Monetary policy and unemployment

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In this article we scrutinise some arguments that have featured in the debate about monetary policy’s impact on unemployment; for instance that inflation below the targeted rate has led to 50,000–70,000 more people being unemployed, that monetary policy has been conducted asymmetrically and that the stabilisation policy regime – including the choice of inflation target – that was adopted when the fixed exchange rate was abandoned has led in itself to higher unemployment than in the preceding decades. These arguments rely to a high degree on unrealistic assumptions and unfounded expectations about what monetary policy can achieve; or else they disregard other factors that may have contributed to unemployment, for example the unforeseen supply-side shocks that have affected Sweden’s economy in recent years. The tendency in the past year to focus the discussion of unemployment solely on monetary policy’s effects is liable to ignore the need for structural measures that are ultimately far more important for the labour market’s development.

Has monetary policy been too tight?

In the period since the inflation targeting regime was introduced in the mid 1990s, GDP and real income have both risen faster than the average rate in the preceding decades, whereas the picture of unemployment has been less favourable (see Figure 1). In the debate on economic policy, there has been a lively discussion of the reasons for this. Some have attributed much of the deterioration in the labour market to an inappropriate monetary policy.

There are those who have argued that monetary policy has been too restrictive and that this has contributed to unduly high real wages, leading in turn to an additional 50,000–70,000 persons in unemployment (see e.g. Vartiaienen, 2005). Others consider that inflation has been below the targeted level solely because monetary policy has not been properly bal-
advanced and that this fully explains unemployment’s cyclical component, that is, the gap between actual unemployment and its estimated equilibrium level (see e.g. Edin et al., 2004). Here, too, the amount of unnecessary unemployment is assumed to be between 50,000 and 70,000 persons. With reference to inflation having been somewhat below the target on average, it has even been suggested in the debate that monetary policy has been deliberately conducted asymmetrically, in the sense that upward tendencies in inflation have elicited more vigorous countermeasures than downward tendencies and that this in turn has contributed to higher unemployment. Another criticism is that the Riksbank has chosen to target inflation at too low a level and that this has tended to generate unnecessarily high unemployment (see Lundborg & Sacklén, 2002, 2003).

The first two arguments concern the Riksbank’s assessment of economic conditions, what monetary policy can be expected to achieve and the extent to which unemployment is influenced by an inappropriate choice of policy rate. The other two imply that there is something fundamentally wrong with the new framework for stabilisation policy.

The purpose of this article is to assemble arguments which the Riksbank has presented earlier about monetary policy’s impact on unemployment and to supplement and elaborate certain aspects of the analysis in previous publications, for example Bergström et al. (2005). We begin

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1 Equilibrium unemployment refers here to the level of unemployment that can be maintained in the longer run without generating higher inflation.
by briefly discussing the paths of employment and unemployment since the changeover to the current stabilisation policy regime in the early 1990s, as well as whether unemployment and employment are satisfactory indicators of resource utilisation. This is followed by some sections on the relationship between inflation and unemployment, why low, stable inflation is desirable, what is meant by “normal” unemployment or equilibrium unemployment, and how monetary policy is constructed in practice. This brings us to a discussion of monetary policy’s impact on unemployment, where we first scrutinise the calculations behind the claim that an inappropriate monetary policy has led to 50,000–70,000 more people being unemployed. In the next section we consider possible explanations for unemployment being higher than in the preceding decades. Finally, we discuss some structural factors that should be of central importance for the long-term development of the labour market.

The labour market after the change of stabilisation policy regime

Figure 2 presents three indicators of economic conditions: trend-adjusted series for employment, for open unemployment based on labour force surveys (both measured by numbers of persons in logarithmic form), and for GDP (likewise logarithmic) for the period 1980–2004. Open unemployment is also presented as a percentage of the labour force (inverted to simplify comparisons).

The figure shows that, on the whole, the three different indicators of economic conditions give similar pictures of the business cycle, albeit with some discrepancies in the timing of peaks and troughs. Open unemployment also shows a clear cyclical pattern. In the period as a whole, the level of open unemployment averaged 4.4 per cent. Since the crisis in the early 1990s, however, open unemployment appears to have “stuck” at a higher level than in the 1990s. Its average level in the period 1980–92 was 2.7 per cent as against an average of 6.3 per cent in the period 1993–2004.

Figure 3 reproduces these series but here, open unemployment is charted as its deviation from the average level in the period as a whole. This shows that, prior to the crisis in the early 1990s, unemployment was consistently below the total period’s average, whereas since the crisis, apart from two or three years, it has been above the average. However, the level of “normal” (or equilibrium) unemployment no doubt fluctuates

Unemployment appears to have “stuck” at a higher level after the crisis in the early 1990s.

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Trend adjustment with an HP filter. Open unemployment measured with the definition that applied before the labour force survey (AKU) statistics were reorganised.
over time and the higher level of open unemployment that appears to have become “permanent” after the crisis in the early 1990s may indicate that the “normal” level is now considerably above what it was in the 1980s. We shall be returning later on in this article to the issue of how to define “normal” unemployment and to the grounds for believing that in the 1970s and 1980s, unemployment was below the level that can be maintained in the longer run.

The timing of cyclical peaks and troughs differs somewhat between GDP and open unemployment for a number of reasons. Measures of labour market policy, altered conditions for study funds and other fiscal measures affect open unemployment relatively quickly without altering the general state of demand. In 2003, for instance, a sharp reduction of labour market measures contributed, all else equal, to an increase of 0.5 percentage points in the rate of open unemployment. Moreover, we know from experience that there is some lag before unemployment follows an upturn in the business cycle. In the initial phase of an upturn, hours worked (or average working hours) tend to rise before employment picks up. Productivity likewise tends to improve early in an upturn as firms utilise their existing labour and capital more intensively until the recovery becomes more “dependable”. Similarly, cyclical downturns are often accompanied by a temporary drop in productivity, because firms refrain
from laying off personnel in case the slowdown is brief.⁴ Changes in open unemployment may also have to do with structural factors. As a result of all these circumstances, there is no simple relationship between open unemployment and total resource utilisation measured by GDP.

With a given number in employment, open unemployment is also susceptible to changes in the labour force. The labour force co-varies to some extent with the business cycle. A slowdown is usually accompanied by a contraction of the labour force. The explanation as a rule is that many job-seekers withdraw from the labour force because they see less probability of finding a job. When labour demand picks up again, many of these “latent job-seekers” re-join the labour force. Latent job-seekers accordingly constitute a labour reserve that is not included in unemployment as defined for the labour force surveys (AKU). This generally means that open unemployment does not vary as much as employment.

Besides the increase in unemployment, there is cause for concern about the picture of the labour force. As shown in Figure 4, the number of non-participants in the labour force rose sharply in connection with the economic crisis in the early 1990s, after which the high level seems to have become “permanent”. It is evident from the figure that this cannot be attributed to a diminishing population in the active age group. This is a major problem – both for stabilisation policy and in a broader macroeco-

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⁴ This phenomenon is commonly referred to as labour hoarding.
nomic perspective – that a focus on open unemployment is liable to overlook. A dwindling labour force weakens GDP growth and makes it harder to finance public sector activities, which adds up to a loss of welfare. Moreover, low potential GDP growth makes it more difficult to combine strong actual GDP growth with low inflation. Possible explanations for the low labour-force participation are considered later in this article.

The relationship between inflation and unemployment

A natural starting point for a discussion about monetary policy’s impact on unemployment is the Phillips curve. The original version of the Phillips curve, which dominated the discussion of economic policy in the 1960s, postulated an inverse relationship between unemployment and nominal wage movements. Because prices are largely set as a percentage mark-up on wage costs, this relationship was taken to indicate that unemployment is also inversely related to (price) inflation. Given a stable relationship of this kind, it followed that a permanent reduction of unemployment could be achieved via a higher rate of inflation.

Subsequent experience of economic policy and research have shown that while a trade-off between inflation and unemployment may exist in the short run, but is not straightforward, in the longer run there is no trade-off. A distinction is therefore made between short-term and long-term Phillips curves.

Later in this article we return to a discussion of the few studies that do indicate the possibility of a long-term relationship between inflation and unemployment.
The short-run Phillips curve indicates that an expansionary demand policy that boosts inflation in the short run may be capable of reducing unemployment. But if an expansionary policy is implemented systematically as a way of reducing unemployment via higher inflation, the higher rate will lead people to adjust their inflation expectations. In other words, because employees’ concern is the real purchasing power of wages, expectations of higher future inflation would lead to higher nominal wage demands. Actual inflation would then rise and coincide with the expected rate. This implies unchanged real wages and thus no increase in labour demand, so unemployment would not fall. When inflation expectations have been adjusted to the higher actual inflation, unemployment would return to its “natural” level (the level at which actual and expected inflation coincide). This helps to explain why there is unlikely to be a long-term trade-off between inflation and unemployment. Another way of putting this is to say that the Phillips curve is vertical. An expansionary policy aimed at boosting inflation and bringing unemployment down below the natural level would then simply result in higher inflation expectations and higher actual inflation.6

Why is low, stable inflation desirable?

A vertical Phillips curve accordingly indicates that a long-term reduction of unemployment cannot be achieved by raising the rate of inflation. It might also be said to indicate that as long as nominal wages and the price level rise at the same rate, unemployment is not affected by the actual level of inflation. So what is it that makes low inflation desirable?

When inflation is high, its rate tends to fluctuate markedly. This interferes with the function of prices in the system of signals for the allocation of economic resources, because it is then harder to distinguish shifts in relative prices (price changes between product groups) from the general (variable) course of inflation. Uncertainty about future inflation makes it more difficult for households and firms to plan for the longer run and arrive at rational decisions, which impairs economic efficiency because it hampers an optimal allocation of resources over time as well as between economic sectors.

At the same time, it has been argued that unduly low inflation may

5 The “natural” level of unemployment is sometimes also defined as the NAIRU, that is, the level that can be combined with normal resource utilisation and non-accelerating inflation. In this article we use the concepts of normal, natural, NAIRU and equilibrium unemployment interchangeably, even though their implications are not always the same.

6 This somewhat simplified account is based above all on a theory by Friedman (1968). Alternative theories or explanations have been put forward for monetary policy’s ability to affect unemployment in the short but not the longer run; see e.g. Lucas (1973), Fischer (1977) and Rotemberg (1982).
have a negative effect on resource allocation. This has to do with the downward rigidity of nominal wages, whereby very low inflation can obstruct necessary changes in relative wages. If above-average wage increases are needed for a large group in the labour market, for example to facilitate recruitment, targeting a very low rate of inflation would require that other groups accept nominal wage cuts. That is one reason why the Riksbank has chosen to define price stability as 2 (not 0) per cent inflation (we shall be returning to this aspect).

Cyclical unemployment, inflation and monetary policy

The concept of natural unemployment, defined as above, appears to have been applied in the debate in a highly simplified way to theorise about how monetary policy ought to be conducted (see e.g. Edin et al., 2004). A rough outline of the argument seems to go as follows:

The rate of inflation is assumed to be constant when actual and natural unemployment coincide. If actual unemployment is below the natural level, inflation rises and vice versa. From this it follows that if monetary policy succeeds in stabilising inflation, actual unemployment will invariably coincide with the equilibrium level, thereby limiting the fluctuations in actual unemployment. Another common assumption in the debate is that, given 2 per cent inflation, (open) unemployment’s natural level can be assumed to lie around 4 per cent. So if the Riksbank uses monetary policy to ensure that the rate of inflation is consistently 2 per cent, unemployment could be limited to 4 per cent.

Real life is much more complex than that, however. The Phillips curve is a simple formula that does not include many of the factors that affect inflation and influence monetary policy decisions. More recent research has shown, moreover, that basing monetary policy mainly on forecasts of the unemployment gap (unemployment’s cyclical component) raises substantial problems. Let us take a closer look at these:

Natural unemployment can be decomposed into a frictional component (consisting, for example, of the lags that occur in matching job-seekers with vacancies even when the former have the necessary qualifications) and a structural component (consisting of the unemployed whose occupational profile is incongruent with labour demand). If the labour market becomes less efficient (decreased labour market mobility, for example) and if certain industries are closed down or move abroad, the

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7 Instead of being regarded as a separate concept, structural unemployment is sometimes taken to be an extreme form of frictional unemployment.
The natural level of unemployment will rise, at least for a time. This is one reason why the natural level of unemployment is so difficult to estimate.

Furthermore, empirical studies have shown that natural unemployment varies a good deal over time and that, for a given type of estimation, the degree of uncertainty commonly amounts to several percentage points (see e.g. Staiger et al., 1997). Conducting monetary policy on the assumption that natural unemployment’s level is precisely 4 per cent could entail major problems with inflation if natural unemployment is actually higher or lower than this. Orphanides (2002) argues that faulty assessments of the level of natural unemployment contributed to “the great inflation” in the United States in the 1970s.

In a systematic study on US data, using different types of estimated Phillips curves to forecast inflation one year ahead, Atkeson & Ohanian (2001) found that forecasts based on such estimates are not likely to be superior to the simple assumption that inflation one year ahead will match the level in the current year. This conclusion is supported by a study on Swedish data (Jansson & Palmqvist, 2005), showing that the correlation between the unemployment gap (unemployment’s deviation from the estimated equilibrium rate as calculated by the Swedish National Institute of Economic Research; NIER) and various measurements of inflation varies considerably over time, that there are periods when the correlation has the unexpected sign, and that the unemployment gap is of little or no value for forecasting inflation. Atkeson & Ohanian conclude that statements about future inflation ought not to be based on an assessed level of unemployment or on the deviation from an estimated equilibrium level. Neither, they point out, do most other indicators that are commonly used to forecast inflation provide more accurate forecasts than a naïve model. One should therefore refrain from basing inflation predictions on individual indicators.

A strong argument against the existence of a simple relationship between inflation and unemployment, and one that supports Atkeson & Ohanian’s conclusion, is that, as mentioned above, unemployment is by no means the only factor that influences inflation. Supply-side shocks can lead to a change in inflation even though actual and natural unemployment coincide initially. Jansson & Palmqvist (2005) show that supply shocks explain a very large part of the variation in inflation.8

An additional factor that makes the gap between natural and actual unemployment a poor basis for monetary policy is that estimations of natural unemployment often undergo marked revisions in the light of new observations.8

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8 Jansson & Palmqvist (2005) point out that the models and methods they have used are comparatively simple, with no claim that they are the “right” ones.
data. When forecasting inflation, one is obliged to use the data that are currently available (real-time data), data that are often adjusted markedly later. Orphanides & Van Norden (2004) show that the output gap (or the unemployment gap) estimated on real-time information does not deliver reliable forecasts of inflation.9

This is illustrated for Swedish conditions by Flodén (2005), using the labour market gap as estimated by the NIER. He notes that for a long time the NIER considered that the labour market gap in January 2001 was negative (there was some unemployment of a cyclical nature), but that because actual unemployment remained at a high level, the estimation of the gap was revised. This led to an upward adjustment of equilibrium unemployment in earlier periods and it was now considered instead that the labour market gap in January 2001 had actually been positive. From this he drew the following conclusion (Flodén, 2005, p. 60, translated here): “Debates about monetary policy should be welcomed but they are liable to be harmful if they focus on how monetary policy has affected such an imprecise variable as the labour market gap”.

**Monetary policy in practise**

The Riksbank has the overriding function of maintaining a stable value of money. If inflation about two years ahead is expected to be above (below) the 2 per cent target, as a rule the Riksbank raises (lowers) the policy rate. However, this does not mean that the Riksbank completely disregards real economic factors. One of inflation’s chief determinants is total demand in the economy. Over the business cycle, employment usually increases if demand rises and vice versa, though, as mentioned, the response may be lagged. If the Riksbank judges that total demand will fall and that this will be accompanied by a slackening of inflation, as a rule the Bank will lower the policy rate. This normally has some positive impact on employment. With respect to fluctuations in demand, therefore, there is normally no conflict between stabilising inflation and employment. As mentioned earlier, however, the relationship between demand, inflation and employment is not straightforward. This is particularly the case in connection with supply shocks, for instance a temporary improvement in productivity. Even with strongly rising demand, this can contribute for a time to low inflation and increased unemployment. The Riksbank has also made it clear that in a situation where inflation is deviating markedly from the target and a prompt return is likely to entail

9 Orphanides & Van Norden (2004) do show, however, that certain ex post estimations of the output gap may be of use for forecasting inflation.
unduly large real economic strains in the short run (in the form of increased unemployment, for example), there may be a case for bringing inflation back to the target more slowly. So by aiming for a gradual adjustment of inflation to the target a couple of years ahead (sometimes longer), the Bank takes the labour market and other aspects of the real economy into consideration.

Instead of constructing monetary policy solely on the basis of the situation in the labour market, the Riksbank forms a picture of future inflation and real economic prospects in the light of various indicators, such as alternative measurements of total resource utilisation (including the labour market situation), alternative measurements of imported inflation (which is affected by exchange rate movements and world market prices), productivity estimates, profit margins and wage statistics. In other words, sound forecasts of inflation have to take many different factors into account. Starting solely from an uncertain statistic on the gap between natural and actual unemployment would most probably result in very poor inflation forecasts and hence an inappropriate monetary policy that fails to fulfil the target.10

**Monetary policy’s impact on employment**

As mentioned earlier, it has been argued that monetary policy misjudgements, leading to inflation below the target, have landed perhaps an additional 50,000–70,000 people in unemployment. This raises the question of whether those calculations are reliable. Suppose the Riksbank’s monetary policy had been based instead on the inflation forecasts for 2002 and 2003 that subsequently proved to be closer to the outcome than the Riksbank’s predictions: would unemployment in the years in question have been appreciably lower? That is hard to tell because it involves counterfactual assessments. Still, estimates of how policy rate adjustments affect unemployment do provide an indication of the extent to which another construction of monetary policy might have led to lower unemployment. First, however, we shall scrutinise the calculations behind the claim that monetary policy misjudgements led to an additional 50,000–70,000 people in unemployment.

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10 For a fuller account of how monetary policy is normally conducted, see Heikensten (1999).
STATEMENTS ABOUT MONETARY POLICY’S IMPACT ON UNEMPLOYMENT

Given the premises that monetary policy can always fulfil the inflation target and that this would mean that actual and equilibrium unemployment coincide, one could calculate the extra unemployment occasioned by monetary policy misjudgements as the gap between actual and natural unemployment. The number of persons in the labour force is approximately 4,400,000. If the natural level of (open) unemployment is assumed to be 4 per cent and the actual level is 5.5 per cent, then the additional unemployment would amount to 66,000 persons.

\[(0.055 - 0.04) \times 4,400,000 = 66,000\]

Our earlier discussion here warrants a number of objections to calculations of this type: (i) One concerns the assumption that unemployment’s natural level is 4 per cent, which in view of the considerable uncertainty about such measurements, is not self-evident. If natural unemployment were instead to lie around 5 per cent, the calculated addition to unemployment would be 22,000 persons. (ii) The primary objective of monetary policy is to stabilise inflation, which may deviate from 2 per cent even if actual and (estimated) equilibrium unemployment coincide initially. (iii) Monetary policy primarily affects inflation expectations and general demand and there is no simple short-term relationship between these economic variables and open unemployment. (iv) Even if the goal were to be to stabilise unemployment around a given level, being on target all the time would not be feasible because the economy is exposed to shocks that are hard to foresee. This applies regardless of stabilisation policy’s goal.

Vartiainen (2005) has intimated that in recent years (the exact period is not clear from his article), inflation has been below the target by a cumulative figure of perhaps 3 percentage points, leading to a real wage that is 3 per cent “too high” and employment at the end of the period that was 1.5 per cent lower than it need have been (equivalent to the loss of 60,000 jobs). The figures presuppose that the labour elasticity of demand is 0.5. He considers that the high unemployment cannot be due to inefficient wage formation because wage increases in the same period complied with the 4 per cent norm (targeted inflation plus an assumed productivity growth of 2 per cent).

At the same time, Vartiainen notes that annual productivity growth in this period was as strong as 3 per cent (much higher than most forecast-

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ers, including employee organisations, had counted on), but fails to see that this was an important reason why most forecasters overestimated inflation. Moreover, this productivity growth should have gone some way towards offsetting the “too high” real wage that the monetary policy “misjudgements” are claimed to have generated (higher labour productivity motivates higher real wages). The strongly rising productivity has also given a favourable development of unit labour costs in recent years (see Figure 5). So the negative effect on unemployment of the monetary policy “misjudgements” should have been considerably smaller than indicated by Vartiainen’s calculation. Furthermore, if employers and employees had anticipated the strong productivity growth, nominal wages would probably have been higher, leading in turn, all else equal, to higher inflation. It is true, on the other hand, that a longer period of increased productivity may contribute to a transient increase in unemployment for other reasons (we shall be returning to this).

Figure 5. Unit labour costs
Percentage 12-month change, moving four-quarter average

Source: Statistics Sweden.

THE POLICY RATE’S EFFECT ON EMPLOYMENT

A lower policy rate in the years 2002–03 would have been feasible as far as inflation is concerned and, all else equal, it would probably have contributed to somewhat higher inflation in the following period. The uncertainty inherent in all forecasts makes it pointless to speculate about what the consequences for employment would have been if what we know today had been clear in 2002. But it may be of interest to look at the con-
sequences for employment if instead the Riksbank had adopted the policy rate assumptions of other forecasters.

In a box in the Riksbank’s Inflation Report 2005:1, on material for evaluating monetary policy in the period 2002–04, it was stated that in 2002–03 monetary policy was based on an economic assessment that did not differ markedly from what other forecasters foresaw. Moreover, while some observers’ inflation forecasts were somewhat lower than the Riksbank’s for 2004, the differences were slight. So if monetary policy had been based instead on those forecasts, neither monetary policy nor the deviation from targeted inflation would probably have been greatly affected. A great deal would have been required of monetary policy in order to bring inflation appreciably closer to the target than was actually the case. The Riksbank would have needed to predict a future that differed substantially from what other forecasters envisaged. In retrospect, the low inflation in 2004 and 2005 is attributable to stronger productivity growth, lower imported inflation and altered competitive conditions in the Swedish economy. A (deliberately) contractive monetary policy cannot be said to have caused either the low inflation or the high unemployment.

One of the first forecasters to adjust their inflation forecast downwards was the NIER, which also recommended a somewhat steeper reduction of the policy rate than the Riksbank opted for. Still, the policy rates that actually applied in 2002–03 differed from what the Institute recommended by an average of only 0.2 percentage points. It goes without saying that the impact on unemployment of such a slight difference in the policy rate would have been marginal. The NIER has estimated that a 1 percentage point increase in the policy rate over a period of two years would increase the number in unemployment by less than 14,000. Given this figure, about 2,800 fewer people would have been unemployed if the Riksbank had followed the NIER’s policy rate assumptions for the years in question (0.2x14,000=2,800).

Why has unemployment been higher since the 1990s?

The average level of unemployment in the 1960s, 1970s and 1980s was considerably lower than in the latest decade, while inflation was markedly higher, particularly in the 1970s and 1980s (see Figure 6). This has prompted claims in the debate that the new low-inflation regime per se may have contributed to the increased unemployment. As we shall see,

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13 The NIER allowed for the fact that the business cycle also affects the labour force. It should be underscored that such estimates have a considerable element of uncertainty.
there does not seem to be any convincing theoretical or empirical evidence for this claim. Instead, there are other, more probable explanations for why unemployment is so much higher at present than in the preceding decades.

**Figure 6. Open unemployment in per cent of the labour force (moving four-month average) and CPI inflation (percentage twelve-month change); 1970-2004**

![Graph showing open unemployment and CPI inflation from 1970 to 2004.](image)

Source: Statistics Sweden.

**ECONOMIC POLICY IN 1960–91**

From 1950 to 1975, Sweden applied what is usually called a “Keynesian” stabilisation policy, whereby cyclical fluctuations were parried with an active fiscal policy. This regime was relatively successful up to the mid 1960s, when the goal of full employment induced politicians to follow an excessively expansionary line. Economic policy primed business activity in upward cyclical phases, leading to overheating and high inflation. In subsequent downturns it was sometimes necessary to check economic activity in order to combat inflation. The fluctuations in resource utilisation were accentuated, if anything, by this procyclical policy. The Riksbank’s main task was to maintain the fixed exchange rate and the social partners were to agree on an appropriate rate of wage increases. The rules of the International Monetary Fund excluded devaluation in principle up to 1971, which imposed discipline on the labour market.

The system broke down in the mid 1970s, when wage costs shot up and Sweden’s international competitiveness was eroded, leading to rising unemployment. In the interests of full employment, between 1975 and 1982 the Swedish krona was devalued five times, by a total of 25 per
The policy of accommodation maintained Sweden’s competitive position and kept unemployment at a low level. Increased public sector employment also helped to keep unemployment down. Between 1960 and the end of the 1980s the proportion employed in the public sector rose from 15 to 30 per cent. However, the repeated devaluations made it increasingly difficult to keep inflation under control. Employees demanded compensation for the poor development of real wages and employers had little incentive to resist. Everyone counted on another devaluation if the rate of price and wage increases became so high that competitiveness was in danger.

In spite of political commitments, in the early 1990s, to combating inflation as a primary goal of economic policy, in 1992 the “fixed” exchange rate had to be abandoned. The series of devaluations had robbed the fixed rate of its credibility.14

This, roughly, is why the stabilisation policy regime was changed in 1992. It also suggests that in the 1970s and 1980s unemployment was below the level that can be maintained in the longer run. The devaluations and the expansion of public sector employment put off the need to tackle the overall problem of employment. Forslund & Holmlund (2003, translated here) summarise the situation thus: “It appears ... [...]... exceedingly unlikely that unemployment at the extremely low levels we experienced around 1990 would be compatible with stable and low inflation, today as little as around 1990”.

IS THE INFLATION TARGET TOO LOW?

A few academic studies, cited in the debate on economic policy, do indicate, however, that under certain conditions, a higher inflation target could contribute to a permanent increase in employment. They tend to rely on one of the following assumptions: (i) adjusting relative wages is harder when inflation is low because of the downward rigidity of nominal wages (see Holden, 1994 and Akerlof, Dickens & Perry, 1996), (ii) economic agents are not (entirely) rational, particularly when inflation is low, because their primary concern is nominal contracts (e.g. wage agreements) not real contracts (see Akerlof, Dickens & Perry, 2000 and Lundborg & Sacklén, 2002, 2003), and (iii) there is some lag, even in the longer run, before prices and wages adjust to changes in monetary policy (see Karanassou, Sala & Snower, 2003a, b), a somewhat abstruse argument. There are grounds for taking a closer look at some of these studies.

14 See also Lindbeck (2005).

Akerlof, Dickens & Perry have questioned the long-term vertical Phillips curve on two grounds. The first (Akerlof, Dickens & Perry, 1996) is the observation of a resistance to nominal wage cuts, making it more difficult to adjust relative wages. In connection with low inflation, this can lead to increased unemployment. The second ground (Akerlof, Dickens & Perry, 2000) starts from the assumption that households disregard inflation at low rates, which leads to "unduly" low nominal wage demands. The "unduly" low real wages pave the way for increased employment. The higher the maximum rate of inflation is that households disregard, the greater is the potential gain in employment. So if the highest rate of inflation that households disregard were to be above the Riksbank's targeted rate, a permanent increase in employment could be achieved by choosing a somewhat higher target. Real wages could then be reduced and employment would rise. Starting from an empirical study based on the hypothesis in Akerlof, Dickens & Perry (2000), Lundborg & Sacklén argue that raising the inflation target from 2 per cent at present to 4 per cent could lead to permanently higher employment in Sweden.

There are, however, a number of objections, both to the theoretical starting points and to the empirical conclusions:

Strong empirical support for the first hypothesis (Akerlof, Dickens & Perry, 1996) has been hard to find.\footnote{See Lundborg & Sacklén (2002).} Even so, the Riksbank has chosen to define a stable value of money in terms of inflation at 2, not 0, per cent.\footnote{Another reason for not targeting 0 per cent inflation is that such a low level is liable to increase the risk of deflation. A third reason is that, in certain cases, the real interest rate may need to be negative; the policy rate can be lowered down to zero per cent; if inflation is then positive, the real interest rate will be negative.} It would be theoretically feasible, given 2 per cent inflation, 2 per cent productivity growth and a 4 per cent average wage rise, to shift relative wages by, say, 8 per cent, provided that equally large groups of employees get and refrain from wage increases. As most observers (e.g. the NIER and the National Mediation Office) consider that wage formation has functioned satisfactorily in recent years, it is difficult to see that with the inflation target at its present level, the argument from relative wages is all that important in practice.

In the other hypothesis (Akerlof, Dickens & Perry, 2000), households are considered to be not entirely rational because they are assumed to disregard inflation at low rates (this behaviour is known in the literature as "near rationality"). The argument is perhaps reasonable at a particular point in time, when the consequences of accepting a wage that is "too low" are not substantial. Over time, however, always behaving in this
way will have considerable consequences and presumably households ultimately realise this.\textsuperscript{17} A more credible hypothesis is that households do in fact adapt but that this may take longer when inflation is low. Neither would there then be any trade-off between inflation and unemployment in the longer run.

Another argument against the theoretical foundations is that a credible inflation targeting regime should make it easier for households or employee organisations to make rational decisions about an appropriate benchmark for wage increases. A natural starting point for wage formation should, on average, be the Riksbank’s inflation target plus total productivity growth. It should be added that the Riksbank strives for openness and transparency. A monetary policy based on its content being unclear to employees would run counter to this objective.

Another point to note is that when Lundborg & Sacklén (2003) refer to empirical support for their conclusions, they are alluding to a statistical material with only a small number of observations for Sweden’s inflation-targeting period and very few observations that are particularly crucial for the method they have applied. This renders the conclusions uncertain and it should surely be difficult to draw such strong policy conclusions as those advocated by them.

In a review of the relatively limited academic literature in favour of a long-term trade-off between inflation and employment, Holden (2004, p. 15) summarises as follows:

"So far it would, nevertheless, be fair to say that the evidence of long-run inflation - unemployment trade-off is disputed. Among other things, several of these studies are based on rather restrictive assumptions; see for example the discussion of Akerlof et al. (1996) by Gordon (1996) and Mankiw (1996) ... ."

Against this background, today it is hard to find convincing arguments or empirical evidence that the level of the inflation target per se contributed to the higher unemployment since the crisis in the early 1990s. However, future research in this field needs to be followed.

The relatively high unemployment since the beginning of the 1990s is indicative of structural problems in the Swedish economy.

\textsuperscript{17} See also Blinder (2000).
(Forslund & Holmlund, 2003). That relatively high unemployment has persisted since then points in the first place to structural problems in the Swedish economy. One indication of this is that at the high in the latest business cycle, unemployment had not fallen much below 4 per cent. Another, partial explanation could be that after the crisis in the early 1990s, the adjustment towards the long-term equilibrium level has been very gradual. Unemployment can be sluggish or persistent, while in extreme periods it may display hysteresis. Unemployment that is persistent, albeit gradually, to the equilibrium level, whereas with hysteresis the long-term level tends to be affected by how unemployment actually develops.\footnote{There are a number of theoretical explanations of persistence. One is that insiders (those who already have a job) wield more influence than outsiders (the unemployed), so that wages are determined by the interests of the former instead of being optimal for the situation of the latter. Another theory is that long periods of unemployment are liable to weaken the incentive to look for work, so that the downward effect on wages from high unemployment is reduced and the matching of unemployed persons and vacant jobs is impaired. A third theoretical explanation for persistence is that unemployment entails a loss of occupational skills, so that those concerned are less attractive to employers. For a review, see Björklund et al. (2000).}

**IMPAIRED MATCHING**

There are signs that a partial explanation for the increased unemployment may be that the matching of unemployed persons with vacant jobs in the period 1995–2003 was considerably worse than in the first half of the 1990s. Thus, for a given level of unemployment, the vacancy rate was higher in the period 1995–2003, as can be seen from the Beveridge curve in Figure 7.\footnote{See Sveriges Riksbank (2002a) and Konjunkturinstitutet (2004). An adjustment of the Beveridge curve for cyclical labour-market entries and exits gives a deterioration of the matching process that is not quite as marked (see Holmlund, 2003).} A combination of rising unemployment and falling vacancies is usually interpreted as a cyclical variation in labour demand. Simultaneous increases in unemployment and vacancies are usually interpreted instead as impaired matching. The former case is represented by a movement along a Beveridge curve, the latter by the curve shifting outwards.

Identifying possible causes of what appears to be a deterioration in matching is not an easy matter. One explanation could be an increased inflow to unemployment as a result of more rapid structural changes in the economy.\footnote{See also Forslund & Holmlund (2005) och Konjunkturinstitutet (2004).}

There seems to have been some improvement in the matching process in recent years, though it does not appear to be working as well as in the early 1990s. Although it is true that labour market policy regulations are now being implemented more strictly, much of what seems to be an improvement in matching may be illusory. A large part of the improvement can probably be explained by increased sick leave: unemployed per-
sons who are registered as sick are not included in the unemployment statistics. The stricter implementation of labour market policy regulations, combined with differences between the levels of unemployment and sickness benefits, has probably entailed a flow from unemployment insurance to sickness insurance.21

**HAS INFLATION BELOW THE TARGET RAISED EQUILIBRIUM UNEMPLOYMENT?**

The Swedish Trade Union Confederation (LO) and others have argued that, in the period as a whole since the inflation target was adopted, inflation has been below the targeted rate and this has meant that labour demand has been unnecessarily weak, thereby contributing to a loss of occupational skills among those who are out of work. If this has made employers less inclined to recruit these people, the equilibrium level of unemployment may have risen. To tackle this problem, LO considers that monetary as well as fiscal policy should be used more actively in the short term to avoid negative long-term effects on equilibrium unemployment, and that monetary policy ought to attach greater weight to real economic considerations.22

The fact that inflation has, on average, been somewhat below the target has been taken to indicate that the Riksbank has responded to risks of high inflation more vigorously than to risks of low inflation, that is, that monetary policy has been conducted asymmetrically, and that this in turn

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21 Today, however, an unemployed person who reports sick receives the lower of the two benefits.
has contributed to unnecessarily high unemployment. This argument, as well as LO’s view of how monetary policy may have affected equilibrium unemployment and what should be done about this, call for some comments. But first let us study the deviations from the inflation target.

The 2 per cent inflation target, which was adopted in 1993 but did not apply in full before 1995, is defined in terms of the consumer price index (CPI). For many years now, however, monetary policy decisions have been based on an index of underlying inflation, UND1X, which unlike the CPI excludes house mortgage interest expenditure, for example. In the period 1995–2004, UND1X inflation averaged 1.8 per cent. Measured by this performance, monetary policy cannot be accused of sizeable systematic misjudgements. CPI inflation in the same period averaged only 1.4 per cent, but this was largely because the introduction of the new low-inflation regime was followed by a marked fall in the general level of interest rates and this reduced the interest expenditure component of the CPI.

In the period 1996–97, inflation was low as a result of a relatively high interest rate in the preceding years. A relatively tight monetary policy was justified in a transitional period to make the new inflation-targeting policy credible. Inflation expectations had been considerably above the targeted rate in 1994–95. The high interest rate probably did have a largely temporary negative effect on unemployment.

Inflation remained low in 1998–99 despite a low interest rate in the preceding years and rapidly rising demand. In these years, the low inflation was a result of deregulations, lower import prices and unexpectedly high productivity growth, that is, supply-side factors. As we noted earlier, the latter two factors also contributed to the low inflation in 2004.

In retrospect, then, the fact that, on average, inflation in the past decade has been somewhat below the target has natural explanations. Instead of being due to the Riksbank judging upward deviations from the target as more serious than downward deviations, it is a result both of the change from a high- to a low-inflation regime, and of supply-side changes that neither the Riksbank nor other forecasters foresaw.

LO’s fears that a considerable period of high unemployment may lead of itself to a higher equilibrium level should be taken seriously.

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23 The calculation is based on the CPI (and hence indirectly the UND1X) definitions that applied before 2005, that is, the definitions that were relevant for monetary policy up to 2004. At the turn of 2004, Statistics Sweden altered the method for calculating the CPI, so that, on average, measured inflation is 0.2 percentage points lower than before. With the new way of measuring the CPI, the average level of UND1X inflation up to 2005 Q3 is 1.6 per cent; however, 0.2 percentage points of the difference from the earlier figure is due to the altered definitions.

24 See also Heikensten (2005a).

25 A study by Adolfsen et al. (2005) supports the notion that unexpected supply shocks have played a crucial part in keeping inflation below the targeted level.
raises the question of whether, as LO proposes, the solution lies in a stabilisation policy that does more to fine-tune demand, rather than in measures for maintaining the unemployed’s human capital and rendering the labour market more flexible. The economics literature is virtually unanimous that, in monetary as well as fiscal policy, the effect of fine-tuning is liable to be destabilising rather than stabilising. One reason lies in the considerable time lags between the identification of a need for stabilisation, a decision to take action and the effect of any measures. It is preferable to implement a policy for making the labour market less vulnerable to shocks.

PERMANENTLY HIGHER PRODUCTIVITY GROWTH

Another explanation for the considerably higher unemployment since the early 1990s may be the relatively strong increase in productivity growth (this has also contributed to the low inflation). Having slackened prior to the crisis in the early 1990s, productivity growth then picked up relatively strongly, no doubt partly for cyclical reasons initially (see Figure 8). But even after the mid 1990s, productivity growth has remained high, which indicates a more permanent change. The crisis did entail a rapid redistribution of labour from low to high productivity industries as well as from the public to the private sector. Moreover, labour-intensive production processes have been transferred to emerging market economies with lower wage costs. These structural changes may have contributed to the weak picture of employment from the mid 1990s up to the present. In time, however, this process and the attendant improvement in productivity will probably lead to new job opportunities in Sweden.26

It should be noted, however, that the issue of whether increased productivity leads to higher or lower employment is still being discussed in the literature on macroeconomics.27 One topic is whether higher productivity, which goes hand in hand with higher real wages, tends to raise or lower labour supply. A higher real wage has both a substitution effect that tends to increase the supply of labour (because working becomes more rewarding compared with not working) and an income effect that tends instead to reduce labour supply (with a higher income for a given labour input, a person can take more time off and still maintain the standard of consumption from before the real wage increase). As we noted earlier on, the growth of real income has been above the average rate in the preced-

26 For a fuller discussion of the increase in productivity growth, see Sveriges Riksbank (2004).
27 See e.g. Christiano et al. (2004) and Galí (1999).
ing decades. If the higher real incomes have tended to reduce the supply of labour, that in itself may explain a part of the decline in hours worked.

What has happened to the labour force?

Today’s high unemployment is definitely a major problem. In a macroeconomic perspective, however, the very slack labour supply in recent years, despite favourable demographic conditions, is perhaps an even greater problem (see Figure 4). A part of the weak labour market performance is probably a consequence of increased inputs for higher education (and possibly also of a decreased labour supply in connection with rising real incomes) but a major part presumably lies in other, more negative, factors.

During the 2000s there has been a large increase in sick leave and disability pensions even though there are no medical factors that point to a deterioration in public health. At the beginning of 2005, “activity and sickness allowances” (the former disability pension) were being paid to a total of 541,700 people, which is equivalent to 10 per cent of the economically active age group (16–64 years). Over a million people (calculated as full-year equivalents), or almost one in five in the active age group, are now living solely on various benefits.28

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28 See Konjunkturinstitutet (2005a). Benefits refer here to sickness and rehabilitation benefits, “activity and sickness allowances” (the former disability pension), labour market compensation for unemployment or in connection with measures of labour market policy, and social welfare.
There is reason to consider some possible explanations for the increases in sick leave and dependence on benefits, as well as the weak labour market performance in general.

**POSSIBLE EXPLANATIONS FOR THE INCREASED ABSENTEEISM FOR SICKNESS**

Some argue that changes in the organisation of work, with more decentralisation and more individual responsibility, may have increased the psychological pressure on certain groups of employees. However, sickness absenteeism has not risen in other countries where there have been similar organisational changes.29

Increased stress, particularly among double-duty women (whose participation rate has risen in recent decades), may also have played some part in the higher sickness rates. The fact that sickness rates have risen among women in particular supports this argument but the increase probably has more to do with a general lack of time that is not necessarily connected with working conditions. The problem may be accentuated by large tax wedges that make it costly to buy household services (apart from subsidised child care and care of the elderly).30

Hans Karlsson, economist at the LO, has claimed that half of those with a disability pension or long-term sick leave are actually capable of working.31 An observation that supports this is that the sickness rate in Sweden is well above the EU average without there (so far) being any plausible explanations for this. Life expectancy in Sweden is longer than in the rest of Europe, which could be expected to point instead to a relatively good state of health. Another factor that may lend some support to Hans Karlssons’ claim is that regional comparisons show a strong correlation between sickness and unemployment rates (see Edling, 2005).32

Altered social standards are seen by Lindbeck (2003) as a factor behind the increased sickness rates. With the expansion of the welfare sector and more and more people dependent on benefits, living on benefits has probably become more socially acceptable. Greatly increased unemployment in certain regions has tended to establish “unemployment cultures” that make a life based on benefits more acceptable than before. Higher unemployment in northern Sweden is accompanied by sickness and disability rates that are also higher than in the south without there being much medical evidence to explain this. The higher sickness rates in

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31 See Dagens Industri (2005).
32 Such a correlation could admittedly also indicate that long periods of unemployment contribute to more ill-health.
these regions are probably attributable in part to many of the unem-
ployed receiving sickness benefits when they ought to be getting unem-
ployment benefits.

The notion that altered social standards may have contributed to the
increased sickness rates in Sweden is supported, according to Lindbeck,
by the above-mentioned absence of any medical explanations as to why
the state of health in Sweden has deteriorated compared both with other
countries and with earlier decades. Lindbeck cites an opinion poll in which
41–48 per cent of the respondents considered they had a right to report
sick without actually being ill. Moreover, 20 per cent considered they had
this right if they are dissatisfied with their job or their boss. This suggests
that health insurance has come to be used for other purposes than tradi-
tional sickness.

The currently high rates of sickness and ill-health that is not verifiable
on strict medical grounds indicate, moreover, that there may be funda-
mental problems with the routines for reporting sick. It has been found
that in up to 90 per cent of cases, it is only when the patient suggests it
that the doctor proposes sick leave as a form of treatment; moreover, a
patient who asks to be sick-listed is seldom refused.33

INCENTIVES IN BENEFIT AND TAX SYSTEMS

For labour supply, other types of problem are associated with incen-
tives in benefit and tax systems:

The social welfare system probably harbours a considerable element
of moral hazard, that is, over-utilisation because individuals adapt their
behaviour to qualify for benefits. Systematic studies suggest, for example,
that rules whereby unemployment benefits are available over a very long
period tend to prolong the duration of unemployment.34 The notion that
moral hazard is a problem in the Swedish health insurance system finds
support in a study by Johansson & Palme (2005).

Fiddling benefits probably occurs, too. A recent study by Thoursie
(2004), for instance, shows that young men have utilised sickness insur-
ance to a high degree in connection with major sporting events.

Improved economic incentives to work

The slack tendency in the size of the labour force is even more trouble-
some when one considers that, in the coming four decades, the popula-
tion aged 20–64 years is expected to decline in relation to the younger

33 For references, see Konjunkturinstitutet (2003).
34 For references, see e.g. IFAU (2003).
and older age groups. This makes it absolutely essential to focus the economic policy debate on the need for an increased labour supply. In that context it would be a mistake if ways in which the tax and social security system influences work incentives are disregarded on the grounds that the present system is motivated by other considerations.

Since 2004, the NIER publishes an indicator (the net compensation rate) of the share of an increase in labour costs that goes to the employee after deductions for taxes (including income tax, employer contributions and VAT), increased charges and decreased allowances (e.g. housing allowances). In other words, the net compensation rate shows how much someone already in work gains from additional earnings generated by longer working hours or a wage increase. The NIER calculates that in 2005 the average net compensation rate is 40.2 per cent. For about 5 per cent of all those in employment, the rate is below 30 per cent.

Another indicator of the work incentive is the level of compensation, which indicates the effect on a household’s disposable income when a member who has been unemployed, sick-listed or on social welfare becomes employed. An official study (Annex 3 to the 2005 Budget Bill) shows that the level of compensation can be extreme: for parents who are both entirely dependent on social security and have two children, a monthly wage of at least SEK 24,000 would be needed for the household to benefit from one of the parents becoming employed.

Compensation rates and levels do not tell us how behaviour is influenced by taxes and benefits; they simply point to the incentives to find work or to work more. A good deal of empirical research has been devoted to how changes in taxation influence the supply of labour from those who already have a job (only a few studies concern persons living on benefits). The results suggest that the labour supply from mothers and women with low incomes is more sensitive to altered work incentives than the supply from other groups. Perhaps that means that the labour supply from the former groups could be stimulated. In higher income groups, however, empirical studies indicate that labour supply is less sensitive to altered work incentives, and this is sometimes taken as evidence that high marginal tax rates on large incomes are not a major problem for labour supply. This calls for some comment.

High marginal tax rates on earned income lower the return on education; this could harm economic growth in the longer run. Large tax rates and social security contributions are also a burden for households that are already on social welfare.37

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35 See Konjunkturinstitutet (2005b).
36 For a review, see e.g. Vem tjänar på att arbeta?, Annex 14 to LU 2003/2004.
37 As the number of students in tertiary education has risen markedly over time – due in large measure to an increased capacity in connection with higher appropriations – empirical support for these fears is probably hard to find.
wedges on earned income may hamper the ongoing structural shift from employment in manufacturing to jobs in service industries. Moreover, other factors suggest that earlier empirical studies may have underestimated the elasticity of labour from high-income groups. Most of the studies refer to the 1970s and 1980s, when earned and capital incomes were taxed together, which may account for the low labour elasticity (Sacklén 2005). Prior to the tax reform, the tax system as such was highly progressive. However, with considerable scope for tax planning and tax allowances, often resulting in zero-ratings, the progressive element was far smaller than the formal tax scales suggested. In Sweden’s current tax system, opportunities for tax planning are highly restricted and earned income is taxed separately from capital income. So the situation differs from the 1970s and 1980s and Sacklén (2005) argues that this can lead to changes in taxation having larger effects on labour supply.

The need to study labour supply anew is relevant not least with reference to whether tax reforms can stimulate labour supply at a time when demographic factors are tending to reduce the supply, with negative effects on economic growth and the public finances. In the latter context there is also a great need of empirical studies to find out how taxes and benefits affect household behaviour in terms of living on benefits as opposed to finding a job.

Another relevant aspect when it comes to raising labour supply is how to persuade the older segment of the labour force to refrain from retiring unduly early. As the Riksbank has pointed out on a number of occasions, the system for private pension saving with tax benefits may mean that more people choose to retire before their 65th birthday (under the present rules, the pension disbursements can start from the age of 55), which would reduce the supply of labour. Another discussion of how to increase the supply calls for a review of the work incentives in the system of taxes and benefits. In so far as the weak state of employment is a result instead of rapid structural adjustment in the Swedish economy, it is also important to discuss how the labour market can be made more efficient and how the forces that drive entrepreneurs can be strengthened.

In a time of rapid structural change, low labour market mobility and flexibility added to the cost in the form of increased unemployment. Measures for promoting labour market mobility and an adaptable educational system are and will continue to be urgent. The measures to do with supply that we have now touched on indirectly actually seem to be more

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38 See also Henriksson (1998).
39 See e.g. Sveriges Riksbank (2002b).
crucial for achieving permanently higher employment and GDP than the marginal contributions to the real economy that a more expansionary economic policy can achieve in the short run.40

**Our conclusions in brief**

In our view, the debate in the past year, above all in the media, about monetary policy and unemployment has formed a picture of monetary policy and what it is capable of achieving that is directly misleading. This article is intended to fill in the picture in a number of respects that we consider have been missing in the debate.

The calculations which hold that monetary policy misjudgements have resulted in 50,000–70,000 more people in unemployment are based on unrealistic assumptions. In the first place there is the assumption that when actual unemployment coincides with the equilibrium level, inflation will always be 2 per cent. There is no simple or stable relationship between cyclical unemployment and inflation. Moreover, cyclical unemployment is difficult to measure at all accurately, varies appreciably over time and is a very poor indicator of future inflation. The figures cited in the debate on monetary policy’s impact on unemployment also completely disregard the unexpected supply shocks, in the form of higher productivity growth and low import prices, that have affected the Swedish economy in recent years and which primarily explain the low inflation. These shocks are one reason why inflation has been overestimated not only by the Riksbank but also by other forecasters, which highlights the need to improve the possibility of predicting supply-side shocks. The Riksbank is working continuously to this end.

A lower policy rate in the period 2002–03 would have been feasible with reference to inflation. When evaluating whether monetary policy has contributed to higher unemployment, however, the analysis should focus on whether the monetary policy decisions were reasonable in terms of the information that was currently available. Here it can be noted that some forecasters, for example the NIER, did predict somewhat lower inflation in 2004 than the Riksbank but the differences were so small that setting the policy rate in accordance with those forecasts would not have had any decisive consequences for unemployment. Our estimate, admittedly uncertain, is that if the Riksbank had opted instead for the NIER’s policy rate assumptions for the years in question, the number unemployed would have been only about 2,800 fewer. This figure is based on the NIER’s

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40 See also Heikensten (2005b).
estimation of the relationship between the policy rate and unemployment.

As regards the criticisms of the construction of the new stabilisation policy regime, we consider that there is no convincing evidence at present that either the level of the inflation target or an asymmetric monetary policy lay behind the high unemployment. Firstly, from a review of the few studies which suggest that a higher inflation target could have led to lower unemployment, we find that this conclusion rests on a limited statistical material and broad assumptions about households’ behaviour. Secondly, we find clear reasons why inflation has been below the targeted rate and this was not due to the Riksbank systematically treating upward deviations from the target more seriously than downward deviations. It is possible, on the other hand, that unemployment in 1996–97 was affected negatively because the interest rate had been high in the preceding years. The high interest rate was motivated, however, to gain confidence in the new low-inflation regime; in 1994–95, inflation expectations had been considerably above the targeted rate.

So if neither monetary policy nor the new stabilisation policy regime has made a significant contribution to unemployment, how is one to explain why unemployment in the past decade has been so much higher on average than in the preceding decades? Firstly, we find it misleading to compare the level of unemployment after the regime change in stabilisation policy with the levels in the 1970s and 1980s. In those decades, an economic policy that, on average, was unduly expansionary, with repeated devaluations and greatly increased public sector employment, kept unemployment below the level that can be said to be sustainable in the longer run. Secondly, there are studies which indicate that although unemployment remained low, its equilibrium level followed a rising trend over a longer period up to the early 1990s. Thirdly, the increase in unemployment after 1992 was a consequence of the economic crisis in the early 1990s, caused to a large extent by several years of unsuccessful economic policy. Fourthly, the continuation of high unemployment up to the present presumably has to do with structural factors. Much of the unemployment that followed the crisis in the early 1990s may have become persistent. This is indicated by the fact that at the peak of the latest business cycle, open unemployment did not fall much below 4 per cent. To some extent, moreover, the high unemployment may have to do with the rising trend for productivity growth in the second half of the 1990s, though an increase for this reason would seem to be a transitional problem. Stronger pressure from structural changes as a consequence of globalisation may have contributed to impaired matching in the labour market and increased unemployment.
Our concluding observation is that, in the one-sided debate in the past year about open unemployment and how it can be influenced with measures of stabilisation policy, other problems in the Swedish labour market are liable to be disregarded. Despite favourable demographic conditions, the proportion of those aged 20–64 years who belong to the labour force has decreased markedly since the early 1990s. One explanation for this is the greatly increased numbers of sickness-benefit days and disability pensioners. The slack labour supply may be partly due to weak work incentives in the system of taxes and social security benefits, as well as to altered attitudes to what is an acceptable use of, above all, health insurance and disability pensions. Measures for strengthening work incentives and making the labour market more efficient are urgently needed, besides being particularly relevant in the light of the unfavourable demographic conditions that lie ahead, with a declining labour supply, as well as the rapid structural changes associated with ongoing globalisation. A narrow focus on what short-run stabilisation policy can achieve for unemployment, be the measures fiscal or monetary, is liable to distract attention from the need for structural measures that are far more important for the labour market in the longer run.
References


Sveriges Riksbank, (2002b), Submission on the report Våra skatter?, DNR 02-2037-DIR.

