Commentary: The Case for Unencumbering Interest Rate Policy at the Zero Bound

Marianne Nessén

I. Introduction

I am very grateful for the opportunity to discuss the very interesting paper by Marvin Goodfriend. It's an excellent paper, on a very topical issue. It contains much food for thought.

As I have read it, the main points of the paper are:

Real interest rates are expected to be low going forward, as is inflation and inflation expectations. This leaves little, perhaps alarmingly little, room for interest rate policy to become more expansionary in the future, should that be necessary. That is, *unless the lower bound to nominal interest rates is removed altogether*.

Next, the lower bound comes about from the fact that people can substitute into cash if interest rates are too low. So another main point of the paper is to describe three alternative ways of removing the ability of private agents to avoid negative interest rates.[1]

As a final point, Marvin argues that removing the lower bound is "nothing more than a sensible application of monetary economics," a natural route to take.

My remarks today are organized into three parts, and will to a high degree reflect my experience from working at the monetary policy department of the central bank of Sweden, Sveriges Riksbank. The usual disclaimer applies: the views presented here are my own and do not necessarily reflect those of the Executive Board of the Riksbank. First, I will talk briefly on what Marvin writes a lot about, namely declining interest rates and what this implies for central banks' interest rate policy. Second, I will talk—a little longer—about the international experience so far with "mildly" negative interest rates. I use the term "mildly" to keep this separate from what Marvin is describing, namely a situation where it is possible for central banks to cut interest rates "deeply," almost as if without bound (thus also keeping open the ability to "follow through" as Marvin writes). I believe there are important lessons from the international experience that could be relevant for evaluating Marvin's suggestions of getting rid of the lower bound to interest rates altogether.

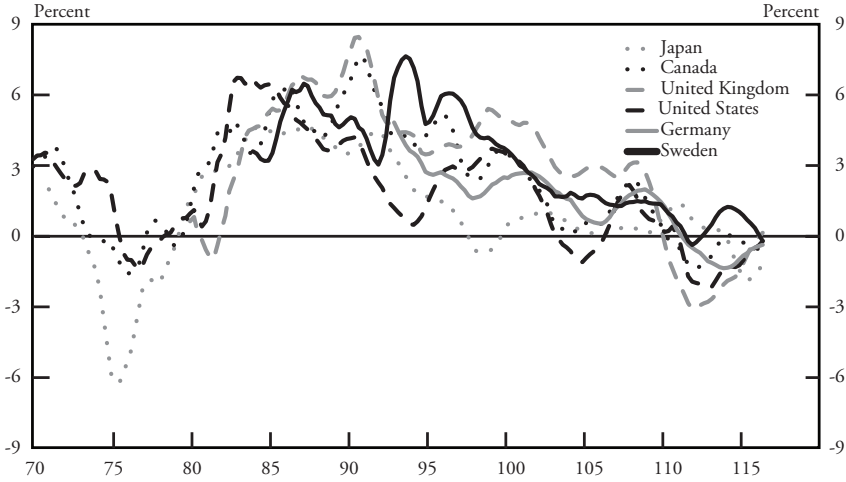
Finally, I will provide some perspectives on "deeply" negative interest rates. To preview my bottom line here: I am not quite as optimistic as Marvin that deeply negative interest rates are as easily introduced or useful as presented in the paper. There are many outstanding issues. And given what is at the heart of much of the current policy discussion—expectations of lower trend growth in the world economy—I am also not convinced that enabling deeply negative interest rates is the first-best solution.

II. Declining Interest Rates

A recurrent theme in commentary on monetary policy in recent years is the decline in interest rates in most advanced economies, a phenomenon that has been going on for many years.

As Marvin notes, real interest rates in the United States and other advanced economies have fallen, from around 4-5 percent or above 25 years ago, to around zero in the case of United States, and to below zero in, e.g., some European economies and Japan (see Chart 1). With low and stable inflation, this goes hand in hand with low nominal interest rates.

Chart 1
Declining Real Interest Rates



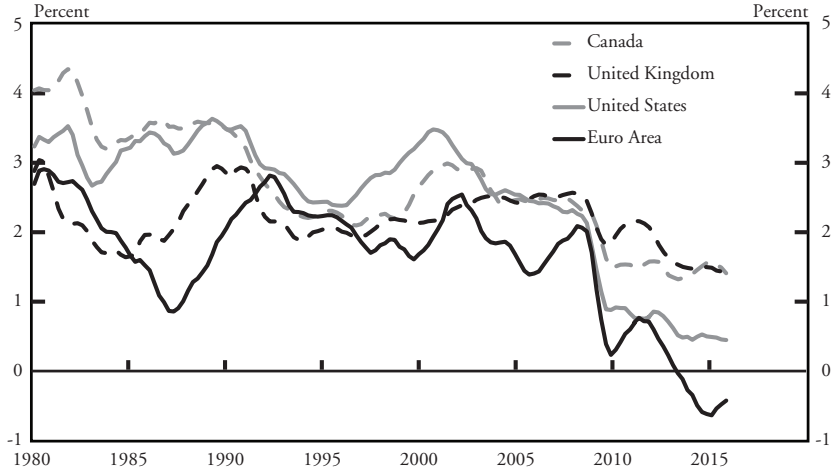
Note: The chart shows a two-year moving average of nominal three-month risk-free interest rates minus actual annual CPI inflation.
Source: OECD.

In the paper, Marvin uses a simple neoclassical model to give an interpretation of what is going on. The model is of a household deciding how to allocate consumption today versus tomorrow, given current and future income prospects. He derives an expression for the intertemporal terms of trade, and its counterpart the natural rate of interest. Thus the fundamental determinants of the natural rate are essentially tastes and preferences (in particular over time), and technological progress—in particular productivity.

This analysis resembles and overlaps with other prominent explanations of why actual real rates and estimates of the natural rate are so low. For example, a recent working paper from the Federal Reserve Bank of San Francisco provides time-series estimates of the natural rate for a number of countries: the United States, the euro area, the U.K. and Canada (see Holston, Laubach and Williams 2016). Their calculations show a steady decline in the natural rate in these currency areas (perhaps with the exception of the U.K.), of some 2 percentage points over the past 20 years, see Chart 2.

Thus, there seems to be broad agreement that natural rates have fallen, and that there are signs that they will remain low. Combining

Chart 2
Secular Decline in the Natural Rate



Note: Four-quarter moving averages.
Source: Holston, Laubach and Williams (2016), "Measuring the Natural Rate of Interest: International Trends and Determinants," FRBSF Working Paper 2016-11.

low real rates with low expected inflation, nominal interest rates will also be low, limiting the room of maneuver for interest rate policy.

The reason why I bring this discussion up in my remarks is two-fold. First, the point that monetary policy is not the sole cause of low interest rates is probably not sufficiently recognized. Some of the critique of central banks—that interest rates are much too low, leading to inefficient allocations, causing problems for pension funds etc.—seem to assume that nominal interest rates can be set by central banks without concern for where the natural rate is. This is not so, and I think Marvin's model illustrates this point nicely. Second, what Marvin's analysis suggests to me is that first-best policies do not lie with monetary policy, but with policies that will improve future growth prospects. I will come back to this in my conclusions.

III. International Experiences with 'Mildly' Negative Interest Rates

Now to my second topic, the international experience with negative interest rates. By now, there are almost half a dozen central banks with negative policy rates. But as I have mentioned earlier, this should be considered as the experience of having "mildly" negative interest rates. It is interesting nonetheless.

Let me go through the experience of some of these central banks, namely four European central banks: the European Central Bank (ECB), the Swiss National Bank, Danmarks Nationalbank and Sveriges Riksbank.[2]

It is now a little over two years ago—June 2014—that the ECB cut its deposit rate to -10 basis points. This was followed by Danmarks Nationalbank (who had been in negative territory earlier in 2012-14, but was above zero when the ECB cut) and the Swiss National Bank in the fall of 2014 and by the Riksbank in early 2015. After more cuts, and some hikes, these central banks now, as of August 2016, have policy rates ranging between -40 and -75 basis points, see Chart 3.

Let me very briefly go through the reasons of why negative policy rates were introduced, how they were implemented, what the effects to date have been and some lessons.[3]

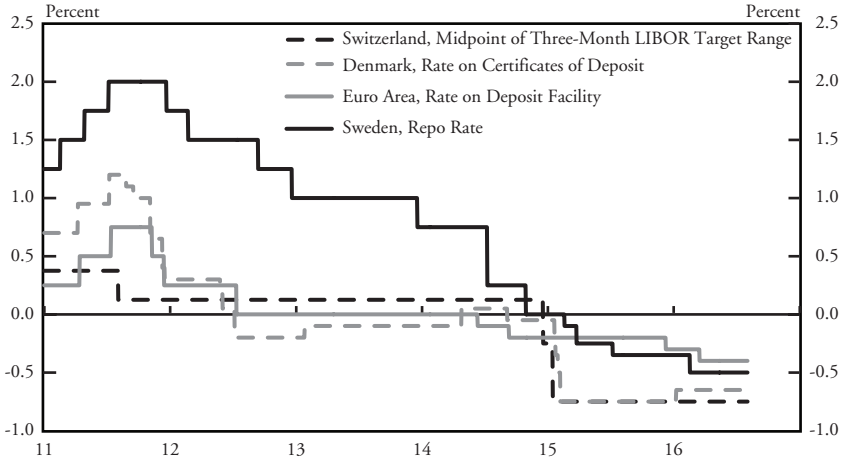
The reasons for lowering policy rates below zero differ somewhat. In the case of the ECB and the Riksbank, the reason was to safeguard the inflation target as the nominal anchor, by anchoring inflation expectations. In the case of Danmarks Nationalbank, it was to defend the fixed exchange rate. And in the case of the Swiss National Bank, it was to prevent the currency from appreciating.

How was it done? One point which may be of interest is that negative policy rates were introduced essentially without any substantial changes to the operational frameworks. That is, the legal and operational details were more or less in place to implement negative policy rates. If I understand correctly, this is not the case, e.g., in the United States.

What have been the effects so far? Largely as expected, even though there are aspects that I will soon return to. This means that cuts in policy rates below zero have passed through, however, not one to one, to money market rates. Longer-maturity and higher-risk yields have also fallen, but here it is difficult to disentangle the effects of interest rate cuts from other monetary policy measures implemented together with negative policy rates. More on that below.

An important exception when it comes to pass-through is that retail deposit rates have stayed at zero. Experience shows that banks

Chart 3
Negative Policy Interest Rates in Europe



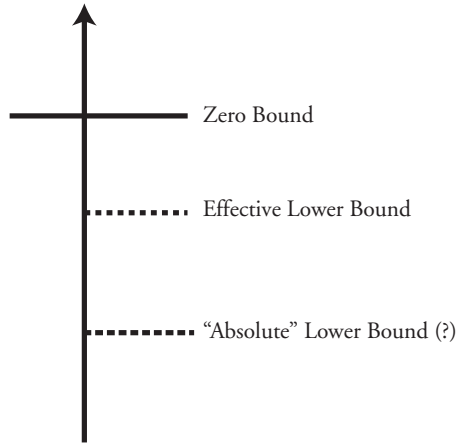
Sources: Macrobond and the Riksbank.

are very reluctant to pass on negative rates to ordinary depositors. Nonetheless, the negative interest rates have had the intended effects, bringing down the level of interest rates in general and providing more stimulative financial conditions.

Of course, not all these effects can be attributed to negative policy rates. In many cases other monetary policy measures have been put in place at the same time. In the case of the Riksbank large asset purchases have been implemented, putting downward pressure on longer-term interest rates. Here, the combination of large amounts of reserves and negative rates has probably jointly contributed to the intended outcome of lower interest rates across the yield curve.

What are the lessons? One lesson is obvious, and this was perhaps well-known before some central banks went negative: The lower bound to nominal interest rates is not zero, but somewhere below zero. Due to various transactions costs, firms and households have not started substituting into cash. But then, where is the lower bound? We don't know, only that it's below zero. Let's call this the definite or absolute lower bound (see Figure 1), but there is potentially a point before this definite or absolute lower bound when the benefits of lowering the interest rates cease to outweigh the costs, let's call it the effective lower bound. Among the central banks I talked about earlier, the

Figure 1
Having Breached Zero …



typical pattern has been to cut rates into negative territory in smaller steps than usual. This reflects uncertainty about pass-through to financial conditions and the broad economy ("benefits") and concern about unexpected effects ("costs"), in terms of market functioning, excessive risk-taking, and signaling effects.

At the Riksbank, we use a simple framework, documented in an *Economic Commentary*, to provide some structure around these concerns (see Alsterlind et al. 2015). As is stated in the *Commentary*, where this "effective lower bound" lies is a matter of judgment and it may vary over time.[4] My impression is that other central banks have a similar framework in place, continuously monitoring the effects—both intended and unintended—of negative rates and updating assessments along the way.

IV. Perspectives on 'Deeply' Negative Interest Rates

Now, the third and final topic, let me give some thoughts, or perspectives on "deeply" negative interest rates. But before doing so, let me state that I believe it is important to continue working on the issue of deeply negative interest rates. As the analysis in Marvin's paper shows, it highlights concepts at the heart of monetary economics, issues that deserve more study.

But I am, as I mentioned in my introduction, more skeptical about the prospects of achieving deeply negative interest rates. First of all, we know from the recent experience I briefly mentioned above that negative interest rates are unpopular. This may have to do with money illusion, but so be it. More study needs to go into how negative nominal interest rates interact with long-held social conventions.

Second, another important area that should be better understood is the long-term consequences of deeply negative interest rates for financial intermediation. In the financial sector and closely related sectors, there are all kinds of distortions—in accounting rules, in fixed nominal contracts, etc. More research on how negative interest rates function in light of these frictions is needed.

V. Conclusion

I very much enjoyed reading the paper. There is much there to think more about. It raises important points that lie at the heart of monetary theory. However, even if the experience with "mildly" negative interest rates has been roughly as expected, I am not sure that we can conclude that "deeply" negative interest rates will work in the same manner. In addition, recent central bank experience with unconventional monetary policies in the form of, e.g., large-scale asset purchases show that these are valuable complements and sometimes substitutes for policy rate cuts. This would perhaps lessen the need for "deeply" negative rates. And at the heart of the current debate lies concerns that future growth prospects are lower than in the past decades. But the remedy for that does not lie with monetary policy, and must be found elsewhere.

Endnotes

[1]These are 1) abolishing paper money, 2) introducing an exchange rate between paper money and reserves or 3) introducing a digital currency (if paper money needs to be kept, this has to be combined with the second alternative).

[2]Danmarks Nationalbank and Sveriges Riksbank are the central banks of Denmark and Sweden, respectively. Denmark has a fixed exchange rate regime (versus the euro) while Sveriges Riksbank has an inflation target (and a freely floating exchange rate).

[3]See Bech and Malkhozov 2016.

[4]Here the concept of "the reversal interest rate," as put forward by Brunnermeier and Koby (2016) also comes to mind. In their model the reversal interest rate is the level at which a policy cut becomes contractionary, not expansionary, since bank lending is depressed and not stimulated.

References

Alsterlind, Jan, Hanna Armelius, David Forsman, Björn Jönsson and A-L Wretman. 2015. "How Far can the Repo Rate Be Cut?" Sveriges Riksbank *Economic Commentaries,* no. 11.

Bech, Morten, and Aytek Malkhozov. 2016. "How Have Central Banks Implemented Negative Rates?" *BIS Quarterly Review*, March.

Brunnermeier, Markus, and Yann Koby. 2016. "The 'Reversal Interest Rate': An Effective Lower Bound on Monetary Policy," manuscript, Princeton University, August.

Holston, Kathryn, Thomas Laubach and John C. Williams. 2016. "Measuring the Natural Rate of Interest: International Trends and Determinants," Federal Reserve Bank of San Francisco, working paper 2016-11, June.