

## **Villy Bergström: Forecasts and business cycles**

Speech by Mr Villy Bergström; Deputy Governor of Sveriges Riksbank, to the Elmateriel Leverantörernas förening (Association of Swedish Electrical Installation Material), Stockholm, 15 May 2002.

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### **Monetary policy no exact science**

During the 1990s many central banks formulated explicit targets for their monetary policy. Sveriges Riksbank formulated its target in 1993 as an annual inflation rate, measured according to the consumer price index (CPI) of two per cent with a tolerated deviation interval of +/- 1 percentage points. Deviations from the target level are the rule rather than the exception. Monetary policy is not an exact science and society is not a machine; it would be neither possible nor desirable to keep inflation at a precise level, particularly not in the short term.

In recent years the Swedish economy has been subjected to relatively large disturbances. On the international front, both the Asia crisis and the Russia crisis, as well as severe fluctuations on the stock markets and in oil prices, have had an effect on us. In Sweden, the rise and fall of the IT sector, as well as deregulation of the electricity and telecommunications markets with ensuing price falls, have affected both prices and production. Such crises and changes of policy can rarely be predicted. This means that the Riksbank will always make "mistakes", with the benefit of hindsight. However, this is self-evident and not particularly valid when assessing monetary policy. What really counts is the direction for monetary policy on the basis of the information available at the time the decision is taken, not what should have been done if it had been possible to predict the future with perfect accuracy.

When we experience major disturbances or changes in the economy, we cannot merely concentrate on the effects on prices. Let me illustrate this with reference to oil prices. If we assume that oil prices rise. Inflation rises, which means that real wages fall, partly as a result of petrol and heating oil becoming more expensive, which means that consumers have less money over to spend on other goods. This leads to a decline in demand and thereby in prices on other goods. Higher oil prices can thus lead to both rising prices and lower demand, which in the long term will once again subdue inflation. It is difficult to predict oil prices as they do not always reflect the demand and supply situation, but are also connected to politics.

The current situation can illustrate this difficulty. Are oil prices rising because the increase in global demand and growth is higher than was assumed, or is the political uncertainty in the Middle East the most important factor? What is the resource situation within the economy? A price rise that occurs when resource utilisation is on its way down can lead to a rapid and profound decline. Rising oil prices in a situation with strained resources can lead to a spread effect, with a general rise in prices within the economy. We can thus have a higher inflation rate at the same time as this can have a subduing effect on production and employment. If monetary policy were to be aimed in every situation at using interest rate hikes to eliminate the effects of oil price rises on inflation, it could lead to a deterioration in production and employment. If transitory effects on inflation are expected to abate without spreading to other prices or affecting inflation expectations, there may be good reason to leave the repo rate unchanged. A gradual adaptation of monetary policy directed at achieving the inflation target a couple of years ahead allows us to take into account employment and growth. That is why the Riksbank's policy is based on achieving its inflation target of 2 per cent one to two years ahead.

### **Acts of terrorism, wars and natural disasters increase uncertainty**

It is important to observe that knowledge of the effects of monetary policy is not complete. The purpose of the deviation interval is to make clear that deviations are probable, while our ambition is to try to limit them. In practice, monetary policy is governed in such a way that we make forecasts for inflation one to two years ahead. If the forecasts for this time horizon are higher than the inflation target we raise the repo rate, and if they are lower, we cut the rate.

So what do we think we can affect through monetary policy? To put it simply, the repo rate affects other Swedish market rates (the interest rate channel), the banks' lending to the general public (the bank channel) as well as other asset prices, such as share prices, and the exchange rate (the

exchange rate channel). The size of the impact made by a change in the interest rate on households' mortgages or on share prices varies over time. Monetary policy can also have an effect via households' and companies' expectations of the future. An inflation target of 2 per cent shall act as a kind of nominal anchor for expectations regarding the future development of inflation and thereby affect pricing, rates and wage-setting. When it comes to setting prices and wages, a major role is played by the expectations of the parties on the labour market or companies and households as to how the Riksbank will react. That is to say, they trust that the Riksbank will on average deliver an inflation rate of around 2 per cent.

We know that forecasts are uncertain. We not only have a tolerated deviation interval and a medium-term target horizon (normally 1-2 years), we also try to assess the uncertainty of the forecast for each forecast we make. Is there a normal level of uncertainty, higher than normal or lower than normal? This is illustrated in the Inflation Report by means of an uncertainty interval with different outcomes for inflation. This interval is then taken into account in the total assessment. Acts of terrorism, wars and natural disasters lead to greater uncertainty. This makes it even more difficult to make assessments.

### **Good target-fulfilment in historical terms, but last year raises some questions**

During the period 1970-1992 inflation in Sweden amounted to an average of 8 per cent a year, while real wages scarcely increased at all. Since the inflation target was first applied in 1995, inflation measured as UND1X (the underlying inflation rate) has been an average of 1.8 per cent a year and real wages have increased by an average of 2.8 per cent. On the whole, this must be regarded as a good level of target fulfilment. Last year, however, inflation was 2.8 per cent, when measured in the same way. And if we look at recent years, underlying inflation has risen for the past two years. Let me therefore give you a brief outline of our forecasts and considerations in recent years.

During the period 1998-2000, the average growth rate was 4 per cent a year. At the beginning of 1999 inflation began to rise, which was initially explained by rising oil prices. It then became increasingly clear that shortages had arisen on the labour market and that these risked leading to high wage increases and thereby high inflation. We estimated that the Swedish economy was in a broad upturn phase, with rising resource utilisation and the risk of an inflation rate higher than the target level. In November 1999 we raised the repo rate and during early 2000 a similar assessment was made. During autumn 2000 we saw ahead of us a situation with a stable and strong upturn in economic activity that would gradually lead to a high level of resource utilisation and rising inflation.

At the beginning of 2001 we received a number of statistics that indicated a slowdown, particularly in the USA. The Federal Reserve surprised everyone with an interest rate cut in January, in between two ordinary monetary policy meetings. The slowdown then spread. The Riksbank and most other forecasters began to revise down their growth forecasts for Sweden and internationally. The share and IT bubble burst and this together with rising oil prices and higher real interest rates during 1999 and 2000, led to a synchronous downturn in economic activity around the world. During the course of 2001, we made several major downward revisions to our forecasts for international growth. The economic downturn is assumed to have had a subduing effect on Swedish inflation via both direct and indirect channels. In mid-2001 the decline in the real economy had on the whole become more marked than expected.

However, the development in prices deviated sharply from the forecasts made by the Riksbank and other analysts. When inflation surprisingly rose considerably during spring 2001, the assessment was made that this was largely due to factors of a transitory nature, partly caused by disturbances on the supply side. Meat prices rose sharply as a result of livestock diseases, electricity prices rose considerably, partly the result of a normalisation following on from the extreme price falls during the previous year when the electricity market was deregulated, but also because of an unusually low level of snow during the winter season 1999-2000, which led to a shortage of water in the power station dams. There were also production problems at the oil refineries, which led to sharp rises in petrol prices. We noted as early as spring 2001 that even when an adjustment was made for these transitory factors, inflation had risen more than expected and we estimated that there was a risk that resource utilisation, which affects inflationary pressure primarily during the following year, could have been higher in 2000 than we had earlier believed.

The krona weakened considerably during spring 2001, which added to the concern over inflation. A majority of the Executive Board decided to raise the repo rate in summer 2001. However, the downward revisions to the growth forecasts continued during the autumn and following the acts of

terrorism in September, there was considerable insecurity. The terrorist attacks came during a sensitive time for the US economy, which was already in a downturn phase, albeit with a relatively good growth in consumption. It was estimated that the attacks would entail a deeper and more prolonged economic downturn with repercussions for the entire global economy. Steering interest rates were cut all around the world, including in Sweden.

Nevertheless, inflation continued to rise. A cold winter in Europe, problems with the Swedish apple harvest and poor fishing catches led to rising prices on fruit, vegetables and fish during the autumn. It is obviously easy to get caught up with details and fail to see the underlying changes. However, we could see even more clearly that the rise in inflation was not merely due to transitory factors, but entailed a broad rise primarily in domestic prices. This could be connected with the fact that secondary effects from the higher energy and food prices had made a greater impact in the consumer channel. Another important factor was that wage growth, despite the weaker development in demand, became even more problematic. Within many industries, for instance, construction, retail trade, banking and insurance, as well as the public sector, wages rose considerably during 2001.

At the end of 2001/beginning of 2002, there were signals from confidence indicators that economic activity might have reached its lowest level in the USA and also Sweden and some optimism regarding the future began to spread. The effects of the terrorist attacks appear to have been limited, although some sectors were hit very hard. To sum up, we can conclude with the aid of this slide (*OH 1 The Riksbank's forecasts for GDP 1999-2003*) that the year 2001 entailed constant downward adjustments in the growth forecasts. At the same time, we can conclude the opposite with regard to the inflation forecasts (*OH 2 inflation forecasts 1998-2002*), which we have been forced to revise upwards again and again.

If we are right that a recovery is now beginning both in Sweden and abroad, we can conclude that the economic downturn was one of the mildest of the post-war period, partly as a result of resolute stabilisation policy. However, the slowdown in Sweden and the rest of the world during 2001 was unexpectedly severe in relation to the forecasts made in 2000. The fact that forecasters miss turning points in the economic cycle is not unique to this particular downturn, but quite a common phenomenon. I will return to the current situation, but first a look back in time.

### **Historical patterns are repeated**

Is it possible to learn lessons from history? Both yes and no. If one studies economic slowdowns over the past three decades, one can see that they differ considerably both with regard to causes, sequence of events and recovery. There is no simple, cyclical pattern that is automatically repeated. At the same time, it is clear that what we have experienced now has elements in common with previous cycles.<sup>1</sup> In some industrial nations, including the USA, the economic downturns during the 1990s have become milder compared with the downturns during the 1970s and early 1980s. Deep recessions have been unusual and arisen in combination with major structural problems, such as bank crises. The fact that industrial nations enter an economic downturn together has been a rule rather than an exception. The decline at the beginning of the 1990s was different, because it was due to different types of disturbance. The German reunification meant that Germany and Europe went their own way to some extent. Bank crises hit different countries at different points in time. In Sweden there was also a very large increase in real interest rates following in the footsteps of the change in the inflation rate and the defence of the fixed exchange rate, which contributed to the crisis in Sweden becoming deeper than those in most other industrial nations and, in addition, the worst recession Sweden had experienced since the 1930s.

The downturn we have just experienced has been unusual in that the decline in production in the USA and Germany was lower than usual and in many European countries there has been no decline in growth at all. In Sweden, too, the slowdown appears to have been one of the mildest during the post-war period. Growth is not expected to decline for a single quarter. During all of the previous downturns in economic activity there has been at least one quarter with a negative result for growth and since 1970 economic downturns have always led to a decline in production over an average of four quarters.

Households' consumption has been relatively strong in many countries during the downturn and this is also the explanation why countries have avoided a decline in production altogether. However, the

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<sup>1</sup> See, for instance, the box on earlier economic downturns in the Riksbank's March Inflation Report or the box in the IMF's most recent economic outlook.

strong household consumption, primarily in the USA, does raise some questions with regard to the sustainability and strength of the recovery, given the initial low level of savings among US households and the relatively high indebtedness.

The fact that large mistakes in forecasting can be made at turning points for economic activity is nothing unusual and the pattern we have been able to distinguish during the 1990s, with short-lived downturns and longer upturns, appears to be holding true.

### **Economic policy has contributed to stability**

A number of different factors may have contributed to upturns in economic activity becoming longer, and the downturns shorter, while variations in production have declined. Various studies bring up different explanations, so I would like to point out that this is more a question of speculation than fact.

One explanation could be that economic policy has contributed to increased stability. Fiscal policy in a large number of countries has been changed towards a balanced budget and avoiding an unsustainable build-up of debt, while monetary policy has been given a clearer focus on maintaining price stability. A greater emphasis on combating inflation and on institutional changes to make central banks more independent, has gone hand in hand with stabilisation policy appearing to have been more successful in counteracting fluctuations in economic activity in many countries.

Changes in production methods, including an altered pattern for adapting stocks and new technology, may have enabled the demand and supply for both goods and capital to be matched more quickly than before, which contributes to the milder downturns and longer upswings. A further factor that could have contributed is that the percentage of services in GDP has increased and the production of services has shorter lead times.

### **Expansive economic policy - good years for the Swedish economy**

A low inflation rate and tidy public finances have provided room for manoeuvre when facing a downturn in economic activity. A changeover towards a more expansionary economic policy in a large number of industrial nations has laid the foundation for the recovery this year. In the USA there was a substantial change in monetary policy at the beginning of 2001. On top of this came considerable fiscal policy stimulation. Monetary policy in Europe and Sweden has also been expansionary. However, many large countries in Europe are still struggling with large budget deficits, which have limited their fiscal policy scope for action.

Last year Sweden had one of the largest surpluses on public savings in the EU. This has enabled an expansionary fiscal policy. This year households' disposable incomes are expected to increase by almost 5 per cent, almost 80 per cent of which comes from increased transfers and lower taxes and charges. Such a large increase in income has only happened on a few occasions over the past decades. Despite the slowdown in economic activity, employment increased strongly and unemployment continued to fall. However, the labour market is split into two parts, with falling employment in manufacturing and an increase in the services industry.

At the same time, the floating exchange rate regime has contributed to a significant change in the pattern. Historically, a devaluation of the krona has been necessary at the climax of a crisis and on several occasions during the 1970s and 1980s crises were caused by the fixed exchange rate in combination with cost developments leading to a cost crisis.

The slowdown in 2001 was different to the extent that industry's competitiveness was very strong. The weakening of the krona began, fortunately, a year before industrial activity slowed down. This contributed to a very strong development in net exports during 2001. This is probably an important factor behind the slowdown being a slowdown rather than a recession in Sweden. Although there are otherwise major differences, it can be noted that the decline in GDP and exports in Finland was much greater than that in Sweden. While industrial production in Sweden decreased at most by 5 per cent, it fell by over 10 per cent in Finland. Whether this is due more to other factors than to the exchange rate is an open question, but it is reasonable to assume that the development of the krona subdued the decline in the Swedish economy. Certainly, it may have at the same time have aggravated the inflation problems. If the krona continues to develop along the path estimated by the Riksbank and many other analysts, and continues to strengthen in 2002 and 2003, it will help ensure that the economic upturn does not grow into overheating.

## **The economic situation and monetary policy**

It is clear from the minutes of the most recent monetary policy meeting that the Riksbank is painting a fairly bright picture of the Swedish economy in future. The international recovery, particularly in the USA, may become slightly stronger than we believed earlier, and this, combined with a continued weak krona, will benefit Swedish exports. However, developments in Ericsson and the telecommunications industry constitute cause for concern and uncertainty. At the same time, the significance of one single sector should not be exaggerated. Industrial activity in Sweden is continuing to strengthen. Both order intake and industrial production indicate a recovery is on its way. This is also reflected in various confidence indicators. With regard to consumption, there are also signs that a turnaround is on its way; households' confidence indicators and the demand for banknotes and coins all point in this direction. Retail trade sales have stabilised and there has possibly been a slight upturn at the beginning of the year. This applies particularly to consumption of durable goods. Low real interest rates and the expansionary fiscal policy indicate that consumption will pick up.

Developments in prices and wages leave a lot to be desired, as I mentioned in the beginning. It is not mumbo jumbo that a productivity level of around 1.5 per cent and an inflation target of 2 per cent are incompatible with wage rises of 4 per cent. The scope for wage rises is a maximum of 3.5 per cent at normal profit levels. Our assessment of wage developments in the coming two years is around 4 per cent, i.e. a level that is not compatible with the inflation target, unless productivity develops better than expected. Higher wage increases than expected were one of the causes behind the Riksbank's two interest rate hikes in March and April. However, wage increases differ between the different sectors and different professional categories. Particularly high wage rises can be noted in the service industries. In some parts of these industries the wages for white-collar workers have increased more rapidly than those for blue-collar workers. This, together with considerable problems in attracting qualified personnel to certain parts of the public sector, entails a risk of a greater wage drift, particularly in a situation where economic activity has improved. Relative wage changes are a normal element in a dynamic economy, but the Swedish labour market has previously shown that large relative changes often lead to a compensatory wage drift. Some large groups have had wage rises of around 5 per cent - this applies to the service industries, the construction sector and white-collar workers in industry - but no large group has received less than the 3.5 per cent that would be necessary to achieve the inflation target.

## **Construction activities over the next few years**

In line with other economic activity, construction activity declined slightly last year, although this was estimated to be a temporary phenomenon. Large resources have been allocated for infrastructure measures and for the development of the third generation of mobile telephony, which is estimated to lead to increased activity in future. There are numerous indications that residential construction will continue to increase, albeit from a low starting level. The continuing positive development of households' disposable incomes should lead to an increase in new building and renovation of housing. Subsidies for building rental apartment blocks, support for student accommodation and ecological construction are also expected to stimulate investment in housing. Seen in a slightly longer term perspective, the low rate of new building is insufficient to meet the demand. A shift in the age structure will probably lead to an increase in housing investment as a percentage of GDP.

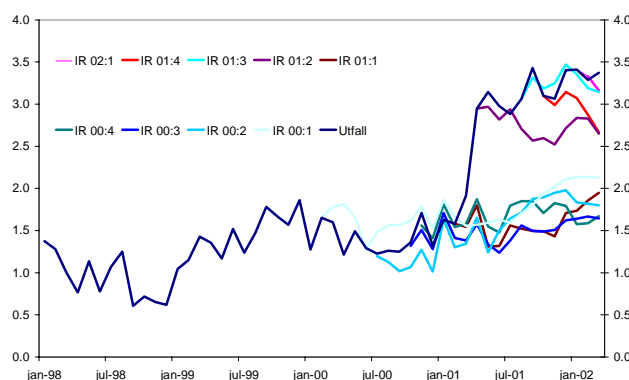
However, even here prices and wages comprise a problem for the industry. The preliminary results show that construction workers received wage increases in excess of 5 per cent last year, while productivity only amounted to 1.4 per cent and unemployment among construction workers was almost 10 per cent. Unemployment in the construction industry varies geographically, however, with a rate of under 3 per cent in Stockholm and over 19 per cent in, for instance, the Gävleborg and Norrbotten regions.

Relative productivity in the construction sector appears to be declining. The gap between the percentage employed and the percentage of GDP is increasing. This means that every person employed in the construction industry is providing a declining contribution to GDP, in relative terms. During most of the 1990s this difference increased, but it has recovered somewhat in recent years. This can perhaps be partly explained by the fact that there is still a large manual element that it is neither desirable nor possible to eliminate. At the same time, it is probable that the entire industry has a lower degree of rationalisation than other industries. This is also visible in the development of prices for both construction services and building materials, which is far above other industrial products, despite a relatively weak demand (*OH 3 development of prices for building materials*). There is

something unhealthy in an industry where wages and prices rise despite a relatively weak demand and lingering unemployment in the industry as a whole.

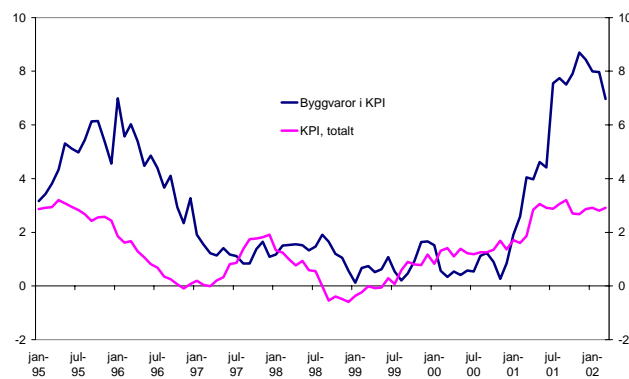
Let me conclude by saying that a recover in the Swedish economy is under way and that the Swedish economy has a good foundation on which to build, with a surplus in both our public finances and in Sweden's international trade. Inflation is hopefully on the way down. At the same time, wage formation and pricing behaviour in general comprise an element of uncertainty as economic activity begins to pick up. Personally, I consider that this indicates a possibility that further interest rate hikes will be necessary in future. However, the next monetary policy step depends, as always, on what happens and the analyses we make. There is always uncertainty and we have now tightened up monetary policy by 0.5 percentage points.

## Outcome and forecasts of UND1X made at different points in time



Sources: Statistics Sweden and the Riksbank

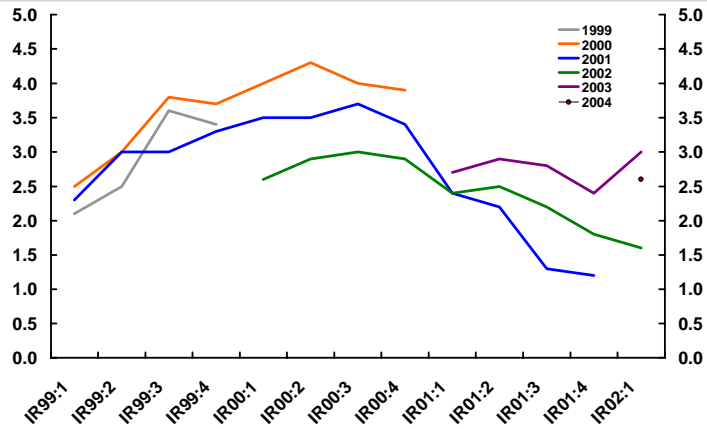
## Building materials in CPI versus total CPI



Source: Statistics Sweden

# GDP forecasts

Percentage annual change



Source: The Riksbank