

## **Karolina Ekholm: Balancing monetary policy – when theory meets practice**

Speech by Ms Karolina Ekholm, Deputy Governor of the Sveriges Riksbank, at SEB, Stockholm, 18 September 2009.

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As I am sure most of you know, I am the newest member of the Executive Board of the Riksbank. I was appointed in January this year – at the height of the financial crisis – and took up my post in March when virtually all the curves for the development of the real economy were pointing sharply downwards.

The period since my appointment has been very intensive and highly instructive. As a university lecturer in economics, part of my baggage included the textbook descriptions of how monetary policy is conducted. I soon realised, however, that there are significant differences between theory and practice. For example, the financial markets work fairly well in theory. At the time I joined the Executive Board, however, this was definitely not the case. This meant that I faced entirely new monetary policy considerations compared to those presented in the textbook analyses of monetary policy.

I had actually suspected that monetary policy is much more difficult in practice than in theory already before I began working at the Riksbank. I am sure that these suspicions would have been confirmed even under more normal circumstances. Now, however, my induction period has been marked by the extraordinary conditions that currently govern monetary policy: a financial crisis that has still not really come to an end, a very dramatic economic downturn and a repo rate that is close to zero. It has definitely not been a gentle settling-in period! Today, I intend to tell you a little about these early experiences and to explain how I view the monetary policy considerations that are relevant in the current economic situation. I will also say something about my view of monetary policy in the period ahead and to what extent we need to take factors other than inflation into account.

### **Monetary policy in practice**

The inflation target lies at the centre of the Riksbank's monetary policy. The stated target is that the annual change in the consumer price index (CPI) should be 2 per cent. As far as the target for monetary policy is concerned there is no difference between theory and practice. Both theory and practice show that low and stable inflation creates favourable conditions for the development of the economy in the long term. There is also broad agreement between academics and central banks about the possibilities and limitations of monetary policy. We know that monetary policy can influence both the average level of inflation and how much it varies over time.

Monetary policy can not, on the other hand, significantly affect the average level of real quantities such as production, employment and unemployment. The average level of such quantities is determined by other factors, such as demography, competition and tax policies, research and development and education and training.

There are therefore good reasons why monetary policy should focus on inflation and have an inflation target.

### ***Flexible inflation targeting policy***

A strict interpretation of the possibilities of monetary policy can easily be perceived as being that central banks can only affect inflation. However, although monetary policy can not affect the average level of real factors, this does not mean that it is ineffectual in stabilising

fluctuations in these factors. I mean by this that monetary policy can contribute to the stabilisation of resource utilisation at a normal level. In practice, central banks with an inflation target conduct what is called flexible inflation targeting. This flexibility means that – alongside the long-term inflation target – the central banks also strive to ensure that fluctuations in both inflation and the real economy are kept at a reasonable level. Striking the right balance between these factors is what the Riksbank calls a well-balanced monetary policy.

The flexibility of inflation targeting becomes particularly important in situations where a conflict arises between the objective of reaching the inflation target and the objective of stabilising the real economy. In some situations, the inflation target calls for a certain type of monetary policy while resource utilisation calls for another. One example of this is the situation that prevailed during most of 2008, the year before I joined the Executive Board. Energy and food prices increased dramatically. This pushed up inflation to unexpected levels. At the same time, economic activity appeared to be declining – a decline that eventually became a severe economic downturn. If, in such a situation, the interest rate had been substantially increased in order to rapidly bring inflation back down to the target, the economic situation could have been undermined even more.

However, as the Riksbank works with a flexible inflation target we can choose not to bring inflation back to the target as quickly as possible. This flexibility also gives us scope to stabilise the fluctuations in the real economy. How long it should take to return inflation to the target depends, among other things, on the type of shock that has occurred, the size of the shock and how long it can be expected to affect the economy.

An almost obvious question in the exam papers on macroeconomics that I helped to set in the spring of 2008 was: What monetary policy can a central bank that conducts flexible inflation targeting be expected to pursue under the prevailing conditions and why? Full marks went to those who answered something like: "such a central bank can be expected to make relatively moderate interest rate increases and accept a level of inflation that exceeds the target in the short term but then falls back to the target". This was also by and large the monetary policy conducted by the Riksbank.

### ***However, it can be difficult to achieve the right balance***

In theory, balancing the need to achieve the inflation target and the need to stabilise the real economy seems relatively simple, even when there is a conflict between these objectives as in 2008. However, when it comes to conducting monetary policy in practice, achieving the right balance is not always so easy.

One problem that I have probably underestimated in the past is that there are no simple and unambiguous measures of how much of the economy's resources are being utilised and what should be considered as a normal level for what we call resource utilisation. In theory it is relatively easy to define the so-called production gap. It is often defined as the difference between what is actually produced and what could be produced if the resources available were used to the full. But I do not really think that it is possible to measure this gap with any great degree of precision. One problem is that it is difficult to measure how much could be produced if all the resources were used to the full. This, which is sometimes called potential production, can not be observed directly but must be estimated.<sup>1</sup> At the same time, there is a great deal of uncertainty about the best way to perform such an estimate. Getting an idea of resource utilisation thus requires that we, like other forecasters, look at many different types of measure and assess which conclusions regarding resource utilisation seem to be

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<sup>1</sup> For a more detailed discussion of how potential production can be defined and measured, see Palmqvist, S. (2007), "Flexible inflation targeting – how should central banks take the real economy into consideration?", Sveriges Riksbank Economic Review, no. 2, pages 91-105, Sveriges Riksbank.

reasonable. Developing analysis in this area is important and such work is underway at the Riksbank. However, I do not think that we should expect it to be possible to find a measure that is so reliable that it can be used in a mechanical way in all situations to determine exactly how monetary policy should be designed so that it also stabilises the real economy.

Another practical problem for forecasters is that it is difficult to identify turning points in economic activity. Here too we have to rely on different types of indicator. We monitor, for example, new orders, stock, the purchasing managers' index, confidence indicators, business tendency surveys and, not least, the Riksbank's own company interviews. At present, the confidence indicators are particularly important. The downturn began with a general crisis of confidence that affected both the financial sector and the public's expectations concerning the development of the economy. It is therefore reasonable to believe that a turnaround requires the restoration of confidence. However, it is difficult to find any exact and stable link between confidence indicators and actual economic development. So, in this context too there is scope for different assessments when it comes to interpreting the economic situation and the consequences for monetary policy.

## **New and difficult monetary policy considerations recently**

### ***No longer a conflict of objectives***

When I took up my post as a member of the Executive Board, there was no longer really a conflict between upholding the inflation target and stabilising the real economy. Energy and food prices began to fall already in the summer of 2008. The global financial crisis that hit with full force in the autumn of 2008 contributed to a dramatic economic downturn in both Sweden and abroad. This reinforced the rapid fall in inflation. At the monetary policy meetings that I participated in during the spring and summer it was easy to make decisions about the direction of changes to the repo rate. Both inflation and the economic situation justified reductions in the interest rate and the repo rate was indeed cut, first to 0.5 per cent in April and then to the all-time low of 0.25 per cent in July.

Any textbook on macroeconomics would have prescribed a cut in such a situation. However, the monetary policy decisions during the spring and autumn were still complicated. The difficult question, at least from my point of view, was how much should the repo rate be reduced. Because we had cut the repo rate so quickly and substantially during the autumn of 2008 and early 2009, the scope for pursuing traditional monetary began to shrink as the repo rate began to approach its lower limit.

Determining what level is the repo rate's lower limit also proved to be difficult. Can the repo rate be cut all the way to zero, or even to a negative level? There is no clear answer to these questions. However, in line with the majority of the Executive Board, my assessment in July was that the repo rate should not be cut beyond 0.25 per cent. The reasons for this were the concern that some financial markets would find it difficult to function normally at lower interest rate levels and that it could have a negative impact on the profitability of the banks. My view was that the economic situation in principle called for an even greater cut. At the same time, I thought it was too risky to reduce the repo rate even more when we did not really know how the financial markets would function with such low interest rates.

One can note after the event that cutting the repo rate to 0.25 per cent was carried out without any apparent problems. In this perspective, the fears that I had in July would seem to be somewhat exaggerated. On the other hand, I believe that it is worthwhile for a central bank to act with some caution in areas where it does not have any previous experience to draw on. This is why I feel that it was justified to reduce the repo rate in small stages when we were already at a record-low level in the initial position.

### ***Measures when the interest rate is close to zero***

What then should a central bank do when the policy rate can not be lowered to the level justified by the state of the real economy? Many central banks have struggled with this question during this crisis. One possibility is to allow the policy rate to remain at the lowest possible level for a longer period than would otherwise have been required. The effects of such a decision can also be reinforced in several ways. The central bank can, for example, lend money to the banks at a fixed interest rate at a maturity that corresponds to the period during which the policy rate is expected to remain at this low level. This can increase the credibility of the forecast that the rate will remain unchanged in the year ahead. It should also push down some interest rates at longer maturities. We decided to implement both of these measures. Since the monetary policy meeting in February, our forecast has comprised a low repo rate during a relatively long period of time. At the monetary policy meetings in July and September 2009, we also decided to lend money to the banks for one year at a fixed interest rate.

The Riksbank's current monetary policy has to be characterised as highly expansionary. Such a policy may lead to fears of a too high level of inflation in the future. Personally, I do not think that such fears are justified. The inflation target is, as usual, the focal point of our repo rate decisions. However, as long as the target is not threatened we should do what we can to contribute to the stable development of production and employment. This is why we believe there is a need to keep the repo rate at an exceptionally low level for an unusually long period of time. It does not appear that inflation will be a major problem, while various measures of resource utilisation indicate that it will remain very low over the year ahead.

### ***Monetary policy and financial stability***

The financial crisis has led to a discussion about whether monetary policy should also take into account signs of the development of financial bubbles and aim to counteract such tendencies. This is an important discussion that I and others in the world of central banking will have reason to return to. One of the explicit tasks of the Riksbank is to promote stability and an efficient payment system. The Riksbank will therefore, whatever the circumstances, take measures if the stability of the system is threatened. This task has, for example, been the reason for the crisis measures that the Riksbank has taken since the autumn. However, we need to discuss whether situations can arise in which flexible inflation targeting conflicts with the aim of promoting financial stability. If so, should interest-rate policy be modified or is it more appropriate to use other instruments to, for example, counteract the development of financial bubbles? I have no ready answers to these questions today. They partly relate to the question of the causes of the current financial crisis. Has monetary policy contributed to the crisis through low interest rates or do the causes lie in entirely different factors, such as global imbalances and/or inadequate regulation and supervision of the financial markets? The analysis of the causes of the crisis has begun, but it is still far too soon to draw any clear conclusions about the contribution of different factors.

### ***The current economic situation***

But what are the prospects for the economy in the period ahead and what challenges are we facing now? The financial crisis reinforced the international economic downturn. It is therefore natural to expect that a recovery will only come when the situation on the international financial markets has normalised.

### ***Stabilisation of the financial sector***

The situation on the financial markets has continued to improve during the summer. This is reflected by the fact that risk premiums on the interbank market, for example the TED and basis spreads, have fallen to levels close to those that applied before the outbreak of the

financial crisis in both Sweden and abroad (see Figure 1). The stock market has also recovered strongly. Swedish companies have gradually found it easier to find funding on the international capital markets. But the situation is still strained. The interest rates offered to Swedish companies are high in comparison to the interest rates for government securities, that is the credit spreads are still high. In addition, corporate demand for export guarantees is much higher at present than has been the case previously. This indicates that the funding situation of the companies is still strained.

### ***International economic activity show signs of recovery***

Since the monetary policy meeting in July, signs have emerged of a slowdown in the economic downturn abroad. In some countries, there are now even signs of a recovery. This can be seen, for example, if we look at world trade, which has now begun to stabilise following the collapse at the start of the year (see Figure 2). Both outcomes and indicators of future economic growth have stabilised or shown an upturn in most regions. In Asia, in particular, growth has clearly picked up during the second quarter of this year (see Figure 3). This is because domestic demand in China has increased, which in turn stimulates exports in the Asian countries. Nevertheless, although the positive signs of a recovery that we could already see in July have strengthened, there is still uncertainty about future developments.

In the USA, which is suffering its most prolonged recession since the 1940s, there are signs of a light at the end of the tunnel. The housing market has improved and the statistics indicate that the fall in house prices has come to a halt (see Figure 4). After four quarters of falling GDP, growth in the third quarter is now expected to be positive (see Figure 5). The labour market is continuing to weaken, however, and unemployment has reached almost 10 per cent, which is an unusually high figure for the USA.

Development in the euro area has been somewhat better than our assessment in early July. It appears that the fall in GDP has come to a halt. Several of the major economies have even reported positive GDP growth. However, the situation on the labour market has deteriorated further. Unemployment is almost at the same level as in the USA.

### ***The fall in Sweden's GDP is slowing down***

Development in a small open economy like Sweden is highly dependent on the development of economic activity abroad and Sweden has also been hit hard by the severe international downturn. GDP has fallen for five quarters in a row. However, since the beginning of the second quarter of this year this fall has slowed down and GDP even increased somewhat between the first and second quarters (see Figure 6). Furthermore, indicators for development in the third quarter, such as the purchasing managers' index and the Economic Tendency Survey, point to the recovery coming slightly sooner than we previously believed. We have therefore revised our forecast for growth in 2009 upwards slightly. But the recovery will begin from a very low level. Sweden's GDP is now expected to fall by 4.9 per cent this year compared with last year. This is the largest decline in Swedish GDP in an individual year since 1940.

### ***The labour market is still showing weak development***

Despite the slightly brighter picture of economic growth, the situation on the labour market is expected to be gloomy for some time to come (see Figure 7). This is because the labour market can not improve as long as the companies have unutilised resources and still need to reduce their workforces. Unemployment is therefore expected to increase both this year and next year. Our assessment is that unemployment will not increase again until 2011.

## ***Inflation is currently low***

Inflation has fallen rapidly since the end of last year and we believe that it will be negative for a large part of the year. The fact that inflation, measured in terms of the Consumer Price Index, the CPI, has fallen so quickly is primarily due to the fall in energy prices and mortgage costs. Inflation measured in terms of the CPIF, in which mortgage rates are kept constant, is more stable but it is expected to be below 2 per cent for most of the forecast period (see Figure 8).

## **My view of the situation**

At the latest monetary policy meeting, I advocated an unchanged repo rate and repo rate forecast. This was also the decision made by the majority. As in July, we also decided to offer our monetary policy counterparties loans at a fixed interest rate for one year. As I mentioned earlier, this can strengthen expectations that the repo rate will remain at the decided level throughout the maturity of the loans and also contribute to lower interest rates for households and companies in other ways.

Many analysts felt that the decision to leave the repo rate unchanged was self-evident. The decision to retain the same repo rate path that we adopted in July was perhaps more unexpected. I will explain the reasoning that led to my conclusion that this constitutes a well-balanced monetary policy.

There are several factors to take into account in this decision. Perhaps the most obvious factor is the change in the economic prospects. As I mentioned earlier, the forecast for GDP growth in Sweden has been revised upwards somewhat. Irrespective of which indicators you look at, resource utilisation is still very low in Sweden and abroad and the development of employment is expected to be weak throughout next year. There is also great uncertainty about how strong and stable the recovery will be. It is positive that there has been a clear improvement in the situation on the financial markets. This reduces the risk of a serious setback. On the other hand, the situation on these markets has not completely normalised. Central banks around the world will continue to use various measures to help the banks find funding. The extensive fiscal policy stimulation measures that have been and are being implemented in all the major economies have in all likelihood helped to dampen the fall in GDP. But, they are also leading to increases in national debts. This can create anxiety among the households and thus entails a risk that recovery will stop short.

Nevertheless, the situation looks brighter today than it did a couple of months ago. This in itself justifies a somewhat tighter monetary policy than that which we regarded as a well-balanced monetary policy in July. However, there are also factors that can have the opposite effect and thus represent arguments for a more expansionary monetary policy. The development of the krona has been stronger than we expected. Just as it is difficult to explain the earlier weakening of the krona in terms of developments in the Swedish economy, it is difficult to explain the recent appreciation in the krona. The best explanation might be that it is a question of an adjustment towards more normal levels after the exchange rate had strongly deviated from its long-term reasonable rate. However, a strengthening of the krona weakens inflation. As inflation is expected to be slightly below the target over the coming years – and now I am referring to inflation adjusted for the effect of interest rate changes on housing costs – this is something that in itself could be an argument for a more expansionary monetary policy.

The brighter economic prospects thus point towards a tighter monetary policy, while the stronger krona points towards a more expansionary monetary policy. I believe that there is more uncertainty about the development of the krona in the period ahead than about the development of economic activity. I therefore attach relatively little importance to the krona when assessing what would be a well-balanced monetary policy.

This means that I instead place greater importance on the improved economic prospects. However, despite the fact that prospects now seem a little brighter, it is still the case that resource utilisation is expected to be significantly below normal over the next few years. This means that there is still a need for monetary policy stimulation to stabilise the real economy. Nor does it appear that such stimulation will conflict with the inflation target. Inflation measured in terms of the CPIF is expected to be slightly below the target of 2 per cent in the next few years. All in all, there is therefore nothing at the moment that calls for a tightening of monetary policy at a faster rate than in our assessment in July.

Nor can I see, as economic activity has improved, any weighty reasons for making monetary policy more expansionary by reducing the repo rate even further. The adopted line, with a repo rate of 0.25 per cent that is expected to remain unchanged for several quarters, represents a very expansionary monetary policy. My view is that this policy should only be changed if inflation and/or the economic situation change considerably compared to our current forecasts.

### **Concluding remarks**

I have now shared with you some of my experiences during my early months as a member of the Executive Board of the Riksbank. I realised already when I accepted the job that it would not be easy. However, the fact that monetary policy decision-making is not as straightforward as it appears in theory only serves to make the job even more exciting.

A well-balanced monetary policy presupposes that we arrive at a reasonable balance between achieving the inflation target and stabilising the real economy. A reasonable balance requires in turn that we can effectively measure how much inflation deviates from the target and how resource utilisation relates to its normal level. We have fairly good measures of inflation, although it has been a problem recently that our main measure of inflation, the CPI, is so highly affected by our own repo rate decisions through their effects on housing costs. Consequently, at our most recent monetary policy meetings we have almost exclusively focused on alternative measures from which housing costs are excluded.

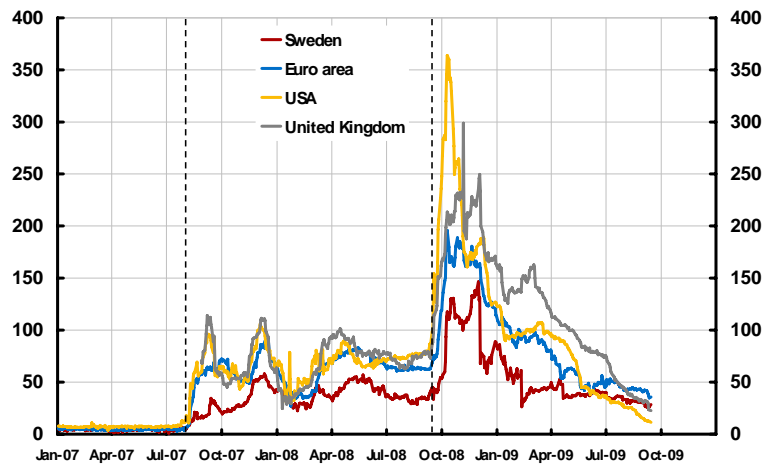
The problems concerning how measures of resource utilisation relate to the normal level are, however, greater. It is difficult enough to measure resource utilisation, but it is even more difficult to measure what its normal level is. Instead we have to weigh together different measures and indicators in a reasonable way. This of course provides greater scope for a wider range of assessments. The financial crisis has, not least, also raised the question of to what extent monetary policy should take financial stability into account. This is an important question that should be analysed further.

Let me conclude by saying that it appears that the fiscal policy and monetary policy stimulation measures that are being implemented throughout the world are beginning to have the desired effects. The situation in the financial sector has improved and an economic recovery is now discernable. But it is still uncertain whether the recovery is stable or whether there is a risk that it will come to a halt as soon as the fiscal policy and monetary policy stimulation measures are phased out. Deciding the appropriate time to begin the phase-out of the now very extensive monetary policy stimulation measures is a major challenge. If the phase-out begins too early there is a risk that the recovery will come to a halt. If we wait too long, there is a risk that we will need to increase the repo rate very quickly in order to meet the inflation target. This is a balance that is much easier to achieve in theory than in practice! However, as I have explained here today, my assessment at the latest monetary policy meeting was that it will still be necessary to keep the repo rate at this low level for a long time to come.

Thank you!

# 1. Financial markets functioning better

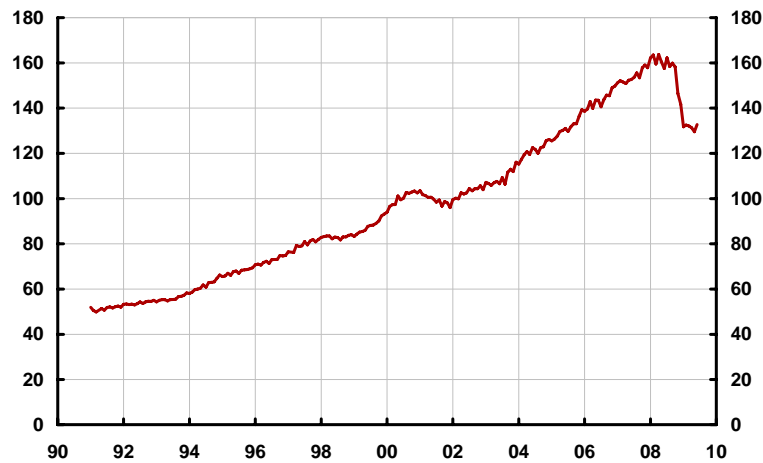
Basis spread, basis points



Note. The difference between 3-month interbank rate and expected policy rate (basis spread) Sources: Reuters EcoWin and the Riksbank

# 2. World trade stabilising

World trade monitor index, 2000 = 100, seasonally-adjusted data

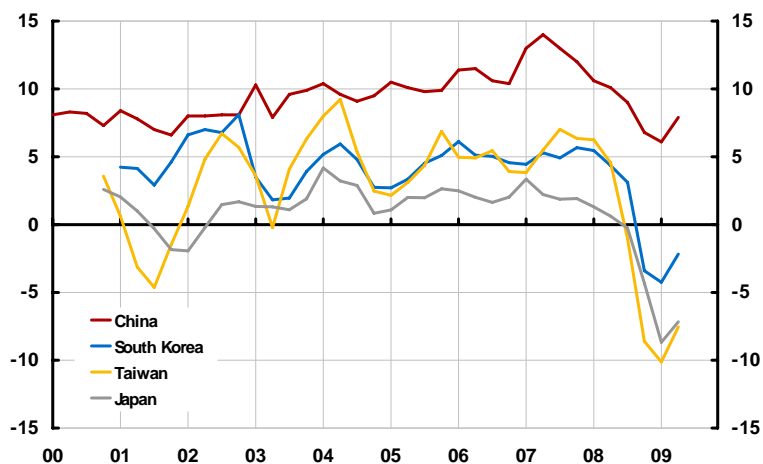


Source: Netherlands Bureau for Economic Policy Analysis



### 3. Growth in Asia

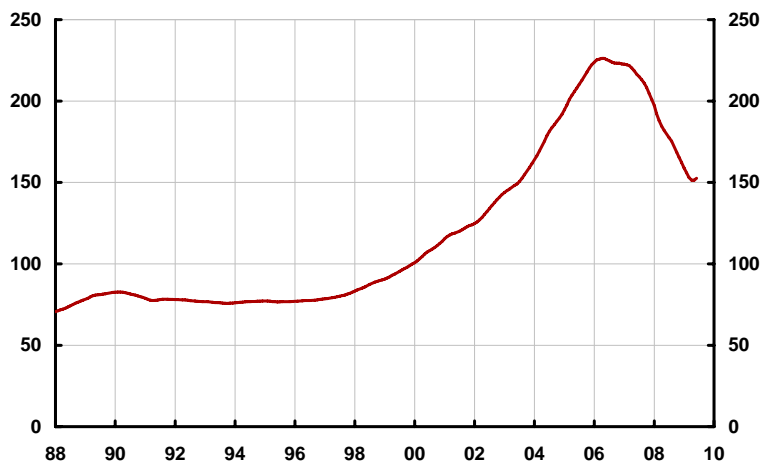
GDP, annual percentage change



Sources: National sources

### 4. House prices in the USA

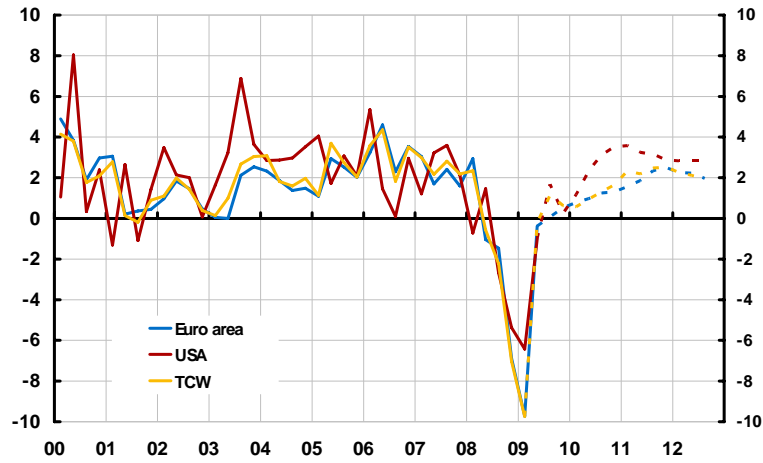
Index, January 2000 = 100, seasonally-adjusted data



Source: Standard & Poor's

## 5. Growth increasing in the world

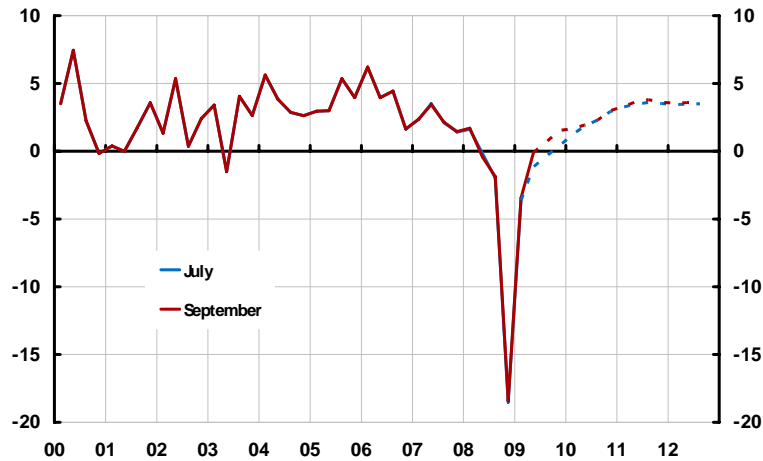
GDP, quarterly change in per cent calculated as an annual rate, seasonally-adjusted data



Sources: National sources and the Riksbank

## 6. GDP

Quarterly changes in per cent calculated in annualised terms, seasonally-adjusted data



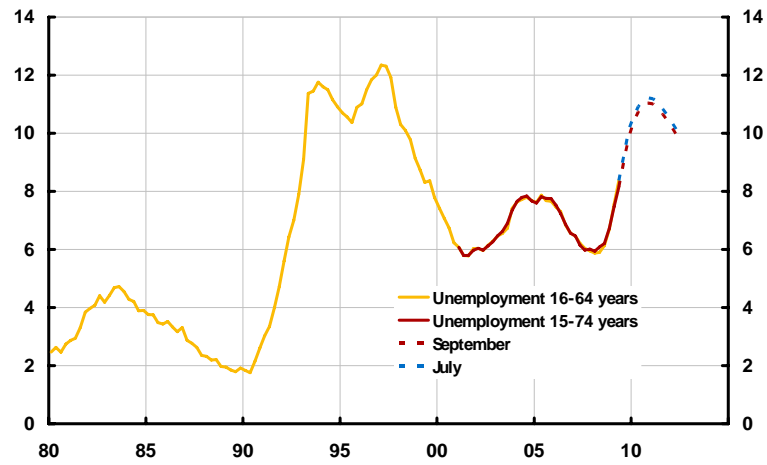
Note. Broken lines refer to the Riksbank's forecasts.

Sources: Statistics Sweden and the Riksbank

## 7. High unemployment throughout the forecast period



Unemployment, per cent of labour force, seasonally-adjusted data

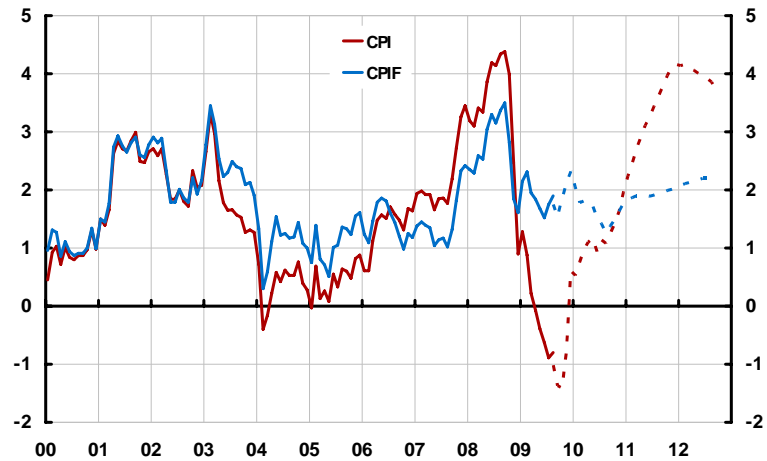


Note. Broken lines represent the Riksbank's forecast, 15-74 age group. Sources: Statistics Sweden and the Riksbank

## 8. CPI and CPIF



Annual percentage change



Note. Broken lines represent the Riksbank's forecast. Sources: Statistics Sweden and the Riksbank