ARTICLE – The Riksbank's strategy for a gradual normalisation of monetary policy

Monetary policy in Sweden is at present very expansionary, as it is in many other countries. This has contributed to strong economic activity and an inflation rate close to the target. Monetary policy is expected to become less expansionary going forward, which is also reflected in the forecast for the repo rate. This gives rise to questions concerning how the Riksbank's holdings of government bonds will develop in the long run, and how increases in the repo rate will interact with changes in the holdings. The Riksbank's overall strategy for a gradual normalisation of monetary policy is similar to that chosen by other central banks. The strategy involves the Riksbank first concluding net purchases of government bonds, while the reinvestments of redemptions and coupon payments on the asset portfolio are continued. After that, when monetary policy gradually is to become less expansionary, the repo rate will be raised slowly, while the reinvestments will continue. When the repo rate has been raised to an appropriate level, the reinvestments of redemptions and coupon payments can be reduced or concluded, so that the Riksbank's holdings of government bonds decline when the bonds mature. In the long run, the holdings should be smaller than they are today, but their exact size will depend on several factors that it is currently difficult to assess.

Monetary policy expected to become less expansionary in future

Since February 2015, the Riksbank has cut the repo rate from zero to –0.50 per cent, carried out extensive purchases of government bonds and also communicated contingency plans to intervene on the foreign exchange market if necessary. Redemptions and coupon payments in the government bond portfolio will be reinvested until further notice so that monetary policy will remain highly expansionary.

From a historical perspective, this is an unusual monetary policy. However, the purpose is the same as with normal monetary policy measures: to stabilise inflation around the inflation target and to support the general economic policy aimed at maintaining sustainable growth and high employment. But attaining the monetary policy goals is particularly challenging when both global interest rates and inflation are low, as monetary policy is then limited by the fact that there is a lower bound for the policy rate. This is an important reason why the Riksbank and several other central banks, since the start of the financial crisis in 2008, have also taken additional monetary policy measures, such as purchasing various types of financial asset.

However, the economic and monetary policy situation has gradually changed for the better. There have been further

signs during 2017 that economic activity abroad is continuing to improve. In Sweden, resource utilisation is high and inflation is close to the target. Like the Riksbank, the larger central banks abroad are still conducting an expansionary monetary policy, but they are in different phases with their monetary policy. The Federal Reserve in the United States concluded its net purchases of assets in autumn 2014 and began a series of interest rate raises in December 2015. In October 2017, the Federal Reserve began to gradually reduce its asset holdings. The European Central Bank (ECB), on the other hand, has announced that it will be continuing its asset purchases, at least until the end of September 2018.

This article describes in a general manner the various strategies and plans communicated by the Federal Reserve and the ECB. After that, there is a description of the Riksbank's overall strategy for a gradual normalisation of monetary policy in Sweden.

Several strategic issues to determine

When monetary policy is to be normalised and made less expansionary, central banks need to take a stance on a number of issues. One concerns the size of the holdings of financial assets that a central bank needs in the long run to be able to implement its monetary policy in an efficient and appropriate manner. If the holdings are to be reduced in relation to the current levels, central banks also need to

zero interest rate", Economic Review, 2009:2, Sveriges Riksbank, describes more generally various monetary policy measures when the policy rate has reached its lower bound.

⁶ For an earlier description of what measures other central banks have taken, see the article "Monetary policy when the policy rate is close to zero" in Monetary Policy Report, October 2014. U. Söderström and A. Westermark, "Monetary policy with a

consider how this should be done. As the financial assets that central banks have mainly bought (bonds) expire at the time of maturity, one way of reducing the asset holdings is to stop reinvesting redemptions and coupon payments. In this way, the holdings will automatically decline without any further decisions by the central bank.⁷ An alternative strategy is to actively sell off the assets.

Another question concerns in which order the various instruments should be used: shall the central bank first raise the policy rate and then reduce its asset holdings, or is it more appropriate to do it the other way round? Or should these two tools be used parallel to one another? A related question concerns whether it is changes in the policy rate or changes in the asset holdings that will be the main monetary policy instrument in the long run.

Of course, from a purely technical point of view, there are many different ways and sequences of decisions to make monetary policy less expansionary. However, for normalisation to continue smoothly, it may be desirable to make clear, in advance, how monetary policy is expected to develop over the next few years.

The Federal Reserve has long signalled how it plans to normalise monetary policy

When it comes to the larger central banks, the Federal Reserve, which has already taken concrete steps towards a less expansionary monetary policy, has been the most clear about which strategy it intends to use when monetary policy is normalised.⁸

To begin with, the Federal Reserve has communicated that in the long run it does not intend to hold more financial assets than are necessary to implement monetary policy in an efficient and effective manner. Consequently, its holdings will become appreciably smaller than in recent years, but larger than before the financial crisis. So as to minimise the effect on the allocation of credit across sectors, the holdings will primarily consist of government bonds.

With regard to the sequence for the various tools, the Federal Reserve has announced earlier that they would continue to reinvest all principal payments from the asset portfolio until the increases in their policy rate were "well under way". They thus chose to begin raising the policy rate before starting to reduce the asset holdings. One reason for doing so is that the central bank would then be able to use its normal instrument (the policy rate) to adjust monetary policy if the reduction of holdings were to cause uncertainty and a

too-rapid tightening of financial conditions, or if other shocks to the economy were to occur.

Once the policy rate is assessed to be at an appropriate distance from the lower bound, there are basically two types of monetary policy strategies that can be considered. One strategy is to use the balance sheet as an independent second tool, which complements the policy rate adjustments, for instance, by selling the assets the central bank has purchased. An alternative strategy is to only use the policy rate as an active tool for monetary policy, while the balance sheet takes a passive role, for instance, by allowing the assets that were bought to expire at maturity. The Federal Reserve has earlier communicated, and now begun to apply, the latter strategy. They have also communicated that the aim is to allow the asset portfolio to be a passive monetary policy instrument even in the longer run.

The Federal Reserve also stresses that they are prepared to adjust the details of its approach in light of economic and financial developments.

The ECB has communicated fewer details

The ECB has been less detailed in its communication of how monetary policy can be normalised. They have emphasised that the development of inflation and the general economic situation determine when and how monetary policy will be normalised. 11

What the ECB has officially communicated mainly concerns how long monetary policy is expected to be expansionary. The net asset purchases are intended to continue until the end of September 2018, or beyond if necessary, and in any case until the ECB sees a sustained adjustment in the path of inflation consistent with its inflation aim. The ECB has also communicated that the key interest rates will remain at their present levels for an extended period of time, and well past the horizon of the net asset purchases. The latter is in line with the Federal Reserve's communication and measures.

Further, the ECB has indicated that the policy rate will in the longer run return to being the main monetary policy instrument. However, the ECB has not said whether they, like the Federal Reserve, intend to give the balance sheet a passive role, for instance, by allowing the assets that have been purchased to expire when they mature.

With regard to the ECB's long-term plans for its balance sheet, they have communicated that the composition and size of the central bank's balance sheet in the long term contain limited information about monetary policy, as, in

European Parliament, 20 November 2017.

⁷ One variation on this strategy is to reinvest a certain percentage of redemptions and coupon payments to allow the holdings to decline more gradually.

⁸ See Board of Governors of the Federal Reserve System, "Policy Normalization Principles and Plans", press release, 17 September 2014; and Board of Governors of the Federal Reserve System, "Addendum to the Policy Normalization Principles and Plans", press release, 14 June 2017.

⁹ Board of Governors of the Federal Reserve System, "Federal Reserve Issues FOMC Statement", press release, 16 December 2015.

¹⁰ L. Brainard, "Transitions in the Outlook and Monetary Policy", speech at the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts,
2. March 2017.

See, for instance, M. Draghi, "Monetary policy and the economic recovery in the euro area", and P. Praet, "Calibrating unconventional monetary policy", speeches at The ECB and Its Watchers XVIII Conference, Frankfurt am Main, 6 April 2017.
 M. Draghi, Hearing of the Committee on Economic and Monetary Affairs of the

normal times, the policy rate is the main monetary policy instrument. The ECB has also emphasised that, in the long run, the balance sheet may need to be larger than it was prior to the financial crisis, for example if the central bank needs to broaden its operational framework to other rates or other counterparties.

The Riksbank's strategy for a gradual normalisation of monetary policy

In connection with every monetary policy decision, the Executive Board of the Riksbank makes an assessment of the repo rate path and any other potential supplementary measures that may be necessary for monetary policy to be well-balanced. The appropriate sequence of monetary policy measures is thus determined, as for the ECB and the Federal Reserve, by normal deliberations of what is the best policy to stabilise inflation around the target and production and employment around long-term sustainable paths.

Compared with the large central banks, a central bank in a small, open economy like Sweden's must to a greater extent take into account other central banks' actions. If the Riksbank's monetary policy were to deviate clearly from that of other countries, this could have a substantial effect on the Swedish krona, which could in turn have negative effects on both inflation and growth in the Swedish economy. This indicates that the choice of long-term strategy for Sweden may be affected by the strategy chosen by other central banks.

It is difficult to plan in detail exactly how monetary policy will gradually be made less expansionary. But an oversight of the Riksbank's strategy for a gradual normalisation of monetary policy can be discerned in five different phases (see Figure A1). In Phase 1, monetary policy continues to be made more expansionary. In Phase 2, net purchases of assets are concluded. Phase 3 and, above all, Phase 4 are phases when monetary policy is gradually made less expansionary. Phase 5 is a normal situation in the longer run. However, the respective lengths of the phases are not predetermined, but are decided by how the economy develops. And, in practice, the boundaries between phases are not necessarily clearly defined, but monetary policy can gradually move from one phase to another. Moreover, as usual, monetary policy will be adjusted to the economy and it cannot be ruled out that it may need to be made more expansionary during this period of normalisation.

The Riksbank's strategy means that net purchases of government bonds will be concluded first, while reinvestments of redemptions and coupon payments in the asset portfolio will continue (Phase 2 of figure A1). In this way, monetary policy will remain highly expansionary. However, redemptions in the Riksbank's bond portfolio only

occur in large steps, approximately once every 18th month. To avoid purchases of very large volumes over a short period, reinvestments may therefore need to be smoothed out over a longer period, and may even be initiated before redemption.

After that, when monetary policy is to gradually become less expansionary, the repo rate will be raised slowly, while the reinvestments continue (Phase 3 in Figure A1).

The Executive Board deems that the Riksbank's holdings of government bonds in the long-term should be smaller than the current level. The Riksbank currently owns a good 40 per cent of the outstanding stock of nominal government bonds, and it is reasonable that the holdings will be reduced to a lower level in the longer run. Exactly how large the holdings will be depends, however, on a number of factors that are difficult to assess at present, for example what size would be appropriate for the banks' liquidity surplus against the Riksbank to enable the Riksbank to implement monetary policy in an effective manner.

When the repo rate has been raised to an appropriate level, the reinvestments of redemptions and coupon payments can be reduced or concluded, so that the Riksbank's holdings of government bonds decline when the bonds mature (Phase 4 in Figure A1). In this way, the asset holdings and the size of the Riksbank's balance sheet decline in a predictable manner. While the holdings decline, monetary policy will be adjusted mainly through adjustments to the repo rate.

In the longer run, reinvestments may be taken up again so that the bond holdings are held at a desirable level (Phase 5 in Figure A1). The Riksbank assesses that also in the longer run the repo rate will be the main monetary policy tool for stabilising inflation around the inflation target and production and employment around long-term sustainable paths.

There is of course uncertainty regarding exactly how fast the repo rate can be raised and the holdings of government bonds reduced. The Riksbank will adapt the details of the normalisation of monetary policy as the economy develops. And if the economic conditions so require, monetary policy can once again be made more expansionary.

Figure A1. Stylised model for a strategy to gradually make monetary policy less expansionary



 $^{^{\}rm 13}$ See ECB, "The role of the central bank balance sheet in monetary policy," Economic Bulletin Issue 4, June 2015.

¹⁴ See V. Constâncio, "The future of monetary policy frameworks", lecture at the Instituto Superior de Economia e Gestão, Lisbon, 25 May 2017.