Per Jansson: The Riksbank's monetary policy strategy – in tune or out of tune with the rest of the world?

Speech by Mr Per Jansson, Deputy Governor of the Sveriges Riksbank, at a meeting at SEB, Stockholm, 2 June 2014.

* * *

Was the strategy for monetary policy that was formulated in the decades before the global financial crisis – and which long appeared so successful – actually too narrow? Does monetary policy need to put greater effort into preventing financial imbalances from arising? The crisis turned many things upside down and forced both central banks and researchers around the world to rethink their arguments and theories.[1]

Today I intend to talk about the rather lively discussion conducted among central banks and in the academic world on this issue. This is a discussion that is both interesting and important, but which I feel has made very little impact on the debate in Sweden. While the discussion here in Sweden for the most part is based on the answer being already given, the attitude in the international debate is much more open and inquiring.

Most people agree that macroprudential policy should be the first line of defence against financial imbalances. But an increasing number have also begun to take the view that monetary policy may need to give macroprudential policy support by, as it is often called, "leaning against the wind". This is an idea I have considerable sympathy for in principle, and I shall try to explain why in my speech today.

Lessons from the crisis: price stability is not enough to prevent financial imbalances

The foundation for the monetary policy strategy we use today is the changeover in monetary policy in the early 1990s, when some central banks began to switch to explicit inflation targets. This turned out to be an effective way of anchoring inflation expectations and in this way attaining price stability. Inflation targeting became the standard for central banks. The way the policy was implemented could differ slightly, but on the whole there was agreement on the fundamental principles. A credible inflation target also creates some scope for monetary policy to stabilise the real economy. Monetary policy could therefore be flexible and focus on attaining a good balance between on the one hand price stability and on the other hand the stability of the real economy, a couple of years ahead. There was also a consensus – sometimes referred to as the "Jackson Hole consensus" – that monetary policy would not try to counteract rapid increases in asset prices or credit growth.[2] I shall return to this shortly.

The long period of relatively stable inflation and robust growth – "the Great Moderation" – that preceded the financial crisis was considered to be proof that the chosen monetary policy strategy functioned well. The experience from the crises that nevertheless arose, for instance the year 2000 when the dot-com bubble burst, was that one could also manage more difficult situations. However, the financial crisis 2007–2008 and the deep and protracted downswing that followed have meant that central banks have been forced to closely examine things that were previously taken for granted. In this way, the situation is a little reminiscent of the situation at the beginning of the 1990s when inflation targeting was introduced. Then, too, there were crises that made it necessary to question the prevailing monetary policy doctrine.

---

[1] Many papers have been published on this theme recently. See, for instance, Bayoumi et al (2014) and the various contributions in the anthology by Reichlin and Baldwin (2013).

[2] See, for example, Issing (2009) for a description of the Jackson Hole consensus. The expression comes from the fact that the town of Jackson Hole in the United States hosts an annual conference that gathers central bank governors and other economic policymakers from around the world.

And then, too, it was the central banks that – of necessity – took the first steps and adjusted their strategies and practical policy before there was any real consensus from academic research to lean on.

One of the fundamental economic policy insights from the period of "the Great Moderation" and the crisis years after this is that low and stable inflation, combined with robust growth, without any direct signs of overheating, is no guarantee that the financial side of the economy will be problem-free. In brief: price stability is not sufficient to prevent financial imbalances.[3] One lesson learnt from this is that the economic policy toolbox needs to be extended. In addition to the tools already available for fiscal policy, monetary policy and the supervision of individual financial institutions, new tools are needed and old tools may require modification to be more usable in counteracting the type of financial imbalances that contributed to the crisis. There is broad agreement on this. And in recent years there has been intensive work around the world on defining and implementing this so-called macroprudential policy.

Does monetary policy also need to give greater consideration to financial imbalances?

However, the insight that price stability does not prevent financial imbalances from arising has also raised a question of principle in central banks. Has the focus on price stability, which has been the basis for monetary policy, been too narrow? Financial imbalances can aggravate economic downswings with severely negative effects on unemployment and economic growth. If it gets really bad, the imbalances may even result in a financial crisis. Should monetary policy therefore put greater effort than before into preventing financial balances from building up?

Even before the crisis, there was of course an insight that financial imbalances entail risks for macroeconomic developments and for financial stability. Maintaining financial stability has traditionally been one of the central bank's main tasks, in addition to maintaining price stability. And analysing financial risks has been an important part of this work. But in the standard framework, financial risks and other financial stability aspects could, and even should, on the whole be kept separate from the monetary policy deliberations – at least over and above the impact that these factors have on the inflation forecast and economic outlook for the coming years.[4]

There were of course arguments in favour of monetary policy explicitly taking financial risks into account.[5] These discussions most often concerned "bubbles" on the asset markets and whether monetary policy should counteract their build-up – "leaning monetary policy against the wind" as it came to be called. However, the consensus among both practicians in central banks and academics was that this is difficult and that in practice it can do more harm than good. Better then to wait and to use monetary policy to stimulate the economy once the bubbles had burst – to "clean up afterwards" instead. However, the financial crisis showed that the effects of financial imbalances and, in some cases, financial instability could be enormous and that the "cleaning up" could require massive and prolonged efforts from economic policy. The earlier consensus has thus been increasingly brought into question.

---

3 Perhaps a more commonly-used concept in this context is financial *stability*. However, I consider it more appropriate to talk about financial *imbalances*. Problems with financial stability are often associated with shocks to the credit supply and with banks defaulting. Financial imbalances can in a worst case scenario lead to this type of situation, but they can also cause major problems for the economy without creating financial instability. One example is that households find they have borrowed too much and thus reduce their consumption over a long period of time to adjust their balance sheets. This can lead to widespread problems of macroinstability in the form of a very deep and prolonged recession.

4 See, for example, Bernanke and Gertler (1999, 2001) and Greenspan (2002).

5 See, for example, Blanchard (2000) and Borio and White (2003).

An excellent status report on this debate can be read in a jubilee issue of the Riksbank's Economic Review, published in November last year. It is a paper by Frank Smets, adviser to the President of the European Central Bank, which he also presented at a conference organised by the Riksbank last summer.[6] Mr Smets argues that after the crisis one can discern three different views with regard to the question of to what extent monetary policy should deal with financial imbalances.

"Modified Jackson-Hole consensus"

The first view is in principle based on the same monetary policy strategy as I have described earlier and called the standard prior to the crisis, but with a few small additions. Smets calls this view a "modified Jackson-Hole consensus". According to this view, there is indeed a need to prevent financial imbalances, that is, it is not enough to wait until afterwards and deal with the problems caused by the imbalances. But the preventive work should be entirely done by macroprudential policy, while monetary policy should have the same role as before.[7] The monetary policy strategy as such thus does not need to be changed very much.

The most common argument in favour of this view, according to Smets, is that monetary policy is a blunt instrument and has limited effects on the financial risks one wishes to counteract. The macroprudential policy tools, on the other hand, are regarded as much more effective for this purpose. The interaction between macroprudential policy and monetary policy can thus be kept to a minimum, and it is perfectly simple to keep the objectives and tools separate from one another.

"Leaning against the wind vindicated"

Characteristic of the second view is that one is more doubtful that macroprudential policy will always manage to prevent financial imbalances on its own. It could, for instance, be because the macroprudential policy tools are not as effective in practice as many people believe and hope. If this were the case, macroprudential policy would need support. And despite the central bank's policy rate not being an ideal tool in this context, it may nevertheless play a useful role, together with macroprudential policy, when it comes to preventing imbalances. Leaning against the wind is therefore vindicated – an expression Smets uses as an overall term for this view. Preventing financial imbalances should thus be included in the tasks of monetary policy, in addition to price stability. This means that the central banks have more deliberations to make and that monetary policy becomes more complicated than it was prior to the crisis. But it is nevertheless not a completely different framework.[8]

"Financial stability is price stability"

The third view goes even further. According to this, the objectives of financial stability and price stability are so closely linked that they cannot really be separated – financial stability *is* price stability, to use Smets' expression.[9] It is therefore not appropriate to separate monetary policy and macroprudential policy. Traditional monetary policy can also be regarded as stabilising the financial system in the sense that it oils the wheels of the monetary transmission mechanism and counteracts financial markets that are functioning poorly. Taken to an extreme, this view probably means that the standard monetary policy strategy would need to change on a more fundamental level.

---

6 Smets (2013).

7 One example of this view is Svensson (2012).

8 See Woodford (2012) for an example of this view.

9 Smets takes the so-called I Theory of Money as an example of this view. See, for instance, Brunnermeier and Sannikov (2013).

I think that the division into these three main views provides a good reflection of the current debate. But there are of course no sharp dividing lines between them, rather the dividing lines are relatively fluid. And where one finds oneself on the scale ultimately depends on which argument or arguments one allocates the greatest significance. It will probably come as no surprise to those of you who follow the monetary policy debate in Sweden that I myself have great sympathy for the principle that monetary policy needs to support macroprudential policy. I would therefore place myself fairly close to the second view in Smets' description. So what has led me to this view? Allow me to begin by giving my interpretation of what a monetary policy that leans against the wind entails.

What does it mean that monetary policy leans against the wind?

There are different ways of illustrating how and why financial imbalances and risks should be included in the monetary policy deliberations. Essentially it is a question of avoiding scenarios where the imbalances will lead to very negative effects on GDP, unemployment and inflation. So in principle it is a question, as usual in monetary policy, of stabilising inflation and the real economy.

An outline: trade-off between target fulfilment in the short and long term

Last year the Riksbank published an article with an outline for how financial imbalances can be included in the monetary policy deliberations.[10] The point of departure was that a central bank now needs to have a more long-run focus than was traditionally the case. The reasoning leads to the conclusion that monetary policy should be regarded as a trade-off between target attainment in the coming years, that is, the period for which central banks normally make forecasts, and target attainment in the longer run, beyond the forecast horizon.[11] The idea is that a monetary policy that solely focuses on target attainment a couple of years ahead could miss the fact that financial imbalances are building up, which risk leading to very poor macroeconomic outcomes in the longer run. So according to this outline, central banks need to balance target attainment in the shorter run against target attainment in the longer run.[12]

Inflation target still the foundation, but may take longer to attain

The first important thing to note is that this trade-off does not mean throwing away the inflation target. Attaining the inflation target thus remains the foundation for monetary policy.[13] However, one consequence of conducting a policy that tries to counteract financial

---

[10] Sveriges Riksbank (2013).

[11] Mervyn King, the former governor of the Bank of England, has used a closely-related means of illustrating why monetary policy should give consideration to financial imbalances, where he instead uses the so-called Taylor curve – a curve that illustrates a central bank's trade-off between stabilising inflation around an inflation target and stabilising the real economy (GDP, unemployment, employment and so on) around a long-run sustainable level. See King (2012).

[12] This reasoning is thus based on the notion that risks linked to financial imbalances can be taken into consideration in monetary policy by incorporating their effects in the longer-run forecasts for inflation and the real economy (for instance, measured in terms of GDP). There are also arguments in favour of the central bank having the stabilisation of financial imbalances as an explicit objective for monetary policy. The financial frictions that give rise to the imbalances could, for instance, entail welfare costs for society, over and above the effects on inflation and GDP, which the central bank may have reason to counteract directly, see for instance, Cúrdia and Woodford (2009). Monetary policy would then have three factors to weigh against one another: stabilisation of inflation around the target, stabilisation of GDP around a sustainable level and stabilisation of some relevant measure of financial imbalances. Regardless of the theoretical argument, this way of including financial imbalances in the deliberations could have practical benefits, for instance by reducing the need to incorporate the risks in the forecasts for inflation and GDP. There could therefore be a point to following both these lines in the internal analyses.

[13] Woodford (2012) illustrates this in a formal model analysis.

imbalances – that leans against the wind – could be that it takes *longer* for inflation to attain the target than it would have if the central bank had not included financial imbalances in its deliberations. Although this policy can be justified in ensuring a good development in the longer-run perspective, in practice there are of course limits as to how much and for how long inflation can be allowed to deviate from the target. This has been a very important point in my own monetary policy deliberations and I will return to this at the end of my speech.

The dividing line in the debate: how effective are the respective policy areas?

Another important thing to note is that a monetary policy that leans against the wind is not intended to *replace* macroprudential policy measures. This could of course be necessary if there is no macroprudential policy in place or during a period when macroprudential policy is being organised. But once it is in place, macroprudential policy shall be the first line of defence against financial imbalances. This is definitely my opinion and as far as I can see it is shared by most of those participating in the debate, that is, even those who think that monetary policy should be able to lean against the wind.

The dividing line is instead at the question of whether monetary policy may need to *support* macroprudential policy to counteract imbalances.[14] Which side of the line you end up on depends on what you believe about the effectiveness of the tools for macroprudential policy and monetary policy respectively. How well do they counteract specific imbalances and what consequences do they have for the rest of the economy?

If one believes that the instruments available to macroprudential policy can effectively keep the imbalances in check, and that monetary policy is too blunt an instrument and mostly affects the rest of the economy – well, then one probably ends up in the "Modified Jackson-Hole-consensus", to return to Smets. On the other hand, if one is more uncertain about the effectiveness of the macroprudential instruments and believes that monetary policy nevertheless has some sting, then there is a greater probability that one will have the view that monetary policy may need to lean against the wind. If one is very uncertain about the effects of both policy areas, one probably also prefers monetary policy to be used parallel to macroprudential policy, at least until more is known about the effects.

Monetary policy may need to support macroprudential policy

Those who are sceptical about a monetary policy that leans against the wind often state, as I mentioned earlier, that the policy rate is a blunt and ineffective instrument in counteracting financial imbalances. But even if this were the case, it would not automatically lead to the conclusion that macroprudential tools are significantly more effective. Some of the tools are new, some have been around for a while but used partly for other purposes. The practical experiences gained so far are thus fairly limited and it is difficult to draw any conclusions from them. It is therefore natural that a number of questions should be raised as to how effective macroprudential policy will be in practice and whether it may need support from monetary policy.[15]

Uncomfortable measures may be difficult to implement

One question concerns their feasibility – will measures be taken in time, or even at all? Some of the macroprudential policy measures have a direct impact on households' finances, similar to fiscal policy measures. They can be perceived to create relatively major changes in the

---

[14] As Narayana Kocherlakota, the President of the US Federal Reserve Bank of Minneapolis, has put it, monetary policy needs to deal with the "residual risk" that remains. See Kocherlakota (2013, 2014).

[15] Critical discussions on the effectiveness of macroprudential policy tools and the implications for monetary policy can be found, for instance, in White (2009, 2013), Mishkin (2011), Borio (2011a), Blanchard, Dell'Ariccia and Mauro (2013), IMF (2013) and Davies (2014).

economic playing-field and thus risk obtaining little acceptance from households, which could make it difficult to implement such measures. In addition, imbalances risk being aggravated in economic upswings, which means that some measures need to be implemented in situations where there is probably a general resistance to them – what is usually compared to "taking away the punchbowl just as the party gets going".[16] Thus, the measures may also be politically difficult to implement in some cases. The extent to which this affects macroprudential policy in practice will of course depend on the institutional set-up chosen.

Difficult target to define and assess

The inherent difficulty in defining concrete targets for macroprudential policy may affect the ability to implement various measures. A common formulation for the objective of macroprudential policy is "to counteract risks to the financial system as a whole", or something similar. Regardless of the exact formulation, it is difficult to specify what the target actually entails in practice. When has it been attained? Let us say that macroprudential measures are implemented over a couple of years and that no problems arise in the financial system. Have the measures then been justified or unnecessary? The only thing the general public can observe is a lack of problems, and there could thus be a risk that the need for macroprudential measures is questioned.[17]

Measures could be circumvented

It could also prove difficult to design a system for macroprudential policy that functions efficiently enough, and which inventive market participants are not able to circumvent. In this situation, monetary policy may need to support macroprudential policy. The policy rate is a blunt instrument in counteracting financial imbalances, as it has a broad impact on the economy. But at the same time, it can be a strength compared with macroprudential tools exactly because it is difficult *not* to be affected by a policy rate increase – monetary policy "gets in all of the cracks", to use an expression minted by Jeremy Stein, previously on the Federal Reserve Board of Governors.[18]

Low interest rates over a long time can contribute to imbalances

Macroprudential policy may also need support if monetary policy is actually a contributory factor to the imbalances the macroprudential policy is trying to counteract. This is an argument that has arisen both with regard to "the Great Moderation" and the origins of the financial crisis, and to the period that followed. If monetary policy is very expansionary over a long period of time, it may contribute, despite being justified with regard to the prevailing economic situation, to the build-up of imbalances on the financial side of the economy – for instance, the formation of distorted expectations of how high interest rates will be in the future and of how the housing market will develop, and so on. In this type of environment monetary policy may need to support macroprudential policy, by contributing less to such imbalances building up in the first place.

---

[16] Goodhart (2013) argues that so-called countercyclical measures will need to be introduced at a time when they are likely to be opposed by many politicians, most borrowers and lenders, and many, probably most, commentators in the Press. He also doubts that the measures will be implemented with sufficient vigour and aggression to have any mitigating effect, as they would be operating against the prevailing trend of the financial market.

[17] This objection of course applies to all policy areas trying to counteract financial risks, including a monetary policy that leans against the wind. But while this objection is often made against monetary policy, it has so far only been discussed to a minor extent with regard to macroprudential policy.

[18] Stein (2013).

Little acceptance for this view in the Swedish debate

To summarise: in my view, macroprudential policy should be the first line of defence against financial imbalances.[19] But it is possible, and even quite probable, that in some situations it may need support from monetary policy. And there is thus, at least as I understand it, good reason to extend the strategy for monetary policy and allow greater consideration to be given to financial imbalances than was the case prior to the financial crisis.

One of the main arguments against this view in the Swedish debate is that monetary policy in practice has little effect on the risks linked to financial imbalances. So the gain in leaning monetary policy against the wind is small in relation to the relatively large costs of such a policy in terms of inflation undershooting the target and negative effects on the real economy. Ultimately, the size of the gains and the costs is an empirical question, as is the question about the effectiveness of macroprudential policy. But judging by the debate in Sweden, both of these questions appear to have been decided already, and it would appear that the only correct point of view is a modified Jackson-Hole consensus, to return to Smets.

My impression is that the debate in Sweden has to a large extent been coloured by the few existing quantifications of the costs of leaning against the wind and of the effects of monetary policy on the risks linked to household indebtedness. This is despite all of these quantifications being very uncertain. This uncertainty should also permeate the policy conclusions drawn from the quantifications.

Take, for instance, the estimates of the effects of monetary policy on indebtedness. One argument in the debate has been that the relationship between debt and interest rates is actually the opposite of what the Riksbank believes – in actual fact, both real debt and the debt ratio should *decline*, not increase, if the policy rate is cut.[20] Earlier this year, the Riksbank presented the results from an empirical study, which estimated the relationship between interest rates and indebtedness during the period 1995–2013 with the aid of a commonly-used empirical method.[21] The estimates show the reverse, that there is clear support that both the debt ratio and real debt *increase* when the policy rate is cut, even if the effect is not so great.[22]

But it is also important to emphasise that these estimates are not the final word and that the effects of monetary policy may very well be greater. For instance, the effects have been calculated for a temporary change in the policy rate. A lasting change would have quite different and much greater effects.[23] One risk with holding the policy rate low over a long time is that it can distort households' expectations of future interest rates, so that they act as though it were a lasting change in interest rates. Also, the empirical method used does not capture specific circumstances, such as the fact that the Riksbank has conducted extensive communication to make households aware of the risks linked to high and growing

---

[19] Of course, the best thing is always to remedy the direct causes of the imbalances. In the specific Swedish case, with rapidly-rising housing prices and credit growth, it is a question of remedying the fundamental structural problems on the demand side and, perhaps most of all, the supply side of the housing market. This is quite essential to achieve a lasting solution, but it is beyond the theme of this speech. See also Jansson (2013).

[20] See, for instance, Svensson (2013).

[21] Sveriges Riksbank (2014).

[22] It has been claimed in the debate that the calculated effect is not statistically significant from a classical statistical perspective. However, the calculations were made using a so-called Bayesian method and it is therefore misleading to use a classical approach to test the hypothesis that the effect is positive. Moreover, it is important to note that here we are talking about a *systematic* relationship. Of course, one cannot rule out the possibility that under special circumstances the debt ratio or real debt might decline when the policy rate is cut. But it appears very improbable that this is the case on average.

[23] See, for instance, Sveriges Riksbank (2014) and Alsterlind et al (2013).

indebtedness. This type of communication could in itself affect households' behaviour on top of the effects of the actual interest-rate policy.

Greater openness for a change in monetary policy strategy abroad

While in Sweden one seems to assume that the answers are given, the attitude in the international debate is less "dead certain", at least this is my experience from meetings and conferences and from the discussions pursued on economic blogs and in academic research. Although no clear majority has emerged in favour of any of Smets' views, my impression is nevertheless that many economists who study monetary policy issues have increasingly moved toward the view that a monetary policy that leans against the wind may be justified. Smets himself, for instance, reaches this conclusion and economists at policy-oriented institutions such as the IMF, the OECD and the Bank for International Settlements (BIS) have also expressed support for this point of view.[24]

The argument in favour of monetary policy possibly needing to counteract financial imbalances has also made an impact on other central banks. Unsurprisingly, the most obvious examples of this can be found in countries struggling with roughly the same problems with indebtedness and the housing market that we have in Sweden. The exact formulations differ somewhat of course, but there are clear similarities.

For instance, Norges Bank (2012) writes: "At the same time, interest rate setting should be robust and counter the buildup of financial imbalances in the economy." The Reserve Bank of New Zealand (2012) has the following wording: "In addition, the PTA's [Policy Targets Agreement] stronger focus on financial stability makes it clearer that it may be appropriate to use monetary policy to lean against the build-up of financial imbalances, if the Reserve Bank believes this could prevent a sharper economic cycle in the future." The Bank of Canada (2012) makes it clear that these deliberations can imply that it takes longer for inflation to attain the target: "[A] tighter monetary policy that keeps inflation below target longer than usual could help to prevent excessive borrowing and a broader buildup of financial imbalances."[25]

In countries where the housing market collapsed in connection with the financial crisis, and where housing prices have already fallen heavily, the deliberations have of course been somewhat different. There, the monetary policy discussion has mainly concerned ways to stimulate the economy and get out of the deep recession. But the idea that monetary policy may need to be used in support of macroprudential policy and contribute to preventing new imbalances arising on financial markets is nevertheless a question that is climbing higher up the agenda in these countries, too, as the economy and the housing market recover.[26] A clear example is the United Kingdom, where the most recent remit for the Bank of England's Monetary Policy Committee (MPC) states that circumstances may arise in which the MPC

---

[24] One recent example is Lagarde (2014): "But where macroprudential policies fall short, monetary policy will have a larger role than in the past to maintain financial stability." Other examples include White (2009), OECD (2010), Caruana (2010), Borio (2011b), IMF (2013), BIS (2013), Bayoumi and Habermeier (2014). See also Mishkin (2011) and the Committee on International Economic Policy Reform (2011).

[25] It should be noted that the central banks in these countries have not necessarily made the assessment that there was motivation for leaning monetary policy against the wind *in practice*. The point is that they consider such deliberations as important to include in monetary policy as a question of principle.

[26] Examples in the US Federal Reserve are Hoenig (2010), Bernanke (2011), Kocherlakota (2013) and Stein (2014). Within the ECB it has been noted that the strategy of a so-called "second pillar" that focuses on developments in monetary aggregates implicitly contains an element of leaning against the wind. See ECB (2010) and Stark (2010).

may choose to temporarily deviate from the inflation target to support the target of the committee with responsibility for macroprudential supervision.[27]

Riksbank's strategy well in line with international debate

Let me conclude by returning to the question in the title of my speech today. Is the Riksbank's monetary policy strategy in tune or out of tune with the rest of the world? Right now there is an international debate on potential changes in the strategy for monetary policy that was common prior to the crisis. One of the most central questions is whether monetary policy should give greater consideration to financial imbalances. Most people agree that macroprudential policy should be the first line of defence. But an increasing number have also begun to take the view that monetary policy may need to provide support by leaning against the wind.

Given this, it is difficult to understand the critics who try to claim that the monetary policy the Riksbank has conducted in recent years is strange and our own invention. On the contrary, I would say that the Riksbank's monetary policy strategy has been well in line with the international debate. To be sure, this claim may seem strange to someone who has only followed the Swedish debate on monetary policy. And this worries me somewhat. It is not a good thing if the debate in Sweden is not as open and inquiring as the debate going on in the world around us.

For me, it is quite simply a question of which strategy provides the best conditions for the Swedish economy to develop in the best possible way. A policy that leans against the wind essentially entails avoiding imbalances leading to very negative effects on GDP, unemployment and inflation. This does not mean abandoning the inflation target – this is still the foundation of our monetary policy. But the result of such a policy could be that it takes longer for inflation to attain the target than it would have done otherwise. There are thus both gains and losses with such a policy, which need to be weighed against one another.

My own stance has always been guided by this deliberation. The recent low inflation outcomes have meant, for instance, that I have placed greater emphasis on the more short-term outcome for inflation. At our most recent monetary policy meeting I said that my tolerance for further downward revisions of inflation prospects in the near term has now reached its lower bound and that I will not vote for a repo-rate increase until CPIF inflation picks up and rises above 1.5 per cent.

Does this mean that I am in effect contradicting myself? Not at all. What I have talked about today concerns *principles* for monetary policy – arguments that the strategy needs to be flexible and allow financial risks to be included in the monetary policy deliberations. But this does not mean that the monetary policy decisions will be self-evident. There are always several aspects to be taken into account and the question of which scale weighs the heaviest will depend on the specific situation at the time of each repo-rate decision. And the further inflation is from the target, and the longer it remains so, the greater the weight this scale will carry, despite the remaining risks linked to household indebtedness and the housing market.

[27] HM Treasury (2014): "Circumstances may also arise in which attempts to keep inflation at the inflation target could exacerbate the development of imbalances that the Financial Policy Committee may judge to represent a potential risk to financial stability. The Financial Policy Committee's macroprudential tools are the first line of defence against such risks, but in these circumstances the [Monetary Policy] Committee may wish to allow inflation to deviate from the target temporarily, consistent with its need to have regard to the policy actions of the Financial Policy Committee."

References

Alsterlind, Jan, Holmberg, Ulf, Jönsson, Kristian, Lagerwall, Björn and Winstrand, Jacob (2013), Risks to the macroeconomy and financial stability from the development of household debt and housing prices. *Memo 6 of the analysis group of the Council for Cooperation on Macroprudential Policy.* Sveriges Riksbank.

Bank of Canada (2012), Backgrounders – Monetary Policy.

Bayoumi, Tamim, Dell'Ariccia, Giovanni, Habermeier, Karl, Mancini-Griffoli, Tommaso, Valencia, Fabián and the IMF Staff Team (2014), Monetary Policy in the New Normal. IMF Staff Discussion Note 14/3, IMF.

Bayoumi, Tamim and Habermeier, Karl (2014), The Evolution of Monetary Policy: More Art and Less Science. Post on the IMF's blog iMFdirect, available at blog-imfdirect.imf.org.

Bernanke, Ben S. (2011), The Effects of the Great Recession on Central Bank Doctrine and Practice. Speech at the 56th Economic Conference, Federal Reserve Bank of Boston 18 October 2011. Board of Governors of the Federal Reserve System.

Bernanke, Ben S. and Gertler, Mark (1999), Monetary Policy and Asset Volatility. In *Economic Symposium Conference Proceedings: New Challenges for Monetary Policy*. Kansas City Federal Reserve Bank.

Bernanke, Ben S. and Gertler, Mark (2001), Should Central Banks Respond To Movements in Asset Prices? *American Economic Review Papers and Proceedings* 91, pp. 253–257.

BIS (2013), VI. Monetary policy at the crossroads, 83rd Annual Report, 1 April 2012–31 March 2013. Bank for International Settlements.

Blanchard, Olivier (2000), Bubbles, Liquidity Traps, and Monetary Policy. In Mikitani and Posen (eds) *Japan's Financial Crisis and its Parallels to the US Experience*, Special Report 13. Institute for International Economics.

Blanchard, Olivier, Dell'Ariccia, Giovanni and Mauro, Paolo (2013), Rethinking Macro Policy II: Getting Granular. IMF Staff Discussion Note 13/03. the IMF.

Borio, Claudio (2011a), Implementing a Macroprudential Framework: Blending Boldness and Realism. *Capitalism and Society* 6 (1).

Borio, Claudio (2011b), Central-banking post-crisis: What compass for uncharted waters? BIS Working Papers No 353. Bank for International Settlements.

Borio, Claudio and White, William (2003), Whither Monetary and Financial Stability? The Implications of Evolving Policy Regimes. In *Economic Symposium Conference Proceedings: Monetary Policy and Uncertainty: Adapting to a Changing Economy*. Kansas City Federal Reserve Bank.

Brunnermeier, Markus and Sannikov, Yuli (2013), Reviving "money and banking". In Reichlin and Baldwin (eds) *Is Inflation Targeting Dead? Central Banking After the Crisis*. Vox eBook. Centre for Economic Policy Research.

Caruana, Jaime (2010), Macroprudential policy: what have we learned and where are we going? Keynote speech at the Second Financial Stability Conference of the International Journal of Central Banking, Bank of Spain, 17 June 2010. Bank for International Settlements.

Committee on International Economic Policy and Reform (2011), *Rethinking Central Banking*. Brookings.

Cúrdia, Vasco and Woodford, Michael (2009), Credit Frictions and Optimal Monetary Policy. Working paper. Department of Economics, Columbia University.

Davies, Gavyn (2014), Macro pru is no panacea. Post on the Financial Times blog on 11 May. Available at www.ft.com.

ECB (2010), Asset price bubbles and monetary policy revisited. Article in *ECB Monthly Bulletin* November 2010.

Goodhart, Charles (2013), Lessons for Monetary Policy from the Euro-Area Crisis. *Journal of Macroeconomics* 39, pp. 378–382.

Greenspan, Alan (2002), Opening Remarks. In *Economic Symposium Conference Proceedings: Rethinking Stabilization Policy*. Kansas City Federal Reserve Bank.

HM Treasury (2014), Monetary policy remit: 2014. Letter from the Chancellor of the Exchequer to the Governor of the Bank of England.

Hoenig, Thomas M. (2010), What About Zero? Speech at Santa Fe, New Mexico April 7. Federal Reserve Bank of Kansas City.

IMF (2013), The Interaction of Monetary and Macroprudential Policies. IMF Policy Paper.

Issing, Otmar (2009), Asset Prices and Monetary Policy. *Cato Journal* 29 (1), pp. 45–51.

Jansson, Per (2013), How do we stop the trend in household debt? Work on several fronts. Speech at SvD Bank Summit, Stockholm, 12 March, Sveriges Riksbank.

King, Mervyn (2012), Twenty years of inflation targeting. The Stamp Memorial Lecture, London School of Economics 9 October 2012, Bank of England.

Kocherlakota, Narayana (2013), Low Real Interest Rates. Speech at the 22nd Annual Hyman P. Minsky Conference April 18 2013, Federal Reserve Bank of Minneapolis.

Kocherlakota, Narayana (2014), Monetary Policy and Financial Stability. Presentation at the 2014 International Research Forum on Monetary Policy March 21 2014. Federal Reserve Bank of Minneapolis.

Lagarde, Christine (2014), Navigating Monetary Policy in the New Normal. Speech at the ECB Forum on Central Banking 25 May 2014. IMF.

Mishkin, Frederic S. (2011), Monetary Policy Strategy: Lessons From the Crisis. In Jarocinski, Smets and Thimann (eds) *Approaches to Monetary Policy Revisited – Lessons from the Crisis*. Sixth ECB Central Banking Conference 18–19 November 2010. ECB.

Norges Bank (2012), Monetary Policy Report 2012/1.

OECD (2010), Counter-cyclical economic policy. OECD Economics Department Policy Notes, No. 1, May 2010. OECD.

Reichlin, Lucrezia and Baldwin, Richard, (eds), (2013), *Is Inflation Targeting Dead? Central Banking After the Crisis*. Vox eBook, Centre for Economic Policy Research.

Reserve Bank of New Zealand (2012), News release announcing 2012 Policy Targets Agreement, 20 September.

Smets, Frank (2013), Financial Stability and Monetary Policy: How Closely interlinked? *Economic Review* 2013:3. Jubilee issue. Sveriges Riksbank.

Stark, Jürgen (2010), In search of a robust monetary policy framework. Keynote speech at the 6th ECB Central Banking Conference “Approaches to monetary policy revisited – lessons from the crisis”, 19 November 2010. ECB.

Stein, Jeremy C. (2013), Overheating in Credit Markets: Origins, Measurement and Policy Responses. Speech at the research symposium Restoring Household Financial Stability after the Great Recession: Why Household Balance Sheets Matter. Federal Reserve Bank of St. Louis.

Stein, Jeremy C. (2014), Incorporating Financial Stability Considerations into a Monetary Policy Framework. Speech at the International Research Forum on Monetary Policy, 21 March 2014. Board of Governors of the Federal Reserve System.

Svensson, Lars E.O. (2012), Comment on Michael Woodford "Inflation Targeting and Financial Stability". *Sveriges Riksbank Economic Review*, 2012:1, Sveriges Riksbank.

Svensson, Lars E.O. (2013), The Riksbank is wrong about the debt – a higher policy rate increases (not reduces) the household debt ratio. Post on the blog Ekonomistas, 26 August 2013. Available at ekonomistas.se.

Sveriges Riksbank (2013), Financial imbalances in the monetary policy assessment. Article in *Monetary Policy Report*, July 2013.

Sveriges Riksbank (2014), The effects of monetary policy in household debt. Article in *Monetary Policy Report*, February 2014.

White, William (2009), Should Monetary Policy "Lean or Clean"? Working Paper No. 34, Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute.

White, William (2013), The prudential regulation of financial institutions: Why regulatory responses to the crisis might not prove sufficient. SPP Research Papers 6 (33).

Woodford, Michael (2012), Inflation Targeting and Financial Stability. *Economic Review* 2012:1, Sveriges Riksbank.