

# ■ Aspects of the relationship between monetary policy and unemployment

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*For fifteen years now, unemployment in Sweden has been historically high. Monetary policy is sometimes blamed for this, particularly in recent years when inflation has been below the Riksbank's targeted rate. The article considers the relevance of this criticism in the light of the conditions in which monetary policy is conducted. With hindsight it can be said that monetary policy could have been somewhat more expansive, above all in the period 2002–03. But to conclude from this that much of the responsibility for the high unemployment in recent years rests with the Riksbank is to have unreasonable expectations of what monetary policy can accomplish.<sup>1</sup>*

Since the change in Sweden's economic policy regime in the early 1990s, real incomes and GDP have grown more rapidly than in the preceding decades but unemployment has developed less favourably (see Chart 1). There has been a lively discussion of the reasons for this. Some see it as a result of a new economic phenomenon, jobless growth; others suggest that it was only after the regime shift that the Swedish labour market's structural problems became visible. There is, however, a third view to the effect that much of the unemployment has been due to inflation being below the Riksbank's targeted rate and that this in turn is a consequence of monetary policy misjudgements. It is the latter argument that is our primary concern here.

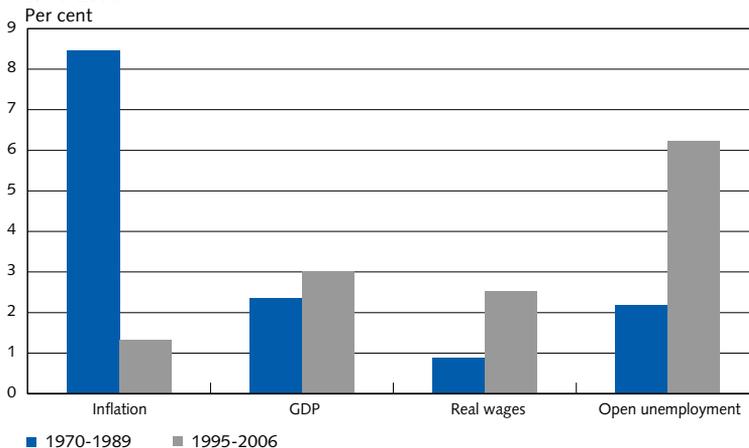
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<sup>1</sup> Valuable opinions have been contributed by participants in the Riksbank's monetary policy group. We also wish to thank Johanna Stenkula von Rosen and Gustav Karlsson for assistance with statistics and charts.

The discussion about monetary policy's role for unemployment flared up in 2004, when inflation was markedly below the Riksbank's target. It was argued that monetary policy had been instrumental in adding between 50,000 and 70,000 to the number of unemployed persons.<sup>2</sup> The Riksbank's opinion about this, presented in speeches and articles, is that the calculations do not, for example, take the conditions under which monetary policy operates into account.<sup>3</sup>

New fuel was recently added to this debate with the publication of Giavazzi & Mishkin's (2006) monetary policy evaluation, which notes on page 77 that inflation has undershot the target in recent years and that "this has been associated with a loss in output and higher unemployment", a formulation that was manna to the Riksbank's critics.<sup>4</sup>

**Chart 1. Inflation, GDP growth, change in real wage income and open unemployment 1970–2006.**



Note. The bars represent the average for each period. Real wages are for the total economy.

Sources: National Mediation Office, Statistics Sweden and the Riksbank.

An open debate about monetary policy and its effects is self-evidently welcome. It is a necessary condition for the legitimacy of the Riksbank's independence as Sweden's central bank. But it is also important that the debate is based on what we now know about the relationship between inflation and unemployment, as well as on a realistic view of what monetary policy can accomplish. The renewed debate about monetary policy and unemployment in the wake of Giavazzi & Mishkin's report shows that a reminder is needed of the conditions under which monetary policy is conducted and acts.

<sup>2</sup> See, for example, Edin *et al.* (2004) and Lundborg (2004).

<sup>3</sup> See, for example, Bergström & Boije (2005), Heikensten (2005) and *Inflation Report* 2005:1, 55–64, Sveriges Riksbank.

<sup>4</sup> See, for example, the leading article in *Aftonbladet*, 2 December 2006, and Johansson & Sommestad (2006). For rejoinders, see Persson (2007) and Rosenberg & Vredin (2006).

This article begins by considering what is the primary aim of the Riksbank's monetary policy because that is fundamental for an understanding and evaluation of monetary policy decisions. We then look at what research and practical experience have to say about the relationship between monetary policy, inflation and unemployment. We also discuss what the necessity of basing monetary policy on forecasts implies for what monetary policy can be expected to achieve. In the light of all this we scrutinise the argument that much of the high unemployment in recent years is the Riksbank's fault. In conclusion, we briefly consider other possible reasons why unemployment today is higher than in the decades before the crisis in the early 1990s.

## 1. Monetary policy's objective

From the public debate about monetary policy and unemployment it sometimes seems that, following the regime shift in economic policy in the early 1990s, responsibility for stabilisation policy in a wide sense has been assigned to the Riksbank. In reality, however, the primary reason for the change of regime was to put an end to the earlier decades' unsuccessful attempts to fine-tune the economy. Economic policy would now be based instead on firm rules; monetary policy would be responsible for price stability and fiscal policy was to be based on long-term sustainability.

The Riksbank Act stipulates that the objective of the Riksbank's activities is to maintain price stability, without any qualifications such as a goal for employment. The Act's prefatory documents do state, however, that without prejudice to the objective of price stability, the Riksbank is to support the goals of general economic policy with a view to achieving sustainable growth and high employment. In recent years the Riksbank has been increasingly explicit about how it takes the real economy into account. This is done by not invariably aiming to restore the rate of inflation to the 2 per cent target as soon as possible in the event of a deviation. Monetary policy normally aims to bring inflation into line with the target within two years after a deviation has occurred. This means that at times the Riksbank deliberately accepts a shorter period during which inflation is above or below the target.<sup>5</sup> This is what is known as a flexible inflation-targeting policy.

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<sup>5</sup> For a fuller account of how monetary policy is conducted, see *Monetary policy in Sweden* (Sveriges Riksbank 2006a), which can be downloaded from the Riksbank's website, [www.riksbank.se](http://www.riksbank.se).

## 2. The relationship between inflation and unemployment

The beginning of the marked increase in unemployment more or less coincided with the introduction of the low-inflation regime in the early 1990s. This might be taken to indicate that the high unemployment is at least partly a consequence of the low-inflation policy as such. So how are inflation and unemployment inter-related?

The standard starting point for illuminating the relationship between inflation and unemployment is the Phillips curve, which postulates a negative relationship in the short run. If demand is stimulated with an expansionary monetary policy, firms will employ more labour in order to increase their output. This will be accompanied by a faster increase in product prices – higher inflation. Sooner or later, however, employees will demand higher wages to compensate for the increased inflation. The price and wage increases will then counteract monetary policy's stimulatory effect, leading to slacker demand and declining employment. In the long run, unemployment will return to an equilibrium level (NAIRU) where actual inflation is at the expected rate.<sup>6</sup> This is sometimes described as the Phillips curve being vertical in the long run.<sup>7</sup>

Some studies do suggest that the Phillips curve could become vertical at a rate of inflation that is somewhat higher than the levels around 2 per cent that most central banks have chosen (see Akerlof et al. 1996, 2000; Lundborg & Sacklén 2002, 2006). In that case, the Riksbank's choice of inflation target may contribute to unnecessarily high unemployment. While space does not permit a closer look at this literature, it should be noted that these studies have elicited theoretical as well as empirical objections (see e.g. Blinder 2000, Holden 2004 and Bergström & Boije 2005). There are currently no convincing arguments or empirical evidence that the choice of inflation target has contributed to higher unemployment. Neither did Giavazzi & Mishkin (2006) find any strong reasons for adjusting the level of the Riksbank's inflation target.

Although the traditional Phillips curve simplifies the relationship between inflation and unemployment, it is an illustrative representation of the basic insight that monetary policy cannot achieve a permanent increase in employment: if an expansionary monetary policy is used systematically to bring unemployment down below the natural level, the end result will simply be higher inflation and inflation expectations.

It is more of a problem to use simple models of this type to form an opinion about how monetary policy ought to be conducted or how

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<sup>6</sup> NAIRU stands for Non Accelerating Inflation Rate of Unemployment.

<sup>7</sup> See Lundborg et al. (2007) for a discussion of factors that can be assumed to affect the level of NAIRU.

it affects unemployment. The simple Phillips curve is sometimes used to argue that provided the Riksbank maintains an inflation rate of two percent, unemployment will be constant and equal the NAIRU. From this point of view, NAIRU is the level of unemployment that is assumed to be compatible with stable inflation in line with the Riksbank's target. Estimations of the NAIRU have been used by Edin et al. (2004), for example, to arrive at monetary policy's contribution to the number of unemployed persons. In 2004 the labour force totalled approximately 4,460,000 persons and the registered rate of unemployment was 5.5 per cent; assuming that the NAIRU was 4 per cent, this line of reasoning gives a loss of jobs for 67,000 persons  $[(0.055-0.04)*4,460,000 = 67,000]$ .<sup>8</sup>

There are several objections to calculations of this type. One concerns the assumption that inflation and open unemployment are, in fact, related in the sense that the targeted rate of inflation leads to actual unemployment at the NAIRU level. Reality is far more complicated and the NAIRU is a concept with little foundation in modern monetary policy research. Numerous factors influence unemployment in practice and most of them are unconnected with monetary policy and inflation. In modern labour market models, unemployment is affected by, for instance, the development of productivity, rule changes and other shocks to which the economy is constantly exposed.<sup>9</sup> From the macro models that are used in research nowadays and, to a growing extent, by central banks, it is clear that inflation likewise fluctuates as a result of many factors.<sup>10</sup> In other words, the driving forces behind inflation cannot be understood simply by studying developments in the labour market. In order to explain a particular development of inflation or unemployment, one needs a picture of all the various disturbances that are currently at work in the economy.

Against this background it is hardly surprising that most empirical studies have not been able to demonstrate a simple and stable relationship between the levels of unemployment and inflation. American studies have found that changes in unemployment explain approximately 20 per cent of the variation in inflation.<sup>11</sup> According to Stiglitz (1997), this points to unemployment being an important factor for monetary policy, an opinion that we share. The Riksbank does, in fact, closely follow how the degree of resource utilisation in the labour market develops.<sup>12</sup> But it is also the case that the American studies show that 80 per cent of the variation in inflation is due to factors other than unemployment. It fol-

<sup>8</sup> Note that the calculation is highly sensitive to the assumption about the NAIRU; with an estimate of 5 instead of 4 per cent, the job loss would amount to 22,000.

<sup>9</sup> See, for example, Rogerson et al. (2005).

<sup>10</sup> See, for example, Smets and Wouters (2003).

<sup>11</sup> See, for example, Stiglitz (1997).

<sup>12</sup> See, for example, *Inflation Report* 2006:3, 42–50, Sveriges Riksbank (2006c).

lows that actual unemployment's deviation from the NAIRU should be of relatively limited value as information about future inflation. Jansson & Palmqvist (2005) show that in the past decade, the relationship between labour-market resource utilisation and inflation has been very weak. For the Riksbank's inflation forecasts, the consequences of assuming that the NAIRU is, say, 5 rather than 4 per cent are therefore very slight.<sup>13</sup> Staiger et al. (1997) consider that NAIRU estimations for the US economy are so uncertain that they add nothing to the discussion of monetary policy.

Our conclusions so far can be summarised as follows: There is a short-run relationship between inflation and unemployment but it is neither simple nor stable. In the long run, a permanent reduction of unemployment cannot be achieved via an expansionary monetary policy. The existence of a short-run link between inflation and unemployment is, however, a reason for the Riksbank to take the real economy into consideration. We have also argued that the NAIRU can be used for an instructive explanation of why a continuously expansionary monetary policy, aimed at bringing unemployment down below the natural level, simply leads to higher inflation and higher inflation expectations. With reference to how monetary policy ought to be conducted, however, the NAIRU has little to contribute. Actual unemployment's deviation from the NAIRU is a poor indicator of inflation for the simple reason that inflation is also determined by many other factors. Modern research suggests that for a judicious monetary policy it is considerably more important to employ a general equilibrium approach and identify the type of disturbance that is affecting the economy.<sup>14</sup>

### 3. Monetary policy's impact on unemployment

Monetary policy is accordingly not to blame for every fluctuation in unemployment. It is still possible, however, that monetary policy misjudgements can render the labour market unnecessarily weak in the short run. At the same time, an assessment of monetary policy in recent years, when inflation has undershot the target, calls for an understanding of the conditions under which monetary policy is conducted. It is also important to understand the reasons why inflation has been so low and how unemployment has been affected by them, over and above any effects connected with the formulation of monetary policy.

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<sup>13</sup> See also Flodén (2005).

<sup>14</sup> See, for example, Rogerson (1999) and Hall (2005).

## MONETARY POLICY IS BASED ON FORECASTS

The first thing to note is that, because of the time lag before its full effects materialise, monetary policy has to be based on forecasts, which are inherently uncertain. Future economic developments cannot be predicted exactly by either the Riksbank or other observers. Moreover, if inflation has strayed from the targeted rate, it cannot be brought into line again at short notice, except possibly with very large interest rate adjustments. It is therefore not reasonable to base an assessment on the notion that the Riksbank must always have an exact perception of future economic developments and that inflation shall be constantly on target. But one can require the Riksbank to produce the best possible forecasts. Given that the Riksbank's forecasts are no worse than others, an assessment must focus on whether monetary policy decisions have been reasonable in the light of the concurrent forecasts.

Giavazzi & Mishkin's (2006, p. 77) conclusion that inflation in recent years has "persistently undershot the Riksbank's target; this has been associated with a loss in output and higher unemployment" is unobjectionable. Declining inflation coincided with rising unemployment. The relevant issue here, however, is the extent to which this was a consequence of shortcomings in the Riksbank's forecasts. Giavazzi & Mishkin note that these forecasts stand up well compared with those from other observers but leave "room for improvements" (p. 77). At the same time, they stress that the forecasting errors were presumably difficult to avoid (p. 56).

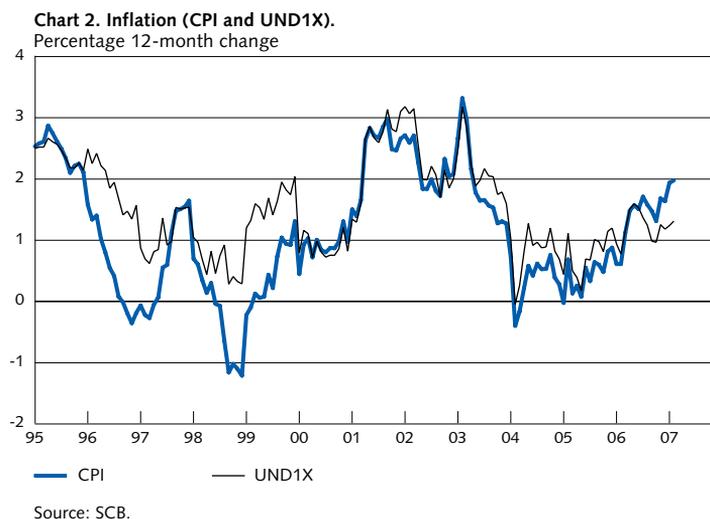
## BELOW-TARGET INFLATION AND ITS IMPORTANCE FOR UNEMPLOYMENT

Between 1995 (when the inflation target was adopted in full) and 2006, annual CPI inflation averaged 1.3 per cent and UND1X inflation 1.7 per cent (the latter calculated with Statistics Sweden's earlier method before 2005 and then with the new method).<sup>15</sup> Although the average level differed somewhat from the Riksbank's chosen target, it must be said that the statutory objective of price stability was fulfilled. Moreover, inflation expectations have been anchored around 2 per cent since long, which suggests that despite the deviations, the inflation target has been perceived as credible.

A period when inflation deviated markedly from the Riksbank's target is 2004–05 (see Chart 2), making it relevant to take a closer look at the reasons for this. Was it a result of earlier monetary policy misjudgements? One way of finding an answer involves studying whether

<sup>15</sup> One reason why UND1X inflation was above CPI inflation in this period is the repo rate's downward trend and the impact of this on house mortgage rates.

the Riksbank's previous behaviour changed in the years before inflation undershot the target (for instance by beginning to pay particular consideration to the development of house prices, as has been asserted in the debate). The conclusion Giavazzi & Mishkin draw from such an analysis is that the actual policy rate was generally close to the rate the Riksbank would have chosen, given an estimated historical pattern of behaviour. So there are no grounds for asserting that it was monetary policy which *caused* the low inflation in recent years. Instead, the Riksbank *reacted* to the low inflation by reducing its policy rate to a level that was historically low.

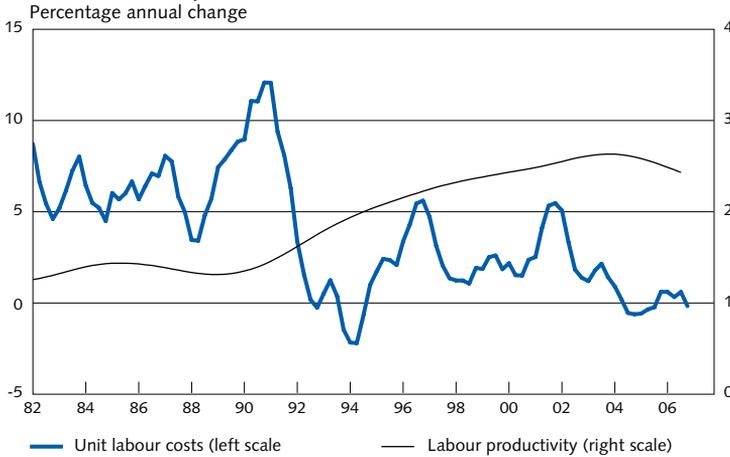


Instead, the low inflation was primarily a result of changes occurring on the supply side of the economy. One illustration of this is the combination of low inflation and strong economic growth. The Riksbank's analysis singles out the high productivity growth as the most important supply shock (see Chart 3).<sup>16</sup> Strong labour productivity, accompanied by moderate wage increases, left firms with less need to raise prices.

It has been argued in some quarters that inflation below the target has resulted in unduly high real wages (see, for example, Vartiainen 2005 and Lundborg 2004) and thereby subdued labour demand. However, considering that the strong productivity growth gave a very favourable development of unit labour costs in the years in question (see Chart 3), it is hard to see unit labour costs as a crucial factor behind the high unemployment.

<sup>16</sup> Simulations in RAMSES, the Riksbank's dynamic general equilibrium model, support the impression that supply shocks were the crucial factor behind the below-target inflation. See Adolfsson et al. (2005).

**Chart 3. Productivity and unit labour costs.**



Note. Trendwise productivity for the total economy, calculated with a Hodrick-Prescott filter. Unit labour costs calculated as a moving four-quarter average.

Sources: Statistics Sweden and the Riksbank.

### HOW WOULD A DIFFERENT MONETARY POLICY HAVE AFFECTED UNEMPLOYMENT?

We have noted that the below-target inflation and weak employment in recent years did not stem from slack growth and demand. On the contrary, the growth of output exceeded the Riksbank's expectations. Neither are there grounds for claiming that inflation below the target has led to notably high real labour costs. But of course one can assert, at least with hindsight, that if the Riksbank had chosen to stimulate demand even more by cutting the policy rate earlier on, employment could have been higher without a risk of inflation overshooting the target. As we pointed out earlier, however, the relevant question is whether the Riksbank's monetary policy decisions were reasonable, given the information and knowledge that were available at the time. Assessments have shown that the monetary policy decisions in the years 2002–03 were based on prospects for inflation and the business cycle that did not differ appreciably from the picture presented by other observers.<sup>17</sup> There were those who argued for a slightly different formulation of monetary policy. The Swedish National Institute of Economic Research, for instance, recommended an earlier reduction of the policy rate. However, compared with the policy rate's actual path in the years 2002–03, the Institute's recommended development represents an average difference of only 0.2 percentage points. It is hard to judge how the labour market would have developed if

<sup>17</sup> See Giavazzi & Mishkin (2006); also *Inflation Report* 2005:1, 55–64, Sveriges Riksbank (2005) and *Inflation Report* 2006:1, 48–61, Sveriges Riksbank (2006b).

the rate had been that much lower for a couple of years. The Riksbank's calculations suggest that the number unemployed might perhaps have been just over 5,000 fewer. According to earlier calculations from the National Institute, the effect would have been even smaller.<sup>18</sup>

In Inflation Report 2005:1 (Sveriges Riksbank 2005, p. 61) the Riksbank states that "the demands on monetary policy would have had to be considerable if 2004 inflation were to have turned out a lot closer to the target than was the case". For one thing, in the years 2002–03 the Riksbank would have needed to foresee a development that no other observer managed to predict and that differed greatly from the general view of prospects for the economy and inflation. For another, the high inflation at that time would have made it very difficult to motivate a policy rate that was a good bit below what the Riksbank actually chose.

Still, let us assume hypothetically that in that situation the Riksbank, unlike every other observer, had managed to foresee the permanently high growth of productivity. Let us also assume that the policy rate could then have been, say, 0.5 percentage points lower in 2002–03 without the Riksbank's credibility being seriously questioned in the prevailing situation with high inflation. What would that have meant for unemployment? The Riksbank's estimate is that this difference could have contributed to around 10,000–15,000 fewer persons in unemployment. That is not a negligible number but it needs to be seen in relation to the total number unemployed, which in 2004 and 2005 was around 350,000 persons (ILO's definition). This shows that the problems in the Swedish labour market do not have all that much to do with the formulation of monetary policy.

#### 4. Factors behind the historically high unemployment

So what are the alternative explanations for unemployment now being higher than in the 1970s and 1980s?

In the decades before the crisis in the early 1990s, economic policy was accommodating – rising costs and falling export growth were countered with devaluations. Writing down the value of the currency safeguarded competitiveness for some years, whereupon another devaluation was called for. As a remedy for the problems with employment, however, this was a short-term solution. As time passed, more frequent and larger devaluations would have been required to restore competitiveness, with an appreciable risk of inflation getting out of hand. Another way of keeping unemployment down in the 1970s and 1980s was a gradual expansion of public sector jobs but neither could that continue. It can

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<sup>18</sup> See Bergström & Boije (2005).

therefore be argued that in those decades unemployment was kept down with measures that were not sustainable.<sup>19</sup> So it is hardly surprising that open unemployment has not fallen back to the level of 2 per cent around which it had fluctuated prior to the 1990s crisis.

It is also possible that the strong productivity growth has contributed to unemployment being higher than would otherwise have been the case. High productivity growth should benefit households in the long run by generating real wage increases. It is more uncertain to what extent advances in technology lead to increased or decreased employment in the *short and medium term*. According to Galí (1999), improvements in technology enable firms to maintain output with fewer employees in a transitional period before labour demand rises. If so, that could explain why the high GDP growth has not been accompanied by rising employment (jobless growth). However, this is a controversial issue in economic research.<sup>20</sup>

Another reason why unemployment has remained historically high after the crisis in the early 1990s could be that it is characterised by persistence or labour-market hysteresis. Persistent unemployment is a phenomenon that entails a slow return to the equilibrium level after a shock. In the presence of hysteresis, unemployment's long-term level tends to be affected by fluctuations in actual unemployment.<sup>21</sup>

There are grounds for believing that the degree of hysteresis may have to do with the type of shock that hits the economy. Results presented by Jacobsson et al. (1997) suggest that in the Scandinavian countries, supply-side shocks, for instance changes in technology, are more important for hysteresis than demand shocks. One explanation may be that changes in labour demand of a more structural nature affect some industries more than others. There is then more of a risk that those who lose their jobs find it harder to get new work in the same industry or locality. When a tighter monetary policy leads to rising unemployment, on the other hand, smaller effects are spread over more industries and when policy becomes more expansionary again, the renewed labour demand is for the same type of labour as before. Ljungqvist & Sargent (1998, 2006) also argue that it is precisely structural changes, together with generous unemployment insurance, that can contribute to persistent unemployment. So the high unemployment today could be, at least in part, a residual effect of the mass unemployment in the early 1990s.

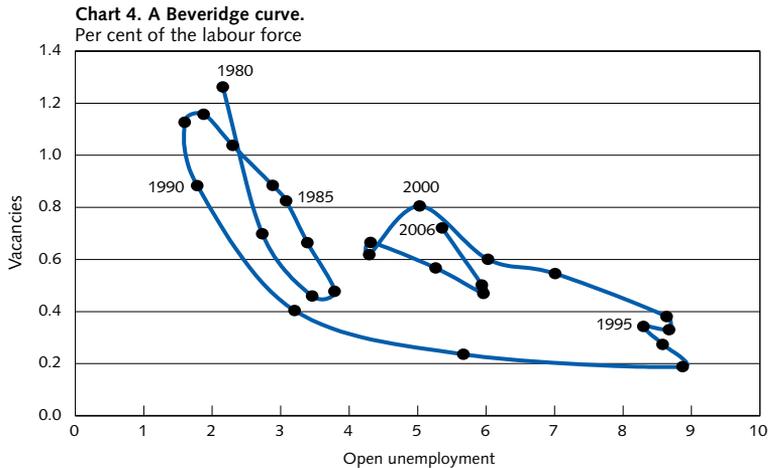
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<sup>19</sup> See also Lindbeck (2003) and Holmlund (2003).

<sup>20</sup> See, for example, Basu et al. (1998) and Christiano et al. (2003).

<sup>21</sup> The Swedish Trade Union Confederation (LO) has raised the issue of whether inflation below the target can have contributed, via hysteresis effects, to an increase in equilibrium unemployment (LO 2005). For a comment on this, see Bergström & Boije (2005).

Yet another possible reason why unemployment has remained high is that in the past decade the matching of unemployed persons and vacant jobs has functioned less well than before. This relationship is often illustrated with a Beveridge curve, which plots the number of vacant jobs against the number unemployed (see Chart 4). A shift along a notional downward-sloping curve is assumed to have cyclical causes, while an outward (inward) shift is assumed to indicate a deterioration (improvement) in the matching of labour supply and demand. As Chart 4 shows, in the years after the crisis in the early 1990s the curve tended to shift outwards.<sup>22</sup>



Note. To allow for methodological changes in the labour force surveys as of 2005, the chart is based on a chained data series. The number of vacancies is estimated on the basis of the number of unfilled vacancies according to statistics from the National Labour Market Board.

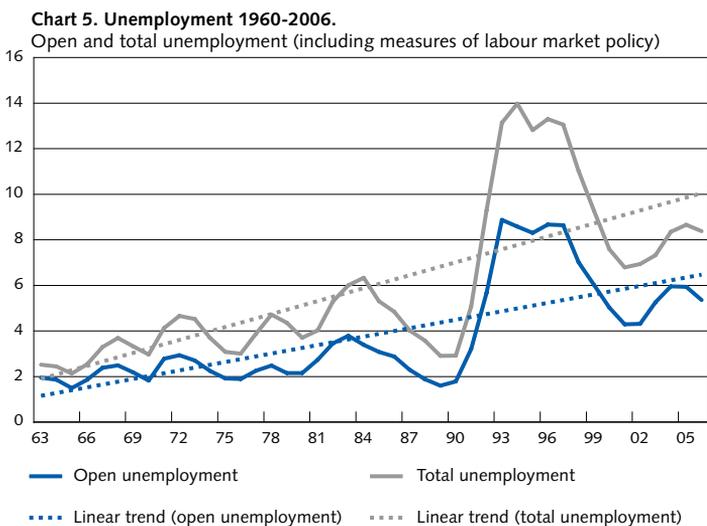
Sources: National Labour Market Board, Statistics Sweden and the Riksbank.

At the same time, however, there are grounds for supposing that various structural changes in the labour market in the past decade and a half have tended to make the labour market more efficient. According to Forslund & Holmlund (2003), factors such as less generous unemployment insurance, the emerging market for labour agencies, increased competition in product markets and tendencies to an increased coordination of wage formation may have contributed to a lower level of equilibrium unemployment.

The actual level of some form of long-term equilibrium unemployment is highly uncertain, however, partly because, as mentioned above, unemployment in the decades before the 1990s can hardly be used to derive a long-term equilibrium. In the latest cyclical upswing, in the

<sup>22</sup> Holmlund (2003) adjusts the Beveridge curve for cyclical labour-force inflows and outflows, which gives a less pronounced deterioration of the matching process.

early 2000s, open unemployment never fell below 4 per cent and total unemployment was never below 7 per cent. Seen over a longer period, unemployment displays a rising trend ever since the late 1960s (see Chart 5). Unemployment increased markedly in connection with the 1990s crisis and then returned to the slightly upward long-term trend. Even excluding the last fifteen years, there has been a rising trend for unemployment, particularly total unemployment. This points to the existence of structural problems in the Swedish labour market. Such problems cannot be remedied with monetary policy.



Note. Due to statistical rearrangements, the chart is based on a chained data series.

Sources: Ljungqvist and Sargent (2006), National Labour Market Board, Statistics Sweden and the Riksbank.

## 5. Conclusions and some final reflections

It is important that monetary policy and its significance for employment and unemployment are debated. At the same time, the debate needs to start from reasonable expectations of what monetary policy should and can achieve. Monetary policy's objective is price stability. Monetary policy does not and should not have a goal for unemployment, partly because of the considerable uncertainty about unemployment's equilibrium level. Neither can monetary policy affect unemployment at all in the long run, only inflation. In the short run, however, the Riksbank can pay some consideration to developments in the labour market by not invariably aiming to return inflation to the targeted rate as quickly as possible.

As monetary policy has to be based on forecasts, it is not reasonable for assessments to assume that the Riksbank can always predict economic developments exactly. Consequently, the Riksbank is not to be

blamed for every short-run fluctuation in either inflation or unemployment. In recent years it is not unreasonable monetary policy decisions but unexpected supply shocks, above all in the form of strong productivity growth, that have contributed to inflation undershooting the target. The persistently high productivity growth may also be one reason why unemployment has not fallen at the same pace as the economy has expanded.

When the Riksbank is criticised for undershooting the inflation target by an average since 1995 of some tenths of a percentage point and this in turn is said to have contributed to high unemployment, historical comparisons may be relevant. In 1990 Sweden had two-digit inflation; economic policy as a whole had been unduly expansionary for many years and recurrent costs crises had necessitated a series of devaluations. That was the background to the cost crisis in the early 1990s and the shift to a new economic policy regime. If anyone had predicted that fifteen years later there would be an intense debate because the Riksbank had missed the inflation target by an average of some tenths of a percentage point, she or he would hardly have been believed.<sup>23</sup>

*With hindsight*, of course, it can still be asserted that monetary policy in recent years could have been a little more expansionary. What that would have meant in terms of increased employment is hard to tell because such assessments are bound to be rather uncertain. Judging from all that we know about the workings of the economy, it seems reasonable to suppose that the effects on unemployment would have been comparatively slight and of a very different order from what the public debate suggests. Instead, there are many indications that it is structural factors which are mainly responsible for unemployment today being considerably higher than in the 1970s and 1980s.

Assigning an unreasonably large share of the blame for unemployment to monetary policy is less serious, however, than the fact that the vital debate about unemployment is wrongly focused. Looking to monetary policy for a solution to the problem of unemployment is somewhat reminiscent of the story about the man who, after a hard evening, searched for his car keys under a street lamp; he had admittedly dropped the keys somewhere else but looking for them under a light was less trouble. The tendency to focus the debate about employment and unemployment on what monetary policy can achieve in the short run is liable to divert attention from other questions that in the longer run are more important for unemployment.

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<sup>23</sup> See also Sundling (2007).

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