

“Winners” and “losers” in the eurozone’s low interest rate environment

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- In this note, we shed light on the effects of the decline in interest rates since 2008 in the four largest eurozone countries and in the eurozone as a whole.
- We focus on the interest-payments/earnings channel. This is the most direct mechanism through which monetary policy affects the real economy, although this is not the only transmission channel and possibly not even the most important.
- When looking at the whole economy, we find that Germany, Italy, Spain and the eurozone experienced an improvement in their net interest-rate positions, while France recorded a moderate deterioration. However, these results mask large differences across sectors and jurisdictions and can also be explained by heterogeneous trends in balance sheets.
- Our analysis shows that the government sector benefitted the most in Germany, while non-financial corporations (NFCs) and households enjoyed the most relief in Spain, where they were also aided by significant deleveraging. In contrast, households in Italy were penalized. Financial corporations (FCs) were the main “losers”, especially in France, with those in Italy being the only exception.

Ten years of unprecedented monetary easing

After ten years of ECB policy easing (via both conventional and unconventional tools) and five years of negative rates, normalization in monetary accommodation in the eurozone remains a distant prospect. Our forecast is for ECB policy rates to remain at their current levels throughout 2020, and financial markets appear to agree. The first increase in the deposit rate is currently being priced for the end of 2021.

The ECB’s easing has played a key role in supporting the real economy in the euro area, avoiding the materialization of deflationary risks and boosting sentiment in financial markets. However, the longer such ample accommodation remains in place, the smaller its incremental impact will be and the higher the probability will be that unintended consequences might start to materialize.

In financial markets, focus on the side effects of ECB policies has recently intensified, after it became clear that the ECB is studying a tiered system for excess reserves. The Governing Council appears to be split on this issue, with some members opposing tiering mainly because of its technical complexity amid uneven distribution of excess liquidity across countries. If implemented, tiering would help ease the drag on bank profitability from the 40bp charge currently applied to funds parked in the ECB’s deposit facility and current account.

In the political arena, the debate on ECB policy has mainly been focused on its redistribution effects, both intended and unintended. Especially in the core countries of the euro area, the prevailing view seems to be that households and financial institutions have shouldered most of the burden of the steep decline in interest rates while the benefits of expansionary monetary policy have mainly been reaped by peripheral countries. However, the reality is more complex.

In this note, we shed light on the effects of the decline in interest rates (in a broad sense, i.e. both policy rates and the term structure) on governments, non-financial firms (NFCs), households and financial firms (FCs) in the four largest eurozone countries and in the eurozone as a whole.

Importantly, we focus on a specific aspect of the interest-rate pass-through, the interest-payments/earnings channel. This is the most direct mechanism through which monetary policy affects the real economy, and it seems to be the most discussed among observers.

However, this is not the only transmission channel by which interest rates effects are passed down, and possibly not even the most important. A more comprehensive analysis of the “winners” and “losers” of the decline in interest rates over the last decade entails a high level of technical complexity. For example, it requires assessing to what extent lower borrowing costs and intertemporal substitution of consumption were able to support firms’ profits and new hiring, improve the quality of banks’ assets and credit availability, reduce the cost of capital, boost asset prices (especially for real estate) and wealth, and increase tax revenues. As these and other spillover effects feed into each other, the probability that expansionary monetary policy will end up benefiting not only economic agents that are net borrowers but all sectors of the economy rises significantly.

Moreover, the complexity of the broader transmission of monetary policy can be well understood if one considers a counterfactual scenario in which the ECB did not implement bold unconventional tools such as the Outright Monetary Transactions (OMT) program. In such a scenario, it is possible that stress in the government-bond markets of vulnerable eurozone countries would have escalated to levels that could have forced some form of restructuring of sovereign debt in one or more of these countries. Therefore, in this context, it is clear that all sectors of the economy in Italy and Spain would have to be regarded as the main beneficiaries of the ECB’s monetary policy in a broader sense, regardless of the development of their net interest payments and earnings.

The structure of our analysis

Our analysis is based on sector accounts, which provide information about the economic activities (both non-financial activities and financial transactions) of the resident sectors and about the interactions between these sectors and the rest of the world (see Box 1). The sector accounts also contain detailed information about financial balance sheets, which our analysis draws upon extensively.

Box 1: European sector accounts

In the European sector accounts, the resident sectors are the government, households, non-financial corporations and financial corporations. Their aggregation is labelled as “total economy”. This is a short description of the economic agents comprised in each resident sector.

- **Government:** central, state (regional) and local governments and social-security funds belonging to the government. This does not include public enterprises.
- **Households:** households, household firms and non-profit institutions serving households.
- **Non-financial corporations:** all private and public firms that produce goods or provide non-financial services to the market.
- **Financial corporations:** all private and public entities engaged in financial intermediation. In the accounts, this sector is further divided into monetary financial institutions (broadly equivalent to banks, including the central bank), other financial institutions (mainly investment funds), and insurance corporations and pension funds.

More specifically, we investigate the development of interest payments and earnings over the last decade, with 2008 serving as a point of reference for our comparisons, given that a peak in the ECB’s last tightening cycle was recorded in that year. Two things should be considered in this regard.

First, monetary policy is not the only factor that drives trends in interest payments and earnings. More specifically, these trends since 2008 were mainly determined both by changes in interest rates and changes in interest-bearing assets and liabilities (namely deposits, loans and bonds¹).

¹According to the ESA 2010 manual, the following financial instruments generate interest: deposits, debt securities, loans and other accounts receivable/payable. However, on the liability side of resident sectors’ balance sheets, only deposits, debt securities and loans are recorded as financial debt. Investors are mainly interested in this definition of debt instead of the definition of total debt (for example, the numerator in the government’s debt-to-GDP ratio refers to financial debt). Therefore, we exclude other accounts receivable and payable from our list of interest-bearing assets and liabilities, and in the remainder of this note, we compute implicit interest rates on interest-bearing assets and liabilities consistently with this approach.

Second, not all of the changes in interest rates relevant to our resident sectors are driven by ECB policy. As governments and firms in the euro area can also finance themselves via non-euro-denominated instruments, and households and firms can invest in assets sensitive to non-euro interest rates, interest payments and earnings for euro area agents should be regarded as being affected both by local and global monetary policies.

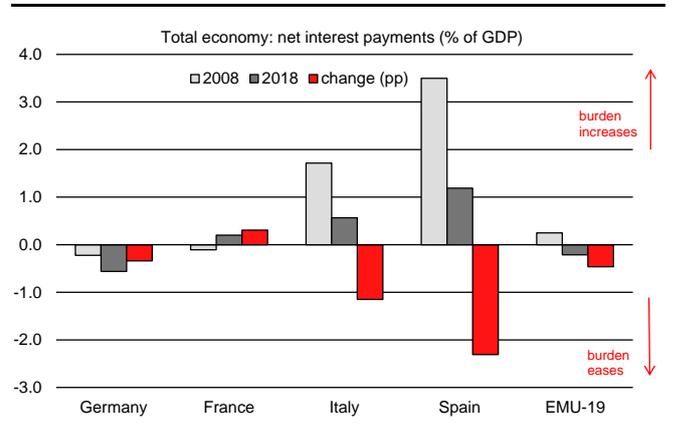
In our analysis, we look at the total economy – defined as the aggregation of the four resident sectors described in Box 1 – and at each sector individually. We label the difference between interest payments and earnings as “net interest payments” if the balance is positive (i.e. if interest expenses exceed receipts), while we refer to it as “net interest earnings” if the balance is negative (i.e. if interest receipts exceed expenses).

In order to improve the comparability of our results, for all resident sectors and the total economy, we express net interest payments and earnings, as well as assets and liabilities, as a percentage of GDP.

Total economy

Chart 1 shows the results for the total economy. It shows the starting points for net interest payments in 2008, the values for 2018 and the cumulative change over the last decade.

CHART 1: FRANCE IS WORSE OFF



Source: ECB, Eurostat, UniCredit Research

These rates are defined as the ratio between interest earnings (payments) and the stock of interest-bearing assets (liabilities, which coincide with financial debt). The loss of information is small for most sectors, given that other accounts receivable and payable represent a small share of total interest-bearing assets and liabilities (no more than 10%), as defined in the ESA 2010 manual. NFCs represent the only sector for which other accounts receivable (which include trade credit) and payable make up an important share of interest-bearing assets and liabilities as per the ESA 2010 manual. This might somewhat distort our computation of the level of the implicit interest rates on interest-bearing assets and on financial debt, although changes in these rates over time are less affected. In the remainder of this note, “debt” refers to financial debt.

The starting levels for both Germany and France were slightly negative; in these countries, interest earnings for the whole economy exceeded interest payments ten years ago. Instead, Italy and (especially) Spain started off with a clearly positive balance, indicating that, in 2008, interest payments significantly exceeded earnings.

In the last ten years, Germany, Italy, Spain and the eurozone recorded improvements in their interest-rate positions. The red bars in negative territory indicate that net interest earnings increased in Germany, while net interest payments decreased in Italy and Spain. In contrast, the situation worsened somewhat in France, where the economy as a whole moved from being in a position where it was a net interest earner to one in which it was a net interest payer. However, the burden was overall moderate.

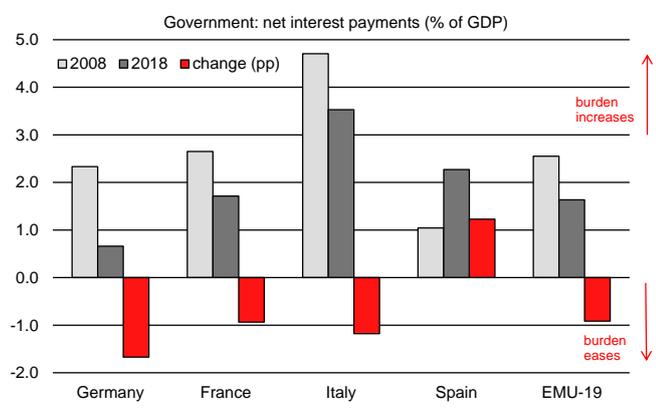
The improvement in Germany was fairly small, while Italy and (especially) Spain benefited the most. In Italy, the interest burden (as a share of GDP) on the whole economy eased by more than 1pp, while in Spain the decline was twice as large. In the eurozone as a whole, the ratio declined by 0.5pp.

In the rest of this note, we adopt a more granular approach and dissect the trends identified for the total economy by looking at development in each resident sector while distinguishing between the impulses stemming from changes in interest rates and those that stem from balance-sheet composition.

Government

Given its asset-liability structure, the government sector is naturally among those sectors that are most positively affected by loose monetary policy. The experience of the last decade was no exception. However, the picture from across our sample is highly mixed.

CHART 2: SPANISH GOVERNMENT FACES A HEAVIER BURDEN

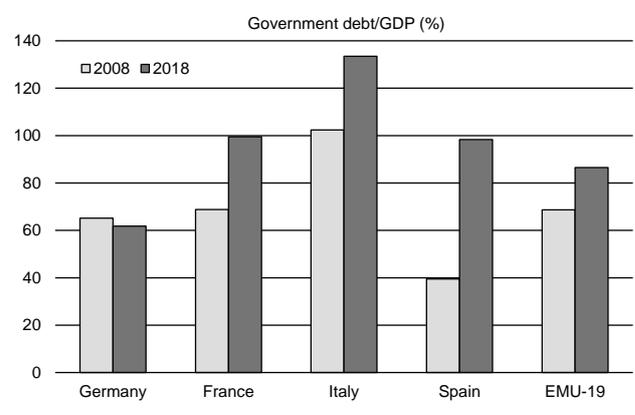


Source: ECB, Eurostat, UniCredit Research

Chart 2 shows that the German government experienced the largest decline in net interest payments; last year, Germany's net interest bill amounted to only 0.6% of its GDP, following a decline in this ratio by more than 1.5pp from 2008. At the opposite end of this spectrum, Spain recorded an increase in the ratio of more than 1pp.

These changes are influenced by a number of factors. The most important of these are trends in interest rates (which, in turn, capture both a pure monetary-policy effect and a credit-risk factor specific to each jurisdiction) and the evolution of indebtedness. These factors are displayed in Charts 3 and 4.

CHART 3: GERMANY'S PUBLIC INDEBTEDNESS DECLINES



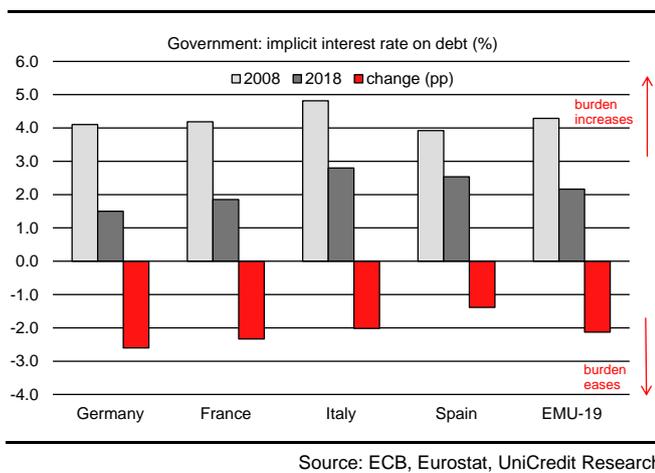
Source: ECB, Eurostat, UniCredit Research

Chart 3 shows very different trends of public debt since 2008 across the main countries in the euro area. Germany is the only jurisdiction in our sample where public-sector indebtedness declined (slightly) over the last ten years. This deleveraging amplified the beneficial impact of falling interest rates on the government's net interest payments. The other countries recorded significant increases in government indebtedness, which, in relative terms, was most sizeable in Spain, where public debt as a share of GDP more than doubled to almost 100%. For the eurozone as a whole, the ratio rose by more than 15pp.

In Chart 4, we identify the role of lower interest rates in the evolution of governments' net interest payments. For this purpose, we compute the implicit interest rate on public debt. This is defined as the ratio of a sovereign's interest payments to its stock of interest-bearing liabilities². The latter coincides with the common definition of public debt. The chart shows how the implicit interest rate evolved in the last decade.

²Debt securities, loans and deposits (in order of importance).

CHART 4: DECLINE IN IMPLICIT RATE – GERMANY LEADS



Source: ECB, Eurostat, UniCredit Research

Germany’s government benefitted the most from falling interest rates. Here, the impulse stemming from the decline in ECB policy rates was amplified by the safe-haven status of government debt, especially at times of heightened uncertainty. In France, the decline in the implicit rate was slightly more moderate than in Germany, while the declines in Italy and Spain lagged behind, probably mainly in the wake of the stress induced by the sovereign-debt crisis.

Besides trends in interest rates and leverage, at least two other factors can affect the speed of adjustment of the implicit interest rate on the debt. The first is the average maturity of marketable debt. The longer it is, the slower the adjustment of the implicit rate to changing market conditions. The second is the composition of debt. If loans account for a comparatively large share of total debt, repricing could take longer, especially if loans have long maturities³.

In Germany, the average-maturity of debt securities is below that of its main euro-area peers, while the weight of debt securities is comparatively low (at only about 70% of public debt, compared to 80-85% in France, Italy, Spain and the eurozone) and that of loans is high (almost 30% of public debt). Therefore, in Germany, the maturity and composition of public debt probably had the opposite effect on the speed of decline of the implicit interest rate.

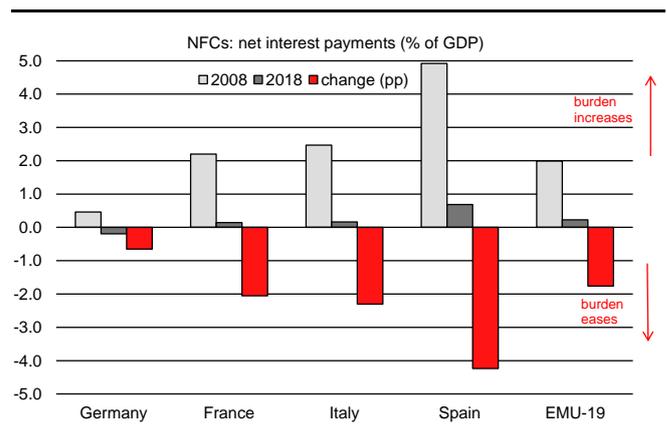
Similarly, it is likely that the more-moderate decline in the implicit rate in Spain compared to Italy might at least in part be explained by the higher share of loans in Spain’s sovereign debt (15-20%, more than double that of Italy) and somewhat higher average maturity of marketable debt in the years following the sovereign-debt crisis.

³ A third factor is the share of floating-rate debt; the higher the share, the faster the repricing. In our sample, when we focus on debt securities, only the Italian sovereign regularly issues paper at variable rates (such paper accounts for about 7% of Italy’s stock of marketable debt).

Non-financial corporations

Chart 5 shows the evolution of net interest payments for NFCs. The data show benefit across the board, as in most countries net interest payments as a percentage of GDP dropped to very close to zero (i.e. the gap between interest payments and interest earnings almost disappeared).

CHART 5: BENEFIT ACROSS THE BOARD



Source: ECB, Eurostat, UniCredit Research

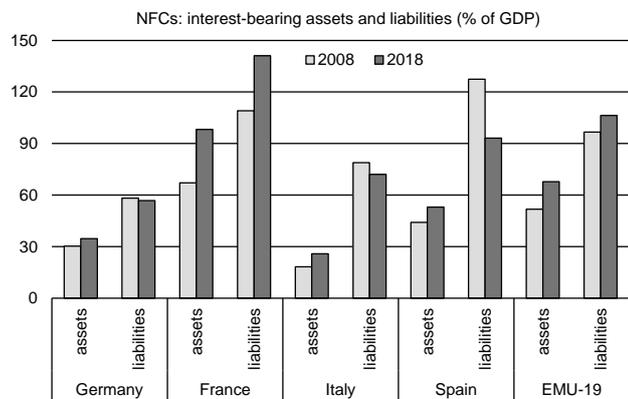
Before the crisis, Spanish firms recorded net interest payments that were more than twice as high as those of their eurozone peers. In the following decade, they enjoyed by far the largest decline in interest payments. At the other end of the spectrum, German companies recorded the smallest improvement in their net interest bill, although this was enough to push the balance between interest paid and earned into negative territory (which implies that German firms became net recipients of interest income).

As explained in the section on government, this heterogeneous pattern reflected both a leverage factor – related to different starting points and changes in firms’ indebtedness over time – and an interest-rate factor. The trend in NFCs’ leverage, which underlies development of net interest payments, is shown in Chart 6, which also shows data on NFCs’ interest-bearing assets.

The large relief on interest payments for Spanish firms to a large extent reflected a combination of a high level of indebtedness amid low holdings of interest-bearing assets in 2008, followed by aggressive deleveraging after the crisis – which was compounded by a moderate increase in interest-sensitive assets.

In Germany, the small relief in interest payments shown in Chart 5 seems consistent with the favorable starting point in 2008, both in terms of low indebtedness and the comparatively small gap between assets and liabilities bearing interest. Both factors remained in place over the last ten years.

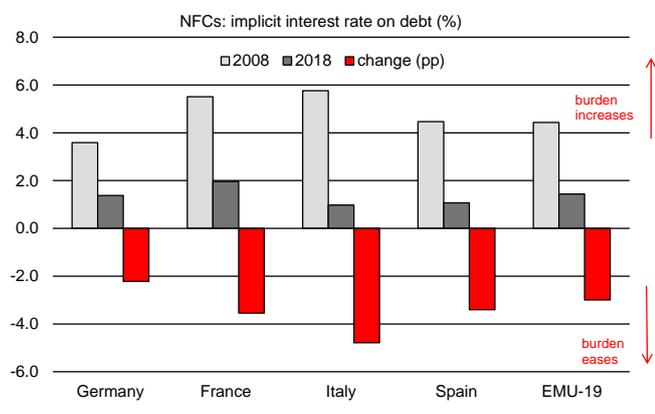
CHART 6: SIGNIFICANT DELEVERAGING IN SPAIN



Source: ECB, Eurostat, UniCredit Research

Chart 7 completes the picture by showing the evolution of the implicit interest rate on the debt of NFCs⁴. Italy experienced the largest decline in its implicit interest rate, while France and Spain recorded drops that were broadly in line with the average for the eurozone. In contrast, this decline was comparatively shallow in Germany, and this provides a further explanation for the small improvement in the net interest bill of NFCs in the eurozone's largest country.

CHART 7: ITALY'S IMPLICIT RATE DECLINED STRONGLY



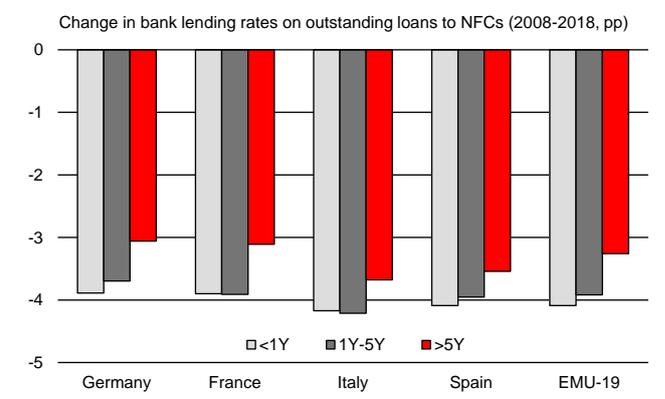
Source: ECB, Eurostat, UniCredit Research

Identifying the drivers of the dynamics reflected in Chart 7 is not straightforward, especially given the different sizes of declines in the implicit rate on NFCs' debt in Italy and Germany.

Available evidence suggests that the banking sector played a role here. This can be seen in Chart 8, which shows changes since 2008 in bank lending rates on outstanding loans to NFCs broken down by loan maturity.

⁴ Similarly to the government sector, the debt of NFCs comprises loans, debt securities and deposits (in order of importance).

CHART 8: ITALY SAW THE LARGEST REPRICING OF LOANS...

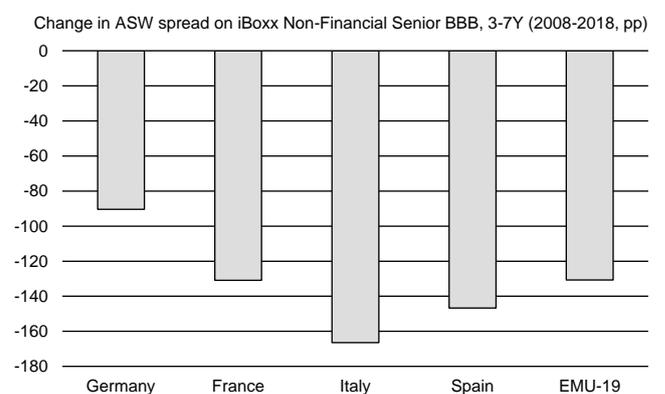


Source: ECB, Eurostat, UniCredit Research

The largest repricing occurred in Italy, across all loan maturities, while rates declined the least in Germany. This picture is also broadly confirmed by data on new bank business; Italy recorded the largest decline in the ECB's composite lending rate for new loans to NFCs of the countries in our sample.

The corporate-bond market likely added to impulses from lending rates. Chart 9 shows changes in corporate-bond spreads across our sample and shows, again, that Italy led the pack in terms of repricing, while Germany lagged.

CHART 9: ...AND IN CORPORATE-BOND SPREADS



Source: iBoxx, UniCredit Research

In general, we note that Italy is the country in our sample where the weight of corporate-bond financing increased the most in the last decade, while Germany recorded the smallest rise. Depending on the average maturity of corporate bonds compared to that of loans and on the share of variable-rate loans⁵, this might have affected the pace of decline in the implicit rate on NFCs' debt in our sample.

⁵ NFCs' bond issuance that carries a variable interest rate represents a very low share of the total.

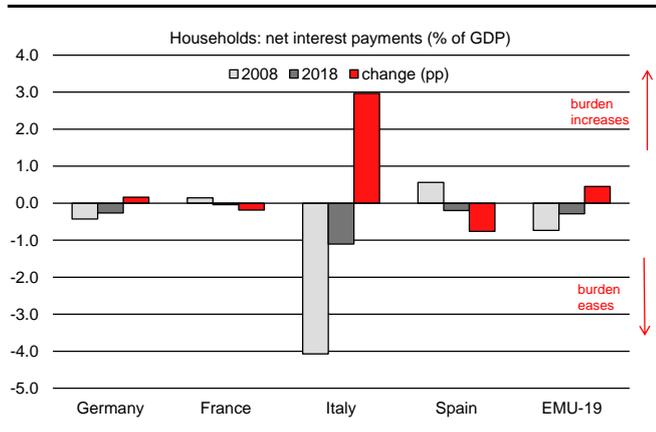
However, all these factors are unlikely to fully explain the trends shown in Chart 7. Other forces were probably at play.

Households

Analysis of the household sector is more complex than it is for the government and NFC sectors. This is mainly because, in most eurozone countries, households' interest-bearing assets exceed liabilities, and the asset side of households' balance sheets is often characterized by large recourse to intermediated forms of investment. Moreover, data limitation does not allow a fully-comprehensive picture to be drawn. Therefore, our findings should be taken with a pinch of salt.

Chart 10 shows the evolution of net interest payments for the household sector.

CHART 10: ITALIAN HOUSEHOLDS STAND OUT



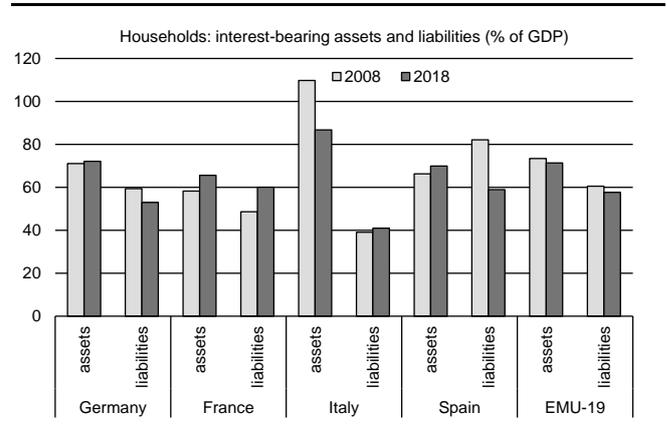
Source: ECB, Eurostat, UniCredit Research

Italy stands out, both because of its starting point (with net interest earnings worth a whopping 4% of GDP in 2008) and due to the large erosion of such earnings over the last decade – down to only about 1% of GDP in 2018. In Germany and France, the situation of households did not change much, while in Spain households benefitted more meaningfully, shifting from being net interest payers to net earners, although by a thin margin. For the eurozone as a whole, the decline in interest rates brought about a reduction of households' net interest earnings.

Chart 11 shows the evolution of assets and liabilities bearing interest held by households. Recall that these categories include deposits, loans (also granted) and bonds.

Three things are worth highlighting, as they help shed light on the development of net interest payments/earnings.

CHART 11: HIGH ASSETS AND LOW LIABILITIES IN ITALY



Source: ECB, Eurostat, UniCredit Research

First, in 2008, sizeable interest earnings for Italian households mainly originated from the highest level of interest-bearing assets and the lowest level of interest-bearing liabilities in our sample.

Second, the big reduction in interest earnings for Italian households in the last ten years came along with a significant reduction in the proportion of interest-sensitive assets being held. In 2018, interest-bearing assets of Italian households amounted to 87% of the country's GDP, down strongly from 110% in 2008 but still well above levels recorded in Germany, France, Spain and the eurozone as a whole. At the same time, the amount of interest-bearing liabilities stabilized at around 40% of GDP, which remains the lowest level in our sample. This suggests that erosion of Italian households' interest earnings reflected not only the decline in interest rates but also the consequent changes in the composition of households' portfolios towards non-interest-bearing assets (typically more risky), with the latter factor amplifying the effect of the former.

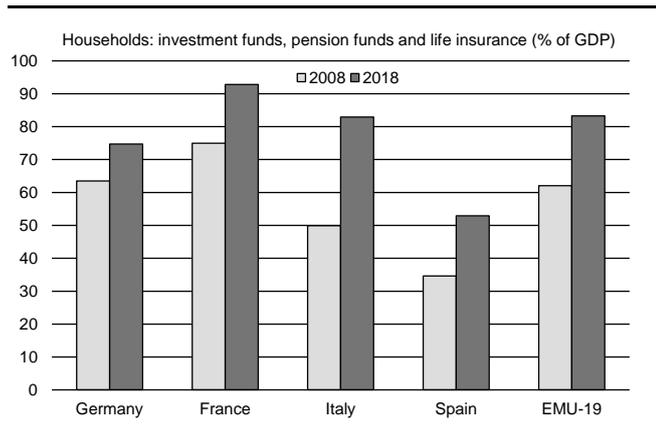
Third, in Spain, which showed the second-largest change in net interest payments/earnings since 2008 in our sample, the improvement was also driven by a material decline in liabilities. This mainly reflected households' deleveraging in the aftermath of the bursting of the housing bubble.

Some caution is warranted when interpreting these results because interest payments and earnings, as reported in the sector accounts, refer to deposits, bonds and loans held directly by the considered resident sector. This does not pose any measurable issue on the liability side of households' balance sheets, where loans account for the vast majority of total liabilities.

However, things are more complex on the asset side, given that households invest a non-negligible share of their financial wealth in investment funds, pension funds and life-insurance schemes. In turn, these funds invest some of their assets in deposits, bonds and loans.

Therefore, in the data in Chart 11, the proportion of households' effective investments in interest-bearing assets has been underestimated. Thus, Chart 10 should be considered as providing incomplete information. The loss of information is greater when households' investments in investment funds, pension funds and life-insurance schemes are comparatively high.

CHART 12: LARGE INTERMEDIATED INVESTMENTS IN FRANCE



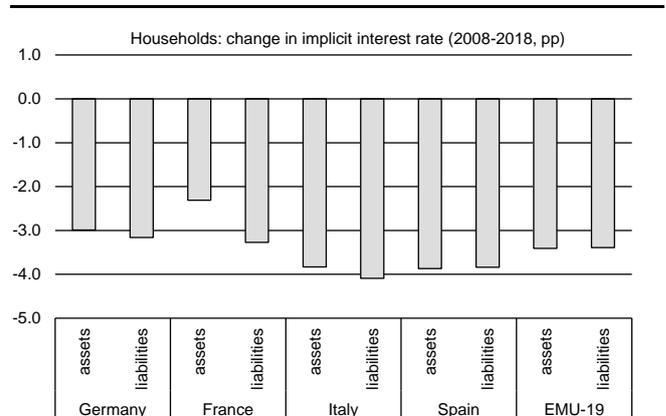
Source: ECB, Eurostat, UniCredit Research

The data in Chart 12 show that this is the case among French households, which have consistently recorded the largest allocation to investment funds, pension funds and life-insurance schemes. This occurs amid below-average investments in (directly held) interest-bearing assets shown in Chart 11. Given French households' comparatively strong preference for intermediated forms of investments, France is the country in our sample for which the likelihood that Chart 10 might understate the effect of falling interest rates on households' interest earnings is highest.

Chart 12 also shows that Italian households played catch-up from 2008 to 2018; they started this period with a comparatively low allocation to intermediated forms of investments and raised such allocation by the end of last year to a level that is in line with the eurozone average. In this regard, German households were broadly in line with the eurozone average in 2008 but fell below it over the course of the ensuing decade. Spanish households were, and remain, significantly below the eurozone average.

To complete the picture, similarly to what we did for the other sectors, we computed the implicit interest rates on households' assets and liabilities that bear interest. Chart 13 shows the results.

CHART 13: FRENCH HOUSEHOLDS BENEFIT FROM MISMATCH



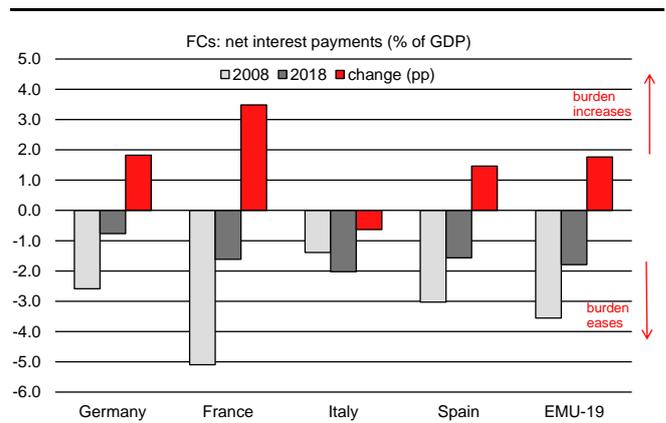
Source: ECB, Eurostat, UniCredit Research

In most of the jurisdictions in our sample, the implicit rates on both assets and liabilities have declined by 3-4pp since 2008, with the decline in the rate on assets broadly matching the decline in the rate on liabilities. France is the only exception, having recorded a comparatively small decline in the implicit interest rate on assets. This has supported the net interest income of French households.

Financial corporations

Due to their business models, FCs are net earners of interest receipts. Recall that the broad category labelled "FCs" comprises monetary and financial institutions (mainly banks, including central banks⁶), other financial institutions (mainly investment funds) and insurance corporations and pension funds. Chart 14 shows the evolution of FCs' net interest earnings over the last decade.

CHART 14: ITALY BUCKS THE NEGATIVE TREND



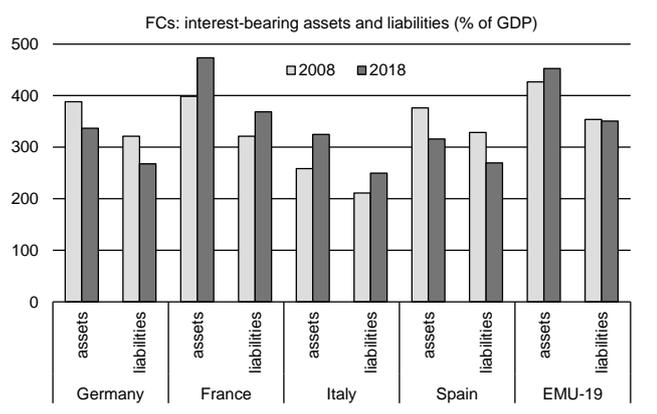
Source: ECB, Eurostat, UniCredit Research

⁶ Sector accounts do not allow for the separation of central banks from the rest of monetary and financial institutions (MFIs). However, this is unlikely to distort our main findings, given the limited weight of central banks in this category. For example, total assets held by the ECB and the Eurosystem amount to EUR 4.7tn and EUR 7.7tn respectively. This compares with the EUR 37tn in financial assets held by eurozone MFIs and the EUR 79tn held by FCs.

Unsurprisingly, the prevailing trend of the last ten years consists of an erosion of net interest receipts, as shown by the red bars, which are mainly in positive territory. However, this picture is not homogenous. In Germany and Spain, the deterioration in the net interest earnings-to-GDP ratio was about 1.5-2.0pp, which is broadly in line with the outcome for the eurozone as a whole. In France, the worsening was twice as severe as that for the eurozone (aggregate) – although this is from a very favorable starting point, given that, in 2008, French FCs enjoyed net interest earnings worth 5% of GDP. Italy stands out as an exception because it was the only country in our sample to record an improvement in net interest earnings since 2008; over the last decade, Italian FCs swung from recording the lowest net interest earnings (as a percentage of GDP) to the highest in our sample.

Chart 15 shows the development of FCs' interest-bearing assets and liabilities that underlie the trends in net interest earnings.

CHART 15: INTEREST-SENSITIVE ASSETS EXCEED LIABILITIES



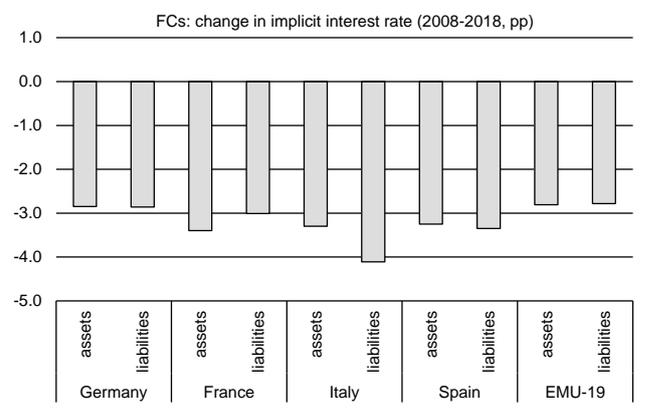
Source: ECB, Eurostat, UniCredit Research

Two points here are worth highlighting. First, across all jurisdictions, interest-sensitive assets always exceeds liabilities. Together with maturity transformation (i.e. borrowing at short-term tenors and lending at longer maturities), this balance-sheet structure is at the root of the business model of MFIs, which account for the majority of assets and liabilities of FCs. If interest-bearing assets and liabilities remain constant and interest rates on both decline by the same amount, net interest earnings shrink.

Second, the change in interest-sensitive assets and liabilities over time is not enough to explain the comparative dynamics in net interest earnings shown in Chart 14. For example, over the last decade, French FCs increased their interest-bearing assets by more than their liabilities, yet, they suffered the biggest erosion of net interest earnings in our sample. This underscores the importance of looking at price variables, alongside variables that pertain to quantities.

The data in Chart 16 shed light on the evolution of the implicit interest rates on FCs' interest-bearing assets and liabilities since 2008.

CHART 16: TREND IN IMPLICIT RATES SUPPORTED ITALIAN FCs

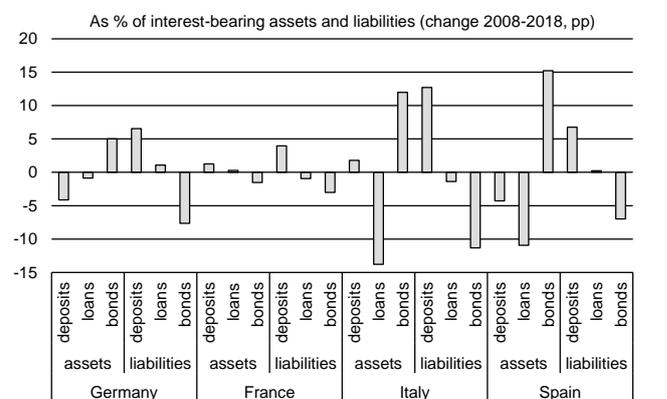


Source: ECB, Eurostat, UniCredit Research

Interestingly, in Germany, Spain and the eurozone as a whole, the decline in the implicit interest rate on assets perfectly matched the decline in the interest rate on liabilities, while France and, especially, Italy recorded mismatches. In more detail, in France, the implicit rate on assets declined more than the rate on liabilities – hence contributing to a decrease in net interest earnings. In Italy, the rate on liabilities declined by a significantly larger degree than the rate on assets, and this contributed to an increase in net interest earnings.

The data in Chart 17 dig deeper into the factors potentially driving these mismatches. They show changes in the share of deposits, loans and bonds on total interest-bearing asset and liabilities of FCs over the last decade. We have omitted data pertaining to the aggregate eurozone to improve the readability of the chart.

CHART 17: CHANGES IN BALANCE-SHEET COMPOSITION



Source: ECB, Eurostat, UniCredit Research

The data show that the composition of assets and liabilities changed comparatively little in France and much more so in Italy. In the case of the latter, on the asset side, a double-digit decline in the weight of loans was accompanied by a similarly large increase in bond holdings. This is mainly attributable to a rotation of Italian MFIs' assets, through which increased regulatory charges and margin compression on lending were countered through an increase in exposure to bond holdings (especially of government paper).

On the liability side, the funding mix changed materially as cheap ECB funding made it possible for Italian banks to significantly reduce bond issuance, while reliance on deposits rose strongly. This allowed Italian banks to achieve a comparatively large decline in the implicit rate on interest-bearing liabilities.

Conclusion

In this note, we shed light on the effects of the decline in interest rates on governments, NFCs, households and FCs in the last decade in the four largest eurozone countries and in the eurozone as a whole. We focused on a specific aspect of interest-rate pass-through: the interest-payments/earnings channel. This is the most direct mechanism through which monetary policy affects the real economy, although this is not the only transmission channel and possibly not even the most important.

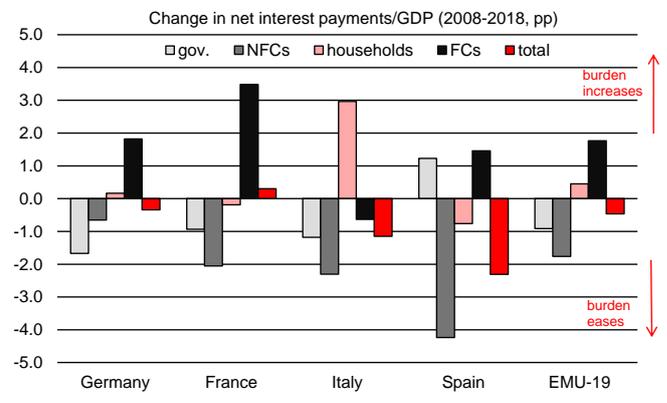
The development of net interest payments and earnings since 2008 has mainly depended on changes in interest rates and the changes in interest-bearing assets and liabilities.

Our results often contradict commonly held wisdom. We found that all the countries in our sample except for France experienced an improvement in their net interest-rate positions. However, this result masks several differences across sectors and jurisdictions, and is also explained by heterogeneous trends in balance sheets.

We showed that the government sector benefitted the most in Germany, where the impulse stemming from the decline in ECB policy rates was amplified by the safe-haven status of government debt. NFCs and households enjoyed the most relief in Spain, where they were also aided by sizeable deleveraging. In contrast, households were penalized in Italy due to their large holdings of interest-bearing assets and low level of indebtedness. FCs were the main "losers", especially in France, with Italy being the only exception. Italian FCs were able to buck the trend, mainly thanks to a combination of increased bond holdings (especially of government paper) and a more-favorable funding mix amid cheap ECB liquidity and higher reliance on deposits.

The final chart summarizes our findings.

CHART 18: SUMMARY



Source: ECB, Eurostat, UniCredit Research

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