

# Negative interest rates: Challenge or opportunity for Europe's banks?

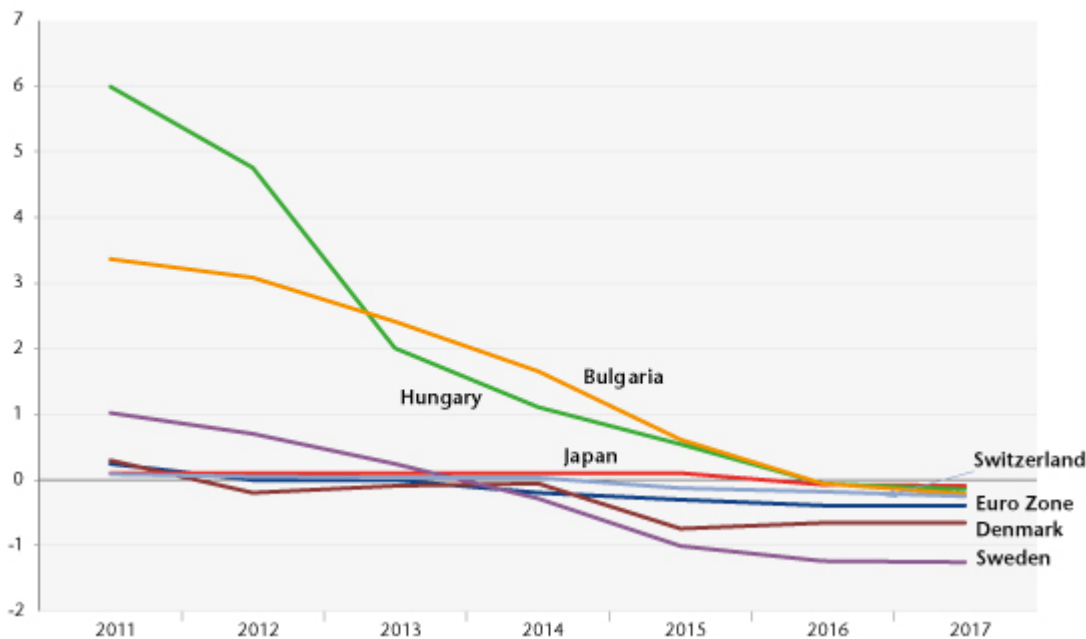
By [Whelsy Boungou](#)

It has been five years since commercial banks, in particular those in the euro zone, have faced a new challenge, that of continuing to generate profit in an environment marked by negative interest rates.

At the onset of the 2007-2008 global financial crisis, several central banks implemented new "unconventional" monetary policies. These consisted mainly of massive asset purchase programmes (commonly known as Quantitative Easing, QE) and forward guidance on interest rates. They aimed to lift the economies out of crisis by promoting better economic growth while avoiding a low level of inflation (or even deflation). Since 2012, six central banks in Europe (Bulgaria, Denmark, Hungary, Sweden, Switzerland and the European Central Bank) and the Bank of Japan have gradually introduced negative interest rates on bank deposits and reserves, in addition to the unconventional measures already in force. For example, the ECB's deposit facility rate now stands at -0.40% (see Figure 1). Indeed, as indicated by Benoît Cœuré [1], the implementation of negative rates aim to tax banks' excess reserves to encourage

them to use these to boost the credit supply.

Figure 1. Changes in central bank deposit rates



However, the implementation of negative rates has raised at least two concerns about the potential effects on bank profitability and risk-taking. First, the introduction of negative rates could hinder the transmission of monetary policy if this reduces banks' interest margins and thus bank profitability. In addition, the lowering of credit rates for new loans and the revaluation of outstanding loans (mainly at variable rates) reduces banks' net interest margin when the deposit rate cannot fall below the Zero Lower Bound. Second, in response to the impact on margins, the banks could either reduce the share of nonperforming loans on their balance sheets or look for other assets that are more profitable than loans ("Search-for-yield").

[In a recent article](#)

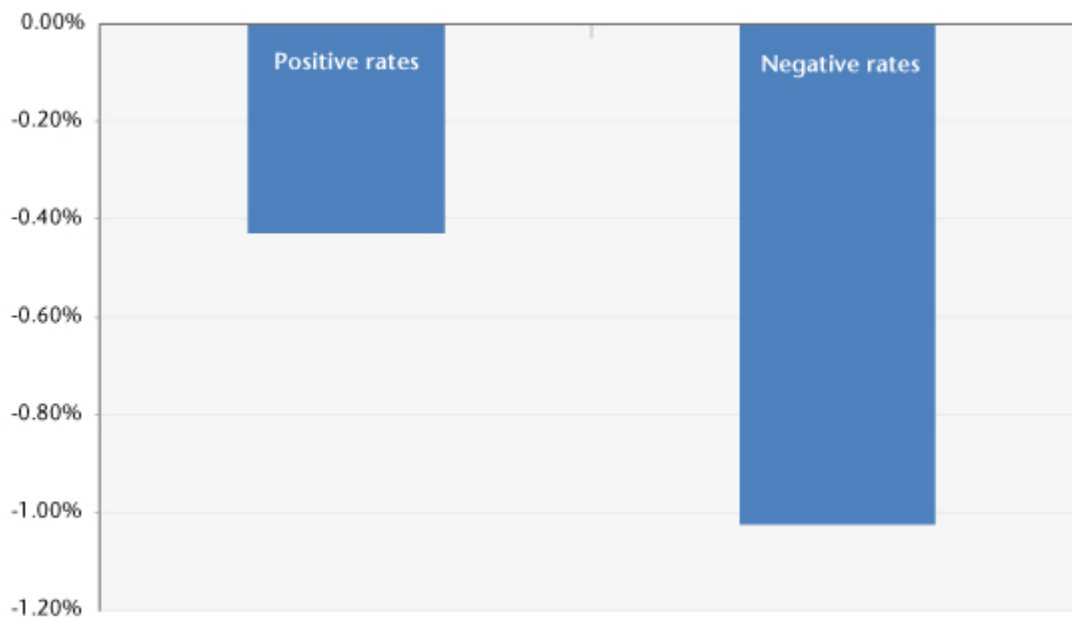
[2], we used panel data from 2442 banks from the 28 member countries of the European Union over the period 2011-2017 to analyse the effects of negative rates on bank behaviour with respect to profitability and risk-taking.

Specifically, we asked ourselves three questions: (1) What is the impact of negative rates on banks' profitability? (2) Would negative rates encourage banks to take more risks? (3) Would the pressure on net interest margins from negative rates encourage banks to take more risk?

At the conclusion of our analysis, we highlight the presence of a threshold effect when interest rates fall below the zero bar. As can be seen in Figure 2, a 1% reduction in the central bank deposit rate reduced banks' net interest margins by 0.429% when rates are positive, and by 1.023% when they are negative. Thus, negative rates have a greater impact on banks' net interest margins than do positive rates. This result points to the presence of a threshold effect at zero. In addition, in response to this negative effect on margins (and in order to offset losses), the banks responded by expanding their non-interest rate activities (account management fees, commissions, etc.). As a result, in the short and medium term there was no indication that the banks resorted to riskier positions. However, the issue of risk-taking may eventually arise if negative rates persist for a long time and the banks

continue to suffer losses on net interest margins.

Figure 2. The impact of central bank deposit rates on banks' interest margins



Note: This figure presents the results of our analysis of the impact of interest rates on the margins of 2442 banks operating in the European Union over the period 2011-2017. The element "positive rates" refers to the impact on the banks' interest margins of a reduction in the central bank deposit rate when this is positive. "Negative rates" refers to the impact on the banks' interest margins of a reduction in the central bank deposit rate when it is negative.

[1] Coeuré B. (2016). Assessing the implication of negative interest rates. Speech at the Yale Financial Crisis Forum in New Haven. July 28, 2016.

[2] Boungou W. (2019). [Negative Interest Rates, Bank Profitability and Risk-taking](#). Sciences Po OFCE Working Paper no. 10/2019.

---

# The impact on redistribution of the ECB's monetary policy

By [Jérôme Creel](#) and [Mehdi El Herradi](#)

A few weeks before Christine Lagarde assumes the

presidency of the European Central Bank (ECB), it may be useful to examine the balance sheet of her predecessors, not only on macroeconomic and financial matters but also with respect to inequality. In recent years, the problem of the redistributive effects of monetary policy has become an important issue, both academically and at the level of economic policy discussions.

Interest in this subject has grown in a context marked by the conjunction of two factors. First there has been a [persistent level of inequality in wealth and income](#), which has been hard to reduce. Then there are the activities of the central banks in the advanced economies following the 2008 crisis to support growth, particularly through the implementation of so-called “unconventional” measures [\[1\]](#). These measures, mainly manifested in quantitative easing (QE) programmes, are suspected to have increased the prices of financial assets and, as a result, favoured wealthier households. At the same time, the low interest rate policy could have resulted in a reduction in interest income on assets with fixed yields, most of which are held by low-income households. On the other hand, the real effects of monetary policy, particularly on changes in the unemployment rate, could help keep low-income households in employment. The ensuing debate, which initially broke out in the United States, also erupted at the level of the [euro](#)

[zone](#) after the ECB launched its QE programme.

In a [recent study](#) focusing on 10 euro zone countries between 2000 and 2015, we analysed the impact of the ECB's monetary policy measures – both conventional and unconventional – on income inequality. To do this, we drew on three key indicators: the Gini coefficient, both before and after redistribution, and an interdecile ratio (the ratio between the richest 20% and the poorest 20%).

Three main results emerge from our study. On the one hand, a restrictive monetary policy has a modest impact on income inequality, regardless of the indicator of inequality used. On the other hand, this effect is mainly due to the southern European countries, especially in the period of conventional monetary policy. Finally, we found that the redistributive effects of conventional and unconventional monetary policies do not differ significantly.

These results thus suggest that the monetary policies pursued by the ECB since the crisis have probably had an insignificant and possibly even favourable impact on income inequality. The forthcoming normalization of the euro zone's monetary policy could, on the contrary, increase inequality. Although this increase may be limited, it is important that decision-makers anticipate it.

---

[\[1\]](#) For an analysis of the expected impact of the ECB's unconventional policies, see [Blot \*et al.\* \(2015\)](#).