

## Box 1

**THE BANK-BASED TRANSMISSION OF MONETARY POLICY TO FINANCIAL CONDITIONS DURING THE RECENT PERIOD OF MONETARY EASING**

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In both Spain and the euro area as a whole, the banking channel is key for the transmission of monetary policy to the financial conditions of the economy, given the important role played by credit institutions in financial intermediation. This channel operates mainly via changes in banks' funding costs and in the returns on their financial assets, all of which has an impact on the remuneration of households' and firms' deposits and on the cost and ease of access to bank loans. The speed and strength of bank-based monetary policy transmission depends on a number of factors, such as the soundness of the banking system and the degree of bank concentration, the macroeconomic context or access to alternative sources of financing.<sup>1</sup>

This box analyses the pass-through of the recent monetary easing to the financial conditions of Spanish households and firms via the banking channel. To this end, it describes the mechanisms of this channel and assesses how effectively monetary policy is passing through to bank interest rates. The change in the cost and volume of credit is compared with that observed during the last comparable cycle (in terms of the intensity of the policy rate cuts) and growth in bank financing in this cycle is compared with that expected based on historical patterns.

In late 2023, the European Central Bank (ECB) began to adopt a less restrictive monetary policy stance and announced that policy rates had reached levels that would help ensure the return of inflation to its 2% medium-term target. From June 2024, a series of successive policy rate cuts were implemented, leading to a cumulative decline of 200 bp in the deposit facility rate, to 2% in June 2025. These rate cuts, along with investors' anticipation of them, have gradually passed through to money and debt market interest rates.<sup>2</sup> Thus, from October 2023 to May 2025 (the latest available data for bank interest rates),

the 1-year EURIBOR fell by around 200 bp to 2.1%, while the comparable 10-year benchmark rate<sup>3</sup> accumulated a decline of 70 bp (to 2.5%).<sup>4</sup>

Banks' lower financing costs in debt markets have exerted downward pressure on the remuneration of deposits, further reducing the cost of their liabilities. As is usually the case, this adjustment has taken place gradually and with some lag.<sup>5</sup> Interest rates on households' and firms' new term deposits have thus declined by around 80 bp and 160 bp, respectively, from their peaks in June 2024 and December 2023, to stand at 1.8% and 1.9% in May 2025.

Monetary easing has also reduced the remuneration on bank reserves and lowered the returns on other assets held by banks, such as government debt. Less appealing investment alternatives have encouraged banks to extend new credit, gradually lowering its cost. Specifically, between October 2023 and May 2025, interest rates on new loans in Spain fell by 120 bp, 120 bp and 160 bp in the households for house purchase, consumer credit and other lending and loans to businesses segments, respectively (to 2.7%, 5.8% and 3.4%).

In order to assess the speed and strength of the pass-through of monetary policy to bank interest rates, an exercise was carried out to compare the observed changes in interest rates on new loans and deposits from October 2023 to May 2025 with the counterfactual changes that would have been observed if the banking channel had been effective, given the changes in the market interest rates. Specifically, error-correction models with monthly data for bank rates and market rates at the corresponding terms, from January 2003 (the start of the time series of the interest rates applied by monetary financial institutions to euro area residents)<sup>6</sup> to

1 For an analysis of the impact of bank-specific characteristics and the structure of a country's banking sector on the pass-through of monetary policy to bank interest rates, see, for example, Carlo Altavilla, Fabio Canova and Matteo Ciccirelli. (2020). "Mending the broken link: Heterogeneous bank lending rates and monetary policy pass-through". *Journal of Monetary Economics*, vol. 110(C), pp. 81-98; Leonardo Gambacorta and David Marques-Ibañez. (2011). "The bank lending channel: lessons from the crisis", BIS Working Papers 345, Bank for International Settlements, and Sergio Mayordomo and Irene Roibás. (2023). "The pass-through of market interest rates to bank interest rates". Documentos Ocasionales, 2312, Banco de España. <https://repositorio.bde.es/handle/123456789/34572>

2 Medium and long-term interest rates are also driven by risk premia.

3 Since there is no 10-year EURIBOR benchmark rate, this variable is proxied by the fixed component of a 10-year interest rate swap where the variable component is the 6-month EURIBOR.

4 However, in December 2024 it fell to its lowest level (2.2%) in this cycle.

5 Normally, a lag of six months to one year. See, for example, Philip Lane (2022). *The transmission of monetary policy*. <https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp221011~5062b44330.en.html>

6 Banco de España Circular 1/2010, transposing Regulation (EU) No 1072/2013 of the ECB (ECB/2013/34).

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August 2007, were used to estimate the historical relationship between the two rates in a period of relative financial stability and sustained economic growth in Spain. During these years, the long-term elasticity between bank interest rates and market rates estimated using these models was close to one, indicating an effective pass-through of monetary policy.<sup>7</sup>

Charts 1 and 2 present the results of this analysis for interest rates on new term deposits and new bank loans, respectively. Chart 1 indicates that monetary policy is passing through to the remuneration of households' term deposits more slowly in this cycle than projected by the model (with an interest rate in May 2025 almost 100 bp higher than expected, according to the point estimate). By contrast, the pass-through to the remuneration of firms' term deposits appears to be taking place effectively and is in line with that estimated by the model (the interest rate observed falls within the 95% confidence interval).<sup>8</sup> Chart 2 shows that, in general, the reduction in market interest rates is also passing through effectively to interest rates on new bank lending,<sup>9</sup> although since early 2025 this pass-through appears to have slowed somewhat in lending to households.

Chart 3 compares the change in the cost and volume of credit in the current period of monetary policy easing with that observed in the 2008 episode, during which the interest rate on main refinancing operations decreased by 325 bp, to 1% in May 2009.<sup>10</sup> This decline was more pronounced than that observed in the current episode, and policy interest rates fell to a lower level. Although interest rates on new loans fell more sharply from October 2008 to May 2010 across all segments – by 360 bp for housing loans (to 2.4%), 220 bp for consumer credit and

other lending (to 6.5%) and 330 bp for loans to firms (to 2.6%) –,<sup>11</sup> developments in outstanding credit volumes have generally been much more favourable in the current cycle. In particular, outstanding amounts have increased across the board in this cycle (by 0.7% for housing loans, 5.5% for consumer credit and other lending and 0.8% for loans to firms, from 2023 Q4 to 2025 Q1), in line with the increase in the supply of and demand for such financing.<sup>12</sup> By contrast, in the 2008 episode, loan supply and, above all, demand fell, and outstanding amounts declined across most segments (by -2% in consumer credit and other lending and -3.3% in loans to firms between 2008 Q4 and 2010 Q1). Lending for house purchase was the only segment where growth was similar to that recorded in this cycle.

Differences in credit supply and demand developments in both monetary policy easing cycles are strongly influenced by the macroeconomic context, the health of the banking system and the financial situation of households and firms. Thus, whereas the 2008 financial crisis led to an economic recession, in the current cycle the Spanish economy has performed favourably, thanks to a strong labour market and buoyant activity. The banking system, which faced a severe solvency and liquidity crisis in 2008, is currently in a position marked by sound profitability and favourable credit quality developments, with solvency and liquidity levels well above the regulatory minimums. Meanwhile, the financial situation of households and firms has improved significantly over the past decade, with debt-to-income ratios close to historical lows and a limited proportion of vulnerable agents.

Lastly, an exercise was carried out to compare the actual growth in the stock of bank loans during the current cycle

7 From the summer of 2007, this relationship began to be shaped by other factors associated with the global financial crisis, such as higher credit risk and strong competition in retail deposit-taking, given the funding difficulties encountered by some euro area banks. For more details on the methodology used, see Sergio Mayordomo and Irene Roibás. (2023). "The pass-through of market interest rates to bank interest rates". Documentos Ocasionales, 2312, Banco de España. <https://repositorio.bde.es/handle/123456789/34572>

8 In the euro area, by contrast, the reduction in the remuneration of deposits appears to be similar to that expected, for both households and firms.

9 In the euro area, the same analysis yields similar results, with a somewhat faster-than-estimated pass-through in the corporate segment in the last few months.

10 The deposit facility rate was cut by 300 bp and was 0.25% in 2009. Until September 2019, the ECB Governing Council used the main refinancing rate as its primary instrument. Since then, against a background of very low interest or even negative interest rates, the deposit facility rate has become the key tool for steering monetary policy.

11 This sharper fall is in line with the reduction in market rates, which declined by around 400 bp, to 1.2%, in the case of the 1-year EURIBOR and by almost 170 bp, to 3.1%, in the case of the 10-year benchmark. The reduction in the remuneration of term deposits was also more marked (270 bp, to 2.1%, for households and 330 bp, to 1.3%, for firms).

12 The changes in loan supply and demand are taken from the Bank Lending Survey (BLS). Supply is proxied by the change in credit standards, with the opposite sign.

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Chart 1  
Interest rate on new deposits (a)

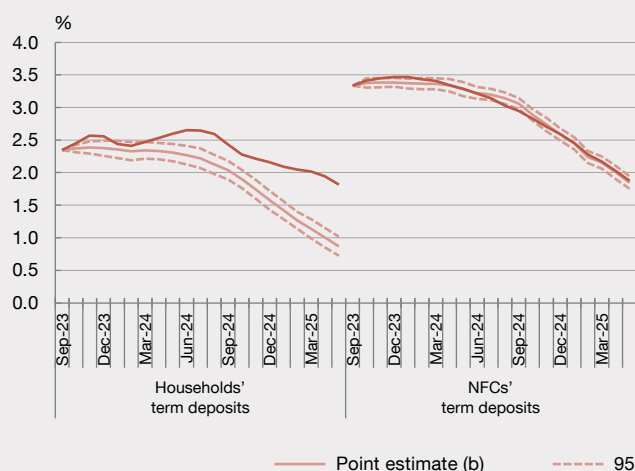


Chart 2  
Interest rate on new lending (a)

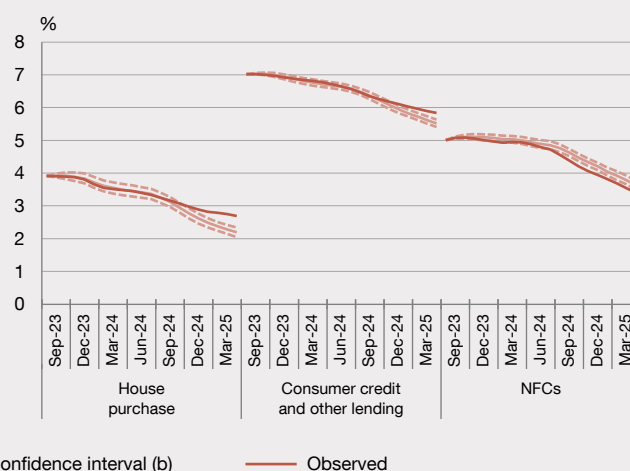


Chart 3  
Change in financing conditions during monetary policy easing cycles

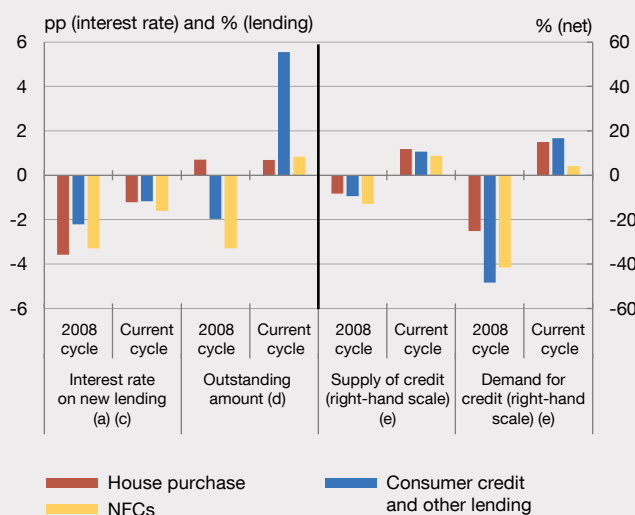
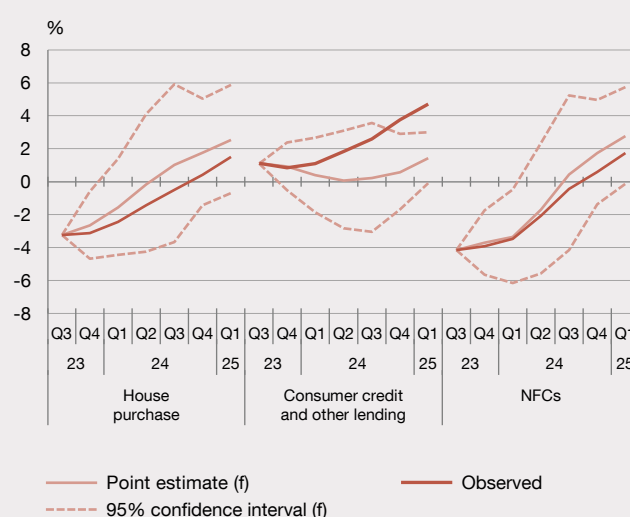


Chart 4  
Year-on-year change in the outstanding amount of lending



SOURCES: ECB, INE and Banco de España.

- a NDERs adjusted seasonally and for the irregular component.
- b Resulting bank interest rate if the current cycle's reduction in the market interest rate had passed through effectively, as estimated by standard error-correction models on data for the period January 2003-August 2008.
- c The change in interest rates for the 2008 cycle is calculated as the difference between May 2010 and September 2008. For the current cycle, it is calculated as the difference between May 2025 and September 2023.
- d Calculated as the net flow of credit accumulated over each cycle (2008 Q4-2010 Q1 and 2023 Q4-2025 Q1) divided by the stock of credit at the start of the period. Seasonally adjusted data.
- e BLS data. Supply is proxied by the change in lending standards, with the opposite sign. For each segment, the chart shows the average of the net percentage, i.e. the percentage of banks reporting an easing (supply) / increase (demand) less those reporting a tightening (supply) / decrease (demand) in the period (2008 Q4-2010 Q1 and 2023 Q4-2025 Q1).
- f Year-on-year rate of change of counterfactual credit based on historical patterns, as estimated by error-correction models based on data from 2002 Q4 to 2023 Q3, given observed developments in the cost of credit, lending standards and a set of macroeconomic variables relevant to credit demand (private consumption, residential investment, house prices, business investment, unemployment and inflation).

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of monetary policy easing with that expected based on historical patterns, given observed developments in the cost of credit, lending standards (as an indicator of credit supply) and a set of macroeconomic variables relevant to credit demand.<sup>13</sup> This was done using error correction models that estimate the relationship between bank loan stocks and these variables, with quarterly data from 2002 Q4<sup>14</sup> to 2023 Q3. On the basis of the historical relationships estimated by these models and the observed paths of the explanatory variables, counterfactual developments in credit since the last quarter of 2023 were projected. Chart 4 shows the observed year-on-year rate of change in credit stocks and compares it with counterfactual developments (for which both the point estimate and the 95% confidence bands are shown). According to these estimates, bank financing has behaved as expected based on historical

regularities, although in the consumer and other lending segment it appears to have grown faster in 2025 Q1 than predicted on the basis of these patterns.

In conclusion, the evidence presented in this box suggests that the pass-through of monetary policy to interest rates on new bank loans and deposits during the current easing cycle is taking place effectively across most segments, in terms of speed and strength. In addition, the sound performance of the Spanish economy, banks' favourable financial situation and the contained indebtedness and debt burden of households and firms have enabled this improvement in financing conditions to translate into a sustained recovery in bank lending. This recovery in lending appears to be in line with historical regularities, given the developments in the cost of borrowing from banks, credit standards and the macroeconomic context.

<sup>13</sup> Private consumption, residential investment, house prices, business investment, unemployment and inflation.

<sup>14</sup> The first quarter for which information on credit standards is available in the BLS.