

ANALYSIS – The Riksbank’s assessment of the long-term neutral interest rate⁴⁶

The term neutral interest rate refers to the policy rate that has neither an expansionary nor a tightening effect on the economy. When the interest rate is neutral, balance is achieved in the real economy and, inflation will eventually stabilise at the target. The neutral interest rate cannot be observed; instead, various types of information must be used in an attempt to assess where it lies. The uncertainty of these assessments limits their usefulness in practical policy. The Riksbank’s assessment is that the long-run neutral interest rate is in the interval 1.5 to 3 per cent.

The neutral policy rate is governed by factors over which central banks have no influence, in the long term primarily global saving and investment patterns. These are, in turn, affected by various structural driving forces, such as demographic changes. The neutral interest rate varies over time and cannot be read off any statistics; one must try to assess where it lies by estimating models and by using other relevant information. Assessments of the neutral interest rate are therefore associated with a significant degree of uncertainty.

The neutral interest rate is a theoretical reference value that indicates whether monetary policy is expansionary or contractionary. The gap between the policy rate and the neutral interest rate indicates how expansionary or contractionary the policy is. However, there are limits when it comes to how useful the neutral interest rate is in practical policy. Estimates of the neutral interest rate often refer to the long-term neutral interest rate or the trend of the neutral interest rate. This also applies to the assessment presented in this article. The assessment thus primarily provides information on the Riksbank’s expectations of the level of interest rates in the long term. Even if this is highly influenced by relatively sluggish global factors, it is inherently uncertain.

In addition, over the short term, the economy is affected by various factors that can make the neutral interest rate higher or lower than the long-term one over a number of years. For example, a country’s fiscal policy may be expansionary for a period, causing demand and inflation to rise. All else being equal, the normal policy rate, the neutral interest rate in the short term, will be on a higher level for a period. In such a situation, the gap between the policy rate and the long-term neutral interest rate is not an appropriate measure of how expansionary or contractionary monetary policy

⁴⁶ For more detailed discussions and analyses of the Riksbank’s view of the neutral interest rate, see A. Seim (2024), “Neutral rate – significance, limitations and assessment”, speech at Sveriges Riksbank, 26 November, C. Flodberg (2024) “Structural factors determine interest rates in the longer run”, *Economic Commentaries* No. 5, Sveriges Riksbank, H. Lundvall, I. Strid and D. Vestin, “The neutral rate of interest – theory and evidence for Sweden”, forthcoming *Staff Memo*, Sveriges Riksbank, and V. Corbo and I. Strid, “Forecasts and narrative for the policy rate in a macroeconomic model with a real interest rate trend”, forthcoming *Staff Memo*, Sveriges Riksbank.

is. These more short-term changes in the neutral interest rate are genuinely difficult to estimate. At each policy decision, the central bank must thus assess the monetary policy that needs to be conducted so that the economy develops in line with the forecasts, that is the desired development of inflation and the real economy. It also needs to regularly monitor and assess the effects of monetary policy on the economy to evaluate whether the policy is as expansionary or contractionary as expected.

The long-term level of the neutral interest rate

The neutral interest rate has had a downward trend from about the middle of the 1990s and reached historically low levels at the start of the 2020s. This downturn mainly reflects trends and structural changes in global saving and investment patterns. Different studies highlight different explanations for this development.⁴⁷

The downward trend in the neutral interest rate has affected the conditions for monetary policy. For monetary policy to keep inflation on target, policy rates around the world have had to be reduced to lower and lower levels with each economic cycle. This explains why many central banks, including the Riksbank, set their policy rates at zero or negative values before the period of higher inflation in recent years.

There is an ongoing international discussion about the likely development of the long-term neutral interest rate in the future. Some analysts consider that the driving forces that contributed to lower the neutral rate have not eased off and that it will therefore remain low. Others argue that the long-term neutral rate has risen slightly, or will do so in the future. Examples of causes for this include expectations that major structural investments will be needed to cope with the climate transition and that defence spending will need to be increased in an increasingly uncertain world. However, researchers and other analysts are relatively unanimous, at least at present, that the neutral interest rate will not rise sharply and return to the levels that prevailed a few decades ago.⁴⁸

Over the years, the Riksbank has commented on the neutral interest rate in speeches and reports. This communication has mostly concerned the trend decline in the neutral interest rate and its implications for monetary policy. A quantified assessment was most recently made in an article in the Monetary Policy Report for February 2017. The conclusion was that the policy rate could be expected in the long run to be between 2.5 and 4 per cent.⁴⁹ This assessment was a downward revision from previous estimates and reflected the fact that Swedish domestic interest rates are largely influenced by international events and that interest rates had trended downwards around the world. The Riksbank then communicated in 2019 and 2022 that the

⁴⁷ For an examination of the forces behind this downward trend, see H. Lundvall (2023), "Driving forces behind global trends in the neutral interest rate", Annex 2 to *Long-Term Survey 2023*, SOU 2023:87.

⁴⁸ However, it should be noted that, a few decades ago, few analysts predicted the long downward trend in the neutral interest rate.

⁴⁹ See the article "The repo rate in the long run" in the *Monetary Policy Report*, February 2017, Sveriges Riksbank.

level was probably in the lower part of, or slightly below, the range from 2017, that is, that the long-term neutral interest rate had continued to fall since then.

Over the past year, the Riksbank has reviewed international studies, assessments from other central banks, information from financial markets – both from the pricing of financial instruments and from surveys – and has used Swedish data to estimate leading models in the literature on the neutral interest rate.⁵⁰

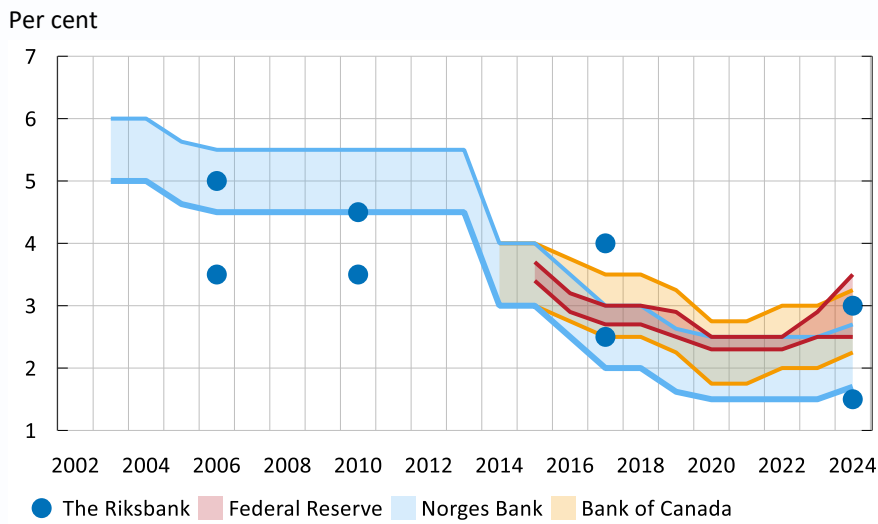
Based on this analysis, the Riksbank assesses that the long-term neutral interest rate, and thus the long-term normal policy rate, is probably between 1.5 and 3 per cent. This is one percentage point lower than the range the Riksbank published in 2017 and consistent with the communication from 2019 and 2022. Figure 44 shows how the assessment compares with the assessments made by Norges Bank, the Bank of Canada and the US Federal Reserve.⁵¹

The assessments are reasonably in line with each other. As the assessments for the other countries have been made more continuously, it appears that they reached their lowest level in the early 2020s in the context of the pandemic. There is a tendency for the assessments to have risen slightly since then, but the change is comparatively minor.

⁵⁰ A more detailed review can be found in H. Lundvall, I. Strid and D. Vestin, "The neutral rate of interest – theory and evidence for Sweden", forthcoming *Staff Memo*, Sveriges Riksbank.

⁵¹ The assessment for Norges Bank is from the article "Anslag på nøytral realrente" (Estimates of the neutral real interest rate)", in the *Monetary Policy Report 2/2023*. For the Bank of Canada, the estimates come from the publications "Potential output and the neutral rate in Canada", "The neutral rate in Canada" and "Monetary Policy Report". For the Federal Reserve, the range is calculated as the difference between the highest and lowest assessments of the long-term policy rate made by the members of the Federal Open Market Committee (the so-called dot plots), with the three highest and the three lowest assessments excluded. The Riksbank's earlier estimates come from the articles "What is a normal level for the repo rate?" in *Inflation Report*, 2006:2, "What is a normal level for the repo rate?" in *Monetary Policy Report*, February 2010, and "The repo rate in the long run" in *Monetary Policy Report*, February 2017, Sveriges Riksbank.

Figure 44. The Riksbank's and other central banks' assessments of neutral interest rates



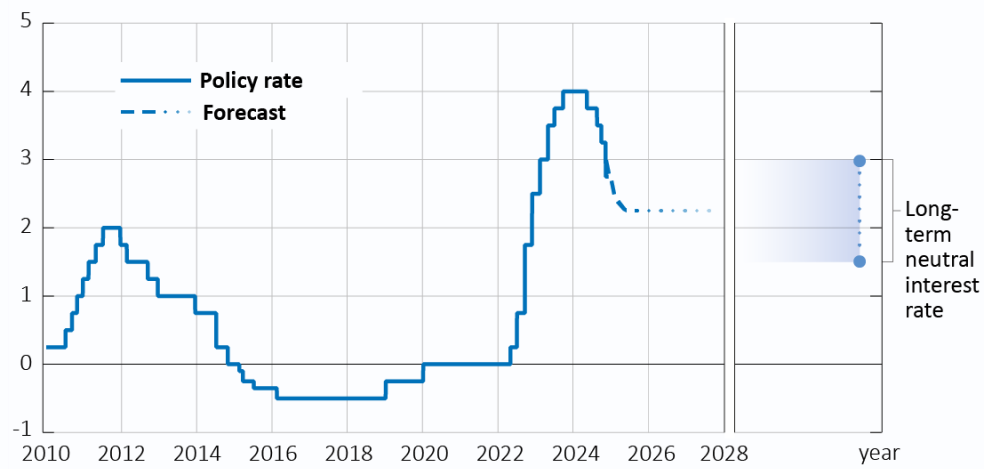
Sources: National central banks and the Riksbank.

The interval reflects the uncertainty existing in estimates of the long-term neutral interest rate. One should be aware that the policy rate can be both significantly higher and significantly lower than the interval. For example, with an interval of 1.5–3 per cent, it cannot be ruled out that the policy rate at times will have to be cut to levels around zero. In the event of an economic slowdown or deep recession, when inflation is far below the target, a policy rate cut by 1.5 to 3 percentage points would not be particularly exceptional. Similarly, the policy rate may, at times, have to be raised significantly above 3 per cent to be sufficiently contractionary when this is necessary.

Figure 45 illustrates the thinking behind the interval for the long-term neutral interest rate. This is an assessment of what a normal policy rate will be in the long term. The interval illustrates the uncertainty in the assessment.

Figure 45. The interval for the long-term neutral interest rate

Per cent



Note. The solid line refers to outcomes, the dashed/dotted line refers to the Riksbank's forecast and the dotted vertical line and the shaded area show the uncertainty surrounding the forecast for the policy rate in the longer run.

Source: Sveriges Riksbank.