the EU is over-represented in the import statistics.

Figure B8. Effects of shift to cheaper countries, in foreign currency.
Annual percentage change



Source: The Riksbank.

Figure B9. Effects of shift to cheaper countries, in Swedish kronor.
Annual percentage change



Source: The Riksbank.

⁶ Similar calculations made by the Bank of England and Norges Bank have given results of a similar size.

All in all, this means that this estimate probably does not measure the right price and has probably underestimated the low-cost countries' share of our total imports. The substitution effect is therefore probably underestimated.

Conclusion

This box reports that the low import prices are partly due to the fact that there is a continuing shift in imports towards cheaper producer countries. Preliminary estimates indicate that this substitution may have contributed to bringing down import prices for Swedish importers by a couple of percentage points in 2004.

The result of the calculations used as a basis for the analysis in this box should be interpreted with caution, but they give reason to believe that international price pressure is overestimated in the weighing together of producer prices that has been used until now.