Henry Ohlsson: The inflation target – a benchmark for price-setting and wage formation

Speech by Mr Henry Ohlsson, Deputy Governor of the Sveriges Riksbank, at a conference, organised by Facken inom industrin, Bålsta, 16 April 2015.

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Accompanying charts can be found at the end of the speech.

I would like to begin by thanking you for the invitation to take part in this conference. It's a great pleasure to be here. Many faces are familiar after my 18 years on the Economic Council of Swedish Industry, while others are new. My own role is also new, the post of deputy governor of the Riksbank is an honour and carries great responsibility, but is also very interesting. It feels particularly appropriate to be holding my first speech in the role of Deputy Governor of the Riksbank in a context closely linked to wage formation. My subject today is why the inflation target is so important for smoothly-functioning price-setting and wage formation.

The Swedish labour market is about to enter into large-scale wage bargaining rounds. Several hundred collective wage agreements will expire in the first part of 2016. As always, the outcome of future wage bargaining rounds is important for the parties directly concerned. This essentially concerns both companies' competitiveness and employees' purchasing power. Thus, the significance of the agreements extends across the entire economy.

In the traditional Swedish model, different agents have clear roles. The social partners are responsible for wage formation through their negotiations. In recent decades, the sectors exposed to international competition have led the way and set the standard, as it were, for the rest of the labour market. I firmly believe that the outcome of this system has been positive. The Industrial Agreement has played an important role. In other words, the inflation target and the Industrial Agreement have worked well together.

The inflation target contributes to smoothly-functioning price-setting and wage formation

The role of the Riksbank is and always has been to be responsible for monetary policy. Monetary policy is conducted with the aim of ensuring that the annual rate of inflation is 2 per cent.

It is important to have a benchmark for expectations in the economy and thereby lay the foundations for efficient price-setting and wage formation. Its purpose is to enable economic agents to plan long-term, for instance, with regard to wage negotiations. In other words, the inflation target makes it easier for households and companies to make good economic decisions. It creates the conditions for good economic development with long-term economic growth.

The benchmark of an inflation target of 2 per cent was established in 1993. Prior to that, a fixed exchange rate acted as the anchor for wage formation and price-setting. At that time, inflation in Sweden was linked to that in competitor countries. However, increases in wages and prices in Sweden became too high, at the same time as real purchasing power hardly increased at all. These were the problems that a new inflation-targeting policy would remedy.

But why choose a target of 2 per cent? The reason why the inflation target in most countries has been set at 2 per cent or close to this is more the result of chance and circumstances than science. When an inflation target was introduced in Sweden, the Riksbank assessed that underlying inflation was at that time 2 per cent. Several other industrial nations had already chosen 2 per cent. The aim in Sweden then became to keep inflation at around this level.

Most central banks probably considered, quite simply, that an inflation rate of 2 per cent was a reasonable level to strive for – sufficiently low for people not to worry about when making financial decisions, but not too low.

There are three important reasons why the target is higher than zero.

- The *first* concerns statistical measures of inflation being assumed to overestimate actual price increases. This is partly because it is difficult to distinguish price increases due to better quality from price increases per se. If one has an inflation target of zero, and the inflation rate measured is zero in accordance with the target, there is thus a risk that inflation will actually be below zero because the quality improvements have been underestimated and thus the prices have fallen in relation to the level of the quality.
- A *second* reason is that the changes in relative prices and wages that are necessary for the economy to develop can occur more easily if there is a low, positive inflation rate than if there is no inflation. In other words, some inflation can function as a lubricant in the economy.
- A *third* reason, and the one that has perhaps received most attention in recent years, is that if an inflation target is set too low, it will leave insufficient scope to stimulate the economy by cutting interest rates in a deep recession.

Important that the inflation target remains in place

But the most important thing is to choose a certain level for the inflation target and then build up confidence in this level. Such confidence can hardly be created if the inflation target is constantly being adapted to actual inflation. Many economic agents now assume that inflation will be around 2 per cent in the coming period. It is important that we can rely on this being the case.

This does not mean that the Riksbank can ensure that inflation will always be 2 per cent. It is not possible to formulate monetary policy with such precision. Inflation will deviate from the 2 per cent level during certain periods. One reason is that unforeseen events will always occur, another is that it takes time before changes in monetary policy have a full impact. However, the Riksbank's ambition is to formulate monetary policy so that inflation returns to the target level in a few years' time.

But why in a few years' time? Why not the next quarter? The reason is that the Riksbank also strives to stabilise production and employment around long-run sustainable levels. Sometimes an overly rapid return to the inflation target could lead to excessive fluctuations in production and employment. The Riksbank then tries to bring inflation back on target at a somewhat slower pace so production and employment develop in a stable manner. It is also possible that inflation will approach the target for reasons that risk slowing down production and employment. One example of this is when substantial wage increases lie behind an inflation rate that is below target beginning to rise.

The inflation target and Industrial Agreement have contributed to higher real wages

So what significance has the inflation target had? Let me start by reviewing what has happened to the rate of inflation.

Figure 1 shows how high inflation in Sweden has been from 1970 until today. Inflation here is measured in terms of the annual percentage change in the consumer price index (CPI).[1] The average annual rate of inflation during the period 1971–1992 was 8.4 per cent. The inflation

[1] Statistics Sweden has adjusted the methods for calculating the consumer price index, for instance in 2005.

target has led to a severe slowdown in the rate of inflation. If we look at the period from 1993 up to the end of 2014, the average rate of inflation was 1.5 per cent. The figure also shows that the variations from year to year have declined since the inflation target was introduced.

A related question here is how high inflation has been since the Industrial Agreement was drawn up in 1997. The answer is that the average annual rate of inflation has been 1.2 per cent since then. Figure 2 shows the average value for annual inflation over six three-year periods since 1997. These three-year periods roughly follow the agreement periods.[2]

Actual inflation has been close to the target for three of the agreement periods. During the other three periods, inflation has been much lower. After two periods of being close to the inflation target, average price levels have not increased during the most recent agreement period.

How have wages developed since the inflation target was introduced? During the period 1970–1992, when there was neither an inflation target nor an Industrial Agreement, nominal wages in the whole of the Swedish economy increased by on average 8.9 per cent a year. This is shown in Figure 3. But as inflation was so high, the increase in real purchasing power was very limited. Real wages actually increased by an average of only 0.7 per cent a year.

During the period 1997 to 2014, nominal wages in the Swedish economy as a whole have increased by an average of 3.3 per cent per year (see Figure 3). And as inflation has been low, real wages have increased by 2.1 per cent a year. Let me summarise: the period with an inflation target and the Industrial Agreement have meant lower nominal wage increases, but at the same time higher real wage increases as inflation was much lower than before.

Have the wage increases varied substantially between the three-year periods since 1997? Figure 4 shows how nominal and real wages have increased during the six three-year periods since 1997.[3] Nominal wages have increased at their lowest by an average of 2.8 per cent a year. This is the case during the two most recent three-year periods, that is, the time since the financial crisis in 2008-2009. The three-year period 2001-2003 is the one with the highest nominal wage increases; 4 per cent a year on average. Looking at real wages, on the other hand, recent years have seen the highest increases since 1998-2000, the first agreement period following the signing of the Industrial Agreement.

If we summarise, there is no doubt that the years with a combination of inflation target and Industrial Agreement have led to much higher real wage increases than the previous years without an inflation target or the Industrial Agreement.

Where are we now?

That is what has happened so far, but where are we now? I think there are three important things so study when looking at the current situation and which have significance for the smooth functioning of price-setting and wage formation. The first concerns the low inflation rate, the second the significance of inflation expectations and the third the expansionary monetary policy.

Inflation below target – several reasons for this

Let’s start with inflation: Why is it so low now and therefore also far below the target? What are the reasons for this?

2 The Figure shows the period 2010–2012 as a whole, although there were several wage bargaining rounds during this period.

3 For natural reasons, there are no wage data available for 2015 yet.

On an overall level, one can say that the low inflation is explained by the weak international demand in recent years and the weak domestic activity. This development reflects the fact that the recovery following the financial crisis has been unexpectedly sluggish – perhaps less so in Sweden than in many other countries.

The low inflation is not just a Swedish phenomenon. It has also fallen or developed surprisingly weakly in many other countries in recent years, and other central banks have also found it difficult to attain their inflation targets.

In Sweden, companies appear to have found it unusually difficult to pass on their cost increases to prices. There are also signs that inflation may have been held back by increased competition and uncertainty over the development of the economy. Furthermore, electricity prices have been unexpectedly weak over the past year. In addition, the oil price fell heavily during the second half of 2014.

The Swedish krona also strengthened during the period 2010–2013. This meant that import prices measured in Swedish krona fell, and thus also Swedish consumer prices. However, during 2014 the krona weakened, which instead led to higher prices.

Finally, there is a technical factor that is important for inflation as measured in terms of the consumer price index, CPI. When the Riksbank cuts the repo rate to bring up inflation, the immediate effect is the opposite. Households' mortgage interest expenditure, and thus the CPI, then fall. There is an alternative measure of inflation, the CPIF, which is based on a constant interest rate and therefore not affected by the Riksbank's repo rate cuts. Many often follow the CPIF instead of the CPI, particularly during periods when the repo rate changes a lot.

Inflation expectations indicate confidence in the inflation target

It is important that the inflation target is credible. And it becomes credible when the economic agents expect inflation to return to the target following deviations. It is primarily the long-term inflation expectations that indicate confidence in the inflation target.

Central economic agents are regularly asked how high they expect inflation to be in the coming years. Figure 5 shows how inflation expectations two and five years ahead have developed since 2010. Initially, expectations five years ahead were actually above the inflation target of 2 per cent. However, during 2014 there was a change, when the five-year expectations fell below the level of 2 per cent. The most recent surveys show that expectations five years ahead are now at around 1.9 per cent a year.

Inflation expectations two years ahead have been below those five years ahead ever since 2012. The most recent surveys show that expectations two years ahead are now at 1.3–1.4 per cent a year. Together with measurements five years ahead, the picture is that the credibility of the inflation target on the whole has increased thus far this year.

Expansionary monetary policy to stimulate inflation

The Riksbank's aim is to bring the rate of inflation back towards the target of 2 per cent. Monetary policy is therefore very expansionary today in the sense that the Riksbank's policy rate, the repo rate, has been cut in several stages and is currently at –0.25 per cent. The repo rate is expected to remain at this level at least until the second half of 2016. Furthermore, the Riksbank decided in February and March this year to purchase government bonds to a value of SEK 40 billion. The repo-rate cuts and bond purchases contribute to pushing down market rates. Figure 6 shows how the repo rate has developed since 2010.

The purpose of cutting the repo rate and buying bonds is thus to bring up inflation. Lower interest rates contribute to increasing demand in the economy. It becomes more attractive for households to consume and for companies to invest. Higher demand also makes it possible for companies to raise their prices.

The expansionary monetary policy has had an effect. There are signs that inflation has now bottomed out and is on the way up. Food prices began to rise faster in 2014. Prices of services also began to rise faster last year.

On Tuesday the inflation figures for the month of March were published. Over the past twelve-month period, consumer prices have increased by 0.2 per cent. When adjusted for interest-rate cuts the increase is 0.9 per cent. If, moreover, we disregard the effects of energy prices, the rate of inflation is 1.3 per cent.

Yesterday the most recent survey of inflation expectations was published. Expectations of inflation two years ahead are now at an annual rate of 1.3 per cent. If we instead look at the longer term, five years ahead, yesterday's figure was 1.9 per cent.

There are thus several signs that the expansionary policy is showing results and that inflation has begun to rise. Inflation expectations have also begun to rise. But inflation is still a rather long way below the target. There are also threats to the upturn in inflation. The krona strengthened at the end of February and the beginning of March. This risked stopping the upturn. That was why the Riksbank decided in March to cut the repo rate further and to extend the purchases of government bonds to supplement the decisions made in February. The Riksbank is still prepared to do more to ensure that inflation rises towards the target if this is necessary.

The exchange rate is floating – and highly volatile

In other words, the exchange rate has considerable significance for inflation trends. The Swedish krona has floated since 1992. There are several factors that affect a floating exchange rate. Differences in rates of inflation in Sweden and abroad and differences in interest rates between Sweden and the rest of the world are two such factors. Net trade in goods and services is another. Differences in economic growth and monetary policy are also significant. It is very difficult to predict how the exchange rate will develop. One reason for this is that different factors have different significance at different points in time.

Figure 7 shows how the value of the Swedish krona has developed in relation to an index of international currencies, the KIX. The greater the significance a foreign currency has for Swedish foreign trade, the larger the weight it is given in the index. The curves in the figure can be interpreted as showing what the foreign currency costs in Swedish krona. When the krona weakens, the foreign currency costs more and the curve rises. The KIX index is the exchange rate the Riksbank considers most important.

The Swedish krona showed an appreciation trend from 2010 until the first part of 2013. However, there were substantial variations. From the beginning of 2014, the trend has turned, and the krona has weakened. But during this period, too, there have been substantial fluctuations in the short term.

International developments important – even with a floating exchange rate

During my years on the Economic Council of Swedish Industry, I have sometimes gained the impression that some analysts have considered that the floating exchange rate means that one can disregard developments in costs and wages in competitor countries when assessing the competitiveness of Swedish companies. But this is wrong. The development of the exchange rate, as shown in Figure 7, has been affected by a number of factors, where competitiveness is only one factor and moreover not always an important one.

Competitiveness is affected by differences in payroll expense and increases in payroll expense in Sweden and other countries. It is also affected by differences in productivity and increases in productivity. A rapid increase in productivity in Sweden is therefore particularly beneficial if it is higher than the increase in productivity abroad. Finally, it is important to see how prices develop in the markets where Swedish companies exposed to international competition sell their goods and services.

Wages in Sweden have increased by on average 2.7 per cent a year since 2010. This is shown in Table 1. The increase is in line with that in Germany, but higher than the increase in the euro area as a whole. It is also higher than the aggregate for OECD countries. At the same time, productivity in Sweden has not increased as quickly as in other countries.

The development of unit labour costs reflects the difference between wage increases and growth in productivity. Unit labour costs, measured in the respective currencies, are shown in the column on the far right of the table. Sweden is here on the same level as Germany, but higher than the euro area as a whole and also higher than the OECD aggregate.

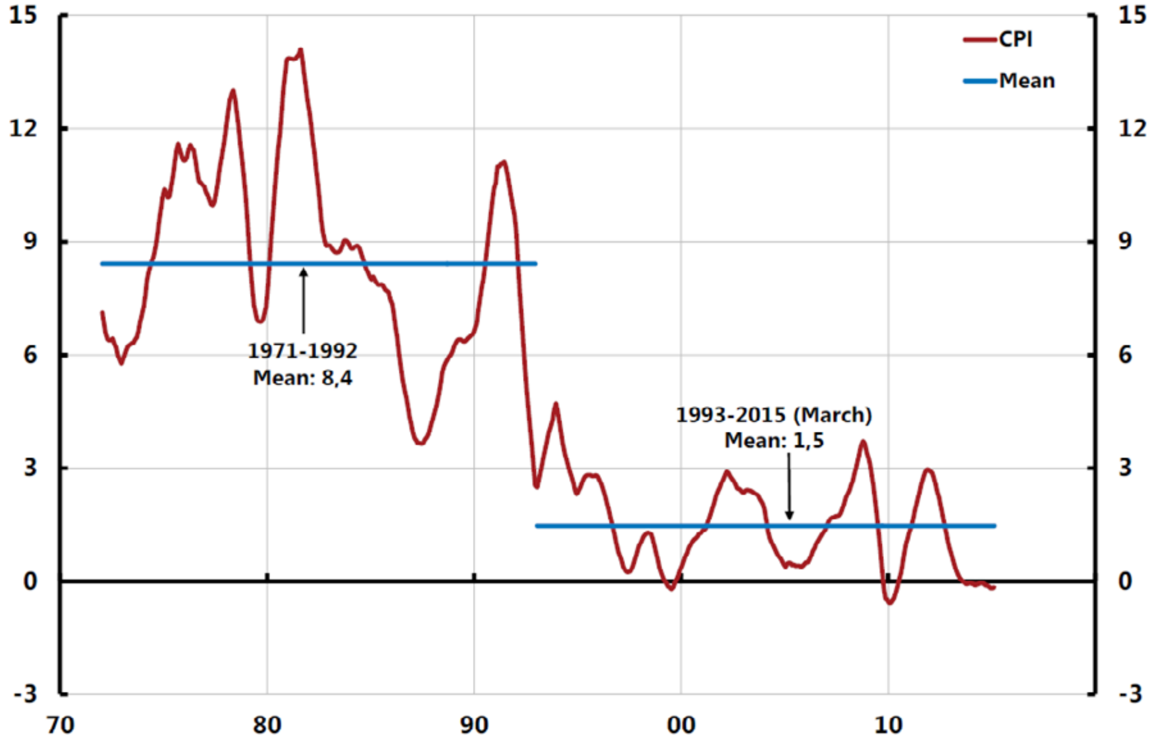
Inflation towards the target – in an orderly manner

Let me round off. One main purpose of my speech is to show how important the inflation target has been as a benchmark for price-setting and wage formation in Sweden. It is an important task for the Riksbank to create confidence in the inflation target. This is why we are worried over the current low inflation rate. The Riksbank wishes to safeguard the inflation target. We can do this by formulating monetary policy so that the current low inflation rate rises towards the target. During the spring we have therefore cut the policy rate further on two occasions and moreover decided to buy government bonds. We are prepared to do more than this if it proves necessary. At the same time, it is important that the journey back towards the inflation target is a smooth one and does not pose any threat to production and employment.

We are now on the verge of very extensive wage bargaining rounds. Several hundred collective wage agreements will expire in the first part of 2016. It is the social partners who will negotiate and sign new collective agreements. What the Riksbank can do is to inspire confidence in the inflation target, which can in turn provide a starting point for the negotiations. The inflation target and the Industrial Agreement have worked well together since 1997. They can continue to do so.

Figure 1. CPI inflation

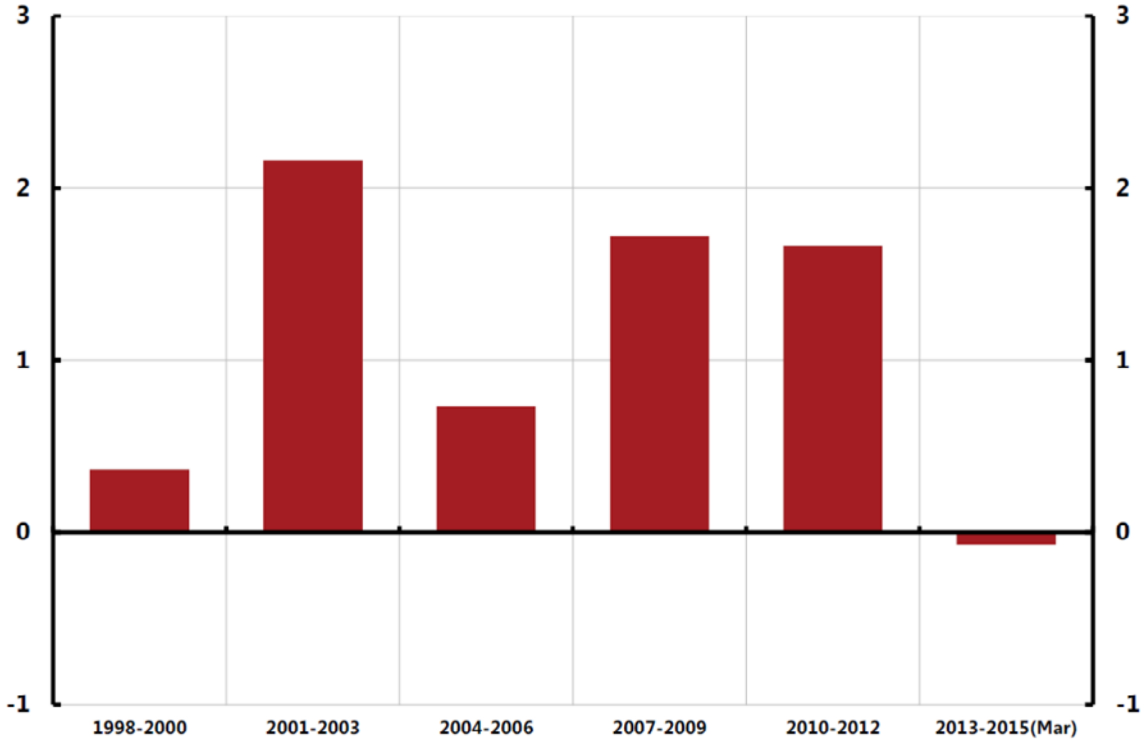
Annual percentage change, twelve-month moving average



Note. Statistics Sweden has adjusted the methods for calculating the consumer price index, for instance in 2005. The figures refer to real-time data, that is, inflation at the time of publication.
Source: Statistics Sweden

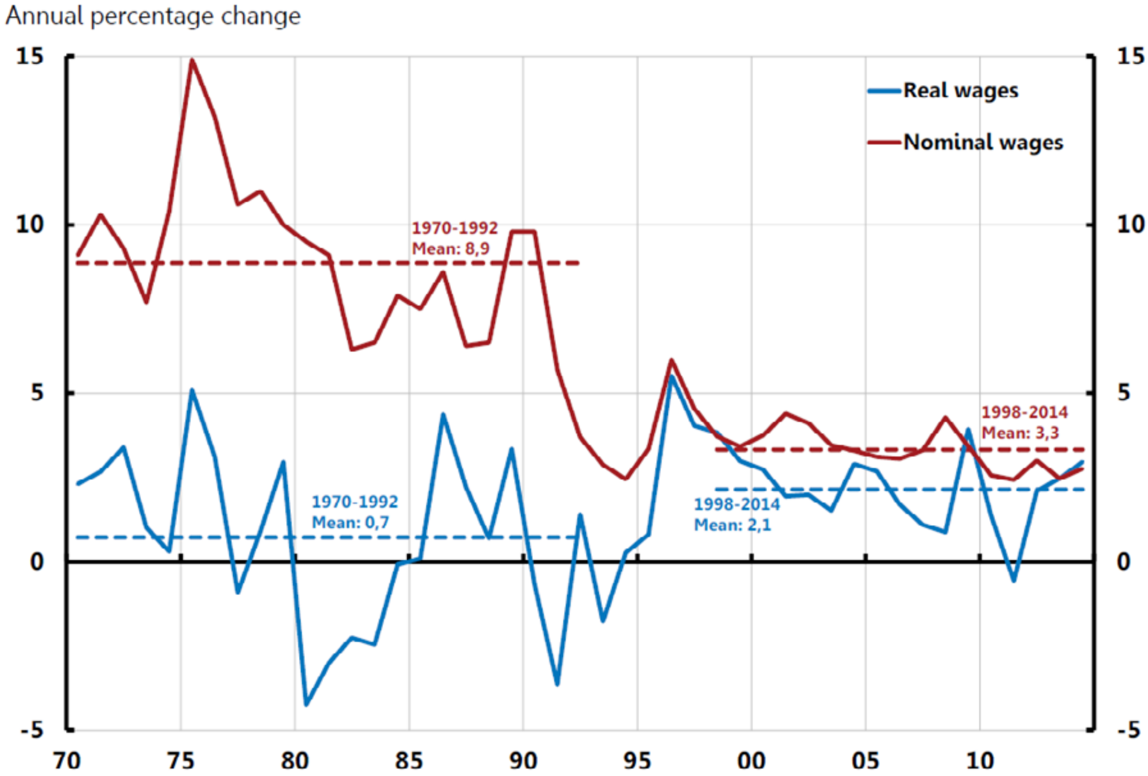
Figure 2. Inflation since 1997

Annual percentage change, average



Note. Inflation refers to CPI.
Sources: Statistics Sweden and the Riksbank

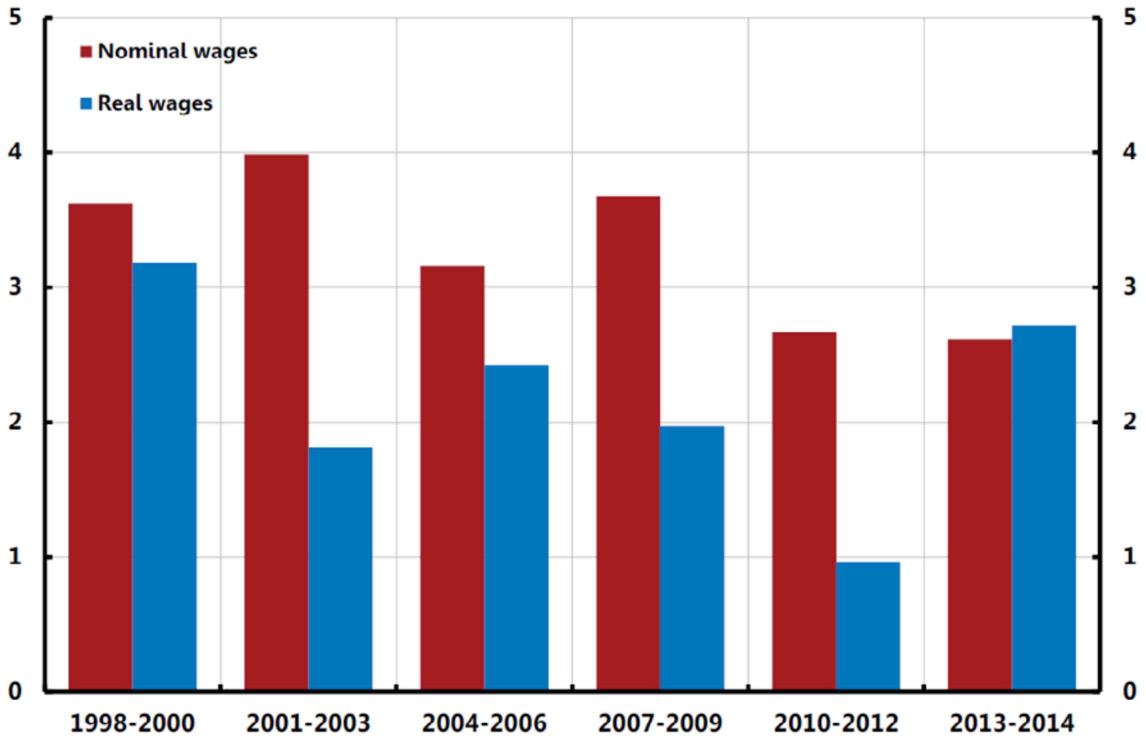
Figure 3. Nominal and real wage increases



Note. Annual percentage change. According to short-term wage statistics since 1993 and wage structure statistics prior to 1993. Real wages are calculated as the difference between the annual percentage change in nominal wages and the annual percentage change in the CPI.
Sources: The National Mediation Office and Statistics Sweden

Figure 4. Nominal and real wage increases since 1997

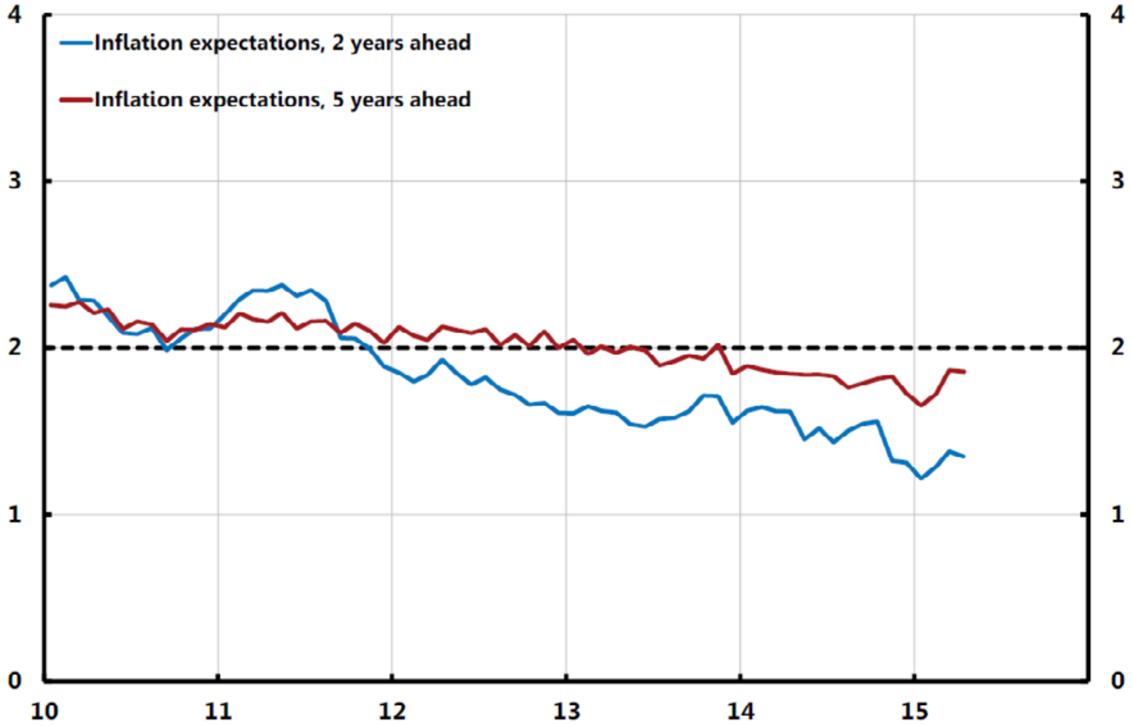
Annual percentage change, average



Note. Real wages deflated by the CPI.
Sources: Statistics Sweden and the Riksbank

Figure 5. Inflation expectations 2 and 5 years ahead since 2010

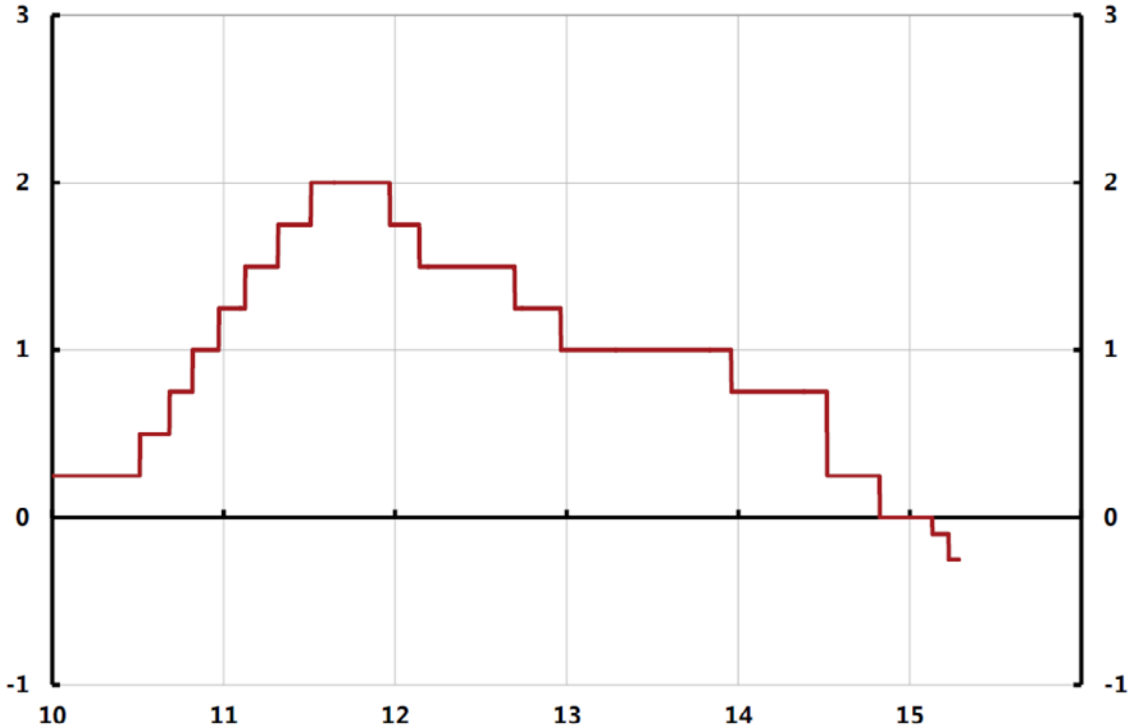
Per cent, money market participants



Source: TNS Sifo Prospera

Figure 6. The repo rate 2010-2015

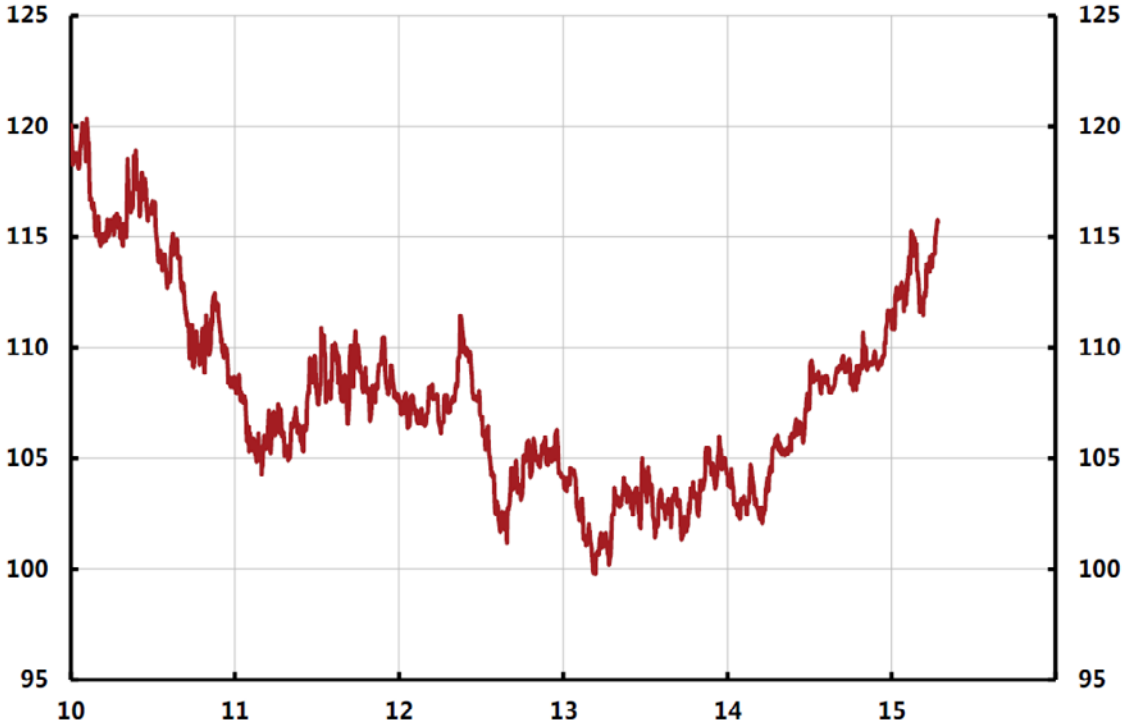
Per cent



Source: The Riksbank

Figure 7. Exchange rate 2010-2015

KIX index, 18 November 1992 = 100



Sources: National sources and the Riksbank

Table 1. Payroll expense and productivity 2010-2015

Percentage increase per year, average

	Payroll expense	Productivity	Unit labour cost
Sweden	2.7	0.4	2.3
Germany	2.7	0.6	2.3
Euro area	1.6	0.5	1.0
The OECD	2.1	0.8	1.4

Note. Data refer to economy as a whole. 2015 refers to the OECD's forecast.
Source: OECD, Economic Outlook, November 2014.