

## **Irma Rosenberg: Why is Swedish inflation so low?**

Speech by Ms Irma Rosenberg, Deputy Governor of the Sveriges Riksbank, at the shareholders' meeting of SBAB - Sveriges Bostadsfinansieringsaktiebolag, Stockholm, 13 April 2005.

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### **Introduction**

Thank you for your invitation to come here today.

Inflation today is low and has fallen short of our inflation target since the middle of 2003. There are several explanations for this. One obvious reason is that our own interest rate cuts affect an important component in the consumer price index (CPI), namely homeowners' interest costs, which decrease as a result. Another is the developments in electricity prices, although we had largely foreseen the effects of these. The principal factors, however, seem to have been the recent years' high productivity growth in the Swedish economy and the drop in import prices.

Current inflation is not the decisive factor behind the interest rate decisions that we make today. That is because it takes 1-2 years before rate adjustments have their full impact on inflation. Consequently, our interest rate decisions are based on an assessment of inflation prospects in the coming years. The current inflation rate is the starting point for this assessment, however, and it is therefore important to understand the underlying reasons for why inflation is so low today. Another reason is that it may be warranted in some situations to allow inflation to deviate from target for a period that extends beyond the normal forecast horizon, which is something I will be coming back to. A third reason is that it is important for the Bank's future forecasting work to understand why our forecasts sometimes are inaccurate.

The low inflation rate has helped fuel the monetary policy debate in the past year. On the one hand, we have been criticised for not sticking to our normal policy rule and that monetary policy, given this rule, is not expansionary enough. On the other hand, it has been claimed that the expansion in household credit has been too fast and that the risk of a house price bubble should prompt us to raise the repo rate. One variation on the latter theme has been more general criticism that the Riksbank has its hands tied as a result of its own inflation target and that its policy is rigid. The essence of this seems to be that we have adopted an overly slavish approach in trying to meet the inflation target. So the question of how best to conduct monetary policy is not easy. As a result we always welcome a serious, challenging discussion.

I intend today to try to answer the question of why inflation is so low, after which I will tie this in with recent developments and the current monetary policy situation. But before I do so, I would like to touch upon the fundamental issue of how we conduct monetary policy.

### **A framework for monetary policy**

The objective of Swedish monetary policy is explicitly set out in the Sveriges Riksbank Act: it is to maintain price stability. The Riksbank has defined this in terms of a target for inflation: to keep inflation at 2 per cent, with a tolerance for deviations of  $\pm 1$  percentage point.

In practice the Riksbank's conduct of monetary policy normally involves adjusting the repo rate with a view to influencing demand in the economy. By influencing borrowing costs, the incentives to save, exchange rate developments and thus exports and imports, etc. the repo rate has an effect on aggregate demand in the economy and gradually also on inflation. It is generally held that a rate adjustment normally takes roughly 1-2 years before it has its greatest impact on inflation through these different "channels".

That means that our interest rate decisions must be based on a forecast of economic and inflation developments in the years ahead. Even though the current inflation rate is not the decisive factor for our interest rate decisions it is, of course, important nonetheless since it constitutes the starting point for our inflation forecast, which is the key element underpinning our decisions. To make the Riksbank's monetary policy strategy clear it has been described in terms of a simple policy rule: if the forecast points to an inflation rate above 2 per cent 1-2 years ahead the repo rate should normally be raised, whereas it should normally be lowered if inflation is forecast to be below 2 per cent.

But this policy rule cannot be applied mechanically. That is why “normally” is included in the wording. We have also underscored time and again that the rule only helps us part of the way. There may be reason to depart from it. The Riksbank’s clarification of monetary policy in 1999 explains when this may be the case. One reason is the occurrence of a shock that has caused inflation to deviate considerably from target. In such cases there may be a risk of undesirable fluctuations in the real economy if we were to try to bring inflation back to target within the normal time horizon. We have to be able to make allowances for such circumstances; otherwise they could have serious repercussions for the real economy. And our monetary policy framework provides scope for this. But no two situations are ever exactly the same. It is necessary to have a thorough analysis on which to base our standpoints and an explanation for our decisions. Another reason to deviate from the policy rule is if inflation is judged to be influenced by temporary effects, i.e. effects that will diminish without any monetary policy intervention. That, for example, is why we often focus our discussion on UND1X, the measure of underlying inflation that excludes the effects of indirect taxes and subsidies as well as interest rate changes. But it can also be a case of temporary supply shocks that are not expected to persist, such as the sharp rise in electricity prices at the turn of the year 2002/2003.

For a number of years the confidence in monetary policy and economic policy in general has been high enough to allow such factors to be taken into account. But at the same time it places demands on our communication – that we are clear, for example, about when there is reason to extend the forecast horizon and why. It is also one of the reasons that we introduced some improvements to our decision-making material in our most recent Inflation Report, which we expect will help us explain and justify our actions more clearly. These included extending our forecast horizon somewhat in certain situations.

So we do have room for a considerable measure of flexibility. And we have also made use of that over the years. On several occasions, e.g. 2001 and 2003 but also earlier, we made it clear that we had disregarded transitory effects that were affecting inflation. The Riksbank has also referred to developments in asset prices, e.g. in 2000, but we did not believe at the time that it gave reason to allow policy to be affected to any great extent. Recently, however, developments in property prices have had some, albeit limited, significance for our monetary policy decisions.

The inflation target is thus our point of departure, and we normally apply a time horizon that reflects the lag with which monetary policy has an impact on inflation. But we are prepared to depart from this if we have good reason to. Our ambition in such cases is to communicate the reasons clearly.

### **Why has inflation been so low?**

Let me now go on to address the factors behind the current inflation rate. The gauge that the Riksbank has chosen for its inflation target, the consumer price index (CPI), measures the price of a basket of goods and services for household consumption. On average, the rate of increase of the CPI has been 1.4 per cent<sup>1</sup> from 1995, when the inflation target was introduced, through 2004 (Chart 1). The CPI is the broadest index that we use and includes the effect of our interest rate adjustments on mortgage interest expenditure. The fact that average CPI inflation has been so low is due in large measure to the Riksbank’s rate cuts in the mid-1990s, when confidence in the inflation targeting policy increased. In terms of UND1X, which excludes this effect, inflation has averaged 1.8 per cent over the same period. UND1X inflation has in actual fact guided the Riksbank’s monetary policy for a large part of the current period and is thereby also an important inflation measure when evaluating policy.

In recent years, however, inflation has been markedly lower. Since May 2003 it has averaged 0.8 per cent according to the CPI. The substantial monetary easing that began at the end of 2002 and continued through 2003 and 2004 has held down households’ interest costs and thereby contributed to the low CPI inflation. But inflation has been below target in terms of UND1X as well; on average it has been 1.2 per cent over the same period. This is partly because electricity prices rose to record-high levels at the turn of the year 2002-2003 and then fell back somewhat. We judged that to be a temporary effect and predicted that electricity prices would fall back, thus bringing inflation figures down again. For both CPI and UND1X inflation this meant that the change in relation to the

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<sup>1</sup> Inflation measured according to the method for computing the CPI that was used up to the end of 2004. The analysis in the rest of the discussion is based on the new CPI method, though

corresponding month a year earlier dropped sharply at the beginning of 2004 – an effect that was partly expected, as I was saying.

But excluding energy prices, too, inflation since the beginning of 2003 has been very low, with non-energy UNDEX averaging 0.9 per cent. There are many reasons for that, but the most important is unusually low import prices and surprisingly high domestic productivity growth. Allow me now to discuss this in a little more detail.

One way to do so is to look at the developments in different components of the CPI. As a first step, the CPI can be broken down into prices of goods and services. I then choose to exclude oil, electricity and mortgage interest, which we already know has contributed to the low CPI inflation. Goods prices (Chart 2) rose weakly in 2003, but since the end of the same year they have been falling. The rate of price increases for services has diminished in recent years and currently stands at roughly 2 per cent. So this does not appear at first sight to be a contributory factor to the low CPI inflation. It is important to remember, though, that productivity growth in the services sector is normally assumed to be somewhat lower than in the goods sector. Given an inflation target of 2 per cent, therefore, services prices should, on average, be increasing slightly more than 2 per cent and goods prices by somewhat less. With the exception of short periods this has also been the case since 1995, as services prices have risen on average by 2.5 per cent and goods prices by 0.6 per cent. So, developments in services prices have also contributed, at least in the most recent period, to the low inflation. The chief remaining explanation for the low CPI inflation appears, however, to be found in the developments in goods prices.

### **Falling goods prices contributing to the low inflation**

When it comes to goods prices it is natural to distinguish between price developments for domestically produced goods and goods that are imported from other countries. Prices of imported consumer goods have dropped since the middle of 2003. But inflation for domestically produced goods has also been low, with prices even falling during the second half of last year (Chart 3).

Consumer prices for both domestically produced and imported goods depend on many factors, e.g. the competition situation both abroad and in the home market and developments in costs and profit margins for both producers and distributors. To better understand why inflation is so low, the next step is to analyse the various stages from the production or importing of goods until the goods are put up for sale to consumers in shops.

Allow me to begin by looking at developments in the producer prices of domestic goods and in the prices of imported goods at customs, i.e. the prices paid by wholesalers in the distribution sector. I will then analyse how the path through the distribution sector can be thought to affect the final price of the goods that customers buy in shops, i.e. the price in the CPI.

### ***Producer prices of domestically produced goods***

The rate of increase for producer prices of domestically produced consumer goods has been very low since the beginning of 2003 but has risen weakly from 0.5 per cent to about 1 per cent in February this year (Chart 4).

The main driver of a company's production costs, and thereby the price of its products, is the costs of intermediate goods and labour costs. Intermediate goods costs in manufacturing dropped in 2002 and 2003, after which they increased by 2.3 per cent in 2004 according to the National Institute of Economic Research's estimates (Chart 5). Product prices have by and large followed the cost developments for intermediate goods, even though changes in the costs of intermediate goods do not feed through fully to product prices. Thus, having fallen for a period, product prices for industrial goods also began to rise towards the end of 2003 although the rate of increase stopped at 1 per cent in 2004.

Since the latter half of the 1990s labour costs per hour in the Swedish manufacturing sector have risen at a somewhat diminishing rate. Coupled with high productivity growth, this has resulted in sharply falling unit labour costs (Chart 6). That contributed to a slight rise on average in profit margins in the manufacturing sector last year as well, despite the fact that the increase in intermediate goods prices did not completely pass through to product prices.

Stiffer competition, partly due to low prices of imported goods, increased import penetration, i.e. a higher share of imported goods in total consumption, and new foreign players in the Swedish market may have contributed to the high productivity growth and the low producer price inflation for domestically produced goods.

### ***Producer prices for imported goods***

Import prices for consumer goods have fallen since the end of 2002 (Chart 4). Import prices in Swedish kronor are determined by the price developments and price level in the countries from which we import, how large a share we import from each country and developments in the exchange rate.

The krona has strengthened more or less continuously from its weak level at the end of 2001, and this of course has contributed to the fall in import prices in recent years (Chart 7). In 2004, however, the krona did not appreciate to the same extent, but prices of imported goods continued to drop. To some extent this may reflect a lag in the pass-through of the krona's appreciation but price developments for consumer goods in international markets have also been subdued during the recent economic slowdown.

The weak imported inflation is also due in some measure to the fact that we have continually increased our share of imports from low-cost countries such as China and Poland. According to a first preliminary estimate by the Bank, this import switch to cheaper countries in general may have contributed to reducing the prices paid by Swedish importers by a couple of percentage points in 2004. This estimate is uncertain since in most cases there is no data available for how different trading-partner countries' export prices to individual recipient countries evolve, only their average export price. Nor is there data for our total imports from non-EU countries because all imports from these countries that reach Sweden via another EU country are registered in the statistics as imports from the EU. As a result, it is likely that this estimate does not measure the right price and probably underestimates the low-cost countries' share of our total imports. So the effect of this import switch is probably somewhat understated.

In the measure we currently use for international prices in our forecasting the concentration of low-cost countries is slightly smaller than that used in this estimate. It is therefore likely that our forecast for import prices has not fully captured the shift towards cheaper import countries. As mentioned in the Inflation Report, this is one possible explanation for why our forecasts have not managed to completely capture the fall in import prices.

### ***Weak producer price inflation not the whole explanation***

The conclusion of the discussion so far is that a combination of low price increases for intermediate goods, subdued wage growth and robust productivity growth in manufacturing has held down producer price inflation for domestically produced goods since the middle of 2003. In addition, it is likely that the krona's appreciation, but also the rise in the share of imports from low-cost countries, has contributed to the low rate of price increases for consumer goods. But that does not appear to be the whole explanation. If we take a weighted average of the producer price developments for domestically produced and imported consumer goods – the dotted curve in the chart – it becomes clear that consumer goods prices have fallen even more than producer prices in 2004 (Chart 4).

### ***The distribution sector***

This is because consumer prices are also affected by what happens in the distribution sector, i.e. the part of the business sector that supplies the domestically produced and imported goods to the customer. This includes wholesalers and retailers and involves such things as stock-keeping, transportation, administration, the range of goods offered and marketing. The end price of a good is therefore influenced by factors such as the degree of competition, profit margins, wage developments and productivity growth in this sector. The ability to investigate this in greater detail is limited, however, by insufficient data.

The part of the distribution sector that involves transportation saw a fall in unit labour costs in 2003 and 2004, while profit margins have recovered somewhat. In the statistics this sector includes a number of less relevant groups, such as restaurants, hotels and communication. In wholesale and retail trade, unit labour costs have increased at a lower and lower rate in recent years, and didn't rise

at all in 2004. Meanwhile, profit margins rose slightly after having fallen from 23 to 15 per cent in the past ten years (Charts 8 and 9).

In addition, competition in the retail sector has increased considerably in recent times due to the establishment of more and more low-price chains. Among other things, that is being reflected in large-scale marketing campaigns in which one big chain store after another is advertising price cuts. Food prices in the CPI have also dropped. Nevertheless, profit margins appear to have increased slightly in 2004. That may be attributable to increased efficiency as a result of larger shop space, a higher proportion of own brands and possibly a more effective use of IT.

### **Supply factors behind the low inflation**

This shows that supply factors are the main force driving the low inflation. The low domestic inflation is due in large measure to the high productivity growth in the economy. Structural changes, too, such as the stiffening competition in the retail food sector, which has recently resulted in a drop in food prices, have played a part. The slack in resource use that has been evident in the economy for some time has of course also contributed to the low domestic inflation.

We can also observe that the prices of imported goods have fallen in recent years. That is partly due to the krona's appreciation and partly to low price increases for consumer goods in the international market. Increased imports from low-cost countries have also led to greater downward pressure on prices of imported consumer goods than we previously expected.

Having looked back at these developments I now intend to look ahead and touch upon the assessment of the economic and inflation outlook that we presented in our latest Inflation Report in light of the information received since then.

### **The current economic situation**

In the Inflation Report that was published in the middle of March we forecast that economic growth in both Sweden and abroad would remain high in the coming years. For Sweden we predicted a growth rate of roughly 3 per cent a year, which is higher than we deem sustainable in the long run. Export demand was expected to rise at a slower pace, while domestic demand was forecast to increase somewhat faster, mainly owing to increased investment but also to a slightly stronger pick-up in private consumption. That was also assumed to contribute to an improvement in the labour market.

Against the background of the continued cyclical upswing and expectations of a reduction in spare resources, domestic inflation was forecast to rise. Higher wage costs in line with an increase in employment and lower productivity growth was assumed to imply a faster increase in unit labour costs and a gradual rise in companies' costs. The factors that had resulted in falling prices for imported goods in the past year were estimated to gradually diminish during the forecast period, even though we anticipated that imported inflation would remain low in the period ahead as well. It is reasonable to expect that a pick-up in resource utilisation in the world economy will lead to higher international price pressures. We also made the assessment that the krona would not appreciate nearly as much during the forecast period as in recent years and that it would therefore not have as large a restraining effect on price increases in Swedish kronor in the period ahead. The shift seen in imports in recent years, which has involved a greater share coming from low-cost countries, is likely to continue, however, and probably depress import prices in the period ahead as well. All in all, this gave us reason to expect a continued low but gradually rising inflation rate for a large part of the forecast period, and an inflation rate in line with the target towards the end of the period.

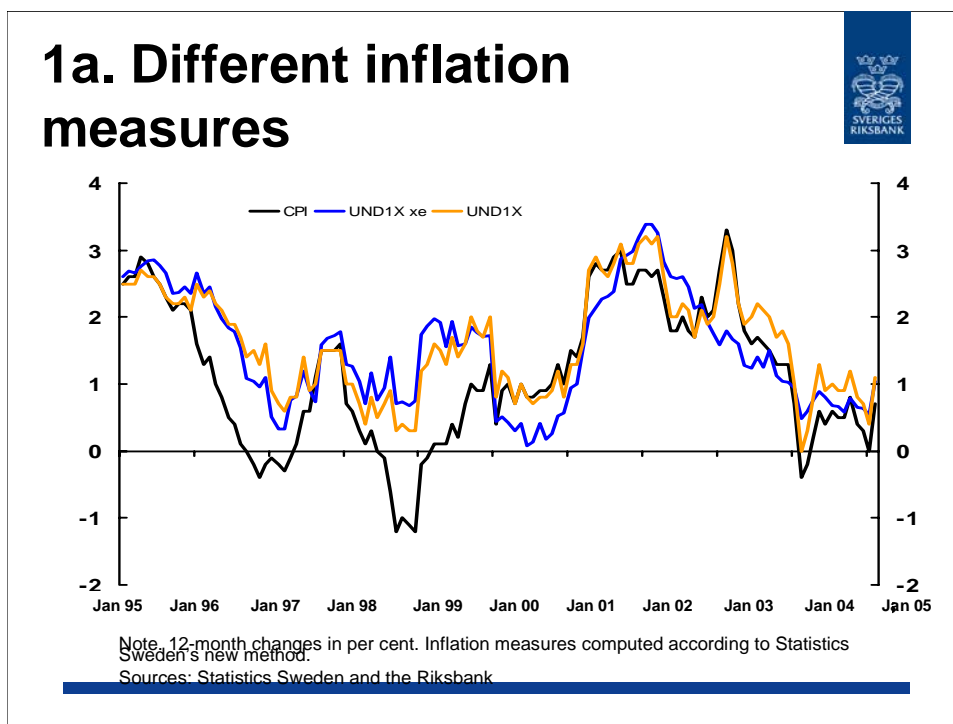
The information received about the Swedish economy since the publication of the Inflation Report points to a stable upswing in economic activity with an increased contribution from domestic demand. However, the foreign trade statistics and the National Institute of Economic Research's most recent business tendency survey suggest that manufacturing activity may have begun to slow and that the expansion in the export industry may have been dampened somewhat faster than expected. Meanwhile, the same survey points to increasingly strong domestic demand in sectors such as construction, trade and private services. Retail sales have grown in line with what we assumed in our forecasts and Swedish households have become more optimistic about the future. Recently, however, the oil price has returned to a very high level and some indicators in the euro area have been weak. Nevertheless, on the whole the developments appear to be broadly in line with the economic outlook we presented in the previous Inflation Report.

## Concluding remarks

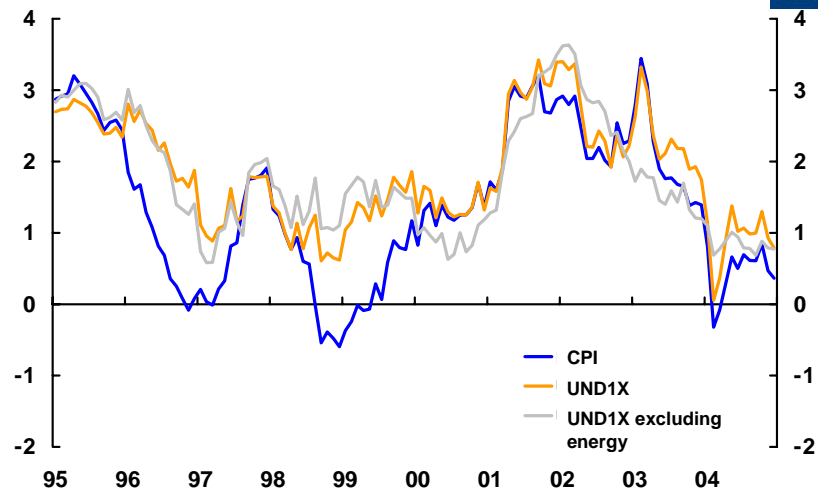
Allow me to conclude by reiterating that we expect inflation to be lower than target for a large part of the forecast period. The main driving forces behind the low inflation are supply factors that in themselves are favourable for Sweden's economic performance and that by and large are not affected by monetary policy. Interest rates are already record-low and this has resulted in a fast increase in household borrowing and house prices. Monetary policy is stimulating demand at a time when the economy is growing at a rate that is not judged to be sustainable in the long term. We therefore expect resource utilisation to rise in the coming years and, as a result, cost pressures and inflation too. Our most recent forecast points to an inflation rate in line with the target at the end of the forecast period.

Our conclusion at the last monetary policy meeting was that the repo rate should be left unchanged at present, but that there was not any hurry to raise it either. The new data that has been received since the publication of the Inflation Report gives us no reason at present to revise that assessment.

Finally, I would also like to remind you that we regularly assess the new information that we receive and its effects on future inflation. For example, we could end up in a situation where we see that economic activity is either being notably dampened or is speeding up unexpectedly; in such a case there may of course be reason to revise our assessment.



## 1b. Different inflation measures

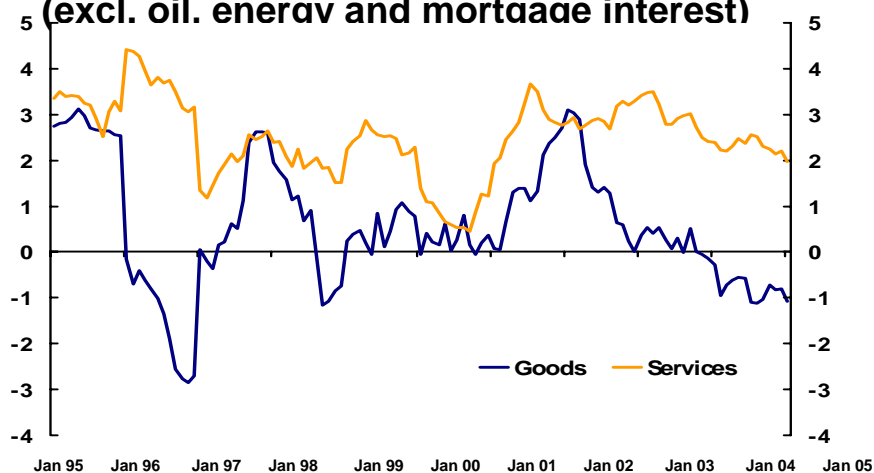


Note. 12-month changes in per cent. Inflation measures computed according to Statistics Sweden's old method.

Sources: Statistics Sweden and the Riksbank

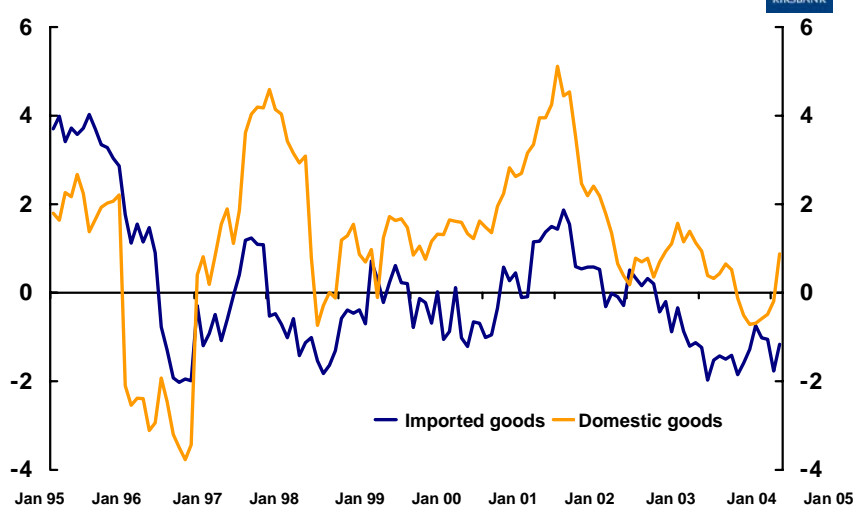
## 2. Inflation: goods and services

(excl. oil, energy and mortgage interest)



Note: 12-month changes in per cent. Inflation measures computed according to Statistics Sweden's new method.  
Source: The Riksbank

## 3. Consumer goods

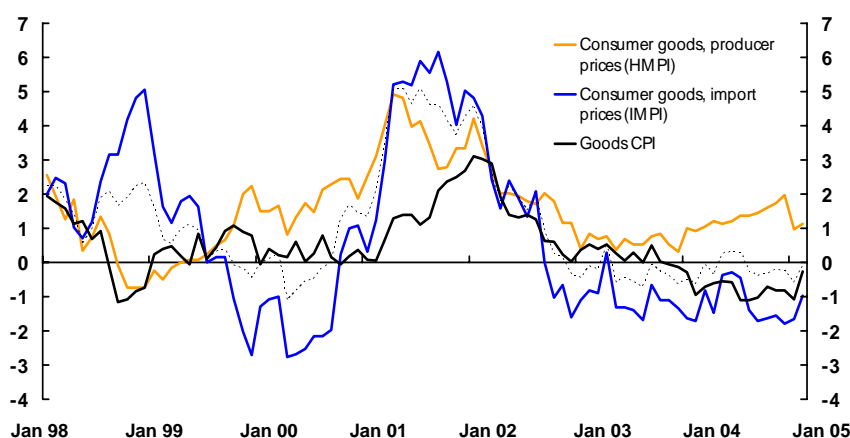


Note: 12-month changes in per cent. Inflation measures computed according to Statistics Sweden's new method.

Source: The Riksbank



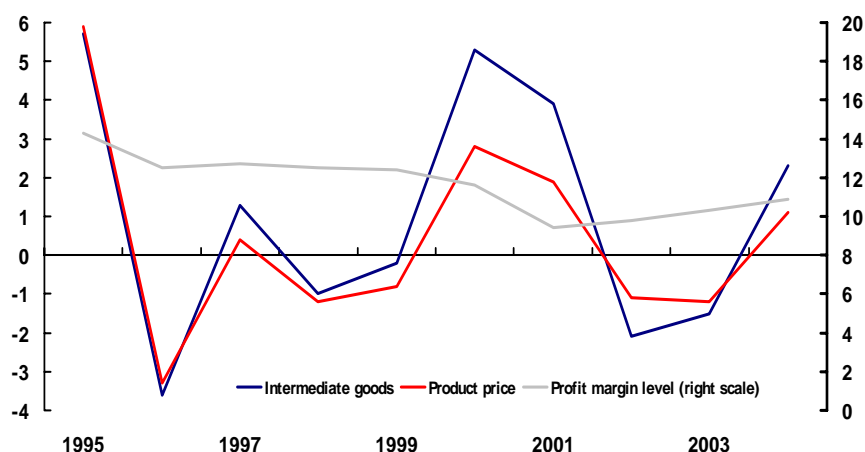
## 4. Goods in consumer and producer channel



Note. 12-month changes in per cent. Inflation measures computed according to Statistics Sweden's new method.

Sources: Statistics Sweden and the Riksbank

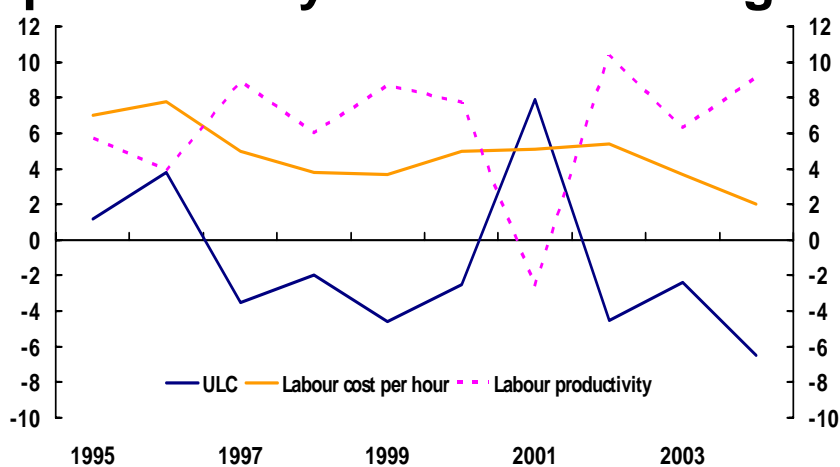
## 5. Product price, intermediate goods and profit margin in Swedish manufacturing sector



Note. Intermediate goods and product price are annual percentage changes, profit margin is the level in per cent of the value of gross output.

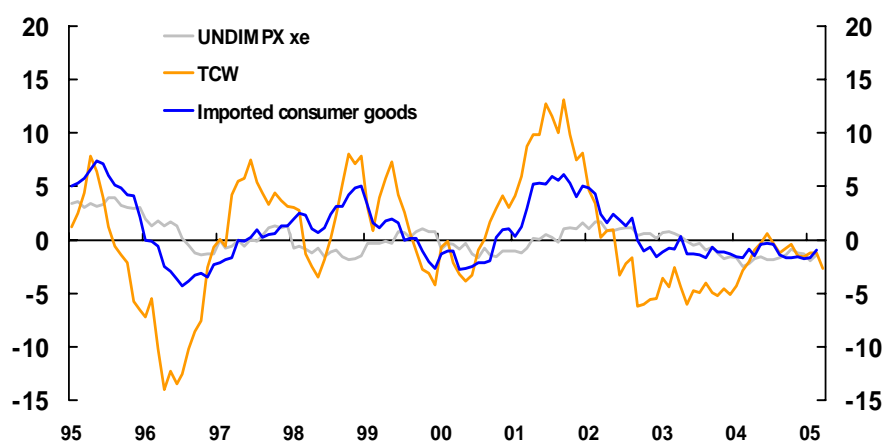
Source: National Institute of Economic Research.

## 6. ULC, labour costs and productivity in manufacturing



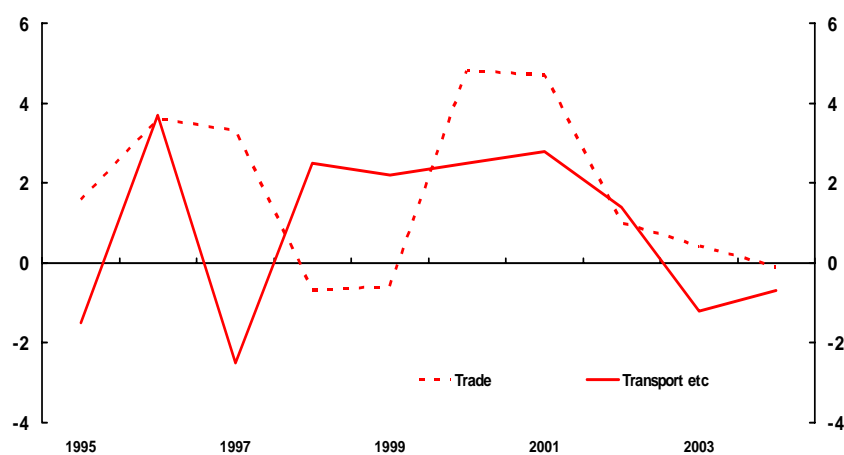
Note. Annual percentage changes.  
Source: National Institute of Economic Research.

## 7. SEK/TCW, UNDIMPX xe and imported consumer goods



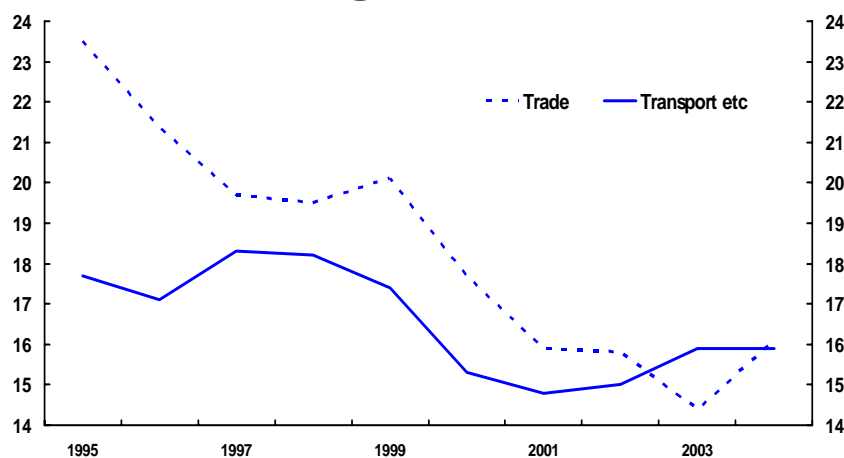
Note. 12-month changes in per cent.  
Source: Statistics Sweden and the Riksbank

## 8. Unit labour costs



Note. Annual percentage changes.  
Source: National Institute of Economic Research.

## 9. Profit margins



Note. Level as per cent of the value of gross output.  
Source: National Institute of Economic Research.