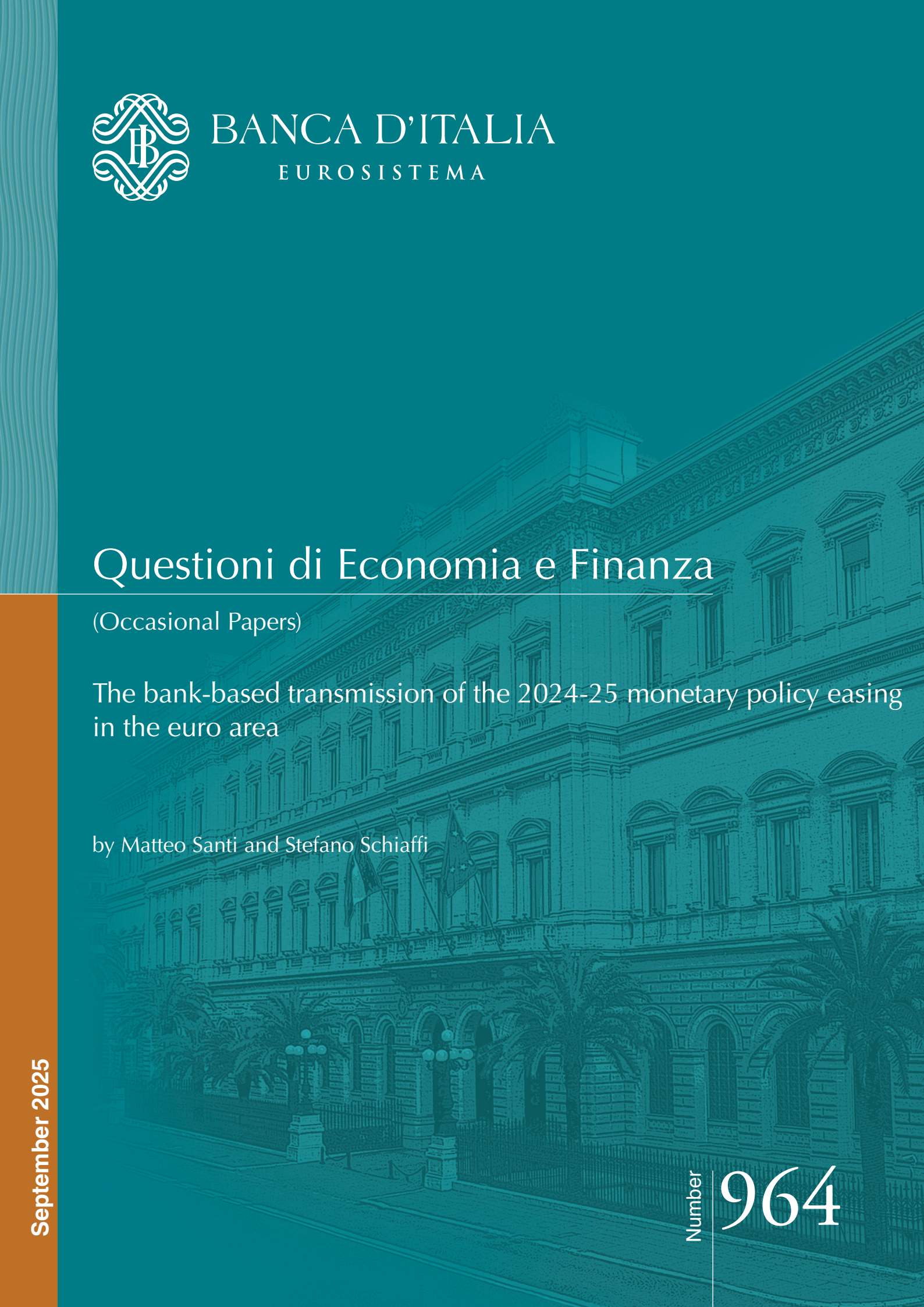
BANCA D'ITALIA
EUROSISTEMA

Questioni di Economia e Finanza

(Occasional Papers)

The bank-based transmission of the 2024-25 monetary policy easing in the euro area

by Matteo Santi and Stefano Schiaffi



September 2025

Number 964

BANCA D'ITALIA
EUROSISTEMA

Questioni di Economia e Finanza

(Occasional Papers)

The bank-based transmission of the 2024-25 monetary policy easing in the euro area

by Matteo Santi and Stefano Schiaffi

Number 964 – September 2025

The series Occasional Papers *presents studies and documents on issues pertaining to the institutional tasks of the Bank of Italy and the Eurosystem. The* Occasional Papers *appear alongside the* Working Papers *series which are specifically aimed at providing original contributions to economic research.*

The Occasional Papers *include studies conducted within the Bank of Italy, sometimes in cooperation with the Eurosystem or other institutions. The views expressed in the studies are those of the authors and do not involve the responsibility of the institutions to which they belong.*

The series is available online at www.bancaditalia.it .

ISSN 1972-6643 (online)

Designed by the Printing and Publishing Division of the Bank of Italy

THE BANK-BASED TRANSMISSION OF THE 2024-25 MONETARY POLICY EASING IN THE EURO AREA

by Matteo Santi* and Stefano Schiaffi*

Abstract

This paper assesses the intensity with which the monetary policy easing that began in June 2024 was transmitted to banks' funding costs and lending rates in the euro area up to May 2025. Compared with the 2008-09 easing cycle, the pass-through to banks' funding costs was somewhat weaker, mainly due to a dampened transmission to overnight deposit rates. Conversely, the pass-through to lending rates for firms was slightly stronger, reflecting banks' relatively muted risk perception compared with the 2008-09 easing cycle. An analysis based on a Vector Error Correction Model on a broader sample shows that large variations in risk perception may drive a wedge between reference rates and bank lending rates. However, in the easing cycle that started in June 2024 the dynamics of banks' risk perception were relatively subdued and, as a consequence, the transmission of reference rates to lending rates was strong.

JEL Classification: C32, E32, E37, E51, E52.

Keywords: monetary policy, bank lending channel, interest rate channel.

DOI: 10.32057/0.QEF.2025.964

* Bank of Italy, Monetary Analysis Division, Economic Outlook and Monetary Policy Directorate.

1. Introduction

The responsiveness of bank lending rates and volumes to monetary policy decisions is a key channel of monetary policy transmission, as it influences agents' investment, consumption and saving decisions, thereby affecting aggregate economic activity and inflation dynamics.

Against this backdrop, our paper analyses the extent to which the ECB's monetary policy easing cycle started in June 2024 was transmitted to banks' funding costs and lending rates in the euro area, and we compare this transmission intensity with the previous monetary accommodation cycle of 2008–09. We proceed in two steps. First, following Beyer et al. (2024), we calculate the ratio of the cumulative change in banks' lending rates and funding costs observed since the start of the easing cycle and the corresponding change in €STR/Eonia rates over the same period (hereafter referred to as "beta"). This metric provides a descriptive statistic of the pass-through of changes in monetary policy rates to bank funding costs and lending rates, allowing for a direct comparison with the easing cycle of 2008-09. Second, we estimate a two-variable linear Vector Error Correction Model (VECM) to assess the strength of the pass-through to interest rates on loans to non-financial corporations (NFCs) and households (HHs) in comparison with historical regularities since 2003.

Our main findings are as follows. The pass-through to banks' funding costs was slightly weaker compared to the 2008–09 easing cycle, mainly due to a lower transmission to overnight deposit rates. Conversely, the pass-through to NFC lending rates was somewhat stronger than in the 2008-09 cycle, partly due to banks' subdued dynamics of risk perception during the most recent easing phase. Considering a broader historical perspective that encompasses all monetary policy cycles since 2003, our analysis indicates that the pass-through of the recent policy rate cuts to lending rates is consistent with established historical patterns. This suggests that, although large variations in banks' risk perception may drive a wedge between reference and bank lending rates. its relatively muted dynamics in the first year since the start of the easing cycle did not materially affect the transmission of monetary policy.

Our analysis relates to an extensive literature on the pass-through of monetary policy to bank funding costs and lending rates. Previous studies have documented that the pass-through to lending rates in advanced economies is generally incomplete (around 0.8 according to the meta-analysis in Gregor, Melecký and Melecký, 2021), heterogenous across countries in the euro area (e.g. Sørenser and Werner, 2006; Bernhofer and Van Treeck, 2013) and weaker when the policy rate is close to the ZLB

(Herbst et al., 2025).[1] Additional research has explored the interaction between credit risk, both realized and perceived by banks, and the intensity of monetary policy transmission (Gambacorta et al., 2015; Bottero and Conti, 2023), as well as how the pass-through may vary depending on bank-specific characteristics (e.g. Holton, Rodriguez d'Acri, 2018). Recent papers have also examined the post-pandemic hiking cycle, finding a sluggish pass-through to deposit rates in the euro area (Messner and Niepmann, 2023) and a fairly heterogenous strength of the transmission across European countries (Beyer et al., 2024). Our contribution lies in empirically assessing the pass-through during the easing cycle that the ECB started in June 2024, utilizing available data up to May 2025.

The remainder of this paper is structured as follows: in Section 2 and 3 we compare the intensity of the pass-through to banks' funding costs and lending rates in the 2024-25 ECB's easing cycle with that observed in 2008-2009. In Section 4 we present the assessment of the transmission to lending rates with respect to historical regularities, based on the VECM. Section 5 concludes.

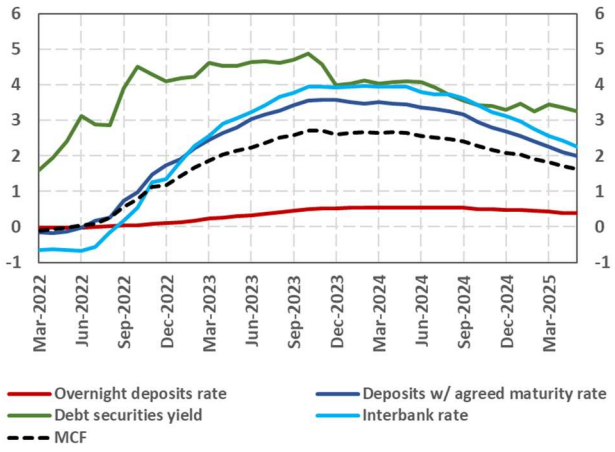
2. The evolution of bank funding conditions since the start of the easing cycle

Since the beginning of the ECB's monetary policy easing cycle in June 2024 and up to May 2025, banks' marginal cost of funding (MCF) declined steadily, reflecting the reduction in interest rates on all its main components other than overnight deposits, in a context of a broadly stable composition of funding sources (Figg. 1 and 2).[2]

[1] See Andries and Billon (2016) for a survey of empirical works on the pass-through of policy rates to bank interest rates in the euro area.

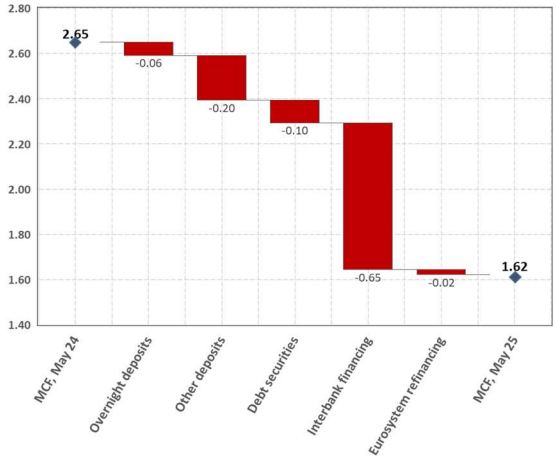
[2] The marginal cost of funding is calculated as the weighted average of the costs of banks' various funding sources, using their respective outstanding amounts as weights. This is the cost that a given bank would incur to increase its balance sheet by one unit, drawing on funding sources in proportion to the composition of its liabilities at that time. In May 2025, the overall decrease of the MCF since May 2024 – just before the beginning of the easing cycle – was of 103 basis points, to 1.62 per cent.

Fig. 1 – Banks' marginal cost of funding and its main components
(per cent)



Source: Authors' calculations on ECB, Bloomberg and ICE Bank of America Merrill Lynch data.
Notes: Last data: May 2025.

Fig. 2 – Contributions to the evolution of MCF between May 2024 and May 2025
(percentage points; contributions)

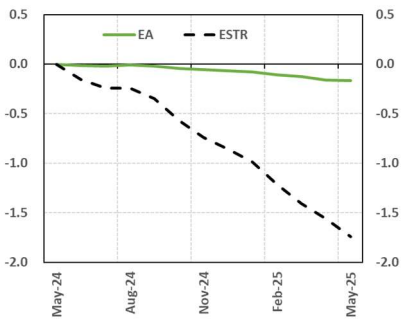


Source: Authors' calculations on ECB, Bloomberg and ICE Bank of America Merrill Lynch data.
Notes: Last data: May 2025.

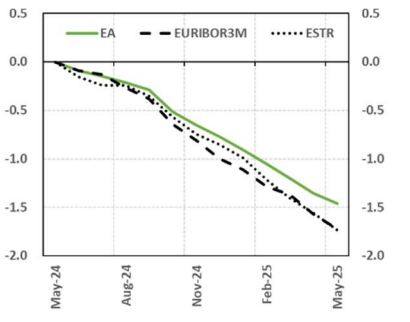
The overall reduction of 175 bps in the deposit facility rate by May 2025 led to a fall in interbank rates and in the remuneration of deposits with agreed maturity of a similar magnitude (by about 170 and 150 bps between May 2024 and May 2025, respectively; Fig. 3). Bank bond rates fell by about 80 bps in 2024 and stayed broadly constant afterwards, reflecting the evolution of the benchmark rate. In contrast, overnight deposit rates decreased only by 17 bps, as discussed in more detail below.[3]

Fig. 3 Pass-through of policy rate cuts to components of banks' cost of funding
(cumulated changes since May 2024; percentage points)

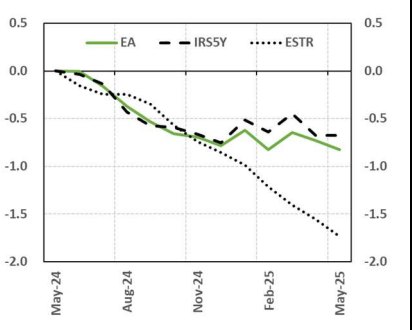
a) overnight deposits



b) deposits w/ agreed maturity



c) debt securities



Source: Authors' calculations on ECB, LSEG and ICE Bank of America Merrill Lynch data.
Notes: Last data: May 2025. Figure A1 in the Annex reports analogous information for the 2008-09 easing cycle.

[3] Bank bond rates are measured by the average yield to maturity of a basket of euro-denominated bonds issued by banks and traded on the secondary market. Interbank rates are measured by the volume-weighted average rate of repo trades (general and special collateral).

The pass-through of policy rate cuts, as measured by changes in €STR/Eonia[4], to banks' funding cost was slightly weaker than that observed during the 2008-09 easing cycle.[5] The beta for the MCF, 12 months after the first policy rate cut, was equal to 0.59 in May 2025 and to 0.79 in September 2009 (Fig. 4).[6] For term deposits, the beta appears to be similar over the two easing cycles (about 0.85). The bank bond yields beta is also similar in the two cycles (about 0.50), although slightly smaller in 2024-25, reflecting different dynamics of the benchmark rate (5-year IRS) and of risk premia in the two easing episodes. While the benchmark rate decreased smoothly during the easing cycle of 2008-09, in 2024-25 it dropped until December 2024 and had a quite volatile behaviour afterwards, also following announcements of fiscal expansions in the euro area, resulting in an upward pressure on bank bond yields. On the other hand, as market perceptions of bank default risk were increasing following the onset of the Global Financial Crisis, the risk premia component was putting relatively more upward pressure on bank bond yields in 2008-09. All in all, the lower marginal cost of funding beta was mainly driven by the much smaller overnight deposits beta in the current cycle (0.10, compared with 0.28 in 2008-09), coupled with a higher share of overnight deposits in banks' liabilities.[7]

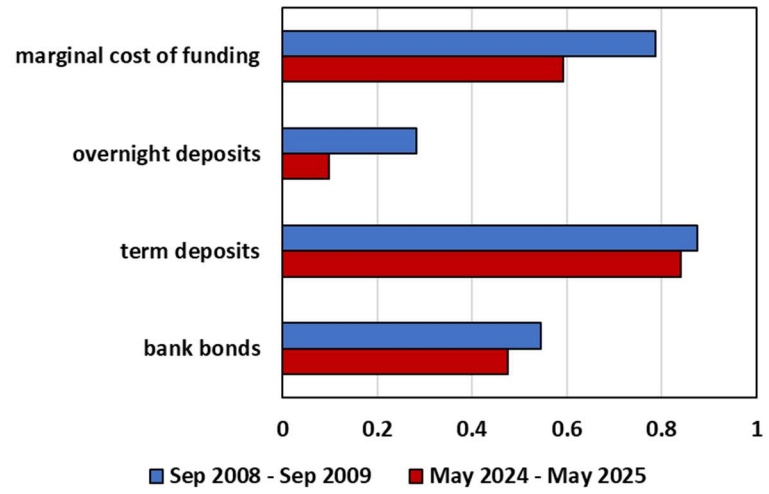
[4] Throughout this section, we follow Beyer et al. (2024) and compute the beta as the ratio between the change in the remuneration of a bank liability or the interest rate on a loan since the start of a policy cycle and that in €STR/Eonia rates over the same period. For the MCF, the remuneration is weighed by the share of the liability in banks' funding.

[5] The European Central Bank started to lower its key interest rates in October 2008 and continued to ease its monetary policy until May 2009, with a cumulative reduction of 300 basis points.

[6] Fig. A4a shows that the MCF beta was consistently slightly smaller in the current cycle than in 2008-09, starting four months after the first cut.

[7] Overnight deposits accounted for 37 per cent of banks' liabilities in May 2025, compared with 23 in September 2009. The relative weight of all the other liabilities in banks' balance sheets decreased over the same period.

Fig. 4 –Funding costs beta, comparison between 2024-25 and 2008-09 easing cycles

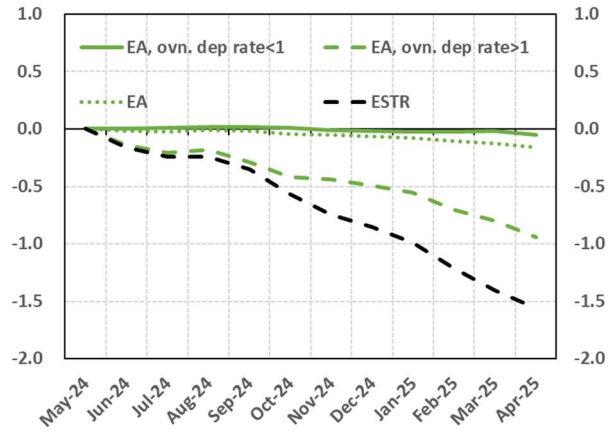


Source: Authors' calculations on ECB, LSEG and ICE Bank of America Merrill Lynch data.
Notes: Betas obtained as the ratio of the change in the rate on banks' liabilities and the change in the €STR, over the specified time span.

The currently low pass-through to overnight deposit rates reflects their already low level at the start of the easing cycle, itself a consequence of the limited transmission during the 2022-23 ECB's tightening cycle.[8] This sluggish aggregate response is driven entirely by banks that, as of May 2024, remunerated overnight deposit at rates below 1 per cent (Fig. 5). These banks, with a beta close to zero, account for about 92 per cent of total overnight deposits. In contrast, banks offering overnight deposit rates above 1 per cent in May 2024 exhibit a much larger beta (0.59).[9] This pattern is not unique to the easing cycle that started in June 2024. In 2008-09, banks with deposit rates below 1 per cent before the rate cuts also exhibited a significantly lower deposit beta (0.10; Fig. 6). However, at that time, the aggregate overnight deposit rate before the first policy rate cut was higher than in May 2024 (1.6 per cent) and banks offering an interest rate on overnight deposits below 1 per cent represented only 26 per cent of total overnight deposits.

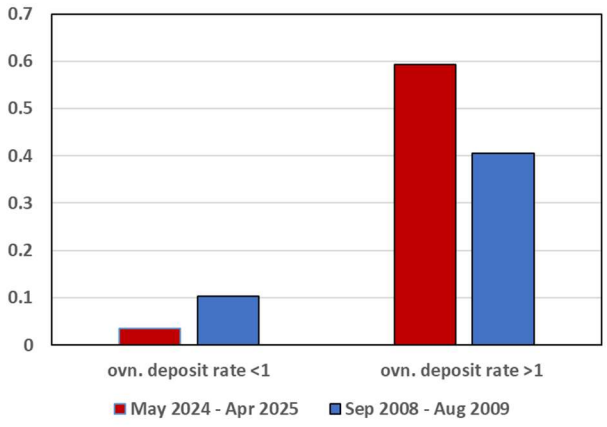
[8] For more details on the pass-through to overnight deposit rates in the 2022-23 tightening cycle, see the Box "The transmission of monetary tightening to the cost of credit", in Bank of Italy 2022 Annual Report.
[9] We choose a threshold of 1 per cent for the overnight deposit rate in this exercise having in mind i) a terminal rate for the DFR in the current easing cycle between 1.75 and 2.25 per cent, in line with recent estimates published in the ECB Economic Bulletin 2025/1; ii) a beta for overnight deposits equal to 0.4 according to historical regularities (see e.g. Bottero and Conti, 2023). Considering i) and ii), banks would need to enter the easing cycle with a deposit rate of at least 0.9 per cent – which we round up to 1 – in order to pass-through the key interest rate cuts. Results are qualitatively robust to choosing different thresholds, as 1.5 per cent.

Fig. 5 – Pass-through of rate cuts to overnight deposit rates
(cumulated changes since May 2024; percentage points)



Source: Authors' calculations on ECB and LSEG data.
Notes: Last data: April 2025.

Fig. 6 – Overnight deposit rates beta by level of deposit rate at the onset of the easing cycle



Source: Authors' calculations on ECB data.
Notes: Betas obtained as the ratio of the change in the rate on overnight deposits and the change in the €STR, over the specified time span.

At the start of the 2008-09 easing cycle, banks offering an overnight deposit rate below 1 percent did not differ significantly from other banks in size, while they had a slightly higher amount of excess liquidity in relation to their total assets (Fig. A3). These banks also had a significantly higher share of deposits to total liabilities. This evidence may help rationalize the limited pass-through to deposit rates observed both during the 2022-23 tightening and the 2024-25 easing. It may be argued that banks that offered a remuneration on overnight deposits above 1 percent, in addition to having lower excess liquidity, were also less reliant on deposits as a source of funding. It is therefore possible that, in line with the deposits channel of monetary policy (Drechsler et al., 2017), these intermediaries had lower deposit market power and transmitted more to the deposit rate offered to their customers the policy rate hikes in 2022-23. There is similar evidence regarding the characteristics of banks with deposit rates above or below 1 percent before the 2008-09 easing, although the difference in the share of deposits in total assets between the two groups of banks is smaller than in May 2024.

3. The pass-through of policy rate cuts to lending rates to firms and households

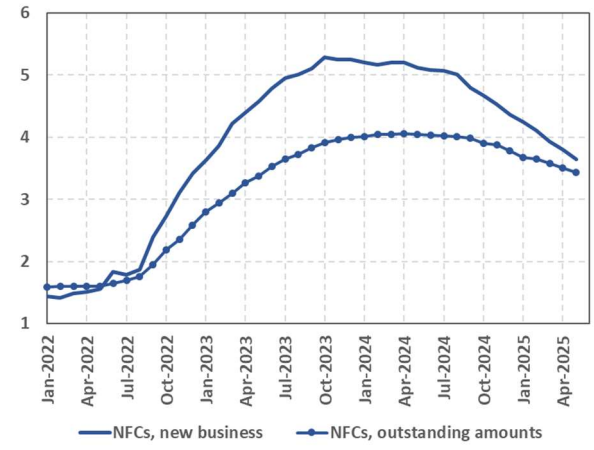
The decline in banks' funding costs translated into more favourable financing conditions for both NFCs and HHs. In May 2025 interest rates on new loans to NFCs stood at 3.6 per cent (Fig. 7a), about 160 bps below their peak in October 2023. This decline, which began in late 2023, accelerated

following the first policy rate cut in June 2024.[10] Similarly, the cost of new loans to HHs for house purchase was 3.3 per cent in May 2025, around 70 bps below the peak of November 2023 (Fig. 7b).[11] Since May 2024, interest rates on new loans to NFCs and to HHs for house purchase decreased by about 150 and 50 bps, respectively (Fig. 8), reflecting movements in the respective benchmark rates.

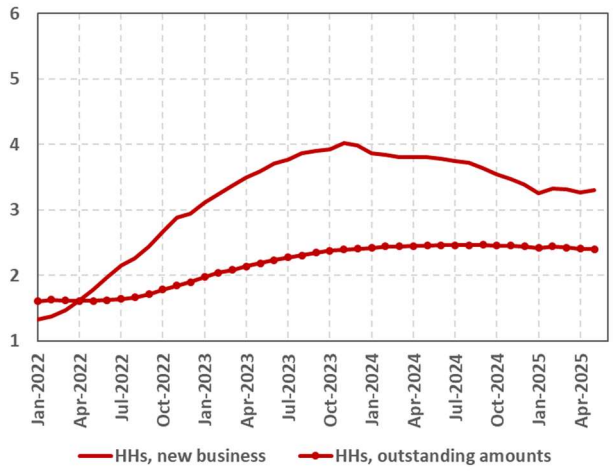
Qualitative evidence from the Bank Lending Survey (BLS) confirms the gradual loosening of credit conditions, which started in 2023Q4 for HHs and in 2024Q2 for NFCs, after several quarters of tightening. The easing was driven by lower lending rates and lower margins on average loans, both for NFCs and for HHs.

Fig. 7 – Lending rates to NFCs and HHs, new loans and outstanding amounts
(percentage points)

a) Loans to NFCs



b) Loans to HHs for house purchase

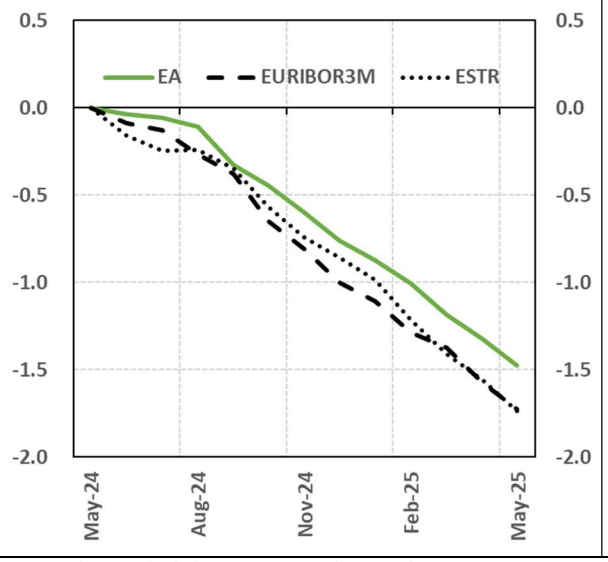


Source: ECB.
Notes: Solid lines: Composite cost of borrowing. Dotted lines: Average interest rate on outstanding amounts. Last data: May 2025.

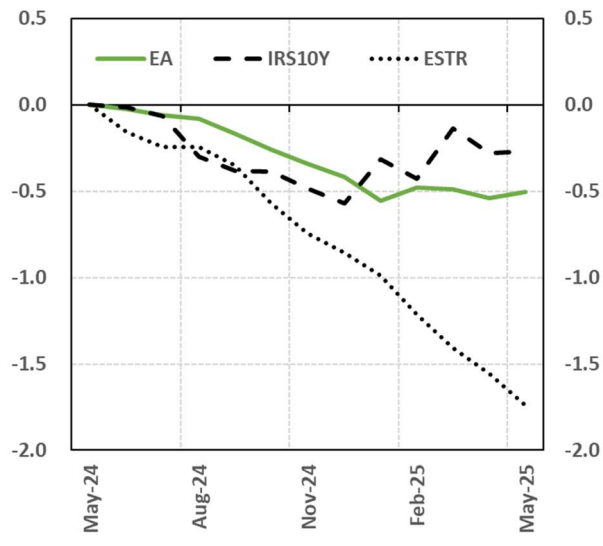
[10] The average interest rate on outstanding loans to NFCs (3.4% in May 2025) is about 60 bps lower than the maximum reached in May 2024.
[11] The interest rate on outstanding loans to HHs for house purchase remained broadly stable since the first rate cut (2.4% in May 2025), owing to the large proportion of fixed rate mortgages.

Fig. 8 – Pass-through of rate cuts to lending rates
(cumulated changes since May 2024; percentage points)

a) Loans to NFCs



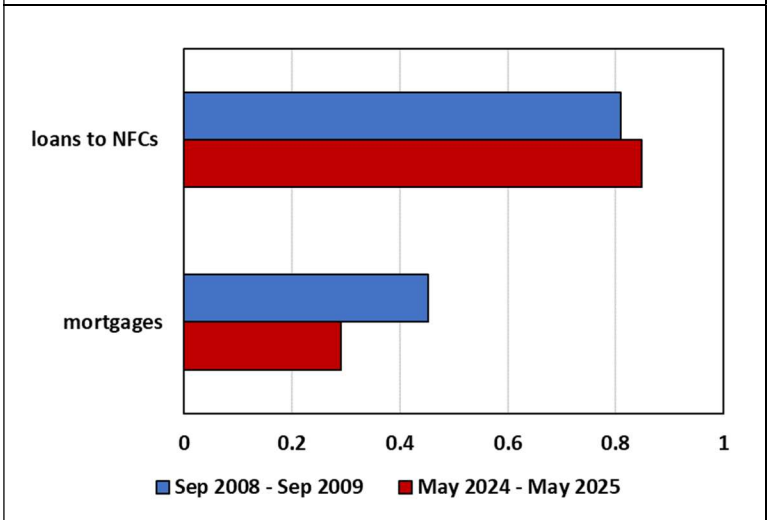
b) Loans to HHs for house purchase



Source: Authors' calculations on ECB and LSEG data.
Notes: Last data: May 2025. Figure A2 in the Annex reports analogous information for the first months after the easing cycle started in 2008.

The pass-through of policy rate cuts, as measured by changes in €STR/Eonia, to NFC lending rates was slightly stronger than that observed during the 2008-09 easing cycle. The NFC lending rates betas 12 months after the first policy rate cut were equal to 0.85 in May 2025 and to 0.81 in September 2009 (Figure 9). The betas were consistently higher, although slightly, in the 2024-25 easing cycle, starting from the fourth month after the first cut (Figure A4b).

Fig. 9 – Lending rates beta, comparison between 2024-25 and 2008-09 easing cycles

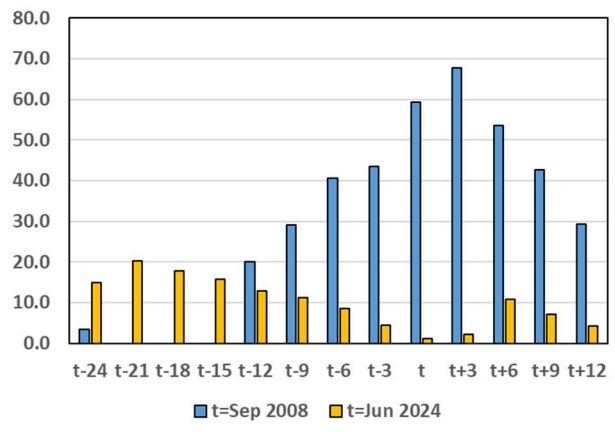


Source: Authors' calculations on ECB and LSEG data.
Notes: Betas obtained as the ratio of the change in the rate on lending rates and the change in the policy rate, over the specified time span.

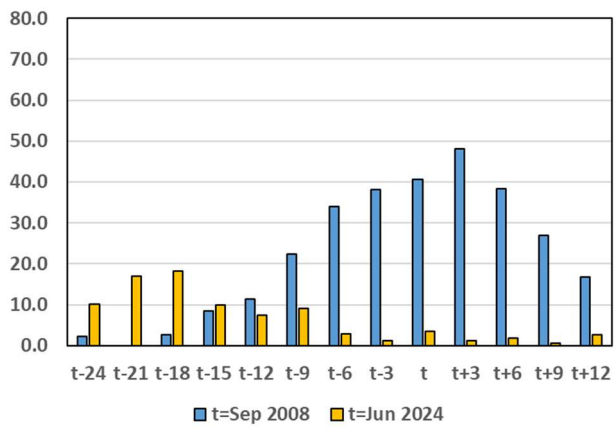
Given the somewhat weaker pass-through to banks' marginal cost of funding compared to 2008-09, the slightly stronger transmission to NFC lending rates in the easing cycle that started in June 2024 implies a more rapid decrease in banks' lending margins. This, in turn, reflects the significantly different macroeconomic and financial environment in the two episodes. Indeed, the contribution to changes in credit standards from risk perception reported by intermediaries participating in the BLS had a markedly different evolution during the two easing cycles (Fig. 10a). In 2024-25 (yellow bars), the reduction in interest rates has been preceded by a steady moderation in the contribution from banks' risk perception, whose increase had been previously driven by the energy shock and by the ECB policy tightening (Auer and Conti, 2024; Conti et al. 2024). In addition, the size of the increase in risk perception observed in the first quarters following the start of the easing cycle was quite limited. On the contrary, the 2008-2009 easing cycle was preceded by a sharp increase in banks' risk perception related to tensions in the financial sector, likely weakening the transmission of the monetary easing to lending rates.

Fig. 10 – Changes in banks' risk perception
(net percentage of banks)

a) Loans to NFCs



b) Loans to HHs for house purchase



Source: ECB.
Notes: The chart reports the net percentage of banks declaring a tightening effect from their risk perception to changes in their credit standards.

The beta for interest rates on loans to HHs for house purchase was smaller in May 2025 than in September 2009 (equal to 0.29 and 0.45, respectively). Figure A4c shows that the beta was slightly larger in the current cycle, consistently with that on loans to NFCs, up until February 2025, reflecting

the milder dynamics of banks' risk perception on mortgages (Fig. 10b). Since March 2025, the rise in long-term benchmark rates, also linked to the announcements of fiscal expansions in the euro area, has put upward pressure on mortgage rates, hence lowering the beta.

4. An assessment of the strength of the pass-through to lending rates in the light of historical regularities

In this section, we employ a two-variable linear VECM to assess the strength of the pass-through to lending rates to NFCs and HHs in comparison with historical regularities since 2003. Using this model, we leverage the historical relationship between lending rates and the respective benchmark rates to evaluate the transmission of monetary policy. The model is estimated on a sample that includes data until immediately before the first rate cut (May 2024) and assumes cointegration between interest rates on new loans and the benchmark rate. The equation of the model is the following:

$$\Delta y_t = c + \Pi y_{t-1} + \sum_{j}^{p-1} \Gamma \Delta y_{t-j} + \varepsilon_t$$

Two separate models are estimated for interest rates on loans to NFCs and to HHs for house purchase. The vector y_t includes a lending rate and the respective benchmark rate (3-month Euribor for loans to NFCs and 10-year IRS for loans to HHs).

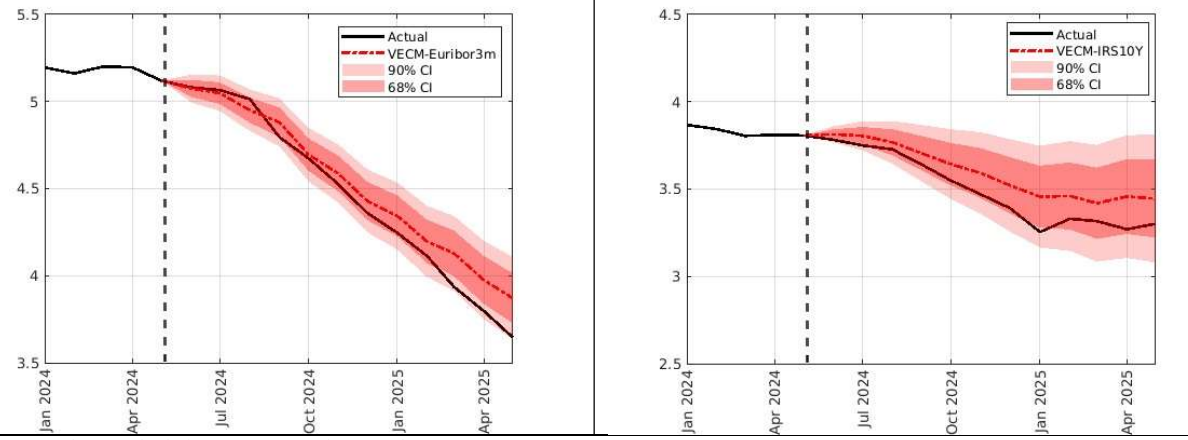
The parameters of this simple model capture the relationship between the two series in the absence of other factors affecting lending rates, such as banks' risk perception or balance sheet constraints. Figure 11a shows the forecasts for NFC lending rates obtained from the model (dashed red line) from June 2024 onwards, conditional on the observed path of the 3-month Euribor. Since the start of the easing cycle, the actual NFC lending rate (solid black line) has aligned quite closely with the conditional forecast, remaining within the 68 per cent confidence bands until February 2025 and falling in the lowest part of the 90 per cent interval afterwards. According to this analysis, the pass-through of policy rate cuts to NFC lending rates is broadly consistent with historical regularities captured by this simple VECM that does not include other potential elements influencing lending rates.[12] The pass-through to interest rates on loans to HHs for house purchase is also consistent with

[12] During the 2022-23 tightening cycle, conducting a similar conditional forecast exercise, the model underestimates the increase in lending rates, particularly for NFCs, consistently with the view that the increase of banks' risk perception

historical regularities (Figure 11b): despite some interest rate fluctuations in most recent months, the difference between the actual lending rate and the conditional forecast is not significant throughout the whole forecast period, indicating also in this case a pass-through broadly in line with historical averages.

Fig. 11 – Actual lending rates and conditional forecasts based on market rates
(per cent)

a) Loans to NFCs | **b) Loans to HHs for house purchase**

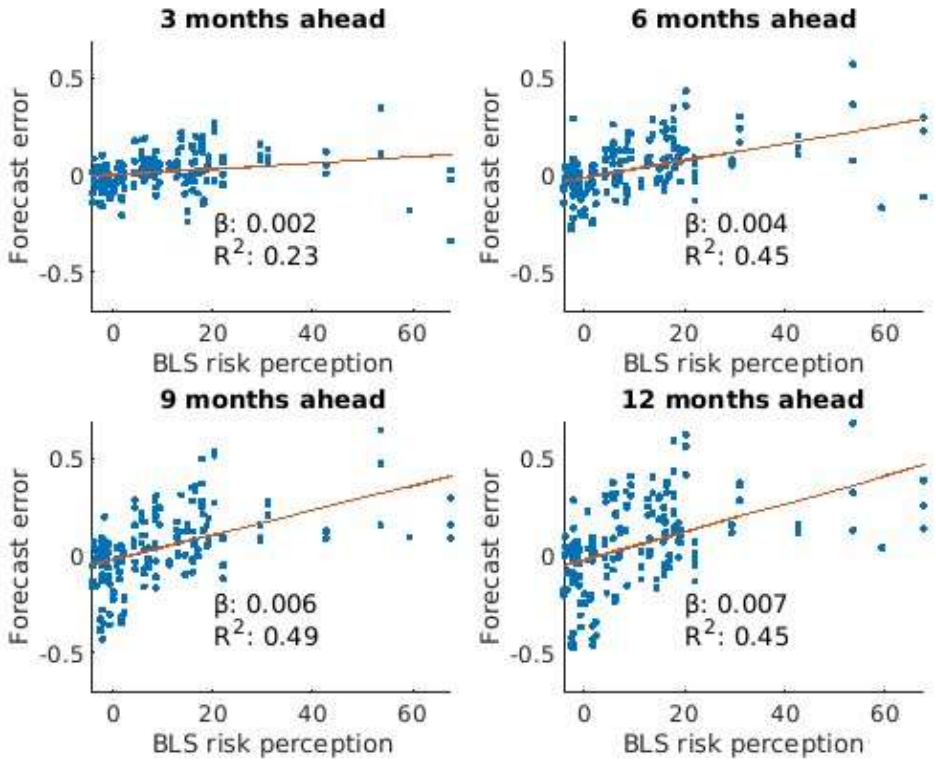


Source: Authors' calculations on ECB and LSEG data.
Notes: VECM model including the composite indicator of borrowing costs (left: NFCs, right: HHs for house purchase) and a market rate (left: 3-month Euribor, right: 10-year IRS). Model estimated on monthly data on the 2003m1-2024m5 sample, with forecasts (dashed red line) obtained conditioning on the actual market rate. Solid black line: actual lending rate.

Finally, we formally assess whether banks' risk perception affected the pass-through of changes in the benchmark rates to lending rates in the easing cycle that started in June 2024. Specifically, we analyse whether the forecast errors of our simple VECM are correlated with banks' risk perception. Figure 12 shows the results of a pseudo-out-of-sample forecasting exercise on NFC lending rates. The VECM is estimated recursively and used to generate conditional forecasts at each step at 3, 6, 9 and 12 month-ahead horizons, conditional on the realized path of the 3m-Euribor. The corresponding forecast errors are then plotted against banks' risk perception[13] at the start of each forecast horizon.

intensified the strength of the transmission (Fig. A5). Evidence from the 2008-09 easing cycle is more mixed, owing also to the short estimation sample.
[13] The model is estimated at a monthly frequency, while banks' risk perception is available at a quarterly frequency.

Fig. 12 – Forecast errors on NFC lending rates and BLS risk perception
(y-axis: percentage points; x-axis: net percentage of banks)



Source: Authors' calculations on ECB and LSEG data.
Notes: VECM model including the composite indicator of borrowing costs for NFCs and the 3-month Euribor. Model estimated recursively on monthly data on the 2003m1-(2008m9/2024m5) sample, with forecasts obtained conditioning on the actual market rate. Y-axis: forecast errors (percentage points); x-axis: banks' risk perception (BLS) at the start of the forecast horizon.

Our findings indicate that forecast errors over a 3-month horizon are small and exhibit only a weak correlation with banks' risk perception.[14] However, at longer horizons, a stronger correlation emerges, suggesting that the simple VECM generally provides accurate forecasts in periods of limited changes in banks' risk perception, while it may underestimate lending rates during periods of stress. At present, given the relatively muted evolution of banks' risk perception and credit risk, lending rate dynamics are indeed captured quite precisely by the simple VECM.

[14] The regression coefficient attains its maximum on the 12-month horizon, while the R^2 is maximised at the 9-month horizon. This evidence is consistent with the presence of lags in the transmission of changes in banks' credit standards and risk perception to lending rates and volumes (see for instance Huennekes and Köhler-Ulbrich, 2022; Bottero and Conti, 2023; Auer and Conti, 2024). Results are qualitatively equivalent when replacing banks' risk perception by the self-reported effect of the cost of funds and balance sheet constraints on their credit standards.

5. Concluding remarks

In this paper, we assess the intensity of the pass-through to bank funding costs and lending rates in the euro area during the monetary policy easing cycle that started in June 2024. Our results indicate that, up to May 2025, the transmission of policy rate cuts to bank funding costs was slightly weaker than during the 2008-09 ECB's easing cycle, due to the less intense pass-through to overnight deposit rates and the larger share of this funding source in banks' liabilities. Conversely, the pass-through to NFC lending rates was slightly stronger than in 2008-09, owing in part to the relatively muted contribution of risk perception to changes in banks' credit standards in the easing phase that started in June 2024. From a broader perspective, our analysis based on a simple VECM shows that the strength of the pass-through to lending rates of policy rate cuts since June 2024 is broadly in line with historical regularities. Our analysis highlights the potential importance of banks' risk perception in affecting the transmission both in tightening and easing cycles, acting as an amplifier or a dampener of the pass-through of monetary policy decisions. However, our estimates suggest that the relatively muted dynamics of banks' risk perception in the first year since the start of the easing cycle did not impair the transmission of the 2024-25 monetary policy easing.

References

Andries, N. and Billon, S. (2016) "Retail bank interest rate pass-through in the euro area: An empirical survey", Economic Systems, 40(1), 170-194.

Auer, S. and A.M. Conti (2024) "Bank Lending in an Unprecedented Monetary Tightening Cycle: Evidence from the Euro Area", Banca d'Italia, Occasional Papers No. 856.

Bernhofer, D. and van Treeck, T. (2013) "New evidence of heterogeneous bank interest rate pass-through in the euro area", Economic Modelling, 35, 418-429.

Beyer, R. C., Chen, M. R., Misch, F., Li, C., Ozturk, E. O. and Ratnovski, M. L. (2024) "Monetary policy pass-through to interest rates: Stylized facts from 30 European countries", IMF Working Papers 2024/009, International Monetary Fund.

Bottero, M. and A.M. Conti (2023) "In the thick of it: an interim assessment of monetary policy transmission to credit conditions", Banca d'Italia, Occasional Papers No. 810.

Conti A., Neri S. and A. Notarpietro (2024) "Credit strikes back: the macroeconomic impact of the 2022-23 ECB monetary tightening and the role of lending rates", Banca d'Italia, Occasional Papers No. 884.

Drechsler, I., Savov, A. and Schnabl, P. (2017). "The deposits channel of monetary policy." The Quarterly Journal of Economics, 132(4), 1819-1876.

Gambacorta, L., Illes, A. and Lombardi, M. J. (2015) "Has the transmission of policy rates to lending rates changed in the wake of the global financial crisis?", International Finance, 18(3), 263-280.

Gregor, J., Melecký, A. and Melecký, M. (2021) "Interest rate pass-through: A meta-analysis of the literature.", Journal of Economic Surveys, 35(1), 141-191.

Herbst, T., Lang, J. H. and Rusnák, M. (2025) "The Impact of Monetary Policy and Macroprudential Policy on Corporate Lending Rates in the Euro Area", ECB Working Papers No. 3057

Holton, S. and d'Acri, C. R. (2018) "Interest rate pass-through since the euro area crisis", Journal of Banking and Finance, 96, 277-291

Huennekes, F. and P. Köhler-Ulbrich (2022) "What information does the euro area bank lending survey provide on future loan developments?", in ECB Economic Bulletin 8/2022.

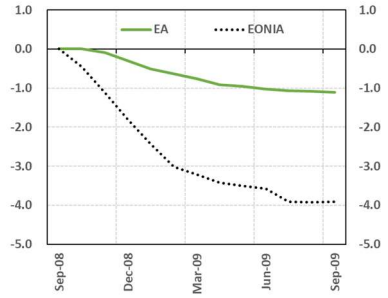
Messer, T. and Niepmann, F. (2023) "What determines passthrough of policy rates to deposit rates in the euro area?", FED Notes¸ Board of Governors of the Federal Reserve System, July 28.

Sørensen, C. K. and Werner, T. (2006) "Bank interest rate pass-through in the euro area: a cross country comparison", (No. 580). ECB working paper.

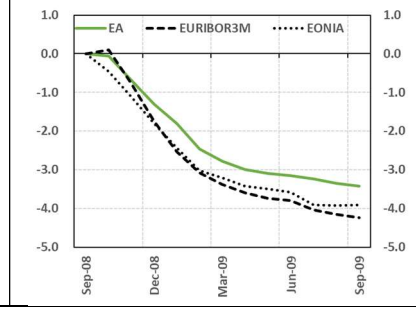
Annex

Fig. A1 – Pass-through of rate cuts to components of banks' cost of funding
(cumulated changes since September 2008; percentage points)

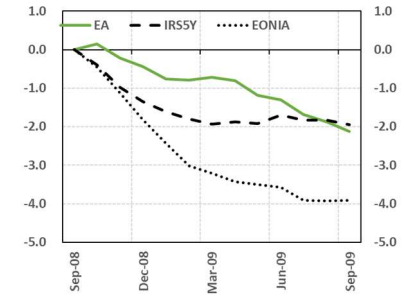
a) overnight deposits



b) deposits w/ agreed maturity



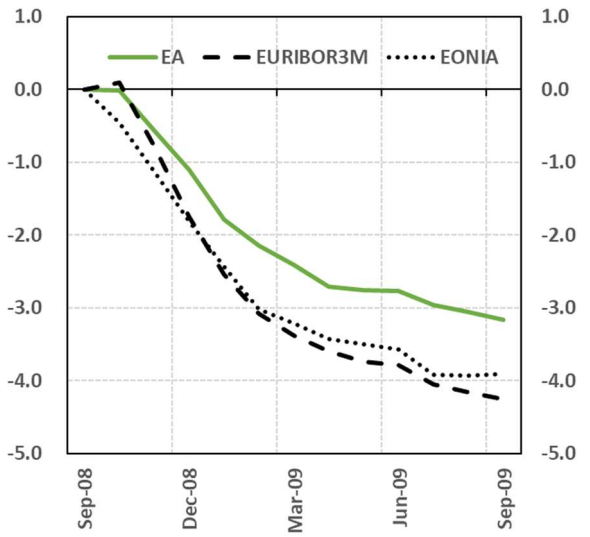
c) debt securities



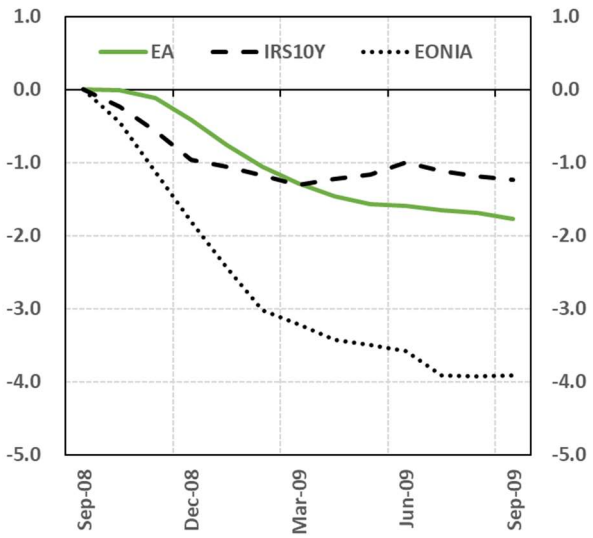
Source: Authors' calculations on ECB, LSEG and ICE Bank of America Merrill Lynch data.

Fig. A2 – Pass-through of rate cuts to lending rates
(cumulated changes since September 2008; percentage points)

a) Loans to NFCs

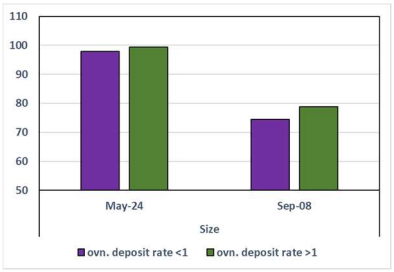
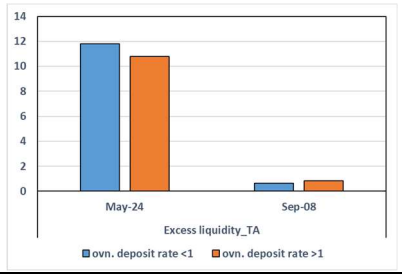
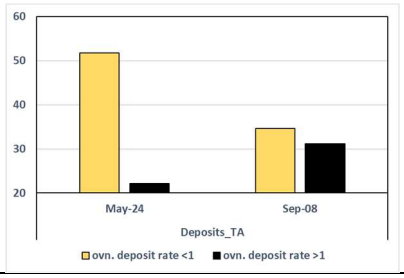


b) Loans to HHs for house purchase



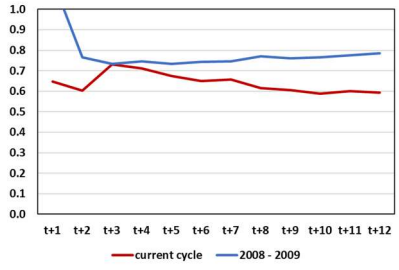
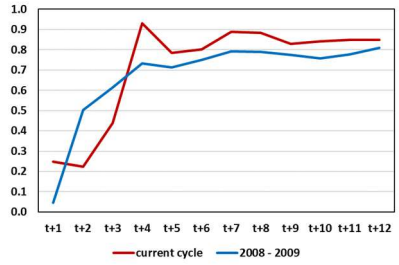
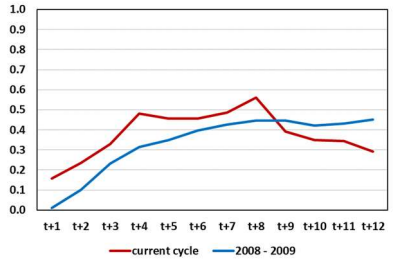
Source: Authors' calculations on ECB and LSEG data.

Fig. A3 – Average balance sheet characteristics of banks by level of deposit rate at the onset of the easing cycle

a) Total assets *(€ millions)*	b) Excess liquidity to total assets *(percentage points)*	c) Deposits to total assets *(percentage points)*
		

Source: Authors' calculations on ECB data.

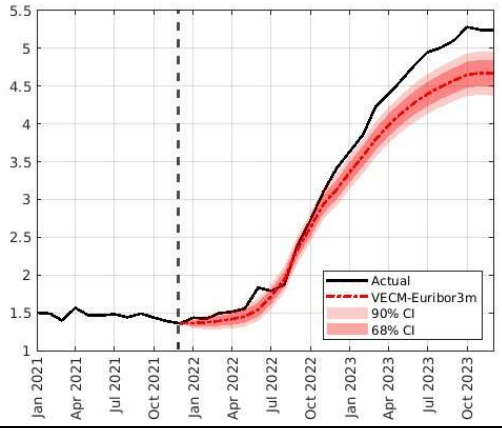
Fig. A4 – Lending rates and cost of funding betas
(percentage points)

a) Marginal cost of funding	b) Loans to NFCs	c) Loans to HHs for house purchase
		

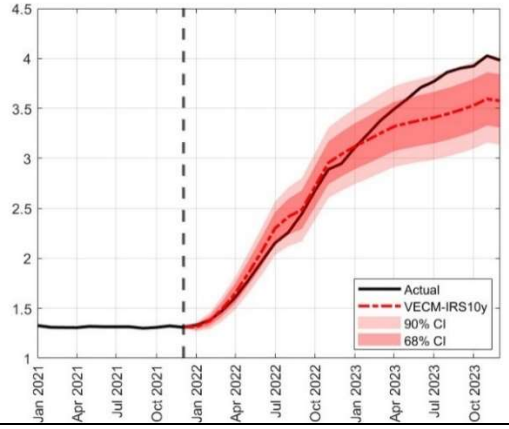
Source: Authors' calculations on ECB and LSEG data.
Notes: Betas obtained as the ratio of the change in the rate on lending rates and the change in the policy rate, over the specified time span.

Fig. A5 – Actual lending rates and conditional forecasts during the 2022-2023 tightening cycle
(percentage points)

c) Lending rates to NFCs



d) Lending rates to HHs for house purchase



Source: Authors' calculations on ECB and LSEG data.
Notes: VECM model including the composite indicator of borrowing costs (left: NFCs, right: HHs for house purchase) and a market rate (left: 3-month Euribor, right: 10-year IRS). Model estimated on monthly data on the 2003m1-2021m12 sample, with forecasts (dashed red line) obtained conditioning on the actual market rate. Solid black line: actual lending rate.