



SPEECH

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A new playing field for monetary policy: What can a small, open economy expect?*

As difficult as it is to believe today, it was only ten years ago that monetary policy was considered to be a relatively straightforward and uncomplicated business. It was assumed that essentially all that the central bank needed to do was to set the policy rate so that inflation ended up close to the target at the same time as production and employment developed in a satisfactory manner. There was a widespread perception that the central banks had finally gotten a grasp of how monetary policy should best be conducted, and this, it was assumed in turn, was an important explanation for the 'Great Moderation' – the fairly long period of unusual macroeconomic stability that preceded the financial crisis.

How different the situation is today. Conducting monetary policy is now rightly seen as anything but easy by both central bank representatives and economic analysts in general. Despite heavy monetary policy stimulation, inflation is far below target in many countries and the recovery from the global financial crisis is still going slowly in most places after seven or eight years. A number of central banks have been forced to switch to conducting monetary policy by other means than policy rate adjustments, as this rate has now been cut as far as is deemed possible. Monetary policy seems to have lost its magic touch, at least for the time being.

Today, I intend to describe a few reasons for why it has become more difficult to conduct monetary policy than in the period prior to the global financial crisis. I also intend to describe which further tools monetary policy decision-makers will need to consider if these difficulties persist. In between, I also intend to give my view on how much room for manoeuvre a small country has to deviate from developments in large countries and their monetary policy.

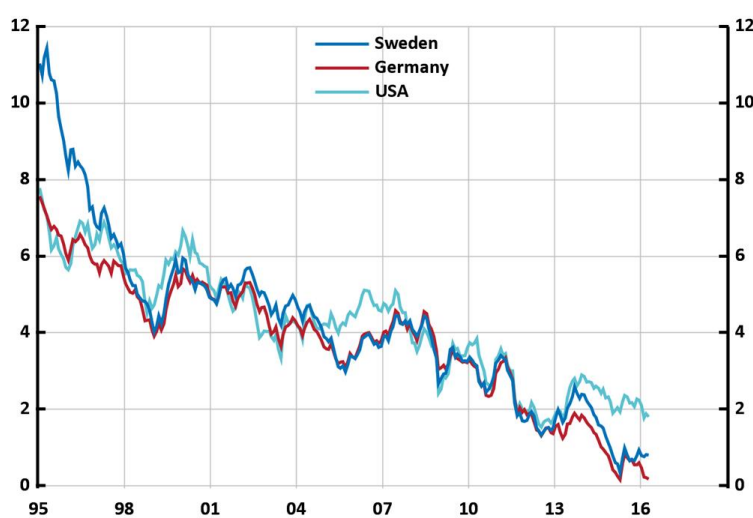
Low global level of interest rates

In recent decades, the level of interest rates has shown a falling trend, both in Sweden and internationally (see Figure 1). Long-term real interest rates, which is to say nomi-

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nal interest rates minus inflation, have fallen by about 4.5 percentage points around the world over the past 30 years. The reasons for the downturn are not fully understood. One example of an explanation is that global saving has increased in recent decades due, for example, to demographic factors, at the same time as investments have decreased due, for example, to a falling relative price for capital and lower public investments.¹

Figure 1. Low interest rates in Sweden, Germany and the United States



Note. Yields on 10-year government bonds
Source: Macrobond

In that the level of interest rates is lower today than it was previously, central banks' room for manoeuvre has decreased. It has become more difficult for them to stimulate the economy when economic activity is weak or inflation is below target. This is partly because when the level of interest rates is low, policy rates are also low, on average. This reduces scope for cutting the policy rate, as this cannot be decreased indefinitely but will reach its lower bound more frequently.² A low nominal interest rate situation will also reflect the low level of inflation. All other factors being equal, when average inflation is low, it is more difficult to achieve the really low or even negative real interest rates that are sometimes needed to stimulate the economy.

Reduced lower boundary for the policy rate and unconventional monetary policy have increased scope for action

In principle, the central banks have managed the reduced scope for action in two ways. Some central banks, including the Riksbank, have cut their policy rates to below zero, which had previously been generally perceived as the lower bound. In the wake of this, a fairly intense international debate has started on the advantages and disad-

¹ See Rachel and Smith (2015).

² The Bank of Canada estimates that the real neutral interest rate fell from about 3 per cent in 2005 to about 1.5 per cent in 2015. Model simulations suggest that this has increased the probability that the interest rate will hit its lower bound from 5 per cent to 15 per cent (see Kryvtsov and Mendes, 2015).

vantages of negative interest rates, in which certain debaters are positive and others almost paint doomsday scenarios. This debate has been somewhat overblown. It seems reasonable to assume that negative interest rates are less problematic to implement and function better in certain countries than in others, depending, for example, on the degree of cash usage. The theory here is that, at a certain interest rate level, probably negative, deposit customers will start to withdraw their money. At this interest rate level, it could thus be said that interest rate stimulation will cease. If the banks are unwilling to cut their deposit rates below zero, their profitability will become impaired. The banks' possibilities to compensate for this, for example via increased lending margins, are thus another important factor. There is no uniform answer as to where the policy rate's lower bound lies, as it varies from country to country.

The Swedish debate has also been stormy. Something that I feel is often disregarded in this debate, or at least underestimated, is that the Swedish repo rate is not set in a vacuum. We must take account both of the fact that global real interest rates are very low and that monetary policy abroad is highly expansionary. Both of these factors put restrictions on which monetary policy it is possible to conduct. I shall return to this shortly.

Of course, it should also be remembered that the introduction of negative interest rates means a fairly marginal increase of monetary policy scope – when all is said and done, it is hardly possible to cut the rate into negative territory by several percentage points.

Many central banks have also attempted to increase scope for monetary policy by purchasing various securities. It seems highly likely that this has contributed towards preventing considerably weaker economic development. But it is still not easy to determine how efficient this kind of policy actually is. Above all, it is uncertain whether it can form an adequate alternative to adjustments of the policy rate if the global level of interest rates should remain very low for an extended period.

I will return to the low global level of interest rates soon. Until then, allow me just to observe that this is an important reason for why monetary policy is more difficult to conduct today than it was a decade ago.

Globalisation and monetary policy autonomy

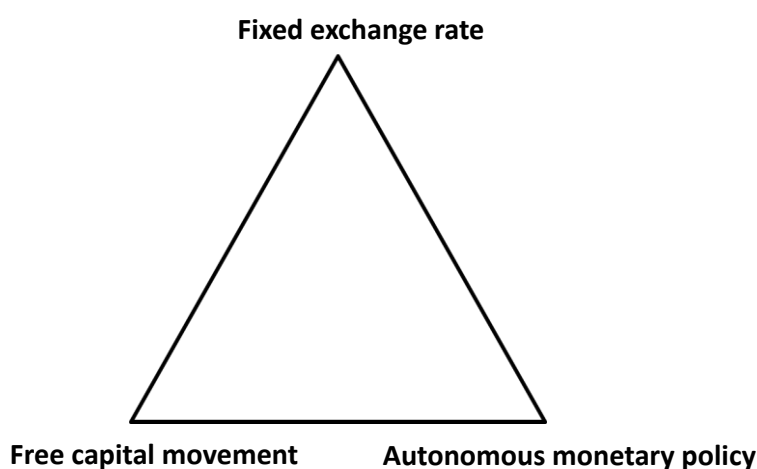
In recent years, there has also been discussion of whether the globalisation of the world's financial markets has led to a situation in which the actions of large central banks, such as the Fed and ECB, restrict the smaller central banks' possibilities for taking action. Thus, the latter should also, in this way, have seen their scope for action decrease and their monetary policy autonomy be curtailed.

In brief, the background is that the ongoing integration of global financial markets means that large volumes of capital can be quickly moved to where the return is expected to be relatively higher. One of the driving forces behind these capital flows is assumed to be the policy conducted in large, leading countries. These flows can make it difficult to conduct monetary policy in other, smaller countries and may have consequences for the macroeconomic and financial stability there.

Trilemma or dilemma?

To be rather more concrete, let me proceed from what is known, in international macroeconomics, as the ‘trilemma’ (see Figure 2). The idea is that countries are assumed to strive for three circumstances that are usually all desirable: free movement of capital, monetary policy autonomy and a stable exchange rate. The problem is that all three cannot be attained simultaneously. If you want to conduct a monetary policy of your own and, at the same time, have a stable exchange rate, the movement of capital must be regulated. Without regulation, a country would find it difficult to conduct a monetary policy resulting in an interest rate deviating substantially from those of other countries. Differences in return would lead to large currency flows that would exert pressure on the exchange rate. If you want to allow free movement of capital but still have a fixed exchange rate, you cannot conduct a monetary policy of your own. This was the case in Sweden before we transitioned to a floating exchange rate: monetary policy was aimed at ensuring that currency flows were balanced so that the desired krona exchange rate was not exposed to pressure. Finally, having free movement of capital and your own monetary policy, like Sweden does today, requires a floating exchange rate.

Figure 2. The trilemma in international economics



Some argue that, in light of the present large international capital flows and globalised financial markets, not even a floating exchange rate can always sufficiently guarantee that a country will be able to conduct its own monetary policy, or at least that the capital flows make such a policy considerably more complicated. One hypothesis that has gained attention is that the capital flows can be regarded as part of a global financial cycle. This cycle also consists of asset prices and credit growth and it covaries with measures of uncertainty and risk aversion on the financial markets.³ It also appears that the most important driving force behind the cycle is the monetary policy conducted in large countries, particularly the United States.

³ See Rey (2013).

Free capital movement makes it more difficult to isolate a country from the rest of the world – and indirectly thereby from monetary policy in large countries – even if it has a floating exchange rate. Some go so far as to say that developments on the financial markets have meant that the exchange rate is no longer a parameter for action in the trilemma. The trilemma has instead been reduced to a choice between only two alternatives – a dilemma: either one has free capital movement and accepts that it is then difficult or impossible to conduct a monetary policy of one's own, or one conducts one's own monetary policy but counteracts the free movement of capital.⁴

My main hypothesis: countries with floating exchange rates still have monetary policy autonomy

However, this is probably going a bit too far as a general description of the actual situation in small open economies like Sweden. In a globalised world, developments abroad will always have great significance for what happens in your own country. Nevertheless, however, the situation seems to be that the choice of exchange rate regime plays an important part in how great the impact will be. Most empirical studies indicate that countries with floating exchange rates have greater possibilities to dampen the effect on their own economies of global financial and monetary forces than countries with fixed exchange rates do.⁵ In this sense, the trilemma still stands.

There may also be reason to reflect over what is actually meant by monetary policy autonomy. A high degree of covariation in countries' interest rates may be an indication that small countries must follow the monetary policy of larger countries. But it could also mean that all central banks, large and small, react to synchronised economic conditions – that the covariation is largely due to fundamental factors that all are exposed to. In the latter case, it would be misleading to suggest that monetary policy in small countries is not autonomous – it does react to circumstances in the home country, even if these greatly coincide with international developments.

A more relevant definition of restricted autonomy would be a situation in which monetary policy in large countries forces small countries to respond in a way that is not compatible with their own economic development. It is thus important to try to find out to which degree an observed covariation in interest rates depends on restricted monetary policy autonomy in small countries according to this definition or on synchronised economic circumstances. Unfortunately, this is also difficult.⁶

Weaker interest rate channel but stronger exchange rate channel?

One interesting hypothesis in research into monetary policy and globalisation is that globalisation has not necessarily led to a weakening of the monetary policy transmission mechanism, as could spontaneously be suspected, but rather that the impact has changed character. More specifically, monetary policy's interest rate channel can certainly be expected to become weaker as financial integration increases, as domestic actors find it easier to smooth their consumption over time by borrowing abroad. On

⁴ See Rey (2013).

⁵ See, for example, Aizenman et al. (2015) and Obstfeld (2015). For a current review of empirical research, see Anaya and Hachula (2016).

⁶ Caceres et al. (2016) define autonomy-restricting effects of foreign interest rates as the response in the domestic interest rate *above and beyond* what is justified by domestic economic circumstances. They find that, with this definition, the empirical analysis indicates significantly greater monetary policy autonomy in small, open economies than more traditional estimates suggest. See also Disyatat and Rungcharoenkitkul (2015).

the other hand, the exchange rate channel may become more effective. One reason for this is that the increased integration has also made it more common for domestic actors to hold foreign assets. When the exchange rate changes, the value of these assets also changes. The central bank can therefore also influence demand in the economy this way. An interest rate rise that strengthens the exchange rate leads to a decrease in the value of these foreign assets – a wealth effect that strengthens the normal exchange rate channel with reduced exports and increased imports. Some analysts claim that it cannot be ruled out that the net effect of a weaker interest rate channel and stronger exchange rate channel has been to make monetary policy more efficient, rather than less.⁷

One implication of a relatively stronger exchange rate channel may be that, in the future, it may become even more important to small, open economies. This, in turn, may entail a number of complications, as exchange rate adjustments are sometimes associated with attempts to manipulate the value of a country's own currency and 'beggar-thy-neighbour' policies. However, as I have said, this is only a hypothesis so far, and more empirical evidence is needed regarding how globalisation has affected the monetary policy transmission mechanism.

The debate on how much large central banks' actions affect monetary policy in small countries will continue, as will the general discussion of the effects of globalisation on the possibilities for monetary policy. However, at present, it seems reasonable to assume that the low global interest rate poses a greater challenge when it comes to which monetary policy can be conducted in countries such as Sweden.

Temporarily restricted autonomy when the inflation target is defended

Although small countries with variable exchange rates normally have a certain degree of monetary policy autonomy, this does not, however, prevent specific situations arising in which their central banks become highly dependent on the actions of larger central banks. Recent developments in Sweden provide an example of this.

A little less than a year ago, at the start of 2015, the Riksbank was in a difficult situation. Inflation had long been below the target of 2 per cent, while long-term inflation expectations were showing a falling trend and were below target. The Executive Board of the Riksbank considered it particularly essential to get inflation to rise towards 2 per cent, as there was a risk that continued low inflation would lead to inflation expectations continuing to fall and to confidence weakening in the inflation target as an anchor for the formation of prices and wages.⁸ The monetary policy easing that had been introduced earlier therefore continued.

The situation was complicated because the Riksbank needed to take into account the fact that monetary policy was very expansionary in many other countries. Large differences between monetary policy in Sweden and in other countries could lead to a rapid and strong appreciation of the exchange rate. This, in turn, could impede rising inflation and also have negative consequences for the real economy. In this context, it was particularly important that the European Central Bank (ECB) initiated very large

⁷ See Meier (2013) and Georgiadis and Mehl (2015).

⁸ I am not going to discuss in any more detail why it is important to defend the inflation target. This has been discussed in depth elsewhere, both by me and by other representatives of the Riksbank, for example in Skingsley (2015) and Flodén (2015). Briefly, it is because it is important both to have a credible anchor for price and wage formation and for this anchor to be far enough above zero that the policy rate does not hit its lower bound too frequently.

asset purchases, which led, for example at the end of February and beginning of March 2015, to the krona appreciating strongly against the euro. Against this background, it has been particularly important to follow the ECB's actions and it is probably in this light that we should consider the fairly common claim in the Swedish debate that "the Riksbank is forced to follow in the ECB's footsteps".

However, this is a special case in many ways. When we start to approach a situation in which we feel more certain that the inflation target is again well-anchored among economic agents, we will be able to take a more tolerant attitude towards the development of the exchange rate. This means that it will again become possible to conduct monetary policy with a greater degree of freedom.

In situations in which confidence in the inflation target has to be defended, it is not only autonomy that is temporarily weakened, in the sense I have just described. This also applies to the possibility of conducting a flexible inflation-targeting policy, which is to say taking account of factors other than inflation. This also reduces the degree of freedom for monetary policy, compared with a situation in which confidence in the target is completely solid. In such situations, the central bank needs, in both word and deed, to put inflation first, in the same way as the Riksbank needed to do when the inflation target had recently been introduced at the start of the 1990s and confidence in the target needed to be built up. Of course, back then, the situation was the reverse – what was needed was to restrain inflation, not make it increase.

So, to summarise my comments so far. A number of factors have led to the scope for monetary policy now seeming to be more limited than it was ten or so years ago. The most obvious of these is that the global real interest rate, that has long shown a decreasing trend, has now reached very low levels. There is also an ongoing debate on whether the actions of large, dominant central banks place clear restrictions on which monetary policy can be conducted in small countries. The main line of inquiry so far, at least for industrialised countries with floating exchange rates, is that a sufficient degree of monetary policy autonomy exists in normal cases. But under certain circumstances – such as when an excessively rapid and powerful appreciation of the exchange rate could be problematic – it can be difficult for a central bank in a small, open economy to allow large interest rate differentials towards the rest of the world.

The way forward – what can we expect and what kind of preparedness should we maintain?

If it has now become more difficult to conduct monetary policy, what can the Riksbank and other central banks do? Now that Swedish inflation is starting to approach the target, it may be time to lift our gazes and start thinking about the conditions for monetary policy over a slightly longer perspective. How should we consider these in the period ahead – what kind of preparedness should we maintain?

I intend to focus on the consequences of the low global real interest rate, as I deem these to be potentially the most sweeping. So far, the influence of large central banks on the monetary policy of smaller countries such as Sweden seems not to be something we need to be too concerned about under normal circumstances, as long as we have a floating exchange rate. This also applies to the temporarily restricted autonomy and flexibility when a central bank must act resolutely in certain situations to maintain confidence in the inflation target. So far, it is my assessment that this is something transitory.

Different theories behind the weak recovery from the financial crisis

One notable theory for the reasons behind the low interest rates and the sluggish recovery from the financial crisis is the hypothesis of secular stagnation advanced by Summers (2013). The concept here is that a chronic surplus of saving has arisen in the world for various reasons, and that this has pushed the interest rate down. The problem, however, is that not even the current low level of interest rates creates a balance between supply and demand. The result of this is the risk that many countries will become stuck in a situation with too low aggregate demand, resource utilisation below normal and inflation that tends to be much too low.

Rogoff (2015) instead argues that growth is being restrained by the world being in an adjustment phase of an unusually large debt cycle, a “debt supercycle”. Even if the level of interest rates is unusually low, this needs not mean that countries are stuck in a situation of chronic demand deficit. Demand and growth will start to pick up when the debt situation again normalises. Unlike a case of secular stagnation, which can be regarded as a structural phenomenon, the problems are thus assumed to be of a basically cyclical, albeit long-term, nature. Both opinions have high-profile advocates. As yet, we do not know who is closer to the truth and it will probably be some time until it will be possible to say with any great certainty.⁹

The global level of interest rates will probably remain low for a long time

Regardless of how the sluggish recovery from the financial crisis can best be explained, a central issue is that of how long the level of interest rates will be low. If the global interest rate were to start to rise fairly soon, this would increase scope for monetary policy – the problem would ‘solve itself’, so to say. However, empirical estimates suggest that the forces that pushed the global interest rate down will be relatively persistent and that the level of interest rates will remain low for a fairly long time to come.¹⁰ For example, Rachel and Smith (2015) estimate that the global real interest rate will be about or just below 1 per cent in the medium to long term. In other words, it does not seem as though we can expect monetary policy scope to increase that way very soon.

It is primarily for this reason that I believe we need to think about how we will be able to conduct monetary policy over the next ten to fifteen years or so. I would like to stress that my discussion is general and looks forward over a relatively long perspective. It should not be interpreted as dealing with contemporary policies. As regards such policies, my conviction is that we will succeed in bringing Swedish inflation up to target and in anchoring the long-term expectations – as I’m sure you know, we are almost there.

Preparedness for a different monetary policy playing field

But at the same time, we must be prepared for it perhaps not being possible, in the future, to conduct monetary policy in the way and with the impact we have previously

⁹ One further hypothesis is that growth is being restrained by a decrease of productivity-enhancing innovations combined with various restraining forces (‘headwinds’) (see Gordon, 2102, 2015). Like secular stagnation, this is expected to affect the economy for a long time to come. However, unlike secular stagnation, there is no chronic deficit in the aggregate demand (no negative output gap), as it is the growth of potential output that is assumed to have slowed down.

¹⁰ See, for example, Rachel and Smith (2015) and Laubach and Williams (2015).

been accustomed to. For example, we should include in the calculation that the policy rate will probably be unusually low when the next recession occurs. A recession is certainly not on the cards at the moment, but we know that, sooner or later, one will inevitably arrive. When the financial crisis broke out, we were able to cut the repo rate from a level of almost 5 per cent. The Riksbank's latest forecast indicates that, in the middle of 2019, the repo rate will be 0.7 per cent. If a recession should occur within, say, the next five years, our scope for cutting the repo rate would probably be very limited. Neither is this anything unique to the Riksbank – it is true for more or less all central banks.

What, then, can central banks do to attempt to increase their degree of freedom in the period ahead? Earlier, I mentioned two types of measure that some central banks have already implemented and that more could possibly start to use. Firstly, a number of central banks have cut their policy rates to below zero. However, I noted that this, for various reasons, may work less well in some economies and that, in any case, it would only lead to a fairly marginal increase in monetary policy scope.

Helicopter money and more stabilisation via fiscal policy?

Secondly, many central banks have started to conduct various types of unconventional monetary policy, primarily purchases of various securities. There is reason to further consider whether this is something that could be developed and perhaps take new forms. One idea that has seen lively discussion recently, albeit perhaps more among academics and economic debaters than among central bank representatives, is what is known as helicopter money. Briefly, this means that the central bank, in various ways, more or less directly transfers money to the actors in the economy. One way is to increase public expenditure or lower taxes and fund this by increasing the money supply.¹¹ Of course, there are a number of practical and legal challenges inherent in this, such as integrating such measures into an operational monetary policy framework and ensuring an appropriate division of responsibilities between the central bank and the government or parliament. It is also probably something that should not be tried until other possibilities have been exhausted. However, considering the difficulties that are still weighing many of the world's economies down, I think that it is wise to discuss the different possibilities, without closing any doors.

If monetary policy in the period ahead will be less effective, it may be that fiscal policy in general may have to play a greater part in a wider stabilisation policy role than has been the case in recent decades. Of course, this primarily means more traditional fiscal policy, not funded with helicopter money.

Higher inflation target?

One suggestion that has also been discussed but which no country has yet implemented is to raise the inflation target.¹² The average level of the policy rate largely depends on how high the inflation target is. The higher the inflation target and average inflation are, the higher the average policy rate is too. And the greater, therefore, is the 'buffer' monetary policy can use to stimulate the economy if necessary – the

¹¹ See, for example, Bernanke (2016) and Turner (2015).

¹² See, for example, Blanchard et al. (2010), Ball (2014) and Krugman (2014). In the review of the monetary policy framework which the Bank of Canada publishes every five years, for example, an increase in the target is one of the areas to be examined – see Côté (2014) and Kryvtsov and Mendes (2015).

risk is smaller that the policy rate will reach its lower bound and, if average inflation expectations are higher, it will be easier to bring the real interest rate down.

One practical objection towards attempting this in the near future is that there would hardly be any point in announcing a new, higher target when inflation has long been below the old target and this target already seems difficult to reach. In theory, it could certainly be the case that a raised inflation target in itself would create expectations of higher future inflation and that this, in turn, would lower the real interest rate and stimulate demand and inflation. But, in practice, it would probably be at least as likely that raising the inflation target in such a situation would not be perceived as a particularly credible measure. In addition, if the target is raised, a more expansionary monetary policy will initially have to be conducted to get inflation to rise. This will be difficult if the policy rate level is already very low. Assuming that it is decided to raise the inflation target, one probable precondition for this will thus be that it is carried out in a situation that is relatively normal and where inflation is not too far from the earlier target.

It may also be difficult for an individual central bank to raise the inflation target alone as long as an international debate is underway on whether or not a higher target would be advantageous.¹³ There may be reason to wait for a reasonable degree of consensus among central banks and in the research community. If the conclusion were reached that raising the inflation target would be justifiable, this would probably also increase the possibility that several central banks would simultaneously decide to do so. This would probably further increase confidence for such a measure.

Greater acceptance of falling short of the target?

If monetary policy should now turn out to be less effective in the period ahead than it has been historically, one consequence could be that the central banks would be forced to accept below-target inflation for longer periods of time. This would make it important to try to create acceptance for this among households, companies and market participants, so that these do not start to believe that the central bank has abandoned the inflation target.

Expectations among economic agents would thus play a completely central part in this. The problem can be illustrated, in a stylised manner, with the use of Figures 3–5. To maintain the credibility of an inflation target, inflation cannot be allowed to deviate from the target indefinitely. Economic agents can tolerate a deviation in the short term, but, the more time that passes, the closer to target inflation has to be to maintain confidence. It can be imagined that inflation (the red curve) must lie within the interval marked by the broken blue lines in Figure 3 if inflation expectations are not to drift away. This interval thus depends on the agents' expectations and is not something that can be observed. If inflation lies below the interval, expectations will fall, sooner or later, and will pull actual inflation down too, as illustrated in Figure 4. If the central banks now have fewer possibilities to bring inflation back to the target as quickly as before, they must find ways to 'extend' the interval, as in Figure 5.

This will probably be a fairly serious challenge. It will not just be a matter of trying to convince economic agents that monetary policy needs to be more 'flexible'. It will also involve conveying the message that the flexibility, in this case, is not due to the central bank taking account of the development of the real economy, for example, but to

¹³ For arguments against raising the inflation target, see, for example, Yellen (2015), footnote 14.

monetary policy not being as efficient as many, both in academia and in the central banks, had counted on ten years ago.

The way I see it is that central banks will have to create credibility in this kind of flexibility. I feel optimistic about the possibilities, as this has been done before. One parallel that strikes me is with the regime changes in the central banking world in the 1980s and 1990s, when ideas about an independent authority with clear tasks and a mandate for monetary policy became a successful recipe for stabilising the development of inflation and boosting confidence in monetary policy in a large number of countries.

To sum up my speech: my message today is that monetary policy has become more complicated than most researchers or central bank representatives had counted on before the financial crisis. The impact of monetary policy on economies may have changed and, if so, in a way that will mean that the exchange rate will have a greater effect than before. The lower global interest rates have squeezed monetary policy's room for manoeuvre in both small and large economies. And, finally, we need to continue to examine conceivable measures if these global difficulties turn out to be persistent.

Figure 3. Inflation and interval for maintained confidence in the inflation target

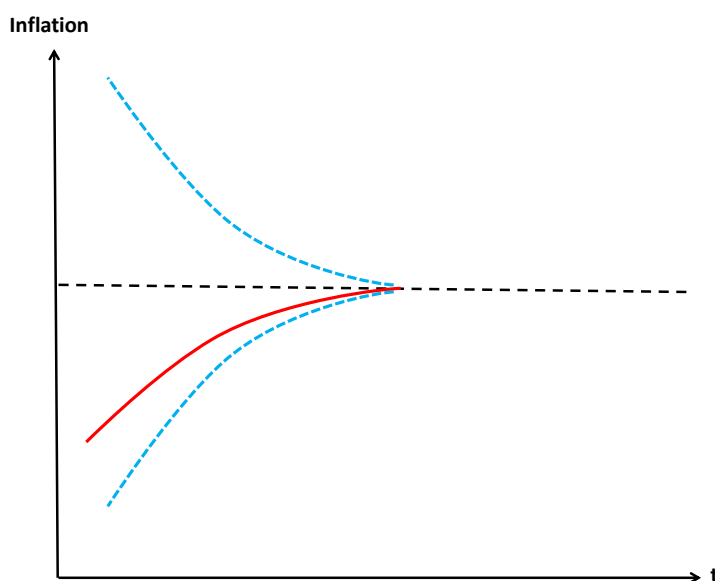


Figure 4. Inflation below the interval lowers expected and actual inflation

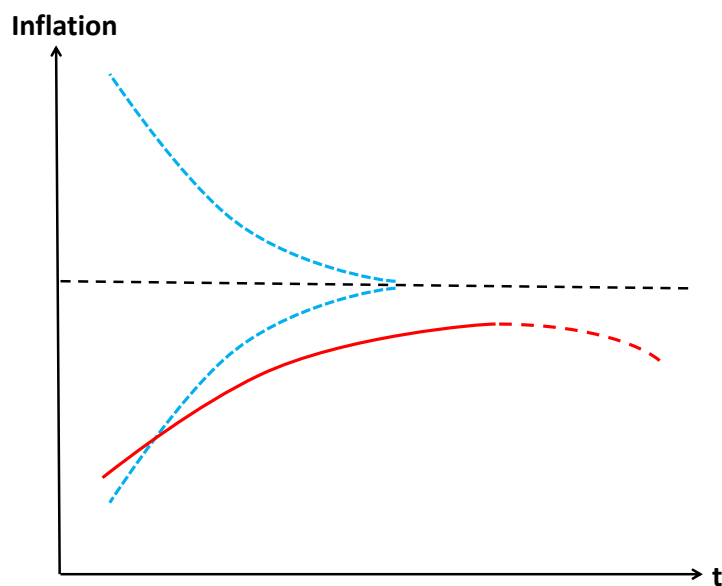
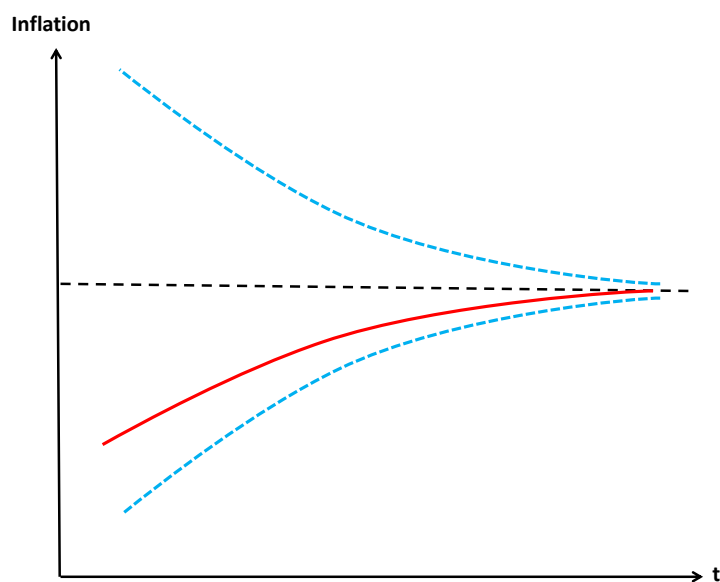


Figure 5. The central banks need to find ways to extend the interval and maintain confidence



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