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# Banks' Interest Margins After the Interest Rate Turnaround – Windfall Profits and Policy Measures Aimed at Bank Resilience and Consumer Welfare

By Philipp Budde* and Doris Neuberger**

## Summary

The European Central Bank's interest rate hikes since July 2022 have been passed on to customers by banks on credit markets to a much greater extent than on deposit markets. As a result, banks' net interest margins have risen extraordinarily sharply. An analysis of the interest rate pass-through on individual submarkets in Germany shows that interest rates for overdrafts have increased the most and interest rates for overnight deposits the least. The banks' increased interest profits are therefore at the expense of lower-income households in particular. The additional profits made by banks compared to previous periods can be attributed to the high interest rates on their central bank deposits, market power in individual customer segments, a low willingness of customers to switch, and ineffective usury legislation. To prevent unearned windfall profits in advance without jeopardizing the resilience of banks, we propose increasing unremunerated minimum reserve requirements by the central bank, strengthening competition policy in the banking sector, limiting banks' dividend distributions, improving consumers' financial information and education, offering them a regulated savings product, and reforming interest rate ceilings on credit markets. A windfall profits tax should remain a measure of last resort.

*JEL classification*: D14, D18, E4, E5, G21, G28, G35, G51, L1

*Keywords*: central bank, lending rate, deposit rate, interest margin, interest rate pass-through, dividend restrictions, consumer credit, usury, interest rate cap, consumer protection, excess profits tax

## Zusammenfassung

Die Zinserhöhungen der Europäischen Zentralbank seit Juli 2022 wurden von Banken auf Kreditmärkten wesentlich stärker an Kund:innen weitergegeben als auf Einlagenmärkten. Dadurch sind die Nettozinsmargen der Banken außerordentlich stark gestiegen. Eine Betrachtung der Zinsüberwälzung deutscher Banken auf einzelnen Teilmärkten zeigt, dass die Zinsen für Überziehungskredite am stärksten und die Zinsen für täglich

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Duncker & Humblot · Berlin

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fällige Einlagen am wenigsten stark erhöht wurden. Die gestiegenen Zinsgewinne der Banken gehen damit auf Kosten vor allem einkommensschwächerer Haushalte. Die im Vergleich zu früheren Perioden erzielten Zusatzgewinne der Banken lassen sich auf die hohe Verzinsung ihrer Zentralbankeinlagen, Marktmacht in einzelnen Kundensegmenten, eine geringe Wechselbereitschaft von Kund:innen und eine ineffektive Wuchergesetzgebung zurückführen. Um leistungslose Zusatzgewinne bereits im Vorfeld zu verhindern ohne die Resilienz der Banken zu gefährden, schlagen wir vor, die unverzinslichen Mindestreserveanforderungen der Zentralbank zu erhöhen, die Wettbewerbspolitik im Bankensektor zu stärken, die Dividendenausschüttungen der Banken zu begrenzen, die finanzielle Aufklärung und Bildung der Verbraucher:innen zu verbessern, ihnen ein reguliertes Sparprodukt anzubieten und die Zinsobergrenzen auf den Kreditmärkten zu reformieren. Eine Gewinnsteuer sollte die Ultima-Ratio-Maßnahme bleiben.

## 1. Introduction

To curb inflation in the eurozone, the European Central Bank (ECB) has gradually increased its main refinancing rate from zero to 4.5 % between July 2022 and September 2023. Banks have subsequently passed these interest rate increases on to customers to varying degrees. Interest rate hikes are typically passed on to lending rates to a greater extent than to deposit rates, which increases banks' net interest margins (Busch and Memmel 2021; Deutsche Bundesbank 2022a, 2023a). Consequently, European banks have earned EUR 100 billion in the last two years (Morris 2023). In 2023, three-quarters of the 20 largest banks in continental Europe, which had already reported their results, recorded the highest profits in their history (Arons 2024). Net interest income at German banks exhibited an exceptionally sharp increase of 11.4 % in 2022, representing the primary driver of the significant expansion in operating income. Although the new business margin had already risen significantly at the beginning of 2022, the margin in the existing business did not begin to rise until mid-2022 due to the long fixed-interest periods, particularly for housing loans (Deutsche Bundesbank 2023a).

According to the European Systemic Risk Board (2024), "the robust profitability" in 2023 has increased the resilience of the EU banking sector to future shocks. However, an assessment of banks' resilience seems premature in view of the short time available after the historically unprecedented interest rate hikes and the increased geopolitical risks. There is even a threat of a "black swan effect", i. e. an event that no one can predict (Schäfer 2024). This makes it all the more important that the increased profits are used to strengthen resilience and not to be distributed to the banks' shareholders.

Theoretical literature shows that an overly generous dividend policy by banks is not compatible with maximizing social welfare, leading to increased risk-taking and a transfer of wealth from depositors and taxpayers to bank shareholders. This risk shifting would lead to significant negative externalities in times of eco-



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nomic downturn (Onali 2014), which may not even be in the collective interests of the bank's shareholders (Shin 2018).

To contain negative welfare effects of windfall profits, new taxes on banks have been implemented in almost half of the EU countries (Maneely and Ratnovski 2024; Fratzscher 2023; Picek 2023; Martín 2024). Taxes on windfall profits are based on the idea that exogenous shocks lead to temporary "undeserved" increases in profits, while taxes on excess profits are aimed at profits that exceed "normal" profits by an amount and over an extended period of time that is not justified by competition in the markets (Trautvetter 2024b). However, the question arises as to which policy measures could have been taken preventively or would be necessary in the future to prevent unearned profits or protect consumers from the resulting losses.

The contribution of this paper is to show the evolution of interest rates and interest rate margins in recent years and decades and, on this basis, to review policy measures aimed at bank resilience and consumer welfare. This is based on the assumption that economic policy aims to increase financial stability and consumer welfare. These objectives are, of course, founded on normative considerations that are not necessarily shared by everyone and will not be discussed here. Chapter 2 shows the extent to which German banks have passed on the ECB's interest rate hikes to individual submarkets in the lending and deposit business. The focus here is on the private customer business, which is less competitive than the corporate customer business. This allows conclusions to be drawn about possible causes and distribution effects of different degrees of interest rate pass-throughs. Chapter 3 examines the development of banks' net interest margins in Germany compared to other European countries before and after the interest rate turnaround. Chapter 4 discusses measures to constrain banks' potentially excessive interest profits at the expense of bank resilience and consumer welfare, such as the ECB's interest rate policy, limits on dividend payouts, consumer protection instruments on deposit and loan markets, and special taxes. Chapter 5 concludes.

## 2. Pass-Through of the ECB Interest Rate Increases to Bank Interest Rates

Interest rate hikes by the central bank initially increase money market rates and thus the refinancing costs of credit institutions. The latter generally base their interest rates on a specific money market rate, such as the EURIBOR (Deutsche Bundesbank 2019). The calculation of interest rates for bank deposits and loans is typically based on the application of a discount or premium, respectively, to a selected refinancing rate. In this manner, banks endeavor to offset their average operational expenses, which encompass capital costs, expected


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loan defaults, refinancing costs, and operational costs, among other factors (Deutsche Bundesbank 2019).

### *2.1 Deposit Markets*

Figure 1 shows the development of interest rates on deposits from private households in German banks' new business and the three-month EURIBOR. While deposit interest rates are usually below the EURIBOR, this discount turns into a premium when money market rates fall or are negative. This is due to the fact that the negative interest rates were not or only slightly passed on to private household deposits.

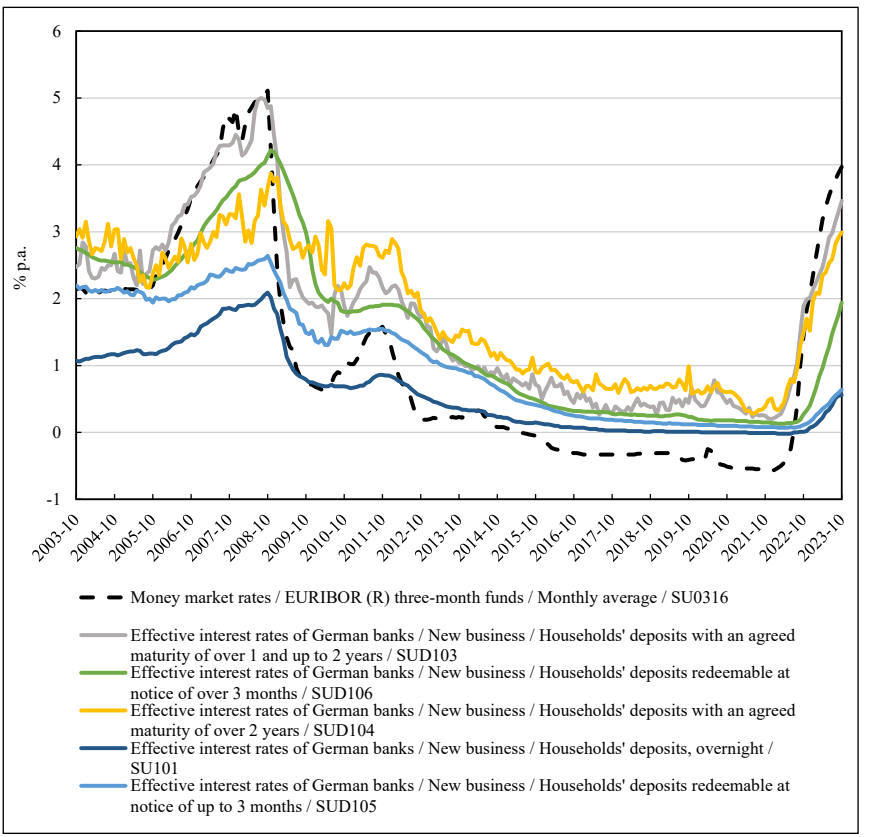


*Figure 1: Money Market Rate (Three-Month EURIBOR) and Interest Rates on Private Household Deposits in Germany*

*Source:* Deutsche Bundesbank, own illustration.


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The most pronounced response to the ECB's key interest rate hikes from July 2022 to October 2023 (+4.5 percentage points) can be observed in interest rates on term deposits, i. e. deposits with a maturity of up to two years. They had already risen in spring 2022 and increased further from July 2022 by 3.23 percentage points (maturity up to one year) and 2.75 percentage points (maturity over one to two years). The key interest rate increases were largely passed on here (up to 72 %) (see Table 1). In contrast, interest rates for overnight deposits, which accounted for approximately two-thirds of the total annual average deposit volume in 2022 (Deutsche Bundesbank 2023a), only rose from September 2022 and then only slightly. The 4.5 percentage point increase in the key interest rate only resulted in an interest rate increase of 0.58 percentage points by October 2023, i. e. only 13 % of the interest rate increase was passed on to depositors. The rise in interest rates for short-term savings deposits redeemable at notice of up to 3 months was similarly low.

*Table 1*

**Interest Rate Development from June 2022 to October 2023: Deposits of Private Households in Germany**

| | 2022/06 (in percent) | 2023/10 (in percent) | Change from 2022/06 to 2023/10 (in percentage points) | Degree of interest pass-through** |
|---|---|---|---|---|
| ECB main refinancing rate | 0 | 4.50 | +4.50 | |
| ECB interest rate for the deposit facility | –0.50 | 4.00 | +4.00 | |
| overnight* | –0.02 | 0.56 | +0.58 | 13 % |
| with an agreed maturity of up to 1 year * | 0.17 | 3.40 | +3.23 | 72 % |
| with an agreed maturity of over 1 & up to 2 years* | 0.71 | 3.46 | +2.75 | 61 % |
| with an agreed maturity of over 2 years* | 0.80 | 2.99 | +2.19 | 49 % |
| redeemable at notice of up to 3 months* | 0.08 | 0.64 | +0.56 | 12 % |
| redeemable at notice of over 3 months* | 0.14 | 1.94 | +1.80 | 40 % |

* Effective interest rates of German banks/New business/Households' deposits

** Change in the deposit rate/change in the ECB main refinancing rate (in percent)

*Source:* Deutsche Bundesbank, authors' calculations.



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The savings achieved by banks as a result of the slower rate of pass-through of interest rate increases than in previous periods were approximately EUR 13.5 billion (approximately 15 % of their total net interest income) in 2022 and approximately EUR 29 billion in 2023 (Deutsche Bundesbank 2023b). The averages for the German banking sector conceal major differences in the interest rate behavior of individual institutions. Direct banks have increased their deposit rates significantly more than the primary banks, which can be attributed to the higher interest rate sensitivity of their customers. Customers of primary institutions with a focus on branch business are less willing to switch compared to customers of other bank groups (Deutsche Bundesbank 2023b). At the end of 2023, the average overnight interest rate was 0.59 % for credit cooperatives, 0.6 % for savings banks, and 1.71 % for banks operating nationwide. Savings banks paid an average of 2.3 % on twelve-month fixed-term deposits, cooperative banks 2.4 %, and nationally active banks 3.3 % interest (Atzler 2024).

### *2.2 Credit Markets*

Figure 2 shows the development of interest rates for loans to private households on individual submarkets and the three-month EURIBOR. The interest rates for genuine credit card loans (only collected since June 2010) are at the highest end, while the interest rates for home loans are at the lowest end. The high interest rates on credit card and overdraft loans cannot be explained by high costs or default risks (Deutscher Bundestag 2020; Peters 2022; Finanzwende e.V. 2023b; Reifner 2017). The interest rates on overdraft loans are not based on the real costs of account management, as they are cross-subsidized by overdraft interest. This is to the detriment of vulnerable groups, such as the unemployed, single parents, or the self-employed, who are the most frequent users of overdraft facilities (Deutscher Bundestag 2020). In a study of overdraft rates at 1,240 banks in November 2020, the average was almost 10 %, with a range of 0 to 13.75 % (Finanzwende e.V. 2023b), despite the negative money market rate (Euribor 2020-11: –0.5 %). The sharp rise in interest rates for consumer loans with a floating rate or an initial rate fixation up to one year (2012-03: 3.3 %, 2022-06: 8.5 %) during the period of falling money market rates (EURIBOR 2012-03: 0.86 %, 2022-06: –0.24 %) is also striking.

Table 2 shows that the ECB's interest rate increase from July 2022 to October 2023 (+4.5 percentage points) was passed on most strongly to the interest rate for revolving loans and overdrafts (+4 percentage points), followed by extended credit card debt (+3.25 percentage points) and long-term consumer loans (+2.78 percentage points). The pass-through was in excess of 50 % in the majority of markets. It was the lowest on the market for consumer loans with a floating rate or an initial rate fixation up to one year, where interest rates had already risen sharply beforehand.


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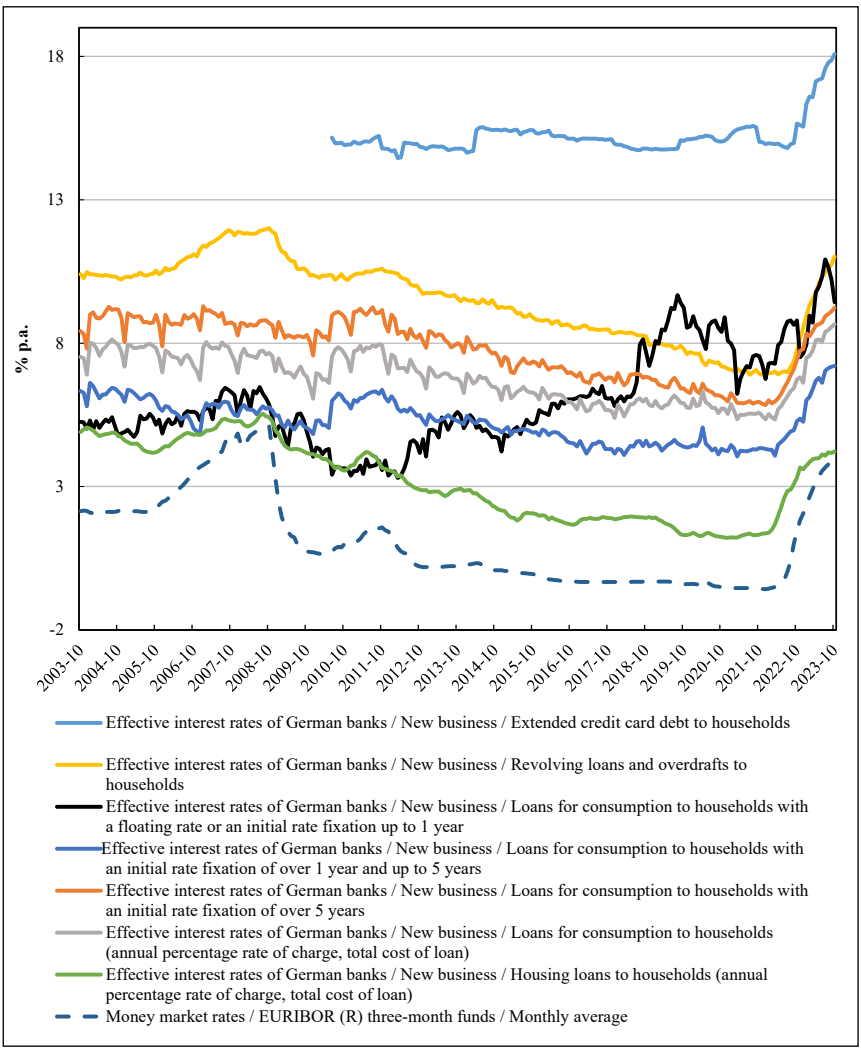


*Figure 2: Money Market Rate (Three-Month EURIBOR) and Interest Rates for Loans to Private Households in Germany*

*Source:* Deutsche Bundesbank, own illustration.


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*Table 2*

**Interest Rate Development from June 2022 to October 2023: Loans to Private Households in Germany**

| | 2022/06 (in percent) | 2023/10 (in percent) | Change from 2022/06 to 2023/10 (in percentage points) | Degree of interest pass-through*** |
|---|---|---|---|---|
| ECB main refinancing rate | 0 | 4.50 | +4.50 | |
| Extended credit card debt to households* | 14.84 | 18.09 | +3.25 | 72 % |
| Revolving loans and overdrafts* | 7.02 | 11.02 | +4.00 | 89 % |
| Loans for consumption to households with a floating rate or an initial rate fixation up to 1 year* | 8.50 | 9.43 | +0.93 | 21 % |
| Loans for consumption to households with an initial rate fixation of over 1 year and up to 5 years* | 4.66 | 7.21 | +2.55 | 57 % |
| Loans for consumption to households with an initial rate fixation of over 5 years* | 6.46 | 9.24 | +2.78 | 62 % |
| Total consumer loans*, ** | 5.99 | 8.66 | +2.67 | 59 % |
| Housing loans*, ** | 2.62 | 4.22 | +1.60 | 36 % |

* Effective interest rates of German banks/New business

** Effective annual interest rates incl. costs

*** Change in the lending rate/change in the ECB main refinancing rate (in percent)

*Source:* Deutsche Bundesbank, authors' calculations.

The sharp rise in interest rates for KfW student loans within the variable-rate consumer loans category is striking. The effective interest rate on these loans has risen from 3.98 % in the period from April to September 2022 to 9.01 % since October 2023 (Studis-online.de 2023), i. e. by more than 5 percentage



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points, exceeding the key interest rate increase, and also exceeding the increase for all other consumer loans (see Table 2). As a consequence, young people have fallen into the interest rate trap with a state development bank (Londene 2023). The interest rate increases result in a reduction in disbursements during the study period and an increase in the interest burden during the repayment phase. Fixed interest rates are only possible during the repayment phase and only in conjunction with a surcharge. According to the Deutsche Bundesbank, the interest rate for student loans is determined by a fixed premium on a reference interest rate (e.g. the 6-month EURIBOR) and an upper limit is agreed upon (Deutsche Bundesbank 2022b). However, this cannot be observed with KfW student loans. The premium on the 6-month EURIBOR has even increased for these loans, while it has fallen for other consumer loans.[1] KfW interest rates were reduced to zero percent for the disbursement phase during the COVID-19 pandemic and were retroactively capped during the 2008 financial crisis, with the state covering the difference (Londene 2023). However, unlike a permanent interest rate cap, a temporary state subsidy of interest rates does not offer sufficient protection.

## 3. Banks' Net Interest Margins

European banks have seen their net interest margins (NIM)[2] increase due to the sharp rise in policy rates and the slow pass-through to deposit rates. However, the European banking sector is heterogeneous, resulting in significant differences between countries and banks.

Figure 3 illustrates that the net interest margin of German banks has fallen since the mid-1990s and reached its lowest level to date in 2022. For the less significant institutions (LSI), the NIM is markedly higher and even slightly higher than the euro area average for LSI (see Figure 4). The significant institutions (SI), on the other hand, have the lowest NIM in the euro area. Lower NIMs can be attributed to a competitive banking system and thus be regarded as beneficial to society (Klein 2020; Saunders and Schumacher 2000). However, the stability of banks may be weakened by low NIMs, limiting retained earnings and thereby reducing the capital base (ibid). In 2022, 65 % of German banks' income was derived from net interest income (Deutsche Bundesbank 2023a). The disaggregated numbers for 2022 reveal that *Landesbanken* rely on net interest income for 65 % of their income, while savings banks and credit cooperatives rely to a great-

[1] From June 2022 to October 2023, the premium of the effective interest rate on the 6-month EURIBOR fell from 8.3 to 5.3 percentage points for consumer loans with a floating rate or an initial rate fixation up to one year, but rose from 3.8 to 4.9 percentage points for KfW student loans (Deutsche Bundesbank 2023c; Studis-online.de 2023, authors' calculations).

[2] The NIM is defined as the net interest income divided by total assets.



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er extent on this source of revenue, with net interest income accounting for 67.8 % and 70.8 % of their respective income streams. The dependence on net interest income is slightly lower for big banks and commercial banks, at 63.2 % and 58.5 %, respectively. The lowest dependency is observed for regional banks and other commercial banks (53.9 %), as well as banks majority-owned by foreign banks (49.6 %) (Deutsche Bundesbank 2024).

In this context, the sustained low-interest rate environment has been a concern (Busch et al. 2022; Dombret et al. 2019; Klein 2020; Simoens and Vennet 2021). At the same time, some of the ECB's other accommodative monetary policy measures, combined with improved lending conditions resulting from low interest rates, have had an offsetting effect on bank profitability (Altavilla et al. 2018; Simoens and Vennet 2021; see Section 4.1).

Figure 3 also illustrates the relatively low impact of the central bank's policy rate on banks' net interest margins. For the United States Drechsler et al. (2021) find that banks can insulate themselves from interest shocks through maturity transformation.

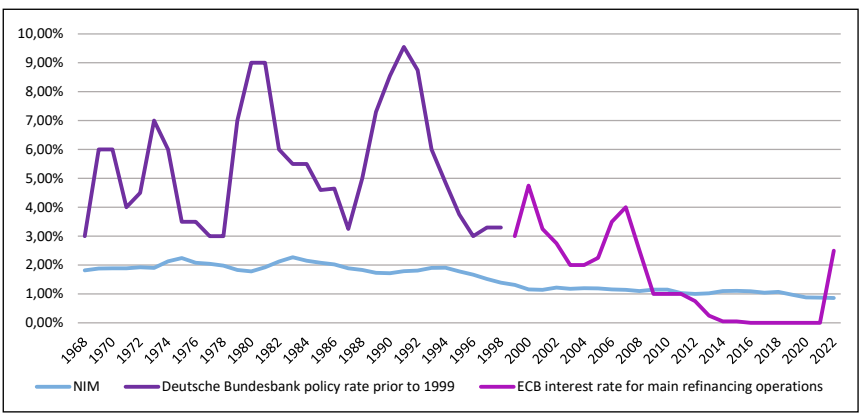


*Figure 3: NIM of German Banks and Central Bank Interest Rate 1968 to 2022*

*Source:* Bank for International Settlements; Deutsche Bundesbank, own illustration.

Figure 4 shows that, following the ECB's rate hike, both euro area and German banks' NIMs had increased by the third quarter of 2022. Comparing the NIMs of SIs in Spain, Italy, and Lithuania, which all introduced windfall taxes, it is evident that the NIMs of Lithuanian banks increased the fastest. In contrast, the increase in NIMs for SIs and LSIs in Germany is less pronounced.

One factor influencing the degree to which interest rates are passed on is the market power of banks (Deutsche Bundesbank 2019; Heckmann-Draisbach and Moertel 2020). The stronger the competition in the respective banking market,


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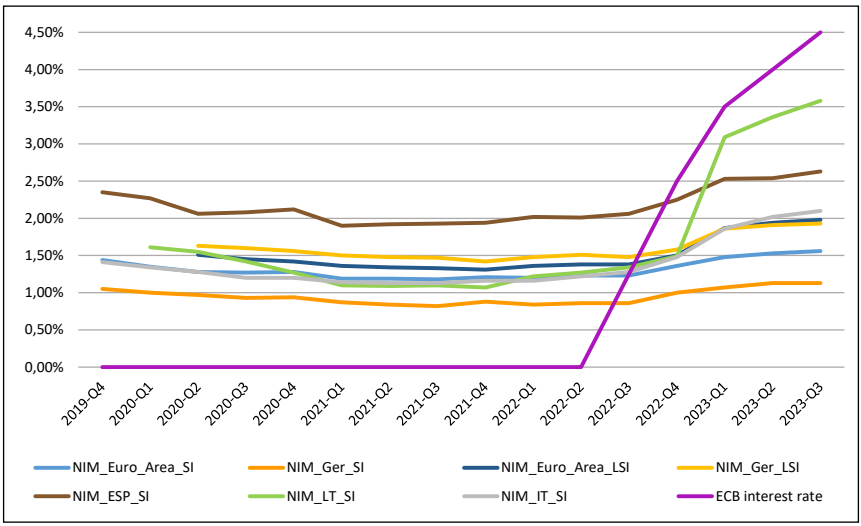


*Figure 4: Net Interest Margin of Selected European Countries' Banks and Central Bank Interest Rate*

*Source:* European Central Bank; Deutsche Bundesbank, own illustration.

the more changes in key interest rates are passed on to customers (Heckmann-Draisbach and Moertel 2020). Unexpected monetary policy tightening is passed on more slowly in more concentrated banking sectors than in less concentrated ones (Kho 2024). Examining the level of competition in the German banking sector, Germany seems to have one of the most competitive banking markets in the euro area, as measured by the Herfindahl index for credit institutions (European Central Bank 2024a). This could be one explanation for a less pronounced increase in NIMs. However, as pointed out by the Sachverständigenrat in 2019, credit cooperatives and savings banks do not compete with each other in their respective groups and regions. Thus, if they were each considered as a single entity, the concentration ratio of the five largest banks (CR5) would increase from 29 % to 68 % (ibid). This would be roughly on par with the CR5 of Spain (European Central Bank 2024b) and indicative of different reasons for lower NIMs in Germany.

There exists no consensus in the literature regarding the appropriate methodology for measuring competition in the banking sector. Van Leuvensteijn et al. (2024) employed a novel approach to assess competition among euro area banks, which makes it possible to assess the impact of the competitiveness of individual banks on their interest rate setting behavior in credit markets. They find that in Germany, banks have on average lower efficiency compared to other coun-


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tries and that German as well as Austrian banks lead a 'quiet' life, being shielded from the disciplinary competitive power of their competitors. In contrast, highly competitive banks in Spain and Italy face a 'busy life'.

A look at individual submarkets indicates that credit institutions have greater market power over private households than over companies. In Europe, the recent turnaround in interest rates has had a greater impact on deposit interest rates for non-financial corporations than on deposit interest rates for private households, reflecting the greater willingness of business customers to switch banks (Beyer et al. 2024). The pass-through of the recent rate hikes is generally weaker and slower than in previous rate hike cycles, with the exception of interest rates on loans to non-financial corporations and on term deposits in euro area countries (Beyer et al. 2024; Byrne and Foster 2023; Messer and Niepmann 2023).

Between the 2007/08 financial crisis and 2022, the amount held by German households in overnight deposit accounts increased by over 350 %. By the end of 2023, this amount had only decreased by about 7 %.[3] The difference in NIMs between SIs and LSIs may be explained by the distribution of these overnight deposits and time deposits. According to the Deutsche Bundesbank (2023a), savings banks accounted for about one-third of overnight deposits whereas credit cooperatives and large commercial banks accounted for about one-fifth. While the latter held roughly 17 % of time deposits, savings banks and credit cooperatives held only 3 % and 6 %, respectively (ibid). Thus, large commercial banks had a larger share of deposits with a higher interest rate pass-through (ibid and Section 2.1). Additionally, the Deutsche Bundesbank (2023b) finds that customers of savings banks and credit cooperatives are less likely to switch banks than depositors at other banks.

Furthermore, banks' excess reserves contributed to higher NIMs and are a factor in the lower pass-through of deposit rates (Beyer et al. 2024; Fricke et al. 2024; Messer and Niepmann 2023). In a banking system with ample reserves, banks have less incentive to attract funding through deposits by increasing interest rates (Beyer et al. 2024; Messer and Niepmann 2023). In particular, reserve-rich banks have higher NIMs, profits, book equity, and stock returns (Fricke et al. 2024). Therefore, when examining windfall profits, it is necessary to discuss the current system of reserve remuneration (see Section 4.1).

Finally, cost efficiency is a crucial aspect of banking profitability. German banks lag behind their European peers in this regard, with only banks in Latvia and Ireland having a worse cost/income ratio (European Central Bank 2022a). Depending on one's interpretation of the state of competition in the German banking sector high cost/income ratios could stem from low income due to

[3] Source: European Central Bank, authors' calculations.


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competitive pressures. However, as described above the level of competition in Germany might be on par with Spain, a country with more efficient banks, measured by the cost/income ratio (ibid).[4] Overall, European banks have lagged behind their US counterparts in improving cost efficiency since the financial crisis (Simoens and Vennet 2021). When analyzing the profits and comparing their magnitude, these differences in efficiency should not be disregarded.

## 4. Economic Policy Measures

### *4.1 Interest Rate Policy of the ECB*

The purported losses incurred during the period of low interest rates are not sufficient to justify the slight increase in interest rates on sight deposits. Rather, during this phase, banks were significantly subsidized by the ECB by borrowing at interest rates below the market rate and investing at interest rates above the market rate without risk. From June 2014 to December 2022, the ECB paid around EUR 36 billion to banks within the eurozone through the targeted longer-term refinancing operations (TLTRO) program, the high allowances on bank deposits, and the excessive interest on bank reserves.[5] Consequently, banks with higher central bank reserves have demonstrated significantly higher stock returns and an increase in net worth since the ECB's interest rate hikes (Greppmair et al. 2023, Fricke et al. 2024).

In 2022, German banks generated interest income of EUR 2 billion from the balances held in the ECB's deposit facility (Deutsche Bundesbank 2023a). The interest rate for the deposit facility rose from –0.5 % in June 2022 to 4 % in September 2023. The difference between the ECB's interest rate for the deposit facility and the interest rate paid by German banks to private households for overnight deposits increased from –0.48 percentage points in June 2022 to a historic high of 3.45 percentage points in September 2023, before only slightly de-

[4] The cost/income ratio is an accounting measure that is susceptible to distortion due to its dependence on country-specific factors that are beyond the control of bank managers. Nevertheless, it remains one of the main measures utilized by the ECB in the Financial Stability Review to report efficiency (Huljak et al. 2018).

[5] The TLTRO program enabled banks to borrow money from the ECB at reduced rates for two years from June 2020, as long as they kept their lending constant. This subsidy amounted to around EUR 20.5 billion. Banks were exempted from paying negative interest on bank deposits during the period of negative interest rates on bank deposits at the ECB. This subsidy amounted to around EUR 11.6 billion. From June 2014 to December 2022, banks' mandatory minimum reserve deposits in their central bank accounts earned interest at the key interest rate (main refinancing rate), which is significantly higher than the market interest rate. This subsidy amounted to around EUR 4.5 billion (Finanzwende e.V. 2023a).


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clining to 3.44 percentage points by October.[6] In 2023, German banks generated around EUR 40 billion in interest income from their deposits with the central bank (approximately 44 % of net interest income in 2022). These central bank reserves are highly concentrated, with only ten institutions holding nearly half of the total excess reserves (Schreiber and Zydra 2023). Reserve-rich banks are larger and have fewer household deposits than those with small reserves (Fricke et al. 2023). It can be concluded from this that in Germany, the primary beneficiaries of the high central bank reserves have been the large commercial banks and *Landesbanken*, while this has not been the case for the savings banks and credit cooperatives.

The amount of reserves held by banks in 2023, in conjunction with the increase in the deposit facility rate to 4 %, resulted in the Eurosystem transferring approximately EUR 146 billion to banks on an annual basis (De Grauwe and Ji 2024). De Grauwe and Ji (2024) note that it is remarkable that a technocratic institution was involved in a transfer of such magnitude, approaching the European Union's entire annual expenditure of EUR 168 billion. The transfer of central bank profits to the private sector in lieu of the state budget is not in accordance with the central bank's mandate.

A number of potential avenues exist for limiting the Eurosystem's interest payments to commercial banks. Firstly, reserves could be reduced through a more active quantitative tightening policy, which may result in an unwanted widening of government bond spreads. Secondly, banks' unremunerated minimum reserve requirements could be increased to absorb the remunerated excess reserves (De Grauwe and Ji 2024). The current minimum reserve requirements amount to one percent of customer deposits and will no longer earn interest as of September 2023. An increase in the minimum reserve would also affect banks, particularly smaller ones, that do not have excess reserves to benefit from high interest payments. Third, non-interest-bearing minimum reserve requirements could only be imposed on part of the bank reserves (two-tier system) or total reserves could be remunerated up to a certain threshold, while a lower rate applies to reserves above this threshold (reverse-tiering or quota system). Such systems have been implemented in Norway and Switzerland (Fricke et al. 2024). In December 2023, the Swiss National Bank not only set the interest rate on minimum reserves to zero but also reduced the interest rate on banks' sight deposits in excess of this in order to limit their interest gains (Schweizerische Nationalbank 2023). The advantage of this system is that the central bank can continue to utilize the interest rate on bank reserves as a monetary policy instrument while significantly reducing the transfer of its profits to commercial banks (De Grauwe and Ji 2024).

[6] Deutsche Bundesbank, authors' calculations.


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### *4.2 Restricting Dividends*

Excessive dividends are not in the interest of the general public and, in certain scenarios, not even in the interest of shareholders (Onali 2014; Shin 2018). There is no consensus in the academic literature regarding the definition of excessive dividends. Tran & Ashraf (2018) defined excessive dividends as a payout ratio above 30 %. This definition was based on the Federal Reserve's Comprehensive Capital Analysis and Review, which subjected banks with dividend payout ratios above 30 % to heightened scrutiny (Board of Governors of the Federal Reserve System 2020). However, this criterion was removed in 2020 to simplify the stress test framework (ibid). In order to define excessive dividends in light of both implemented and planned increased capital regulations, further research is required. Nevertheless, the banking sector is characterized by a near-constant payment of dividends (D'Udekem 2021). After the 2007/08 financial crisis, there was extensive research into the risk-shifting aspect of dividend payments (Ashraf et al. 2016; Acharya et al. 2017; Güntay et al. 2022; Juelsrud and Nenov 2020). Acharya et al. (2017) show that during the crisis, some of the banks that failed, such as Lehman Brothers and Merrill Lynch, increased dividend payments, while banks like Citigroup, Bank of America, and JP Morgan Chase paid smooth dividends. This is consistent with the risk-shifting theory and the findings of Onali (2014), namely that riskier institutions pay higher dividends. For a group of 90 euro area banks, Shin (2018) finds that cumulative dividends from 2007 to 2014 exceeded retained earnings in Spain and Italy. The German banks studied retained EUR 84 billion in earnings and paid EUR 27 billion in dividends, paying the lowest share of dividends to retained earnings (ibid). However, the German sample includes state-owned development banks, *Landesbanken*, savings banks, and credit cooperatives, which differ significantly from commercial banks in their dividend payments. Savings banks and credit cooperatives typically offer lower dividends than commercial banks. Most German savings banks do not pay out any dividends at all (Köhler 2018).

To limit risk-shifting and prevent undercapitalized banks from paying dividends, the Basel III framework implemented restrictions on dividends (Ampudia et al. 2023; Ashraf et al. 2016; Onali 2014; Svoronos and Vrbaski 2020). The recent experience with dividend payouts during the COVID-19 pandemic suggests that system-wide dividend restrictions are preferable to institution-level regulations during a crisis in order to minimize the stigma associated with not distributing dividends (Güntay et al. 2022; Svoronos and Vrbaski 2020). In Europe, the ECB asked banks to refrain from paying dividends from March 2020 to September 2021 (European Central Bank 2021). Ampudia et al. find that "market participants generally understood this measure as a deferral of dividend payouts to the post-recommendation period, rather than as a dividend cut." (2023). However, this measure has achieved its stated objective of strengthening


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banks' resilience and supporting bank lending to the real economy (ibid, Andreeva et al. 2023, Dautović et al. 2023).

In light of the recent surge in profits, we propose a system that would impose general limitations on banks' dividend payments to prevent them from handing out excessive dividends. During an economic crisis, dividend payments would be prohibited, and in a boom, the amount payable to shareholders would be capped. Following the rationale employed during the COVID-19 pandemic, it would be prudent to impose these limits system-wide, with the objective of limiting the stigma and information character of the measure. In this vein, Schroth (2021) illustrates constrained-efficient dividends in a model where banks finance loans with equity and debt. During crises and normal times, banks should restrict dividend payments to preserve equity, but during recoveries, dividends should be encouraged (ibid). Furthermore, Bostandzic et al. (2022) highlight the positive effect of dividend restrictions via capital quality on financial stability. Additionally, Juelsrud and Nenov (2020) show that a dividend cap improves financial stability during rollover crises.

Those who oppose dividend restrictions contend that they may limit the signaling power of dividends. However, Basse et al. (2014) find no evidence that investors and financial analysts see reduced dividends as a sign of a bank's problems. Moreover, it is unclear how much information can be obtained from a bank's income and dividends, particularly in light of income smoothing employed by banks. A growing strand of literature shows that banks use (hidden) reserves to smooth their income and dividends, typically through loan loss provisions (Aggelopoulos et al. 2023; Bornemann et al. 2012; Dräger et al. 2021; Skala 2015). German banks can use 340f reserves, in addition to loan loss provisions. These reserves are a special accounting feature, similar to loan loss provisions, but not linked to the inherent risk of the asset (Bornemann et al. 2012). Dombret et al. (2019) found that the German banking sector has been able to overcome challenges to their net income during the low-interest rate environment by utilizing (hidden) reserves. Dräger et al. (2021) show that German banks would use hidden reserves to counteract the negative effects of an interest rate (hike) shock, based on a quantitative survey of small and medium-sized banks. However, Skala (2015) reveals that banks intentionally exacerbate losses by creating additional reserves when losses exceed existing reserves, thereby undermining Basel III's countercyclical capital buffer. In general, bank managers use income smoothing to meet earnings targets and avoid reporting lower results compared to previous quarters (Aggelopoulos et al. 2023).

Given the comparatively high level of competition in the German banking sector (which is however disputed, see Section 3), the findings of De Cesari et al. (2023) and Onali (2014) seem particularly relevant. These studies link increased competition to a decrease in charter/franchise value accompanied by an increase in dividend payments (ibid). Similarly, Shin (2018) found that share-


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holders, consisting largely of asset managers, view dividends as a way to unlock value when the share price is substantially below book value. Thus, implementing a cap on dividends could increase the level of control that competitive market forces fail to provide.

Recent opposition to capital regulations in the US (Jones and Franklin 2024) and the theoretical literature on dividend payments by banks highlight the need for future research to determine the correct implementation and augmentation of regulations on capital, as well as dividend restrictions. We believe that both options are strictly preferable to windfall taxes. On the surface, the Italian variant of the windfall tax appears to achieve this goal, as it is paired with an incentive to increase bank capital and restrict dividends. However, as will be discussed below (Section 4.4), this legislation was ineffective.

### *4.3 Consumer Protection*

*Deposit Markets*

As explained above (Section 2), the low pass-through of ECB rate hikes on interest rates of overnight deposits and short-term savings deposits to private households can be attributed to the market power of banks, which is, in part, a consequence of customers' low willingness to switch banks. This has a particularly pronounced impact on lower-income households, which often have limited financial resources to invest over an extended period of time. The provision of more information or better financial education can increase the price sensitivity of some customers. In addition, we propose a government-guaranteed savings account, to boost competition, support low-income households and promote saving. This would help to offset the impact of the supranational monetary policy, by partially shielding German low-income households from inflation, which has a particularly detrimental effect on them.

This idea follows Walker (2023), who links the higher interest pass-through to deposit rates in France to the government-backed *Livret A* savings account. It guarantees interest payments, is tax-exempt, withdrawable at any time, and has a deposit limit of EUR 22,950 per person (Service-public.fr 2023). The current interest rate has been 3 % p. a. since January 2023 and will be maintained till January 2025 (Barut-Etherington et al. 2023; Service-public.fr 2024). Thus, the interest rate for *Livret A* is below the inflation rate and even below the ECB's main refinancing rate as of March 2023. Nevertheless, it is still a competitive alternative compared to German savings accounts (see Table 3). For low-income households, the *Livret d'Épargne Populaire* (LEP) offers a more complete protection against inflation. The deposit limit for each taxpayer is EUR 10,000[7], and the

[7] The amount was increased from EUR 7,000 in October 2023.


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income limit is contingent on the size of the family. At the time of writing, the rate for the LEP is 5 %. During the recent surge in inflation and subsequent increase in the ECB's key interest rates, the rate for the LEP was 2.2 % from February to July 2022, 4.6 % from August 2022 to January 2023, and 6.1 % from February 2023 to July 2023 (Barut-Etherington et al. 2023). Therefore, it offers French low-income households a safe and compelling savings opportunity. The Banque de France has deemed the LEP to be a success, with the number of LEPs and the volume held in these accounts increasing significantly in conjunction with rising inflation and central bank interest rates (Barut-Etherington et al. 2023). It justifies market intervention in the form of the LEP by combining two objectives: firstly, to encourage household savings through the provision of a secure and convenient instrument, and secondly, to direct those savings toward needs deemed to be priorities (e. g. social housing) (Banque de France 2010).

*Table 3*

**Interest Rates on Household Deposits in France & Germany in October 2023 & January 2024**

| Effective interest rates of banks/ New business/Households' deposits | Germany | | France | |
|---|---|---|---|---|
| | 2023/10 | 2024/01 | 2023/10 | 2024/01 |
| overnight | 0.56 % | 0.62 % | 0.06 % | 0.06 % |
| with an agreed maturity of up to 1 year | 3.4 % | 3.27 % | 3.78 % | 3.76 % |
| with an agreed maturity of over 1 & up to 2 years | 3.46 % | 3.13 % | 3.74 % | 3.69 % |
| with an agreed maturity of over 2 years | 2.99 % | 2.80 % | 3.56 % | 3.37 % |
| redeemable at notice of up to 3 months | 0.64 % | 0.71 % | 2.43 % | 2.51 % |
| redeemable at notice of over 3 months | 1.94 % | 2.25 % | 2.18 % | 2.42 % |

*Source*: European Central Bank, Deutsche Bundesbank.

While the interest rate on overnight deposits in France is lower than in Germany, deposits with longer maturities have higher remunerations. The Banque de France includes regulated savings products, such as *Livret A*, in deposits redeemable at notice of up to three months (El Amri et al. 2021). Therefore, despite the cash card and high availability, these deposits are not included in overnight deposits. However, while the majority of household deposits in Germany are held in overnight deposits, French households have more money in regulated and ordinary savings accounts. As a result, they receive a significantly higher interest rate (2.43 % compared to 0.56 % in October 2023) on a larger portion of


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their deposits. Furthermore, Table 3 shows that, excluding overnight deposits, French savers have enjoyed higher interest rates for a longer period of time.

Following the example set by France, Germany may offer a regulated savings product, especially for low-income households, to improve interest rate pass-through. One potential avenue for implementing such a scheme could be the introduction of a new rendition of the risk-free and fee-free federal treasury bonds offered by the Deutsche Finanzagentur until 2012 (Deutscher Bundestag 2013, Deutsche Finanzagentur 2024). Demand for this product was particularly strong in uncertain times with relatively high interest rates. This offer, with interest at market rates, provided a "bridge to securities savings" for more and more citizens, contributing to private wealth creation (Deutsche Finanzagentur 2012). A new offer should be accompanied by an information campaign to raise awareness and educate the public on financial products. Given the disproportionately high amount of overnight deposits in Germany, there is ample room for improvement. Finally, the existence of regulated savings accounts in some countries within a monetary union has the potential to influence the transmission of monetary policy. This raises questions for future research.

*Credit Markets*

The high interest rate on risk-free central bank reserves requires an even higher interest rate on risky loans for banks to justify lending. This places low-income and indebted households, in particular, at a greater risk of over-indebtedness. They are often reliant on new loans that are particularly expensive or even usurious (Neuberger and Reifner 2020). Statutory interest rate caps serve to protect consumers from loan agreements with interest rates or total costs that are significantly above the usual market level. Interest usury is made possible by the market power of providers in consumer credit markets with limited price competition – a market failure that cannot be remedied by better financial education and therefore justifies price regulation through interest rate caps (Neuberger 2023).

According to the EU Consumer Credit Directive (Directive 2023/2225, 18 October 2023), EU member states must introduce effective measures to limit excessive borrowing costs. However, German usury legislation fails to provide any meaningful protection in this regard, as it lacks a clear definition of any specific upper limits and the limits in practice are not responsive to fluctuations in interest rates (Verbraucherzentrale Bundesverband e.V. 2022; Neuberger 2023).

The average market interest rates from the MFI interest rate statistics (see Table 2) are the basis for measuring usury in accordance with Section 138 of the *Bürgerliches Gesetzbuch* (BGB), which is standard practice in case law. The contract is usurious if the effective contractual interest rate exceeds the market in-


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terest rate at the time the contract is concluded by around 100 % in relative terms and is therefore at "twice the usual rate" (Reifner 2021; Reifner and Feldhusen 2019). However, the interest rate cap increases the potential for usurious profits when market interest rates rise. In October 2023, it reached 22 % for overdrafts and 36 % for genuine credit card loans (see Table 4). The potential for usury has increased the most for overdrafts (+eight percentage points), followed by extended credit card debt (+6.5 percentage points) and long-term consumer loans (+5.6 percentage points). Consequently, the usury limit on these markets has risen at a greater rate than the ECB key interest rate (+4.5 percentage points), as the interest rate increase was passed on by more than 50 % (see Table 2).

Accordingly, the interest rate cap must be adjusted in accordance with the increase in central bank rates, ideally in proportion to the average pass-through in each submarket (Neuberger 2023). For example, an increase in the refinancing rate by four percentage points with a 100 % pass-through to the average market interest rate would result in an eight percentage point increase in the interest rate cap, whereas a 50 % pass-through would only result in a four percentage point increase. In the first case, the interest rate cap would have to be lowered from 100 % to 50 %, whereas in the second case, it would not, to maintain a constant scope for usury.

It is more practical to calculate a fixed surcharge on a reference interest rate for individual sub-markets. In Switzerland, for instance, there are statutory maximum interest rates for consumer loans and overdrafts that are linked to the Saron (Swiss Average Rate Overnight) (KKG, Art. 14; VKKG). The Federal Department of Justice and Police conducts an annual review of the reference interest rate to determine if any adjustments are necessary. On January 1, 2024, the maximum interest rate for new loans increased by one percentage point, reaching 12 % for consumer loans and 14 % for overdrafts (Eidgenössisches Justiz- und Polizeidepartement 2023). Applying the Swiss usury limits in Germany would have capped the interest rate for overdrafts in October 2023 at 13 % instead of 22 % (see Table 4) – a difference of nine percentage points.


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*Table 4*

**Development of the Usury Ceiling in Germany from 2022/06 to 2023/10**

| | 2022/06 (in percent) | 2023/10 (in percent) | Change from 2022/06 to 2023/10 (in percentage points) |
|---|---|---|---|
| Extended credit card debt to households* | 29.68 | 36.18 | +6.50 |
| Loans for consumption to households with a floating rate or an initial rate fixation up to 1 year* | 17.00 | 18.86 | +1.86 |
| Loans for consumption to households with an initial rate fixation of over 1 year and up to 5 years* | 9.32 | 14.42 | +5.10 |
| Loans for consumption to households with an initial rate fixation of over 5 years* | 12.92 | 18.48 | +5.56 |
| Total consumer loans*;** | 11.98 | 17.32 | +5.34 |
| Revolving loans and overdrafts* | 14.04 | 22.04 | +8.00 |
| Housing loans*;** | 5.24 | 8.44 | +3.20 |

* Effective interest rates of German banks/New business

** Effective annual interest rates incl. costs

*Source:* Deutsche Bundesbank, authors' calculations.

Even in countries where usury limits are linked to the average market interest rates of individual product groups, as in Germany, they are significantly lower. In France, they are set at one-third or 1.33 times (Banque de France 2023; Reifner and Feldhusen 2019), and in Portugal at 50 % or 1.5 times (Banco de Portugal 2023) the average annual percentage rate of charge of all loan agreements, concluded in the previous quarter, of a product group. For example, the upper interest rate limit for overdrafts set by the French central bank in October 2023 was 17.52 %, based on an average effective interest rate of 13.14 % in the third quarter of 2023 (Banque de France 2023). Applying the French usury limits in Germany would have capped the interest rate for overdrafts in October 2023 at 14.65 % instead of 22 % (see Table 4) – a difference of over seven percentage points. Lowering the usury limit in Germany from 100 % to 33 % or 50 % of the average effective interest rates from the current MFI interest rate statistics would also result in a significant reduction in the increase in the usury margin as interest rates rise.



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A relative interest rate cap based on market rates for individual product groups cannot prevent interest rates in individual sub-markets (e. g., credit card loans) that are already too high on average and increase the scope for excess profits when interest rates rise. This suggests a combination with an absolute limit (Verbraucherzentrale Bundesverband e.V. 2022), i. e. a fixed premium on a reference rate[8], as in Switzerland.

In Switzerland and France, the interest rate caps are administered by the central banks and enforced by the civil courts. In Germany, the responsibility for collecting interest rate data falls upon the Bundesbank. In addition, the Federal Financial Supervisory Authority (BaFin) is tasked with the protection of the collective interests of consumers (Sec. 4 (1a) sentence 1 FinDAG). It should monitor and ensure compliance with the statutory usury limits by credit institutions, increase the transparency of market prices and total cost of consumer loans, and sanction violations of the interest rate caps (Neuberger 2023).

### *4.4 Windfall Taxes*

As long as the proposed measures are not implemented banks' windfall profits should be siphoned off through special taxes. Given that such taxes do not address the underlying causes but merely the symptoms, they should only be considered as a last resort.

An economic justification for a windfall profits tax in the banking sector is that banks are systemically important and therefore enjoy implicit or explicit state guarantees. Consequently, the state acts as an insurance company of last resort and should ask banks to pay temporarily higher premiums if they benefit from such insurance (Fratzscher 2023). For example, even the Conservative government under Margaret Thatcher imposed a special tax on banks in the 1980s to siphon off their unearned profits from the economic crisis (Picek 2023). Taxing very high profits can also discourage risk-taking (Meiselman et al. 2023; Maneely and Ratnovwski 2024) and thus promote the stability and resilience of banks. To prevent market distortions, a tax on short-term windfall profits should be limited in duration, not excessive, paired with smart regulation, and implemented transparently (Fratzscher 2023). Excess profit taxes should only be used as a permanent instrument if above-average profit margins due to market power cannot be eliminated in the long run by regulation or competition policy. This applies to a few large global corporations (Trautvetter 2024a, 2024b).

[8] In Switzerland: Saron, in the euro area: EONIA, €STR or EURIBOR (European Central Bank 2019).



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It is difficult to precisely define windfall or excess profits. Most historic excess profits taxes defined excess profits by return on capital rates between 5 and 10 %. Heck et al. (2024) define excess profits as a ratio of profits over assets above 10 %. In its proposed reform of global corporate taxation, the OECD defines excess profits as a return on sales in excess of 10 % (Trautvetter 2024a, 2024b). While banks are currently excluded, the average return on equity for global banks is estimated to have increased to 13 % in 2023, well above the long-term average of 9 % since 2010. In Germany, the average return has also improved significantly – from 3.9 % to 5.4 % (McKinsey & Company 2023; Trautvetter 2024a). As shown above (Section 3), the current profits of numerous banks derived from their interest income are far above historical levels and are due to market power as well as subsidies from the ECB. The corresponding difference to the long-run average can therefore be regarded as windfall profits, although there is no consensus on how large the deviation from the long-term average must be for these gains to be considered unjustified. Greater transparency and enhanced controls by competition authorities and regulation alone are insufficient to effectively mitigate market power and windfall or excess profits (Fratzscher 2023).

When designing bank taxes, there are several trade-offs that are discussed by Maneely and Ratnovwski (2024). Twelve EU countries have introduced new bank taxes since 2023, which differ greatly in their design. Italy, for example, levies a tax of 40 % on excess net interest margins, defined as those that exceed the 2021 level by over 10 %. However, due to the lobbying influence of the banks, it was designed in such a way that it was ultimately ineffective. Banks have the option of not paying the tax, provided that they used at least 2.5 times the amount that would have been paid to strengthen their core capital. If the banks had utilized these reserves to distribute profits, they would have been subject to pay a penalty (Maneely and Ratnovwski 2024; Martín 2024; Munster 2023; Hamaui 2023). The majority of banks utilized this strategy to reduce their excess profits tax to zero, as their profits were so substantial that they were able to distribute substantial dividends to shareholders while simultaneously setting aside higher provisions than required by law. For example, Sanpaolo, Italy's largest bank, has generated a net profit of over EUR 7 billion in 2023 and has announced that it will distribute EUR 5.8 billion to shareholders. More than EUR 1.2 billion has been earmarked for provisions, representing approximately 2.5 times the excess profits. Similarly, Unicredit has announced a profit of EUR 7.25 billion for 2023, dividends of EUR 6.5 billion, and provisions of at least EUR 750 million, only slightly less than 2.5 times the excess profits. Deutsche Bank had calculated in advance, using a simulation model, that the tax on additional profits would have no effect. Not only will the law not generate any revenue for the state, but it will also not strengthen the banks' capital structure, more than already decided by the management before and independently


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of the law (Hamaui 2023). Consequently, this tax does not help to increase the resilience of banks.

In Spain, banks with an annual turnover of more than EUR 800 million are subject to a temporary levy of 4.8 % of their net interest income and net commissions. Lithuania levies a tax of 60 % on net interest income which is 50 % above the 4-year average. The Czech Republic levies a tax of 60 % on excess profits, defined as those exceeding average profits in 2018 – 2021 (Maneely and Ratnovwski 2024; Martín 2024; European Banking Authority 2023). In 2024, Ireland will increase the tax it has been levying for 10 years on financial institutions that benefited from public rescue measures during the financial crisis (Martín 2024). Despite a 30 % increase in the amount collected through bank taxes in the twelve European countries named above from June 2022 to June 2023 (European Banking Authority 2023), this figure remains significantly below the EUR six trillion in public funds that European financial institutions have received since the 2008 crisis (Martín 2024).

Those who oppose windfall taxes contend that the tax could impede the ability of banks that have suffered during the prolonged low/negative interest environment to strengthen their capital base, thereby affecting overall financial stability. As demonstrated in Section 4.1, this argument is tenuous at best. However, it may become true in future scenarios. The abnormally high profits are expected to decline soon as policy rates are lowered, while a number of structural factors will continue to weigh on European banks' profits and capital. Policymakers should therefore encourage banks to maintain capital buffers and strengthen their resilience to future shocks, while exercising caution with respect to profit taxes that could deprive banks of potential sources of capital (Chen et al. 2024). Maneely and Ratnovwski (2024) advocate locking in high bank profits as usable bank capital as an alternative or complementary measure to taxing them, for example by increasing the countercyclical capital buffer rates.

In Germany, a windfall tax on bank profits does not appear to be the right option. A majority of German savings banks do not pay out dividends, although they have more than enough capital (Köhler 2018). Thus, imposing a windfall tax could not only prevent banks from rebuilding their capital stock but would also unduly penalize banks that pay little or no dividends.

The European Central Bank (2022b) recommended a comprehensive review of the potential negative impact of temporary levies on banks' financial stability, resilience, and credit provision. However, this is at odds with the fact that the ECB itself did not adequately assess the negative impact of its drastic interest rate hikes on banking stability and even intended to restrict bank lending in order to curb inflation (Schäfer and Semmler 2023).


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## 5. Conclusion

The European Central Bank's interest rate hikes since July 2022 have been utilized by banks to significantly increase their net interest margins. While interest rates for overnight deposits and short-term savings deposits have only increased slightly, lending rates have risen sharply, particularly for overdrafts and credit card loans, which are already the most expensive forms of credit for private households. This is particularly disadvantageous to lower-income consumers, who are unable to afford longer-term, higher-interest bank deposits and are often reliant on overdraft facilities as they lack access to cheaper installment loans.

The additional profits generated by the increased interest margins represent unearned surplus profits for the banks. They can be attributed to the high interest rates on central bank deposits, market power in individual customer segments due to lock-ins or a low willingness of customers to switch banks, and ineffective usury legislation. Numerous banks utilized these windfall profits primarily to increase their dividends. However, this strategy may ultimately compromise their future resilience.

Regarding bank heterogeneity in Germany, we find that windfall profits from central bank reserves are concentrated in large commercial banks and *Landesbanken*, while savings banks and credit cooperatives have gained comparatively more from a lower pass-through of interest rate increases to their depositors. This is at the expense of consumers. However, savings banks and cooperative banks are distributing fewer dividends than commercial banks, which strengthens their resilience.

We propose the following measures that directly address the causes of windfall profits: Firstly, the Eurosystem should reduce the transfer of its profits to commercial banks by increasing unremunerated minimum reserve requirements, along with quantitative tightening. Secondly, competition policy should foster more competition in the banking sector. Thirdly, to prevent banks from handing out excessive dividends in light of the recent surge in profit, we propose a system that would impose general limitations on dividends. Fourth, consumers should be better informed about banking products and switching options and receive more financial education. Fifth, to stimulate competition and improve consumer protection in deposit markets, Germany should offer a regulated savings product, especially for low-income households, following the example set by France. Sixth, to improve consumer protection in loan markets, German usury legislation should be reformed, following the examples of France or Switzerland. A windfall profits tax should only be considered as a last resort. In our view, ex-ante regulation is preferable to ad hoc ex-post measures that disrupt the profit maximization directive of businesses.


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## References

Acharya, V. V., Le, H. T., and Shin, H. S. (2017): Bank Capital and Dividend Externalities, The Review of Financial Studies, 30(3), 988 – 1018.

Aggelopoulos, E., Georgopoulos, A., and Kotsiantis, S. (2023): Bank provision reversals and income smoothing: A case study, Journal of Accounting and Public Policy, 42(3), 107051.

Altavilla, C., Boucinha, M., and Peydró, J.-L. (2018): Monetary Policy and Bank Profitability in a Low Interest Rate Environment, Economic Policy, 33(96), 531 – 586.

Ampudia, M., Muñoz, M., Smets, F., and van der Ghote, A. (2023): System-wide dividend restrictions: Evidence and theory, Working Papers of Faculty of Economics and Business Administration, Ghent University, Belgium (23/1075).

Andreeva, D., Bochmann, P., and Schneider, J. (2023): Evaluating the Impact of Dividend Restrictions on Euro Area Bank Market Values, ECB Working Paper No. 2023/2787.

Arons, S. (2024): Europe's Largest Banks Top €100 Billion Profit for First Time, Bloomberg, https://www.bloomberg.com/news/articles/2024-02-19/unicredit-bnp-lead-banks-exceeding-100-billion-profit-for-the-first-time (retrieved 27.02.2024).

Ashraf, B. N., Bibi, B., and Zheng, C. (2016): How to regulate bank dividends? Is capital regulation an answer?, Economic Modelling, 57, 281 – 293.

Atzler, E. (2024): Warum Tagesgeld-Sparer bei einigen Banken leer ausgehen, Handelsblatt, https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/zinsen-warum-tagesgeld-sparer-bei-einigen-banken-leer-ausgehen/100002320.html (retrieved 23.01.2024).

Banco de Portugal (2023): Interest rates in consumer credit, https://clientebancario.bportugal.pt/en/interest-rates-consumer-credit (retrieved 28.12.2023).

Banque de France (2010): Rapport annuel 2009 de l'Observatoire de l'épargne réglementée. Paris, Banque de France.

Banque de France (2023): Taux d'usure mensuel Oct 2023, https://www.banque-france.fr/fr/statistiques/taux-et-cours/taux-dusure-mensuel-oct-2023 (retrieved 10.01.2024).

Barut-Etherington, M.-L., Bellon, C., Salmon, V., and Sédillot, F. (2023): La percée historique du livret d'épargne populaire, Bulletin de la Banque de France 248/9.

Basse, T., Reddemann, S., Riegler, J.-J., and Graf von der Schulenburg, J.-M. (2014): Bank dividend policy and the global financial crisis: Empirical evidence from Europe, European Journal of Political Economy, 34, 25 – 31.

Beyer, R., Chen, R., Li, C., Misch, F., Ozturk, E. O., and Ratnovski, L. (2024): Monetary Policy Pass-Through to Interest Rates: Stylized Facts from 30 European Countries, IMF Working Paper WP/24/9.

Board of Governors of the Federal Reserve System (2020): Regulations Q, Y, and YY: Regulatory Capital, Capital Plan, and Stress Test Rules. 12 CFR Parts 217, 225, and 252. Docket No. R-1603. RIN 7100-AF 02, https://www.federalregister.gov/d/2020-04838.



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

Bornemann, S., Kick, T., Memmel, C., and Pfingsten, A. (2012): Are banks using hidden reserves to beat earnings benchmarks? Evidence from Germany, Journal of Banking & Finance, 36(8), 2403 – 2415.

Bostandzic, D., Irresberger, F., Juelsrud, R. E., and Weiß, G. (2022): Do Capital Requirements Make Banks Safer? Evidence From a Quasinatural Experiment, Journal of Financial and Quantitative Analysis, 57(5), 1805 – 1833.

Busch, R. and Memmel, C. (2021): Why Are Interest Rates on Bank Deposits so Low?, Credit and Capital Markets, 54(4), 641 – 668.

Busch, R., Littke, H. C. N., Memmel, C., and Niederauer, S. (2022): German banks' behavior in the low interest rate environment, Financial Markets and Portfolio Management, 36(3), 267 – 296.

Byrne, D. and Foster, S. (2023): Transmission of monetary policy. Bank interest rate pass-through in Ireland and the euro area, Economic Letters, 3/EL/23, Central Bank of Ireland.

Chen, R., Guzzo, V., Jamaludin, F., Mohommad, A., Qu, R., and Zhao, Y. (2024): Bank Profitability in Europe: Not Here to Stay, IMF Working Paper No. 2024/142.

Dautović, E., Gambacorta, L., and Reghezza, A. (2023): Supervisory Policy Stimulus: Evidence from the Euro Area Dividend Recommendation, ECB Working Paper No. 2796.

De Cesari, A., Gilder, D., Huang W., and Onali, E. (2023): Competition and Bank Payout Policy, Journal of Money, Credit and Banking, https://doi.org/10.1111/jmcb.13028.

De Grauwe, P. and Ji, Y. (2024): How to conduct monetary policies. The ECB in the past, present and future, Journal of International Money and Finance, 143, 103048.

Deutsche Bundesbank (2019): Interest Rate Pass-Through in the Low Interest Rate Environment, Deutsche Bundesbank, Monatsbericht, April 2019, 43 – 75.

Deutsche Bundesbank (2022a): Die Ertragslage der deutschen Kreditinstitute im Jahr 2021, Deutsche Bundesbank, Monatsbericht, September 2022, 67 – 107.

Deutsche Bundesbank (2022b): FAQ 2022, https://www.bundesbank.de/resource/blob/724626/c9abbf2395f409b7351e4836be4ade0a/mL/mfi-zinsstatistik-faq-data.pdf (retrieved 03.01.2024).

Deutsche Bundesbank (2023a): Die Ertragslage der deutschen Kreditinstitute im Jahr 2022, Deutsche Bundesbank, Monatsbericht, September, 91 – 103.

Deutsche Bundesbank (2023b): Finanzstabilitätsbericht 2023. Frankfurt am Main, Deutsche Bundesbank.

Deutsche Bundesbank (2023c): Effective interest rates of German banks/New business/Loans for consumption to households with a floating rate or an initial rate fixation up to 1 year/SUD113, BBIM1.M.DE.B.A2B.F.R.A.2250.EUR.N, https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/745582/745582?listId=www_szista_ph2_neu&tsId=BBIM1.M.DE.B.A2B.F.R.A.2250.EUR.N&dateSelect=2024 (retrieved 27.12.2023).

Deutsche Bundesbank (2024): Banking statistics, VIII. Items of banks' profit and loss accounts, 2. Major income and cost items for individual categories of banks, https://www.bundesbank.de/resource/blob/816220/918ffa8efbcdc6ecdcb41bf86bd43e27/mL/bf1epl02-data.pdf (retrieved 25.07.2024).



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

Deutsche Finanzagentur (2012): Bund stellt Privatkundengeschäft ein, https://d-nb.info/1034374419/34 (retrieved 5.08.2024).

Deutsche Finanzagentur (2024): Bundesschatzbriefe, https://www.deutsche-finanzagentur.de/bundeswertpapiere/bundeswertpapierarten/sonstige-finanzierungsinstrumente/bundesschatzbriefe (retrieved 06.05.2023).

Deutscher Bundestag (2013): Antrag Privatkundengeschäft der Finanzagentur Deutschland GmbH fortsetzen, Bundestags-Drucksache 17/12062 (15.01.2013).

Deutscher Bundestag (2020): Hohe Dispositions- und Überziehungszinsen, Bundestags-Drucksache 19/24943 (7.12.2020).

Dombret, A., Gündüz, Y., and Rocholl, J. (2019): Will German banks earn their cost of capital?, Contemporary Economic Policy, 37(1), 156 – 169.

Dräger, V., Heckmann-Draisbach, L., and Memmel, C. (2021): Interest and credit risk management in German banks: Evidence from a quantitative survey, German Economic Review, 22(1), 63 – 95.

Drechsler, I., Savov, A., and Schnabl, P. (2021): Banking on Deposits: Maturity Transformation without Interest Rate Risk, The Journal of Finance, 76(3), 1091 – 1143.

D'Udekem, B. (2021): Agency Conflicts and Dividend Persistence, Journal of Financial Services Research, 60(2), 207 – 234.

Eidgenössisches Justiz- und Polizeidepartement (2023): Höchstzinssatz für Konsumkredite steigt per 1. Januar 2024 um 1 Prozent. Press Release, 30.11.2023, https://www.admin.ch/gov/de/start/dokumentation/medienmitteilungen.msg-id-99111.html.

El Amri, W., Mouriaux, F., Wicky, Y., Bussière, M., Horny, G., and Sahuc, J.-G. (2021): Money and its counterparts: instruments and reflections of monetary policy, Bulletin de la Banque de France, 234/2.

European Banking Authority (2023): Risk Assessment Report of the European Banking Authority. December 2023. Luxembourg, Publications Office of the European Union.

European Central Bank (2019): Was sind Referenzzinssätze? Warum sind sie wichtig und warum werden sie reformiert?, https://www.ecb.europa.eu/ecb-and-you/explainers/tell-me-more/html/benchmark_rates_qa.de.html (retrieved 28.12.2023).

European Central Bank (2021): ECB decides not to extend dividend recommendation beyond September 2021, https://www.bankingsupervision.europa.eu/press/pr/date/2021/html/ssm.pr210723~7ef2cdf6b7.en.html (retrieved 11.03.2024).

European Central Bank (2022a): Financial integration and structure in the euro area. Statistical annex. Frankfurt am Main, European Central Bank.

European Central Bank (2022b): Opinion of the European Central Bank of 2 November 2022 on the imposition of temporary levies on certain credit institutions (CON/2022/36).

European Central Bank (2024a): Herfindahl index for Credit institutions (CIs) total assets, SSI.A.*.122C.H10.X.A1.Z0Z.Z, https://data.ecb.europa.eu/search-results?searchTerm=SSI.A.*.122C.H10.X.A1.Z0Z.Z (retrieved 26.02.2024).



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

European Central Bank (2024b): Shares of the 5 largest CIs in total assets (CR5), SSI.A.ES.122C.S10.X.A1.Z0Z.Z, https://data.ecb.europa.eu/data/datasets/SSI/SSI.A.ES.122C.H10.X.A1.Z0Z.Z (retrieved 05.03.2024).

European Systemic Risk Board (2024): The General Board of the European Systemic Risk Board held its 53rd regular meeting on 21 March 2024. Press release, 28.03.2024, https://www.esrb.europa.eu/news/pr/date/2024/html/esrb.pr240328~8732bb43ab.en.htm.

Finanzwende e.V. (2023a): Bankengeschenke der EZB, https://www.finanzwende.de/themen/banken-und-schattenbanken/bankengeschenke-der-ezb (retrieved 23.12.2023).

Finanzwende e.V. (2023b): Dispozins runter! Zehn Prozent sind zu viel, https://www.finanzwende.de/themen/verbraucherschutz/schulden-und-ueberschuldung/dispozinsen/ (retrieved 27.12.2023).

Fratzscher, M. (2023): Übergewinnsteuer für Banken: Nicht nur die Verluste vergesellschaften: Kommentar, DIW Wochenbericht, 90(34/35), 462.

Fricke, D., Greppmair, S., and Paludkiewicz, K. (2024): Excess Reserves and Monetary Policy Tightening, http://dx.doi.org/10.2139/ssrn.4432543.

Greppmair, S., Fricke, D., and Karol Paludkiewicz, K. (2023): Transmission der Zinserhöhungen hängt von der Höhe der Zentralbankreserven von Banken ab, Deutsche Bundesbank, Research Brief, 61. Ausgabe.

Güntay, L., Jacewitz, S., and Pogach, J. (2022): A Prudential Paradox: The Signal in (Not) Restricting Bank Dividends, Journal of Money, Credit and Banking, https://doi.org/10.1111/jmcb.12995.

Hamaui, R. (2023): La farsa della tassa sugli extraprofitti delle banche, https://lavoce.info/archives/102762/la-farsa-della-tassa-sugli-extraprofitti-delle-banche-2/ (retrieved 09.04.2024).

Heck, I., Rabensteiner, T., and Tippet, B. (2024): A Progressive Excess Profits Tax for the European Union, https://gala.gre.ac.uk/id/eprint/45941/ (retrieved 18.07.2024).

Heckmann-Draisbach, L. and Moertel, J. (2020): Hampered Interest Rate Pass-Through: A Supply Side Story?, http://dx.doi.org/10.2139/ssrn.3747467.

Huljak, I., Martin, R., and Moccero, D. (2018): Cost efficiency of euro area banks. Financial Stability Review, Issue 1, 2018, Box 6. Frankfurt am Main, European Central Bank.

Jones, C. and Franklin, J. (2024): Fed likely to make 'material' changes to controversial bank capital proposals, Jay Powell says, Financial Times, https://www.ft.com/content/1c91413c-ba74-4793-a10b-695f1a80ea9e (retrieved 06.03.2024).

Juelsrud, R. E. and Nenov, P. T. (2020): Dividend Payouts and Rollover Crises, The Review of Financial Studies, 33(9), 4139 – 4185.

Kho, S. (2024): Deposit Market Concentration and Monetary Transmission: Evidence from the Euro Area, ECB Working Paper No. 2024/2896.

Klein, M. (2020): Implications of negative interest rates for the net interest margin and lending of euro area banks. Frankfurt am Main, Deutsche Bundesbank.

Köhler, M. (2018): The Payout Behaviour of German Savings Banks, Credit and Capital Markets, 51(2), 227 – 257.



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

Londene, M. (2023): Studienkredit der KfW – Bildung um jeden Preis, Zeit Campus. https://www.zeit.de/campus/2024/01/studienkredit-kfw-studium-schulden-studenten (retrieved 03.01.2024).

Maneely, M. and Ratnovski, L. (2024): Bank Profits and Bank Taxes in the EU, IMF Working Paper No. 2024/143.

Martín, F. (2024): Bank taxes in the EU: exceptional, temporary and far less than the €6 trillion bank bailout to be paid by the state budget. Committee for the Abolition of Illegitimate Debt, https://www.cadtm.org/Bank-taxes-in-the-EU-exceptional-temporary-and-far-less-than-the-EUR6-trillion (retrieved 03.04.2024).

McKinsey & Company (2023): Banken können Profitabilität weiter steigern – aber Finanzbranche wächst vor allem außerhalb traditioneller Institute. Press Release, 11.10.2023, https://www.mckinsey.com/de/news/presse/2023-10-11-global-banking-annual-review-2023.

Meiselman, B. S., Nagel, S., and Purnanandam, A. (2023): Judging banks' risk by the profits they report, National Bureau of Economic Research: 31635, August.

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

Morris, S. (2023): Rate rises hand European banks a €100bn windfall, Financial Times, https://t.co/2LcEQOfSnp (retrieved 30.12.2023).

Munster, B. (2023): Italy waters down its infamous bank windfall tax … but don't call it a "concession", Politico, www.politico.eu/article/italy-waters-down-windfall-tax-banks-extra-profit-no-concession (retrieved 03.04.2024).

Neuberger, D. (2023): Verbraucherkreditzinsen und Zinsobergrenzen bei steigendem Zinsniveau, Vierteljahrshefte zur Wirtschaftsforschung, 92(3), 75 – 90.

Neuberger, D. and Reifner, U. (2020): Systemic Usury and the European Consumer Credit Directive, Vierteljahrshefte zur Wirtschaftsforschung, 89(1), 115 – 132.

Onali, E. (2014): Moral Hazard, Dividends, and Risk in Banks, Journal of Business Finance & Accounting, 41(1 – 2), 128 – 155.

Peters, S. (2022): iff-Überschuldungsradar 2022/31 – Dispo – Alles klar?, Institut für Finanzdienstleistungen e.V., https://www.iff-hamburg.de/2022/07/13/iff-ueberschuldungsradar-2022-31-dispo-alles-klar/ (retrieved 03.04.2024).

Picek, O. (2023): Österreich braucht eine Übergewinnsteuer für Banken, Momentum Institut, https://www.momentum-institut.at/news/oesterreich-braucht-eine-uebergewinnsteuer-fuer-banken/ (retrieved 28.12.2023).

Reifner, U. (2017): Die Finanzkrise. Für ein Wucher- und Glücksspielverbot. Wiesbaden, Springer.

Reifner, U. (2021): Das auffällige Missverhältnis bei Verbraucherdarlehensverträgen, BKR-Zeitschrift für Bank- und Kapitalmarktrecht, 409 – 416.

Reifner, U. and Feldhusen, C. (2019): Handbuch Kreditrecht. 2. Auflage, München, C.H. Beck.



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

Sachverständigenrat (2019): Den Strukturwandel meistern: Jahresgutachten 2019/20, Sachverständigenrat zur Begutachtung der Gesamtwirtschaftlichen Entwicklung. Wiesbaden, Statistisches Bundesamt.

Saunders, A. and Schumacher, L. (2000): The determinants of bank interest rate margins: an international study, Journal of International Money and Finance, 19(6), 813 – 832.

Schäfer, D. (2024): Stabilität des Europäischen Bankensektors: Wachsamkeit ist Pflicht und Erinnern schadet nicht!, Ifo-Schnelldienst, 77(7), 17 – 20.

Schäfer, D. and Semmler, W. (2023): Finanzmärkte, Arbeitsmärkte und Inflation – Beschleunigt die Zinspolitik der Zentralbank die Inflation und den Banken Crash?, Vierteljahrshefte zur Wirtschaftsforschung, 92(2), 45 – 68.

Schreiber, M. and Zydra, M. (2023): Rechnung von Mario Draghi, Süddeutsche Zeitung, https://www.sueddeutsche.de/wirtschaft/bundesbank-ezb-uebergewinne-mindestreserve-1.6318779?reduced=true (retrieved 28.12.2023).

Schroth, J. (2021): Macroprudential policy with capital buffers, Journal of Monetary Economics, 118, 296 – 311.

Schweizerische Nationalbank (2023): SNB nimmt Anpassungen bei der Verzinsung von Sichtguthaben vor, Press Release, 30.10.2023, https://www.snb.ch/de/publications/communication/press-releases/2023/pre_20231030.

Service-public.fr (2023): Livret A. Direction de l'information légale et administrative (Premier ministre), 01.08.2023, https://www.service-public.fr/particuliers/vosdroits/F2365.

Service-public.fr (2024): Livret A: maintien du taux à 3 % jusqu'en janvier 2025, Direction de l'information légale et administrative (Premier ministre), 31.01.2024, https://www.service-public.fr/particuliers/actualites/A16682.

Shin, H. S. (2018): Bank Capital and Monetary Policy Transmission, in: Hartmann, P., Huang, H., Schoenmaker, D. (eds.): The Changing Fortunes of Central Banking. Cambridge, Cambridge University Press, 80 – 100.

Simoens, M. and Vennet, R. V. (2021): Bank performance in Europe and the US: A divergence in market-to-book ratios, Finance Research Letters, 40, 101672.

Skała, D. (2015): Saving on a Rainy Day? Income Smoothing and Procyclicality of Loan-Loss Provisions in Central European Banks, International Finance, 18(1), 25 – 46.

Studis-online.de (2023): Zinsentwicklung KfW-Bildungskredite, https://www.studis-online.de/studienkredit/kfw-zinsentwicklung.php (retrieved 03.01.2024).

Svoronos, J.-P. and Vrbaski, R. (2020): Banks' dividends in Covid-19 times, Bank for International Settlements FSI Briefs, May 2020 (6).

Tran, D. V. and Ashraf, B. N. (2018): Dividend policy and bank opacity, International Journal of Finance & Economics, 23(2), 186 – 204.

Trautvetter, C. (2024a): Übergewinne richtig besteuern, Rosa-Luxemburg-Stiftung, https://www.rosalux.de/publikation/id/51548/uebergewinne-richtig-besteuern (retrieved 07.02.2024).

Trautvetter, C. (2024b): Why the EU needs an excess profits tax. An explorative analysis of the biggest and most profitable companies, https://www.netzwerk-steuergerechtig



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
OPEN ACCESS | Licensed under CC BY 4.0 | https://creativecommons.org/about/cclicenses/

keit.de/wp-content/uploads/2024/05/2024_Excess-Profits-Tax.pdf (retrieved 17.07. 2024).

Van L., Michiel, I. H., and de Bondt, G. (2024): A New Measure of Firm-Level Competition: An Application to Euro Area Banks, ECB Working Paper No. 2024/2925.

Verbraucherzentrale Bundesverband e.V. (2022): Überschuldung durch verantwortliche Kreditvergabe verhindern, https://www.vzbv.de/publikationen/kredite-verantwortlich-vergeben (retrieved 04.03.2024).

Walker, O. (2023): UK banks lead global rivals in passing on interest rate benefits to savers, Financial Times, https://www.ft.com/content/1d2949d6-00d1-4c18-af81-01439fa7cfc5 (retrieved 06.03.2024).



DOI https://doi.org/10.3790/vaw.2024.1447207 | Generated on 2025-12-15 15:45:17
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