Comment

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Monetary policy in a low inflation environment: some reflections by a policy maker

ECB's first conference: Why Price Stability? Frankfurt, Germany

I should like to begin by thanking the European Central Bank for arranging a conference of this kind, with many interesting and penetrating contributions to both the theory and practice of monetary policy. I am also grateful for the opportunity to comment on José Viñal's (JV's) paper.

JV has presented a very broad and stimulating paper that illustrates his good knowledge of the academic literature in this field. In a way, that makes commenting on his contribution difficult. I have carefully to select what I want to consider. In another way it makes things easier. I can talk about essentially anything I have been working on in recent years and still be able to relate it to JV's paper.

I shall be discussing some of JV's arguments, mainly as someone who in recent years has been involved in the development of Swedish monetary policy's intellectual framework and who is now also one of those who sets the interest rate. This I believe will amount to a natural division of labour between me and my co-discussant.

What I have to say refers above all to three of the issues JV considers. The first concerns the effectiveness of monetary policy in a low-inflation environment. The second is the significance for monetary policy of various disturbances or shocks. The third issue is monetary policy and financial stability.

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I shall then conclude by looking briefly at some general issues that touch on what JV deals with when he discusses the importance of securing the transition to low inflation, as well as when he concludes with respect to the conduct of monetary policy in practice. Those of you who know me can no doubt anticipate what is coming — a call for transparency and clarity in analytical frameworks and processes, internally as well as externally.

Low inflation and the effectiveness of monetary policy

So, in section 3 JV discusses the effectiveness of monetary policy in a world with low inflation. He follows three tracks, of which the first two at least have attracted a good deal of attention in the literature. They are 'the zero bound on nominal interest rates' and 'output-inflation trade-offs: the role of wage and price rigidities in a low-inflation environment'.

The zero bound on nominal interest rates

The first problem with a downward limit for the nominal interest rate arises when the price trend is negative. Since nominal interest rates cannot be below zero, there is a limit to how far down real interest rates can be pushed. While the consequences of landing in such a situation could indeed be serious, it seems to me that the question has been accorded undue weight in the academic literature.

There are two main reasons why I consider that the zero bound on nominal interest rates should not be a particularly important practical matter for monetary policy. My main ground for this standpoint is that I believe that today we know a great deal about the issue and how we should behave to avoid ending up in a deflationary spiral.

First, central banks can act so that *inflation expectations are stabilised* at a level above zero. This can be aided by clearly targeting a specific rate symmetrically. I can mention in passing that a couple of years ago in Sweden we did in fact have falling prices. It might perhaps interest you to see the concurrent development of inflation expectations *(Chart 1)*. The chart shows that the rate of inflation expected by economic agents (in this case the money market) remained stable even during that episode. Indeed, expectations have been in line with the target for several years now, regardless of what the current rate of inflation has been. As I see it, that demonstrates the value of having a distinct target for inflation.

Second, deflationary spirals have a tendency to go together with problems in the financial sector. By introducing systems that reduce the risk of imbalances accumulating and of banks finding themselves in difficulties, the risk that financial problems will contributed to a deflation build-up can be reduced. A good deal remains to be done here in many countries, including the construction of systems whereby prompt, resolute action can be taken when a crisis looms. The latter, moreover, is a matter that increasingly has to be handled internationally, which adds to the complications.

Output-inflation tradeoffs: the role of wage and price rigidities

The other problem JV considers in connection with the effectiveness of monetary policy is the role of price and wage rigidities. The potential problems is, as pointed

out by Akerlof et al (1996), that wage rigidities in combination with low inflation may prevent a necessary downward adjustment of real wages and thus lead to higher unemployment.

To me, the performance of the U.S. economy in the 1990s is in itself a strong refutation of the conclusion that low inflation (below 3 per cent in the case of the United States) would lead to permanently higher unemployment.

There are also more fundamental reasons for questioning their analysis, which presupposes that wage-earners do not understand the effects of inflation, particularly when this is low. That I simply do not believe.

Since the inception of a low-inflation regime in Sweden, the behaviour of wage negotiators has clearly changed. When they formulate wage demands, the labour unions now start explicitly from the 2 per cent inflation target. Our inflation reports are sufficiently detailed for the negotiating parties to be able to insert whatever wage increases they want and read off the approximate consequences for inflation. To take an example, in our October Report, adding 1 percentage point to the average rate of wage increases would lift the rate of inflation at the end of the forecast period by about half of a percentage point. On the basis of this, the negotiating parties can form a fairly clear picture of how we would react with the repo rate.

Here, too, I would like to beat the drum for targeting a specific rate. An interval of 0-2 per cent can, after all, be taken to imply that inflation will average around both 2 and 1 per cent. This may not seem all that important at first sight. But if settlements are based on 1 per cent inflation and the outcome turns out to be 2 per cent, roughly half of the anticipated real wage improvement will have been lost, given the reasonable assumption that productivity growth is 2 per cent. That naturally risks leading to unnecessary misunderstandings.

To conclude my comments on the section about monetary policy's effectiveness, I can say that I agree with what I perceive to be JV's main tenets. The objections to a policy commitment to low inflation are not as weighty as is sometimes suggested in the academic literature. Perhaps they have also become somewhat less important over time in that wage formation has been adapted in many places and we now know more about how to avoid a zero interest rate trap. It is important on both counts that inflation expectations are firmly anchored, which in our case seems to have been facilitated by targeting a specific rate symmetrically.

Different sources of macroeconomic fluctuations

In the following section JV raises some issues to do with whether monetary policy is now easier to conduct than it used to be. One notion is that with a low-inflation regime established, the transmission mechanism is easier to understand. Another is that conducting monetary policy has become easier now that fiscal policy is more oriented to stability.

In a sense I would agree with JV that these changes presumably have made our work easier. Still, I should like to draw attention to another consequence. In a world where demand shocks — not infrequently caused by an unduly expansionary fiscal policy — were the central bank's main problem, what mattered was taking vigorous action when the situation called for it. This is still the case, of course, but

on the whole the job of central bankers it is now less a question of flexing muscles and more of our analytical potential and our ability to communicate our deliberations. That does not necessarily make our work easier in every respect.

Supply shocks, as we have known for a long time, entail difficult monetary policy decisions. Matters are not made easier by inflation being low or by inflation expectations being locked at a lower level in many countries. But we must — as JV points out — take a stand on whether the changes we seem to see are temporary rather than permanent and whether they reflect new technology or belong to the cost-push category. We must also consider in what ways and how quickly any supply-side changes are likely to affect demand.

The recent difficulty in predicting the course of events is evident from my next two charts *(Chart 3)*. They show the mean errors in a number of analysts' forecasts of GDP and inflation in the U.S. and Swedish economies in the period 1991–2000. In the United States, GDP has been consistently underestimated, while inflation has been overestimated. The picture in Sweden is broadly the same.

The charts witness to a negative correlation between the forecasting errors for GDP growth and inflation. This underscores the increased importance of supply shocks in recent years, at least in these two countries. It also meant that growth has exceeded expectations without causing inflation to take off.

Highlighting the implications directly in terms of monetary policy — which is what JV does in a Taylor rule framework — is of course important. However, one also has to think about them in terms of the structural relationships that drive the economy. Let me illustrate this by using the framework we have chosen for our discussions in the Inflation Reports. This framework basically entails structuring the assessment around a simple open-economy model for inflation in which inflation is broadly determined by the output gap, import prices and inflation expectations.

At this point I should perhaps stress that I am not presenting this example to try your patience with a lengthy account of what has happened in my country up in the North. My purpose is to illustrate how one can reason in terms of an inflation targeting model and to demonstrate that this framework provides a good structure for identifying, analysing and communicating the changes taking places in our economies.

Let me take the starting point in the forecast we published in spring 1999 *(Chart 3)*. Obviously we counted on inflation moving up gradually as activity strengthened and the output gap closed. The domestic price rise was expected to be countered, however, by a calculated import price fall due to, among other things, an appreciation of the krona.

How have things turned out? Quite differently from what we anticipated. Import prices have risen, mainly on account of higher oil prices, while domestic inflation has moved up considerably less than expected even though growth has been strong.

The crucial issue is, of course, to understand this development in terms of the economy's way of functioning. At a broad level, one may identify two possible sources:

- The time paths of the factors explaining inflation have changed.
- Structural shifts can have occurred in the relationships that generate inflation.

It seems fairly obvious that the first source possesses some explanatory power. I have already touched on the changes in the *wage formation* system. Another possibility is that the *output gap* was larger initially than we counted on. Judgements in this respect have been complicated, of course, by the fact that unemployment shot up from 2–3 per cent around 1990 to 8–10 per cent some years later. This hypothesis of a larger gap also seems to be supported by regular measurements of capacity utilisation which point in that direction. Our revised measurements of the unemployment gap yield the same picture *(Chart 4). Productivity growth* is another potential candidate and here the question of permanent versus transitory shifts becomes particularly important.

Concerning the second source — structural shifts in the relationships generating inflation — it is so far difficult to find *firm* empirical evidence in any country. However, some preliminary evidence from several countries does suggest that there have been shifts in the pass-through mechanism of import prices. In Sweden we have indications that the coefficient in front of the output gap has changed *(Chart 5*). Such a shift may for example be related to the better functioning of the labour market or to other structural reforms, not least in the early 1990s, beginning to pay off.

Before turning to the next issue — financial stability and monetary policy — let me stress that these issues are extremely complicated. Personally, I believe the structural changes may have been even larger than confirmed to date. One important underlying change in many countries is of course the move to low inflation. In the Swedish case I believe we have also seen effects from the regime shifts on productivity. Also it is striking how major supply shocks in recent years, like the Asian crisis and now the rising oil prices, *so far* have not had major effects on underlying inflation or inflation expectations.

Financial stability and monetary policy

Having discussed the importance for monetary policy of different types of shock, JV moves on to an analysis of matters connected with financial stability. The issues he raises are how a central bank can use the information contained in asset prices and whether there are grounds for letting monetary policy be influenced by the risks inherent in financial imbalances even if there is no immediate threat to the goal of price stability.

Against the background of the growing importance of the financial sector in our economies and of the financial markets becoming global, it is hardly surprising that the academic literature in this field is expanding rapidly.

In the most recent years the discussion has been fuelled by the 'long boom' in the United States and the accompanying increases in credit and asset prices. One batch of questions concerns central bank policy. Should, for example, asset prices be included in the price indexes that central banks aim to stabilise? With the aid of the literature, JV's answer is no and I agree. There are fundamental theoretical

arguments against it. Also, I agree it is likely that an index which includes asset prices will fluctuate widely. That could necessitate large interest rate adjustments.

It is hardly controversial to assert that asset prices should be taken into account when monetary policy is formulated if they form a *part of the inflation process*. There is reason to believe that an increase in household wealth affects consumption and thereby demand in general and the price trend. Share price increases may perhaps affect the corporate investment propensity in a similar fashion, for example via Tobin's *q*. There are also potential effects from the financial accelerator. But much remains to be done, theoretically as well as empirically, when it comes to understanding the nature of these relationships.

There is considerably less agreement in the literature as to whether central banks should try to influence the path of asset prices in connection with a risk of *growing financial imbalances*. One is immediately faced by the difficulty of determining whether an asset market is in fact over-valued. And if one does decide to intervene, how is the bubble to be deflated in an orderly manner? Just mentioning these two problems often leads those concerned with central banking to conclude that intervention is not advisable. JV comes to a similar conclusion and adds that motivating interest rate hikes externally would be extremely difficult in the absence of a threat to price stability.

My position is somewhat different. The arguments should at least be placed in a wider context. In addition to the objective of price stability, as the central bank of Sweden the Riksbank is responsible by law for the payment system and financial stability. Without prejudice to these aims, we should, moreover, support economic policy's other goals, such as high growth and employment. This means, for example, that we should take pains to avoid unnecessary fluctuations in output and employment.

So if we see what we believe to be mounting financial imbalances and judge that in time they will jeopardise a stable economic development, I consider that in principle, at least, there is a case for acting with the repo rate even if we do not perceive a direct threat to the inflation target. Whether this may lead, as claimed by Cecchetti et al. (2000), to less risk of bubbles is another matter that does not materially affect my argument.

Another issue is of course how likely this scenario is, given that we work with a forward-looking price stability oriented framework and financial imbalances normally have affects on inflation in the longer run. Also I should stress that financial instability is normally created, not so much by rising asset prices in themselves as by a credit build-up which is too rapid.

The Riksbank has made it clear that there could be situations in which we would need to act even if there is no immediate threat to our inflation target. We would then have clearly to motivate why the decision was taken. In that we so recently experienced a profound financial crisis not least through the bursting of an asset price bubble, I do believe that in those circumstances we would get broad acceptance for action.

I want to add that JV's reasoning assumes that the repo rate is the only means available to the central bank, which does not need to be the case. For some time

now we have, for example, been publishing reports on financial stability in the Swedish economy twice a year. In these reports, any risks we identify are highlighted with a view to getting them corrected. On the basis of our assessments, we are also in a position to propose rule changes and legislative amendments as a means of reducing the risk of financial problems in the economy.

Concluding remarks

In an early section, JV discusses the transition to price stability in the western world and whether this new policy commitment to stability has come to stay. This is an issue that needs to be considered. I am old enough to know that policy regimes come and go fairly quickly. Ten years ago there were hardly any academic economists in Sweden who advocated a flexible exchange rate. Today it is recommended by almost everyone. The question is, what will be the position in ten years time?

Future prospects for a stability-oriented policy are likely to depend at least in part on how we as central bankers succeed in maintaining and improving confidence in monetary policy. About this issue JV has little to say. He only notes that the greatest risk lies in a continuation of high unemployment, making it important to ensure that further labour market reforms are undertaken in Europe. While I agree about that risk, I am not content to leave the question there. Those of us who work in central banks ought perhaps to deal less with matters that are beyond our control and concentrate more on matters to do with our own actions and how we communicate them. That in itself would, I believe, help to gain greater support for our work.

In other contexts I and many others have stressed the importance of clarity and transparency to afford good opportunities for assessments and exacting accountability. This in turn is important for the legitimacy of our institutions and for monetary policy's credibility.

Also, clarity and transparency are important in the new economic policy context in the EU. Central banks have distinctive rules from governments and social partners. The better the actors understand each other, the greater the opportunities for trust and for a successful policy mix.

However, I would like to stress a different aspect here: the importance of clarity and transparency for the central bank's internal work and decision-making. In that we work with a precise policy target and publish our forecasts in Inflation Reports, in which we systematically attempt to weigh up all the relevant information about future price tendencies, we have been forced to tighten up our internal analysis. The publication of Financial Stability Reports has had the same consequences. Some years later, moreover, we adopted a rule of action with a specific target horizon and a clarification of our approach to transitory effects. All this means that almost every time a new policy decision is at hand, we have to assess any new information in the light of the analytical framework we have built up. This is a very beneficial process. Recently, for instance, we have been wrestling with just the question of how to handle the development of asset prices and the risks of shocks beyond our target horizon. Partly as a result of these deliberations, we are now thinking of publishing a discussion about the development of inflation in a somewhat longer perspective.

In the light of many years work both in the vicinity of decision-making in economic policy and now as a member of the Riksbank's executive board, it seems to me that in work of this kind, perhaps the most important thing to do is build up clear processes whereby a foundation for decisions based on sound economic analysis is produced systematically and then subjected to as broad a scrutiny as possible. One will then at least have provided *conditions* for consistent and wise decisions. That in turn is fundamental for a central bank's credibility and will in the end, I believe, contribute to safeguarding the stability-oriented policy.

Thank you.