Svante Öberg: Wage formation and monetary policy

Speech by Mr Svante Öberg, Deputy Governor of the Sveriges Riksbank, at Folkets hus, Stockholm, 5 December 2008.

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My speech today is supposed to be about wage formation and monetary policy, and I will devote most of my time here to this subject. However, given that we brought the monetary policy meeting forward to Wednesday and that we then reduced the repo rate to 2 per cent. I would like to begin by saying a few words about this decision. As you may know, the members of the Executive Board do not usually discuss their own position on the latest interest rate decision until the minutes of the meeting have been published. It is only then that the views of the individual members are presented officially. The minutes of the meeting on Wednesday will be published on 17 December. My comments on the interest rate decision and the current situation thus reflect the collective view of the Executive Board.

We chose to move the monetary policy meeting forward by two weeks because it became clear to us at an early stage that there was a need for a significant reduction in the repo rate. In the prevailing situation, our assessment was that it was important to make a quick decision. We thus reduced the repo rate by 1.75 percentage points. This is a substantial cut and it has been made on the grounds that since the previous Monetary Policy Report was published in October there has been an unexpectedly rapid and tangible downturn in economic activity in Sweden and abroad. So, in order to prevent development being far too weak and inflation too low, a significant reduction in the repo rate was required. The fact that the interest rate needed to be cut substantially is also due to monetary policy not having such a large impact recently as it normally does. With lower policy rates and a more expansionary fiscal policy in Sweden and abroad, we expect to see an easing-off in the slowdown of the economy and a recovery at the end of 2009.

In this acute situation, one may wonder whether wage formation is something that we need to discuss just now. Obviously, wage formation is not the most central issue for monetary policy at the moment. At the same time, it is important to be able to stand firm when a storm is brewing. Today, the Swedish economy stands on much firmer foundations than it did in the early 1990s – largely thanks to the lessons that we learned from the crisis at that time and the improvements that have been made in the functioning of the economy since then. I would claim that wage formation has been an important element of this and I intend to explain this in more detail in my speech today. At the end of my speech, I also intend to give you my personal view on a question that has emerged in the wake of the latest round of collective bargaining, namely which sector should reach an agreement first and thus set the norm for wage increases in other sectors.

However, perhaps the first question that should be asked is why the Riksbank should show any interest at all in the functioning of wage formation. Wage formation and monetary policy are interrelated. The Riksbank is not a party in the collective bargaining process. It is the social partners that conduct collective bargaining. But the development of wages affects inflation and inflation affects the development of wages. Our job is to maintain a low and stable level of inflation. This job is made easier if wage formation works well.

My speech today can be summed up in the following four points:

- Wage formation has functioned better in the last fifteen years than in the 1970s and 1980s.
- Cost increases are higher in the current agreement period than in the preceding agreement periods.
The economy is weakening, inflation is falling rapidly and the Riksbank is reducing the interest rate.

The sector that is exposed to international competition should also set the norm for wage development in collective bargaining in 2010.

The speech is structured in line with these four points.

I would also like to make it clear that the views on wage formation that I express in this speech today are my own and are not necessarily shared by my colleagues on the Executive Board of the Riksbank.

Wage formation in a longer perspective

High wage increases and devaluations in the 1970s and 1980s

I think that every one here would agree that wage formation has functioned better in the last fifteen years than in the 1970s and 1980s. One way of illustrating this is to compare the development of inflation in Sweden and Germany. In the 1960s, inflation was on average just over one percentage point higher in Sweden than in Germany.

Following the breakdown of the Bretton Woods system in the early 1970s, inflation in Germany was seen as a nominal anchor for inflation in Sweden in that the Swedish krona was pegged to a currency basket dominated by the D-mark.

This strategy did not work. During the 1970s and 1980s, inflation in Sweden was on average more than four percentage points higher than in Germany (see Figure 1).

This is largely related to the development of labour costs in the two countries. Labour costs per produced unit – unit labour costs – increased much more rapidly in Sweden than in Germany during the 1970s and 1980s (see Figure 2).

In order to increase the competitiveness of Swedish industry, the Swedish krona was devalued several times in the late 1970s and early 1980s. The exchange rate of the krona against the D-mark was thus significantly weakened over a long period of time.

This meant that Sweden's competitiveness in relation to Germany actually increased somewhat. However, a comparison of unit labour costs in Sweden and Germany in the same currency shows that the difference just before the crisis in the early 1990s was nevertheless approaching the same level as prior to the devaluations at the beginning of the 1980s. As the social partners were able to count on devaluations, there was no strong incentive to try to avoid cost problems.

The problems worsened during the second half of the 1980s and the early 1990s when Sweden suffered a period that, in many respects, can be described as a classic financial crisis. The phase-out of credit and currency regulations was followed by a dramatic expansion of credit, overheating of the economy, major current account deficits and, finally, a collapse.

Inflation in Sweden in line with that in Germany since the early 1990s

Since the beginning of the 1990s, inflation in Sweden has been roughly the same as in Germany (see Figure 1). There are of course several reasons why inflation in Sweden has fallen to a low and relatively stable level. The crisis that Sweden suffered in the early 1990s

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1 Here and below the term "competitiveness" is used in the sense of relative unit labour costs in the same currency.
was the most serious recession since the Depression of the 1930s. GDP declined three years in succession and employment fell by over 500 000. This also pushed inflation down to a low level. When it was decided that the krona would no longer be pegged against the eeu in November 1992, a monetary and foreign exchange policy was introduced with a floating exchange rate and an inflation target of 2 per cent. Fiscal policy was tightened. The budget consolidation process of the mid-1990s was quite drastic in international terms and also helped to subdue inflation, even though the krona had weakened by approximately 25 per cent directly after the introduction of the floating exchange rate. This was something that Sweden did not manage to do after the devaluations of the late 1970s and early 1980s. The Riksbank was eventually given an independent position with the aim of increasing the credibility of the inflation target, which the Riksbank also managed to do.

**Improvements in wage formation have contributed to positive development**

Another important reason why inflation in Sweden has been able to stay in step with inflation in Germany, and nowadays in the euro area, is that wage formation has improved.

During the 1980s, it became increasingly evident that Swedish wage formation did not function in a manner compatible with economic balance. Collective bargaining often began only when the previous agreements had expired, which meant that negotiations were conducted under more strained circumstances without the obligation to refrain from industrial action. The wage agreements contained guarantees on the development of prices, wages and earnings, as well as renegotiation clauses, which contributed to a situation in which prices and wages chased each other in an upward spiral. The levels stipulated in the agreements were often minimum levels above which there was considerable wage drift.

Several factors have contributed to the improvement in wage formation. In March 1990, the government appointed the so-called Rehnberg Commission. On the basis of the Commission's proposals, stabilisation agreements were signed in most areas of the labour market. These helped to reduce the rate of wage increases from around 10 per cent in 1990 to 3-4 per cent per year in 1992-1993, and to ensure that the agreements no longer contained any flexibility clauses.

In March 1997, the social partners in the industrial sector signed a new cooperation agreement, the so-called Industrial Agreement. This covered regulations on the conduct of collective bargaining and established the partners' joint responsibility for wage formation in their part of the labour market. Similar agreements, although not as far-reaching, have followed in other areas.

In 2000, the new National Mediation Office began work. This established a third, independent party on the labour market with the task of promoting an effective wage formation process. The National Mediation Office was also given increased powers to take action in connection with collective bargaining. The National Institute of Economic Research was given the task of annually producing reports on the economic conditions for wage formation, the "Wage Formation in Sweden" reports.

Over the last 15 years, the national agreements have largely entailed wage levels that have been very compatible with low and stable inflation and the positive development of production and employment. The collective bargaining rounds have begun in good time before the expiry of the old agreements. The sector that is exposed to international competition has normally come to an agreement first and has thus set the norm for other parts of the economy. The agreements have usually run over three years. They no longer contain flexibility clauses that lead to wages and prices chasing one another in an upward spiral. At the same time, wage formation within the national frameworks has provided scope for considerable variations between companies and individuals. The number of labour market conflicts has been lower than before.
The fact that wage formation has worked relatively well over the last 15 years has also made it possible for Sweden to maintain, or even increase, its international competitiveness since we stopped pegging the krona to the ecu in November 1992. One difference compared to previous episodes is that, since 1993, unit labour costs in Sweden have increased at the same rate as in Germany. This is an important explanation of the similar development of inflation in the two countries. The nominal exchange rate has been strikingly stable up to the point when the financial crisis worsened in September. Costs in the Swedish manufacturing industry have fallen in the last 15 years in comparison with those in a large group of countries (see Figure 3). Swedish exports have increased dramatically and the current account is showing a large surplus.

The development of real wages is an additional way of illustrating that wage formation has functioned better in the last 15 years than in the 1970s and 1980s. In the period 1997-2007, the average increase in real wages was 2.5 per cent per year. There has not been such an extended period with real wage increases since the 1960s. This can be compared to the period 1970-1992, when the average increase in real wages was 0.7 per cent. Real wages actually fell in several years during the 1980s and early 1990s (see Figure 4).

**Wages and costs in the current agreement period**

I now come to my second point, which concerns wages and costs in the current agreement period. As far as we can judge at the moment, cost increases will be higher in the current agreement period than in the preceding agreement periods. Wage increases will be somewhat higher and the development of productivity much weaker.

**Higher wage agreements in 2007 than in preceding agreements**

I personally was rather optimistic ahead of the rounds of collective bargaining in the spring of 2007 in the sense that they would mainly be conducted in good time before the old agreements expired and without serious conflicts, and that they would result in wage increases that were compatible with the Riksbank's inflation target. My assessment was based on three factors.

Firstly, the economic conditions prior to the bargaining rounds were good. Wages had increased moderately in the preceding years and there was spare capacity on the labour market. Secondly, wage formation had improved since the crisis at the beginning of the 1990s. Thirdly, the monetary policy framework had improved and thereby the conditions for maintaining low and stable inflation. The public's expectations were that inflation would be around the target of 2 per cent per year.

At the same time, my assessment was that the risks were on the "upside", that is that it was possible that wage increases could be higher. There was strong growth in the economy and employment was increasing rapidly. Despite the positive experience of the preceding years, there was a possibility that the rounds of collective bargaining could be much less straightforward than expected. Market forces could also push up the rate of wage increases to higher levels.

I became more concerned when the content of the agreements became apparent. The levels of the agreed wage increases were significantly higher than in the preceding rounds of collective bargaining. The outcome was similar to the risk scenario that we presented in a Monetary Policy Report in February 2007 before the collective bargaining process began. This undermined the possibility to conduct a relatively expansionary monetary policy with low interest rates and still reach the inflation target.
**Somewhat higher wage increases in 2007-2009 than in the preceding agreement period**

In February 2007, the Riksbank's assessment was that hourly wages would increase by 3.9 per cent per year in the three-year period 2007-2009. When more information on the result of the rounds of collective bargaining became available in June 2007, this assessment was increased to 4.2 per cent per year. My personal belief was that hourly wages would increase more than this.

Since the spring of 2007, the development of the economy has been much weaker than we expected. The crisis on the financial markets has entailed a dramatic downturn in the US economy which has had a dampering effect on economic development in other countries, including Sweden. This can in turn have made the companies more cost conscious and less willing to employ new personnel and increase wages above the levels stipulated in the agreements.

It is therefore reasonable to assume that there will be lower wage increases during the three-year agreement period than we could predict in 2007. Our assessment now is that hourly wages will increase on average by 3.7 per cent per year during the three-year period 2007-2009 measured using the National Mediation Office's method for presenting statistics, and by three tenths more using the method for presenting wage developments in the National Accounts. This is around half a percentage point per year more than during the previous three-year agreement period.

... and a weaker development of productivity will lead to higher cost increases

Labour costs per produced unit have, however, increased considerably more than we expected in the spring of 2007 as the development of productivity has been much weaker than we predicted at that time. In February 2007, we predicted that unit labour costs would increase by 2.3 per cent per year during the period 2007-2009.

We now calculate that unit labour costs will increase by an average of 3.8 per cent per year in 2007-2009 compared to the figure of practically zero per cent per year in 2004-2006 (see Figure 5). This means that many companies are now faced with the choice of either increasing their prices to counteract the decline in profitability, which may be difficult in the present situation with a steady decline in demand, or of making staff cuts. Our assessment is that the companies will probably choose the latter. Price increases will be moderate while employment will decrease significantly.

In the three preceding agreement periods, the high rate of increase in productivity helped to keep unit labour costs down. The growth of productivity was surprisingly strong; certainly much stronger than many of us expected when the agreements were negotiated.

Productivity has now fallen in seven consecutive quarters (see Figure 6). My impression is that the recent development of productivity is in all essentials a result of weaker economic activity. Growth has declined rapidly while the number of people in employment has continued to increase.

If we study how GDP and employment vary over the economic cycle it becomes clear that there is a time lag in the cyclical fluctuation in employment in relation to production. It also appears that this time lag has increased since the beginning of the 1990s (see Figure 7). The Riksbank's assessment is that a recovery in the growth of productivity is probable over the next few years. This is indicated, for example, by the historical links that I have just mentioned. However, we do not expect the rate of growth to be as high as between 2002 and 2006. In the latest Monetary Policy Update, the assessment is that the growth of productivity in 2010 and 2011 will average over 2.5 per cent.

It is more difficult to assess the growth of productivity in the longer term. A number of explanations have been put forward for the rapid development of productivity up to and
including 2006. The IT sector is relatively large in Sweden; IT investments have been extensive; the previous phase-out of product markets has increased competition; Sweden is a small, open economy which also leads to great competitive pressure and so on. My impression is that IT will continue to contribute to a relatively rapid development of productivity in Sweden, while higher real interest rates and energy prices may subdue the rate of growth. All in all, we expect to see a lower long-term rate of increase than we saw from the mid-1990s to the mid-2000s.

The current economic situation and monetary policy

I will now briefly address current monetary policy. The situation can be summed up as follows: the economy is weakening, inflation is falling rapidly and the Riksbank is reducing the interest rate.

The financial crisis is reinforcing the downturn in economic activity

GDP growth is now declining in Sweden and abroad. We expect to see negative growth in the Swedish economy next year (see Figure 8). It is predicted that employment will fall by approximately 120 000 over the next two years and that unemployment will rise to approximately 8.4 per cent (see Figures 9 and 10). An important reason for the dramatic downturn in economic activity we see ahead of us is that the global financial crisis has worsened during the autumn.

Inflation has been unusually high over the past year. But it will probably fall rapidly in the year ahead. In the USA it has fallen in three consecutive months and in the euro area it fell to 2.1 per cent in November. In Sweden, inflation fell to 4.0 per cent in October, but our assessment is that it has fallen significantly in November here too (see Figure 11).

Inflation is high but is declining rapidly

One of the issues that we have had to take note of during the year has been the considerable fluctuation in the prices of food and energy. One of the reasons that we increased the interest rate in the period up to the autumn was to prevent the price increases that started on the world market spreading to other areas via price-setting and wage formation.

During the year, I have argued that it did not appear to be especially likely that short-term increases in the prices of food and energy would push up wages by leading to demands for compensation for the price increases. The slowdown in growth and the weakening of the labour market are factors that weighed against such a scenario. There are also three-year agreements on large sections of the labour market that regulate agreed pay increases and these do not contain, as was the case in the 1970s and 1980s and is still the case in some other countries, price development guarantees that provide automatic compensation for price increases. On the other hand, I have pointed out the importance of inflation and inflation expectations coming down to around 2 per cent ahead of the next round of collective bargaining in 2010.

I have been more concerned about the effects of increases in food and energy prices spreading to other prices in the economy. For example, I have pointed out that food prices have increased more rapidly in Sweden than in the euro area and that the business tendency survey has indicated that the retail sector still planned to increase prices. This indicates that price increases in the world market could spread to other goods. The risk of such a development has now declined in that energy and food prices have fallen on the world markets and the plans to increase prices in the food retail sector are no longer so definite. The decline in demand in Sweden and abroad is further reducing the risk of these contagion effects.
The Riksbank has analysed what is referred to as the persistency of inflation, that is how long the effects of a sudden increase or decrease in inflation endure. We identify two main results for Sweden, which are similar to the results of studies of the euro area. First, there is a degree of persistency in inflation, but it can be regarded as moderate. This result means, in simple terms, that half of the effect of a sudden increase in inflation remains in the next quarter.

Second, persistency has declined since the inflation target was introduced. One possible explanation is that monetary policy has gained greater credibility. There is more confidence than previously that monetary policy endeavours to bring inflation back to the target following shocks. Another possible explanation is that, since the mid-1990s, the shocks have been less extensive than previously, partly because wage formation has functioned better than before.

A conceivable conclusion from a monetary policy point of view is that it can nevertheless be risky to underestimate persistency. This is because the costs of bringing inflation down are high once it has been allowed to overshoot the target. It is therefore better to assume a too high rather than a too low level of persistency.

**Thoughts ahead of collective bargaining in 2010**

I would now like to make some personal observations on a matter that may be important ahead of the next major round of collective bargaining in 2010 regarding which sector should set the norm for wage increases. My view is that the sector that is exposed to international competition should also set the norm for wage development in collective bargaining in 2010.

There has recently been a lot of discussion about the current wage formation system. One question has been whether the system with the manufacturing industry as the sole norm setter is the most appropriate and sustainable option given that we now have a floating exchange rate instead of a fixed exchange rate. The argument is that the same restraining effect on wage formation could now be achieved if the service sector sets the norm rather than the manufacturing industry. The idea is that if the service sector sets the norm too high, the Riksbank would increase the interest rate and that this would dampen economic activity, employment and inflation in the same way as if the manufacturing industry set the norm too high and lost international competitiveness.

**The sector exposed to international competition should set the norm**

My own view is that the sector exposed to international competition still has a central role to play in wage formation. But this sector should not be equated with the manufacturing industry. Other sectors are also exposed to international competition to varying degrees. It is also important that there is consensus between the negotiating organisations on what part of the economy should set the norm.

I do not think that there is any major difference between the previous situation with a fixed exchange rate and the present situation with a floating exchange rate. Our inflation target is largely the same as in other countries. As we saw earlier, inflation over the last 15 years has also been more or less the same in Sweden and Germany.

The only way that we can have higher wage increases is if the development of productivity in Sweden is higher than in other countries. This has also been the case if we look at developments in Sweden compared to developments in the euro area since 2000. Wages

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have increased more rapidly in Sweden than in the euro area, but the development of productivity has also been stronger in Sweden while inflation has been approximately the same (see Figure 12).

For the manufacturing industry, the situation is largely the same in an exchange rate regime with a floating rate as in a regime with a fixed rate in the sense that the wage agreements must look to the future with regard to the development of costs abroad. Normally, it may be reasonable to assume that the exchange rate remains unchanged, which is illustrated by the stable development of the krona against the euro from 2002 until this autumn. A hypothesis of an unchanged exchange rate provides the same conditions under fixed and floating exchange rate regimes.

The krona has weakened significantly in the course of the ongoing financial turbulence, although in the long term we expect it to return to roughly the same level it was at before the crisis. Hopefully, the krona will have stabilised at a higher level than the present level before the round of collective bargaining in 2010. This is at least what the Riksbank believes (see Figure 13).

For the service sector, however, the situation is different in the case of a floating exchange rate. If the service sector sets the norm for wage increases and the increases are higher than the level compatible with the inflation target, the Riksbank will, under normal circumstances, raise the interest rate. This normally results in a strengthening of the krona and a dampening of economic activity and inflation. For the manufacturing industry this leads to a double-edged pressure on competitiveness in that wages increase more than in other countries at the same time as the krona is strengthened.

However, the restraining effect of too high wage increases in the service sector is less direct and less tangible than the effect of too high wage increases in the manufacturing industry. The effect of too high wage increases in the service sector must be explained in several stages (higher wages, higher inflation, interest rate increases, lower real growth and so on) while the effect of too high wage increases in the manufacturing industry has a direct impact on the competitiveness of industrial companies.

The normative role of the manufacturing industry is also dependent on more than the fact that it is a part of the Swedish economy that is exposed to international competition. In the Industrial Agreement, the social partners have agreed on a process in which negotiations are conducted under the obligation to refrain from industrial action and in good time before the old agreements expire, as well as on specific processes for handling conflicts, a joint basis for negotiations and so on.

I therefore conclude that the manufacturing industry, with a possible expansion to include other parts of the Swedish economy that are exposed to international competition, should also set the norm for the development of wages in the round of collective bargaining that will be held in 2010. A broad consensus that this is an appropriate process would facilitate the negotiations and contribute to effective wage formation.

At the same time, I would like to conclude by emphasising that the Riksbank is not a party in the collective bargaining process. It is the social partners that conduct collective bargaining. But the development of wages affects inflation and inflation affects the development of wages. Our job is to maintain a low and stable level of inflation. This job is made easier if wage formation works well.

Thank you!
Figure 1. Difference between inflation in Sweden and Germany
Percentage points

Note. Inflation is measured as the annual percentage change in the CPI. The series is equalised using a 3-month moving average. Sources: Statistics Sweden, Federal statistics agency in Germany and the Riksbank

Figure 2. Relative unit labour costs and nominal exchange rate: Sweden compared to Germany
Index, 1960=100

Note: Exchange rate is EUR/SEK from 2002. Sources: Bureau of Labor Statistics and the Riksbank
Figure 3. Relative unit labour costs in the manufacturing industry: Sweden compared to TCW-weighted countries
Index, 1970-01-01=100

Source: OECD
Note: Converted to SEK.

Figure 4. Real hourly wages
Annual percentage change

Source: National Mediation Office
Figure 5. Unit labour costs in entire economy
Annual percentage change, seasonally-adjusted data

Sources: Statistics Sweden and the Riksbank
Note: Broken lines and columns are the Riksbank’s forecasts.

Figure 6. Labour productivity in entire economy
Annual percentage change, seasonally-adjusted data

Sources: Statistics Sweden and the Riksbank
Note: Squares are the Riksbank’s forecasts. Outcomes are quarterly data and the forecasts are annual averages.
Figure 7. Cyclical variation in GDP and number of employed
Percentage deviation from trend

Note: Trend calculated using Hodrick-Prescott filter. Broken lines are the Riksbank’s forecasts.
Sources: Statistics Sweden and the Riksbank

Figure 8. GDP
Quarterly percentage changes translated to annual rate, seasonally-adjusted data

Note: Broken line is the Riksbank’s forecast.
Sources: Statistics Sweden and the Riksbank
Figure 9. Employed
1000s, seasonally-adjusted data

Sources: Statistics Sweden and the Riksbank

Note: The squares are the Riksbank’s forecasts, 15-74 age group. The outcomes are quarterly data and the forecasts are annual averages.

Figure 10. Unemployment
Percentage of labour force, seasonally-adjusted data

Sources: Statistics Sweden and the Riksbank

Note: Broken line is the Riksbank’s forecast, 15-74 age group. Data before 1993 is linked by the Riksbank.
Figure 11. CPI and CPIF inflation
Annual percentage change

![Graph showing CPI and CPIF inflation from 2000 to 2012.](image)

Note: Broken lines are the Riksbank’s forecasts.
Sources: Statistics Sweden and the Riksbank

Figure 12. Competition-weighted exchange rate, TCW index
Index, 1992-11-18 = 100

![Graph showing TCW index from 2000 to 2012.](image)

Note: Outcomes are current rates to 081201 and the forecasts are quarterly averages. Broken line is the Riksbank’s forecast.
Sources: The Riksbank
Figure 13. Labour costs, labour productivity and CPI in Sweden and the euro area
Average of annual percentage change 2000-2008

Source: Eurostat