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| RESEARCH ARTICLE

Geopolitical Sanctions, State Ownership, and Bank Stability in Europe: Evidence from EBA Disclosures and EU Sanctions Episodes

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| ABSTRACT

This paper investigates whether EU sanctions on Russia following February 2022 affected European banks' stability and how shock transmission changed with state ownership. The analysis is based on the European Banking Authority Risk Dashboard data for 2017Q4-2025Q2 and exposures to Russia, Ukraine and Belarus reported by the EBA.Strong aggregate resilience is identified, relying on European Banking Authority Risk Dashboard data for 2017Q4-2025Q2 and EBA disclosures on exposures to Russia, Ukraine and Belarus. The mean Common Equity Tier 1 ratio was 15.02% prior to 2022 and 15.88% following, and the mean non-performing loan ratio was 2.90% before 2022 and 1.85% after 2022. Return on equity increased from 5.52% to 10.10%, but this is probably as a result of repricing the money supply rather than as a result of sanctions. The loans and advances had the highest share of disclosed regional exposure, accounting for more than 80% of this exposure at 2021Q4, whereas loans and advances from Russian and Ukrainian counterparties amounted to around EUR 82 billion. The results show that there was no aggregate capital or asset-quality shock within the EU/EEA banks at the start. Ownership effects cannot be distinguished using sector averages, however. The paper thus suggests a bank and quarter fixed-effects event study interaction of pre-invasion Russia exposure, majority public ownership and post sanctions time period. It is not yet known whether state ownership reduced or exacerbated the shock, and this will be an empirical question to be answered at the bank level.

| KEYWORDS

Economic sanctions; State-owned banks; EBA transparency exercise; Geopolitical risk; Russia-Ukraine war; Difference-in-differences.

| ARTICLE INFORMATION

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1. Introduction

Sanctions have been pushed to the core of financial-stability analyses as a weapon for financial interdependence. The European Union's measures against Russia's complete invasion of Ukraine included limitations on access to capital markets, deals with the central bank, specific financial messaging, state-owned enterprises, technology exports and some trade and energy transactions. The ultimate goal of the policy was to destroy the financial and productive power of the sanctioned economy. The associated prudential concern was whether similar actions would have a negative impact on the European banks through losses, liquidity problems, compliance costs, and confidence losses. That is an empirical hard question since sanctions are not a single treatment nor a random shock. They come in packages, impact various nations and banks differently, and coincide with the volatility of energy prices and the conclusion of pandemic support, increasing inflation and the fastest European monetary tightening in decades.

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Banks were also not all equally exposed, had different capital buffers, business models and ownership. The standard before-and-after analysis is then subject to the danger of attributing to sanctions what could actually be the result of a country's fiscal or energy exposures, reversals in legacy asset quality, or a reversal in interest rates caused by the pandemic. Currently, there are three streams in the literature that are relevant to the topic but not well connected. First, the literature on sanctions shows significant impacts on bilateral trade, cross-border financial transfers, payment systems, and specific companies (Besedes et al., 2016; Crozet & Hinz, 2020; Drott et al., 2024; Felbermayr et al., 2020). Second, the literature on banking suggests that the propagation of macro-financial shocks depend on capital strength, liquidity, and borrower quality (Berger & Bouwman, 2013; Gambacorta & Shin, 2018; Gropp et al., 2019; Kapan & Minoiu, 2018). Third, the bank-ownership literature suggests that public banks can stabilise lending by imposing countercyclical policies, but can also suffer from political allocation and poor monitoring and loss recognition (Bertay et al., 2012; Iannotta et al., 2013; La Porta et al., 2000; Micco et al., 2007). There is limited research that integrates these views in the context of European sanctions.

This paper has two related questions. First, was there a clear deterioration of aggregate EU/EEA bank capital, asset quality and profitability following the escalation of the sanctions in 2022? Second, what should be used to determine whether majority public ownership affected the response of banks that have higher exposure to pre-war Russia? Answer to the first question is based on verified open EBA aggregate disclosures. The second is answered in a comprehensive event-study and triple-difference design, which sets out the ownership coding, treatment timing, fixed effects and robustness testing. There are threefold contributions. In the empirical analysis, the paper brings together the most policy-relevant EBA indicators surrounding the sanctions episode and quantifies pre/post changes (but not causal estimates). On the conceptual level, it distinguishes between the first-round balance-sheet exposure and the second-round channels of macroeconomic, market, cyber and compliance exposure. Methodologically, it does not measure sanctions intensity as an exposure dose on the bank, but rather as a pre-determined exposure dose; it then acts in synergy with the ownership status. This method tackles a key identification problem that many geopolitical-risk studies have had, namely that all banks are exposed to the event, but not all banks experience it to the same extent. The evidence presented was aggregated and verified and is consistent with resilience and not rupture. The average CET1 ratio was above the average level after 2022 and the NPL ratio was near the historical low level. Profitability improved significantly, thanks to the higher policy rates, but this channel makes it difficult to pinpoint the improvement in profitability after 2022 to sanctions or ownership. The EBA's initial assessment also deemed that direct exposures were small and localized but cautioned that second-round effects may be more significant. These patterns do not assume that there's been a uniform destabilisation of the sector, nor do they conclude that sanctions were without effect, nor do they conclude that state ownership was without effect. Aggregate stability can coexist with large losses at exposed institutions, divestment costs, compliance frictions, and cross-country heterogeneity. The remainder of the paper outlines the theoretical mechanisms and hypotheses, the sanctions chronology and EBA data architecture, the findings of the aggregate analysis, the bank-level causal specification and the implications for prudential supervision and sanctions design. All throughout, a distinction is made between the results measured and the results proposed by estimates to ensure the reproducibility of the results and to avoid inferential overreaching.

2. Literature, mechanisms, and hypotheses

2.1 Sanctions as financial and network shocks

The contemporary sanctions are implemented through trade and finance, the technology and logistics, and expectations. Financial restrictions that are applied selectively can increase transaction costs and hinder foreign currency access, clearing, settlement and correspondent banking. These are influenced by the availability of substitutes, enforcement, rerouting to third countries and network position of targeted entities. Ahn & Ludema (2020) formalize the trade-off between targeting precision and economic pressure, while Felbermayr et al. (2020) provide a systematic global sanctions database that supports comparative empirical work. German cross-border financial flows provide evidence that sanctions can significantly influence the flow of international finance (Besedes et al., 2016). Crozet & Hinz (2020) show that the Russia sanctions and counter-sanctions generated measurable trade losses beyond the targeted products, highlighting spillovers through supply relationships and uncertainty. Financial-network data sharpen this picture. Drott et al. (2024) use TARGET2 transactions to show that restrictions

affecting Russian banks altered payment flows and network participation. Market studies find that the invasion produced immediate negative stock-market reactions, especially in geographically and economically exposed countries (Boungou & Yatié, 2022). Geopolitical risk indices also predict asset-price volatility, investment retrenchment, and financing conditions (Caldara & Iacoviello, 2022; Hassan et al., 2019). For banks, these channels can operate through direct credit losses, market valuation, deposit movements, foreign subsidiary impairment, sanctions-compliance expenses, cyber incidents, and a general tightening of risk appetite.

2.2 Capital, asset quality, and shock absorption

Bank capital has both loss absorption and lending capacity impacts. The positive link between better capitalization and intermediation in crises holds as long as there is a net effect from capital requirements, which varies by type of capital and by adjustment channel (Berger & Bouwman, 2013; Bitar et al., 2018; Gambacorta & Shin, 2018). Higher capital requirements provide quasi-experimental evidence that banks have the ability to adjust risk-weighted assets, lending, and retained earnings, without just one response margin (Gropp et al., 2019). In Spain, dynamic provisioning shows that pre-positioned buffers can help alleviate the impact of downturns on credit supply and firm performance (Jiménez et al., 2017). Cross-border banking studies also reveal that liquidity and shocks to sovereigns are conveyed through multinationals' balance sheets and syndicated lending (De Marco, 2019; Popov & Van Horen, 2015; Schnabl, 2012). The pandemic offers a useful comparator. Global data show that bank profitability fell sharply and banks' risk to banking institutions rose in 2020, and that there was a significant difference in these outcomes across levels of bank capitalization and bank business model (Demirgüç-Kunt et al., 2021; Elnahass et al., 2021). Net interest income and accounting profitability of many European banks were thereupon enhanced by the post-pandemic recovery and the subsequent increase of interest rates during the normalization of interest rates. Altavilla et al. (2018) demonstrate the impact of the interest rate level and slope on bank profitability. An assessment of any sanctions over the period 2022-2025 must therefore take account of the rate cycle, the recovery from the pandemic, the end of borrower support, and the macroeconomic position of the countries.

2.3 State ownership: stabiliser, amplifier, or confounder?

There are conflicting predictions when states own. When private banks contract in lending, public banks can have implicit guarantees, steady funding and policy requirements that can encourage lending. Bertay et al. (2012) find that state-bank lending is less procyclical across the business cycle, and Coleman & Feler (2015) document local real-economy effects of public bank presence during the global financial crisis. Such mechanisms would suggest that state-owned banks could be burdened with losses resulting from sanctions without having to reduce credit substantially, especially if the government has strategic interest in continuity. The counter-argument focuses on political goals, flexible budget constraints, strategic focus and delayed asset write-offs. According to the literature, the evidence of the effects of government ownership is mixed on the issue of risk, efficiency, and performance (Cornett et al., 2008; Iannotta et al., 2013; La Porta et al., 2000; Micco et al., 2007). Public banks might have more exposure in the sanctions arena to state-backed corporations, energy infrastructure or politically-influenced cross-border ties. They may also be subjected to greater pressure to support their domestic companies in the event of disruptions in energy and trade. The net effect is potentially both positive and negative, and is only guessable, not calculable.

2.4 Hypotheses

H1: Banks with larger pre-invasion Russia exposure experience a less favourable post-sanctions change in capital, asset quality, or profitability than banks with limited exposure.

H2: If state backing and policy mandates dominate, majority public ownership attenuates the adverse effect of pre-war exposure on post-sanctions stability.

H3: If concentrated strategic exposures, weaker monitoring, or delayed recognition dominate, majority public ownership amplifies the adverse effect.

H4: Sector-wide EBA indicators show no discrete systemic rupture, even if bank-level effects are economically meaningful and heterogeneous.

3. Institutional setting and sanctions chronology

The period of restrictions is founded on the sequence that started on 23 February 2022 when the Council adopted the restrictions as a response to Russia's recognition of the non-government controlled areas of Donetsk and Luhansk. EU leaders agreed wider measures against individuals and finance, energy, transport and technology on 24-25 February. The restrictions on the transactions with the Russian central bank and the exclusion of seven Russian banks from SWIFT were implemented from 28 February to 2 March. Further packages allowed for the liberalization of state-owned enterprises, capital-market activity, services, technology, transport, and further banks, as well as energy. The sequence makes 2022Q2 the first clean quarterly post treatment period for the EBA's balance-sheet results. The sanctions episode differs from a conventional domestic policy shock. The legal limits are at EU level, but the economic exposure differs for each bank based on their geographic credit exposure, subsidiaries, customer mix, payment volumes and funding relationships. The exposure variable is then a continuous or stratified variable, therefore. A universal post dummy picks up the common economic break, but it is not able to separate out the effect of the sanctions from the ongoing inflation, the energy price, or monetary tightening at the time of the break. The EBA's special feature for the Q4 2021 is especially helpful since it preempts balance sheets adjustment. In the case of direct assets, the disclosure shows that few countries and institutions held the bulk of the assets relating to Russia, Ukraine and Belarus. Over 80% of total exposures were loans and advances, primarily to non-financial corporations. Russian and Ukrainian counterparty deposits totalled EUR 82 billion, with non-financial corporations and households contributing some 70% of this amount. These facts prompt a dose of credit exposure at the bank level and distinct the direct credit risks from potential deposit or operation pathways.

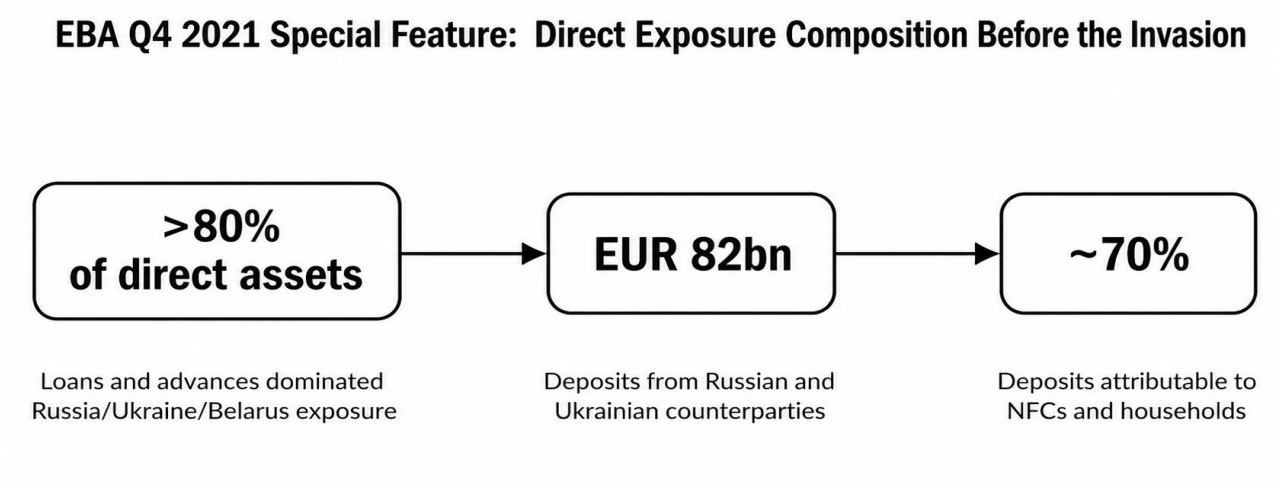


Figure 1. Composition of disclosed EU/EEA bank exposures before the full-scale invasion. Source: EBA Q4 2021 special feature.

4. Data and measurement

4.1 Realised aggregate dataset

The dataset is the realization of the EBA quarter-end large EU/EEA banking institutions aggregate indicators. The data in the series start in Q4 2017 and end in Q2 2025, five years before the sanctions escalation. Normally the EBA sample represents over 80% of the banking sector's assets, although the number of reporting institutions may differ across releases and large subsidiaries can be excluded. The key results include a fully loaded CET1 ratio, the non-performing loan ratio, and return on equity. The 2025Q2 observation for the CET1 applies to transitional arrangements of the CRR and is specifically indicated in the data file. These values were extracted from EBA press releases, dashboards and the special feature for Q4 2021, and checked for definition and reference period. 2020Q4 values are explicit quarter-on-quarter restatements which have been rounded and flagged as such in the EBA release Q1 2021. This is better than "false precision" - the underlying series is available for download in the annex, but a minor error at the second decimal would not affect the conclusions that can be drawn.

Period	CET1 (%)	NPL (%)	RoE (%)	Measurement note
2017Q4	14.60	4.00	6.10	CET1 fully loaded; NPL and annualised Q4 RoE
2018Q4	14.40	3.20	6.50	CET1 fully loaded; NPL and Q4 RoE
2019Q4	14.80	2.70	5.80	CET1 fully loaded; NPL and Q4 RoE
2020Q4	15.50	2.60	1.90	Rounded values implied by Q1 2021 EBA release; use cautiously
2021Q4	15.80	2.00	7.30	CET1 and RoE rounded from EBA dashboard series; NPL stated in EBA release
2022Q4	15.30	1.80	8.90	CET1 stated in EBA release; NPL and RoE rounded from EBA dashboard series
2023Q4	15.90	1.90	10.30	Fully loaded CET1; NPL and full-year RoE
2024Q4	16.00	1.86	10.50	Fully loaded CET1; NPL rounded from EUR 375bn and dashboard series; full-year RoE
2025Q2	16.30	1.84	10.70	CET1 under applicable transitional arrangements; Q2 RoE; not a year-end observation

Table 1. Verified aggregate EBA indicators used in the realised analysis.

4.2 Bank-level disclosure architecture

The harmonised EBA disclosure panel compiled by Bun & Cuijpers (2026) structures all Transparency Exercise releases since 2014, with selected stress-test fields from 2012. It includes stable bank identifiers, reporting period, country, variable code, descriptive label, geographic breakdown and amount reported. Starting in 2018 the core panel will run quarterly. The variables used in the proposed causal analysis, such as fully loaded CET1, leverage, total risk-weighted assets, net profit, return on equity, return on assets, cost of risk and geographic credit exposures - are available under harmonized codes.

Code	Variable	Use in model
FECPHD0020	CET1 ratio, fully loaded	Capital resilience
FECPHD0026	Leverage ratio, fully loaded	Non-risk-weighted solvency
FECPHD0030	Total risk-weighted assets	Scale and denominator control
FECPHD0054	Net profit	Profitability level
FECPHD01000	Return on equity	Profitability outcome
FECPHD01004	Net return on assets	Profitability outcome
FECPHD01006 / 01007	Cost of risk, narrow / wide	Credit-risk pricing
Geographic exposure codes	Russia exposure by portfolio/counterparty	Pre-war treatment dose

Table 2. *Core EBA variables for the bank-level extension.*

4.3 State-ownership coding

Coding of state ownership should apply on 31 December 2021 to prevent post-treatment reclassification. The primary indicator is one if a national, regional or municipal public authority has more than 50% of the voting rights directly or indirectly. If a wider definition of robustness is adopted, then the public control afforded by special statutes, public holding companies or dispersed public shareholders with a combined voting power of over 25%, which provides for board control, should be included. Separate identification of development banks is necessary as there are many differences between their mandates and asset composition with commercial banks. Ownership evidence should be kept in the annual reports, official shareholder register, government portfolio disclosure and bank governance pages, and in cases where there is significant ambiguity, two researchers should verify the ownership.

5. Empirical strategy

5.1 Realised descriptive analysis

The realized analysis presents levels, changes and pre/post means. The pre-period is 2017Q4-2021Q4 and the post-period is 2022Q4-2025Q2. The comparisons made are descriptive and do not impute or exclude causal interpretation. Annual or year-end aggregate observations would lead to misleading precision with the conventional significance tests, and an underpowered and confounded segmented time-series model would be hampered by the pandemic and interest-rate regime. For this reason, economically meaningful percentage-point changes are highlighted and the consistency of existing trends is stressed.

5.2 Bank-level continuous-treatment event study

For bank i in quarter t, define $Exposure_i$ as Russia credit exposure at 2021Q4 divided by total credit exposure. Define $State_i$ as the pre-determined public-ownership indicator and $Post_t$ as one from 2022Q2 onward. The baseline triple-difference model is:

$$Y_i t = \alpha_i + \lambda_t + \beta_1(Exposure_i \times Post_t) + \beta_2(State_i \times Post_t) + \beta_3(Exposure_i \times State_i \times Post_t) + \Gamma X_i t + \varepsilon_i t$$

Bank fixed effects α_i absorb time-invariant differences in business model, domicile, and ownership. Quarter fixed effects λ_t absorb common sanctions, monetary-policy, energy-price, and macroeconomic shocks. $X_i t$ includes log total assets, loan growth, deposit funding, RWA density, and where feasible, country-level GDP growth, inflation, policy rates, and sovereign-spread controls. Standard errors are clustered by bank; country-by-quarter fixed effects are added in the preferred specification to absorb national macro-fiscal conditions.

The coefficient β_1 measures whether more exposed private banks experienced differential post-sanctions outcomes. The triple interaction β_3 measures how that exposure response differs for public banks. For stability outcomes where higher values are favourable, such as CET1 or RoA, a positive β_3 supports the public-buffer hypothesis. For adverse outcomes such as NPLs or cost of risk, a negative β_3 supports the same hypothesis. The opposite signs support the political-allocation or delayed-recognition channel.

5.3 Dynamic specification and identifying assumptions

The dynamic event study replaces $Post_t$ with quarter-relative indicators interacted with $Exposure_i$ and $Exposure_i \times State_i$. The omitted period is 2021Q4. Pre-treatment coefficients measure differential trends and post-treatment coefficients measure the timing and duration of balance sheet adjustment. The design assumes that the conditional trend for high exposure and low exposure banks would have been parallel if there were no sanctions escalation. This is more likely to be true once accounting for country-quarter shocks and pre-war bank attributes, but cannot be ruled out.

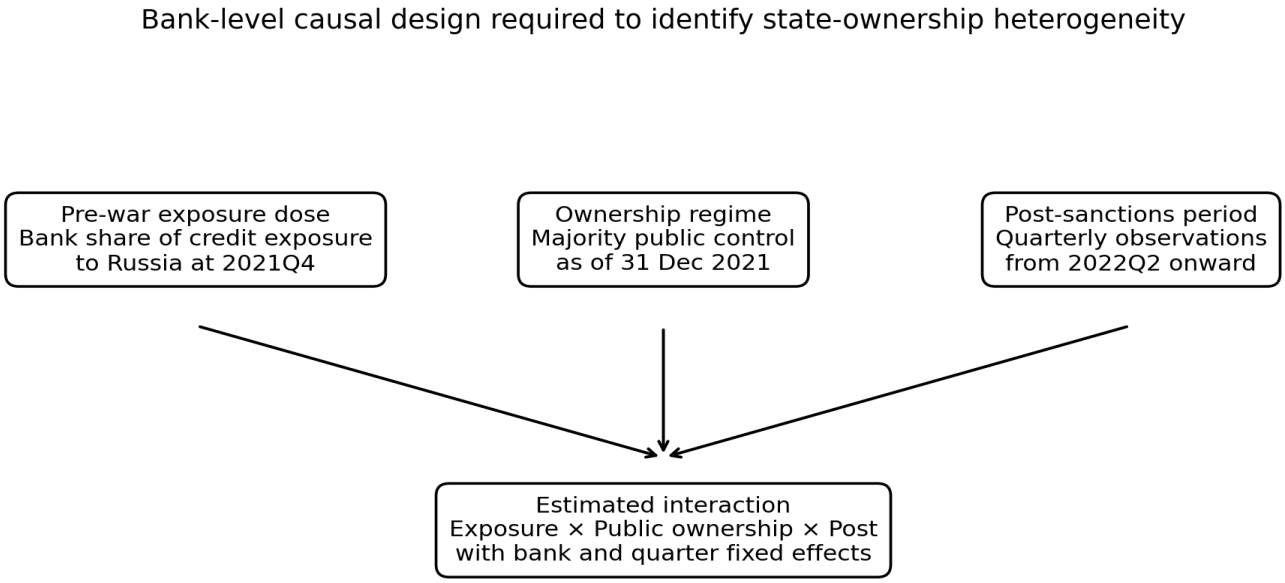


Figure 2. Identification logic for the bank-level state-ownership test.

6. Results

6.1 Capital resilience

Figure 3 indicates that there was no continuing decline in aggregate CET1 capital following the sanctions escalation. The ratio was 15.8% at 2021Q4, declined to 15.3% at 2022Q4 as risk-weighted assets expanded and market conditions deteriorated, and then increased to 15.9% in 2023Q4, 16.0% in 2024Q4, and 16.3% in 2025Q2. The post-period mean was 15.88% compared to 15.02% for 2017Q4-2021Q4, which was a descriptive increase of 0.86%. This is not consistent with the sector-wide capital impairment caused by sanctions. Where exposed institutions were not harmed, it is not evidence. Increased retained earnings, decreased risk-weighted assets, sales of exposures and weaker banks exiting the sample can all help to increase the aggregate ratio. The EBA sample is additionally updated throughout releases. The defensible inference is therefore narrow: the first-round shock did not overwhelm the sector's aggregate solvency buffer.

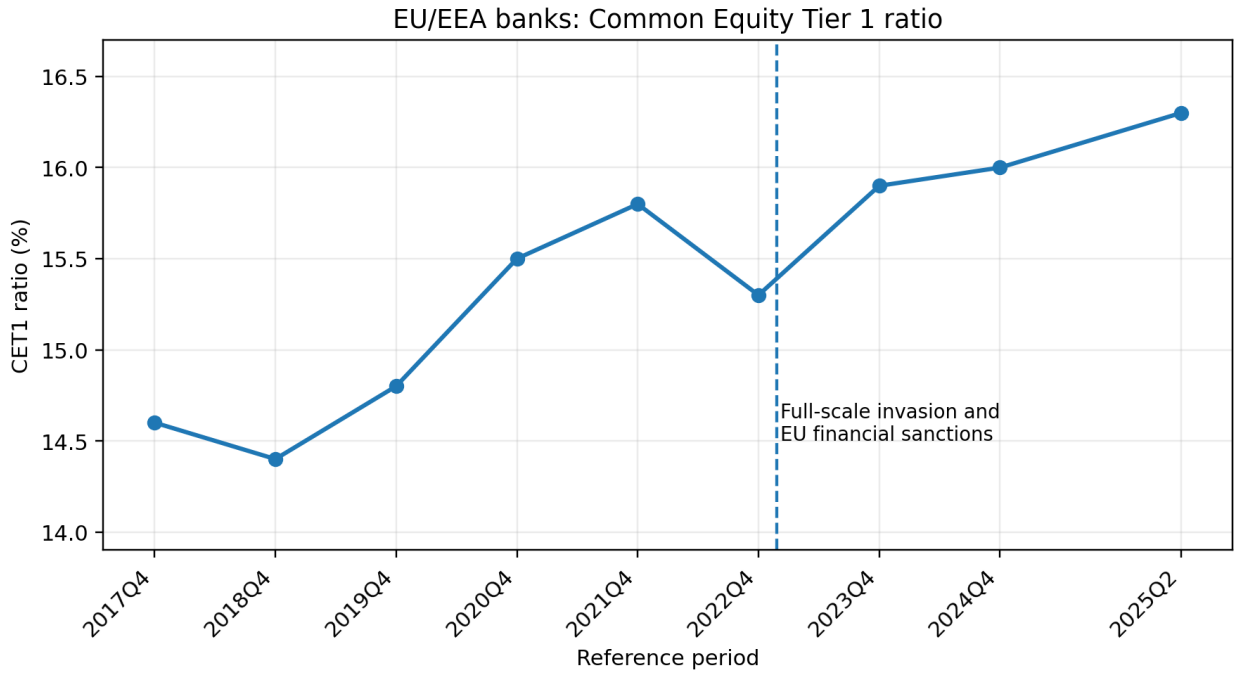


Figure 3. Aggregate CET1 ratio before and after the 2022 sanctions escalation. Sources: EBA Risk Dashboards; authors' compilation.

6.2 Asset quality

The NPL ratio fell from 4.0% in 2017Q4 to 2.0% immediately before the invasion. It reached approximately 1.8% in 2022Q4 and remained between 1.84% and 1.90% through 2025Q2. The pre-period mean was 2.90%, whereas the post-period mean was 1.85%, a difference of −1.05 percentage points. The improvement in most of the above is attributable to legacy NPLs being disposed of, worked out and provisioned over a period of several years, before the sanctions episode. Therefore, the pre/post difference should not be interpreted as an improvement due to sanctions. Lack of an overall NPL spike is nonetheless informative. It suggests a lack of reversal of the asset-quality repair in the sector over the horizon, despite the presence of direct Russia-related credit losses, energy-price spillovers, and macroeconomic weakness. Early warnings were not as uniformly positive, however, as the EBA recognized that stage 2 loans rose and cost of risk rose, in parts of the period since the invasion; and commercial real estate and some corporate loan portfolios declined. Therefore, the assessment of geopolitical credit stress is incomplete and lagged by looking at NPLs on the aggregate.

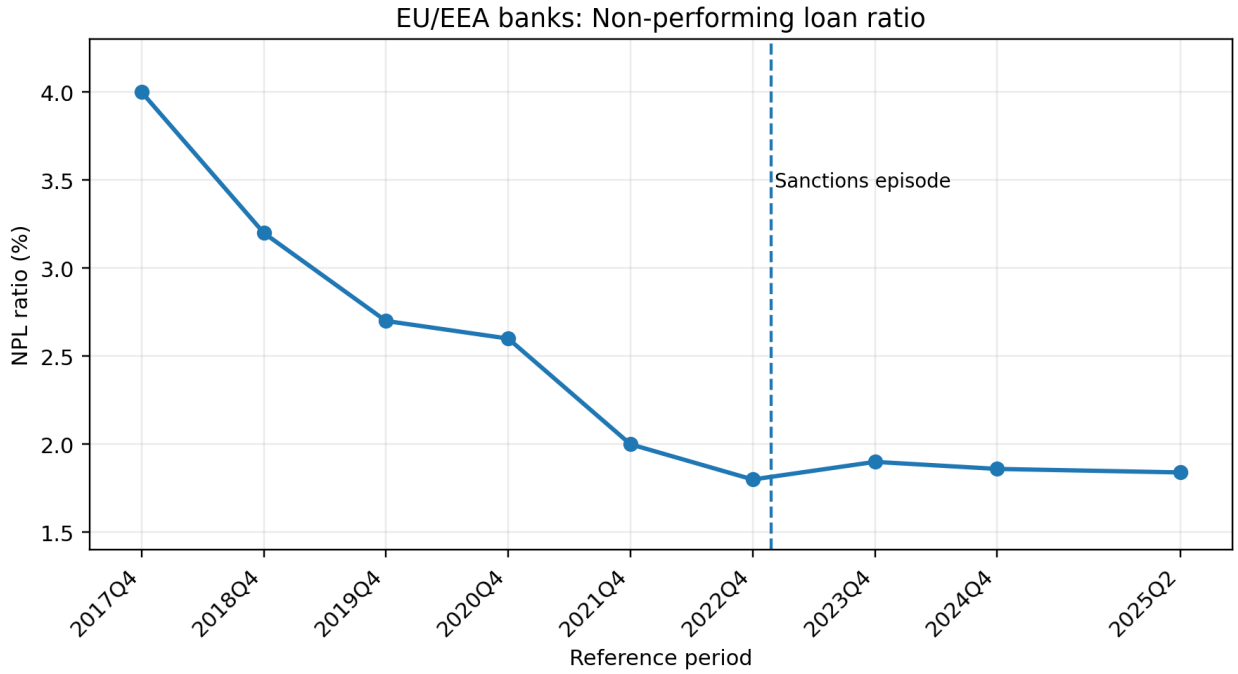


Figure 4. Aggregate non-performing loan ratio before and after the sanctions escalation. Sources: EBA Risk Dashboards; authors' compilation.

6.3 Profitability and the interest-rate confounder

Return on equity displays the strongest post-2022 increase but also the clearest confounding. RoE fell to 1.9% in 2020Q4 during the pandemic and recovered to 7.3% by 2021Q4. It reached 8.9% in 2022Q4, 10.3% in 2023, 10.5% in 2024, and 10.7% in 2025Q2. The post-period mean of 10.10% exceeds the pre-period mean of 5.52% by 4.58 percentage points. The timing and the economy suggest that the rise is to be seen primarily as driven by the growth of net interest income, pandemic normalisation, and the decline of impairment charges rather than related to sanctions. Good asset returns and tight employment and fiscal support reduced household credit deterioration, while asset yields benefited from higher rates until deposit costs fully repriced. Exceptions could have occurred due to divestment, compliance costs, loss of business or loss in the market for specific banks due to sanctions. It is impossible to separate out these channels of aggregation and profitability.

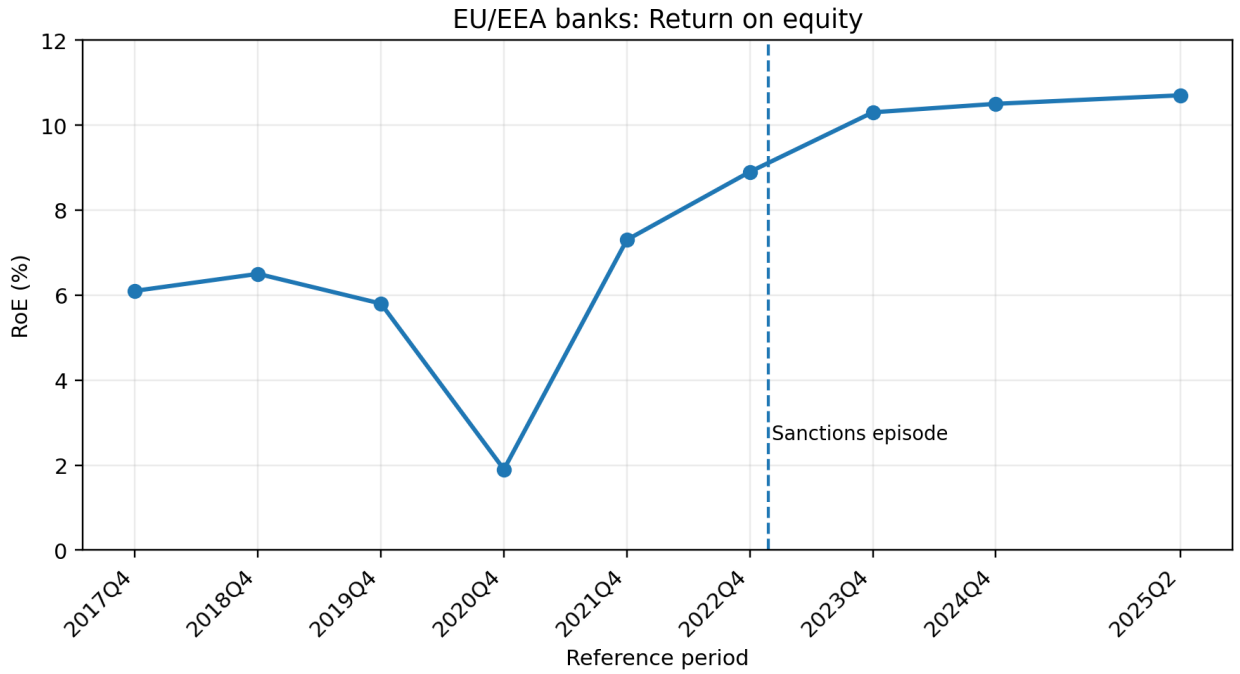


Figure 5. Aggregate return on equity and the post-pandemic recovery. Sources: EBA Risk Dashboards; authors' compilation.

Indicator	Pre mean	Post mean	Difference (pp)	Interpretation
CET1 ratio (%)	15.02	15.88	+0.86	Descriptive; not causal
NPL ratio (%)	2.90	1.85	-1.05	Descriptive; not causal
RoE (%)	5.52	10.10	+4.58	Descriptive; not causal

Table 3. Descriptive pre/post comparison around the 2022 sanctions episode.

6.4 What the aggregate evidence does and does not show

Together, the evidence realised supports Hypothesis 4: There is no obvious aggregate capital or asset-quality rupture in the EBA indicators. The EBA's contemporaneous risk assessment of first-round direct exposures confirming that this was no fundamental risk is in line with the available data. The episode came with high capital, plenty of liquidity and significantly repaired NPLs. Hypotheses 1-3 cannot be adjudicated by the evidence. Ownership level (state-owned) is an attribute of the bank and the distribution of exposure is concentrated. The aggregation of banks eliminates interaction among banks as a mechanism by which to distinguish public and private banks mechanically. To claim from the sector averages that the stability of the state was affected positively or negatively would be an ecological fallacy.

7. Bank-level robustness and validation protocol

A Q1-standard causal implementation should treat robustness as part of identification rather than a catalogue of alternative regressions. Table 4 defines the minimum validation set.

Validation	Implementation	Purpose
Pre-trend test	Quarter-relative exposure interactions for 2018Q1-2021Q3	Reject specifications with economically material differential pre-trends
Country-quarter fixed effects	Absorb national inflation, energy, fiscal, and monetary transmission	Separates bank exposure from domicile shocks
Ownership definitions	Majority public; effective public control; exclude development banks	Tests sensitivity to institutional heterogeneity
Exposure definitions	Russia only; Russia/Ukraine/Belarus; loans only; total assets	Tests treatment measurement and spillovers
Outcome set	CET1, leverage, NPL/NPE, stage 2, cost of risk, RoA, RoE	Avoids reliance on a single stability proxy
Placebo timing	Pseudo-treatment in 2019Q1 and 2020Q1	Detects spurious break attribution
Influence diagnostics	Leave-one-country-out and leave-one-bank-out	Addresses concentration in a few institutions
Sample stability	Balanced panel; constant EBA sample; merger-adjusted identifiers	Limits composition-driven results
Inference	Bank-clustered SE; wild-cluster bootstrap by country	Accounts for serial and grouped dependence
Alternative estimators	Sun-Abraham; Callaway-Sant'Anna; imputation event study	Addresses heterogeneous dynamic effects

Table 4. Required robustness and validation tests for the bank-level causal extension.

The event-study estimators of Sun & Abraham (2021), Callaway & Sant'Anna (2021), Borusyak et al. (2021), and Roth et al. (2023) are designed principally for staggered or heterogeneous treatment settings. In this scenario, legal treatment is prevalent in calendar time, while exposures are continuous and predetermined.In this scenario, exposures are continuous, predetermined, and legal treatment is prevalent in calendar time. The relevance of their lessons is preserved since traditional 2x2 fixed-effects interactions can mask, for example, heterogeneous trends and pre-trends. A transparent implementation should report raw group trends, treatment-dose distributions, and institution-level influence alongside regression coefficients.

8. Discussion

Resilience of the European banking system in the wake of 2022 is influenced by initial conditions and policy architecture. Capital ratios were also high, liquidity was well above the regulatory requirements, and NPLs were significantly reduced prior to the invasion. The exposures were clustered in the direction to Russia, Ukraine, and Belarus, which enabled supervisors to work with a small number of institutions. The buffers lessened the chances that the targeted financial sanctions would trigger a banking crisis in the short term by way of immediate losses. Resilience should not be confused with absence of cost. European banks suffered from divestment losses, legal and compliance costs, payment-screening costs, cyber-security investments and lost business. Second round channels were based on energy prices, industrial production, borrower margins, inflation, interest rates and volatility. The effects can manifest in stage 2 loans, provisioning overlays, operational-risk losses or any particular sector before they can be seen in the headline NPL ratios. It is plausible that ownership may be relevant at every step. Public banks can get direct assistance and can be mandated to lend to some key companies. They can also have high intensity exposures due to public requirement or regional political connection. The term 'state-owned' has a different meaning for national promotional institutions, for German Landesbanken and for some commercial banks in which the state plays a partial role. A binary indicator is thus required for identification, but not necessarily for interpretation, and the interpretation of the mandate type, guarantee structure and governance should be analysed as secondary dimensions. The descriptive findings also illustrate a broader methodological point. Being a high-profile geopolitical event does not justify an event study in itself. The common post coefficient is not easily

interpretable when the event occurs with a big rate-cycle change and during pandemic recovery. Identification has nothing to do with the drama of the calendar date, but rather cross-sectional exposure before the shock.

9. Policy implications

In designing and implementing sanctions, a map of exposures should be shared with prudential supervision prior to implementation of the measures. The information prior to the issuance of the credit, deposits, securities, payment activity, correspondent relationships, and subsidiaries will help authorities determine if it is systemic vulnerability or loss for a specific institution. The EBA special feature illustrates the added value of timely, regular, and standardized disclosure, which should be kept in machine-readable format and consistently linked to reports for all reporting vintages. Second, mandate sensitive supervision is needed for public ownership. The notion of state support being always stabilizing can lead to the temptation of concentrating or delayed loss recognition. On the other hand, the distinction between public and profit-oriented banks would not be captured if one considers them as the same entity. When assessing sanctions resilience, fiscal guarantees, dividend policy, directed lending obligations and exposure to strategic sectors should be documented in supervisory reviews. Thirdly, headline capital and NPL ratios should be supported by stage 2 migration, cost of risk, operational losses, deposit concentration, and sanctions compliance ratios. The direct financial channel remained low at the overall level, while operational and cyber channels remained high. Therefore, a good sanctions stress test should include credit, market, liquidity, conduct, legal and operational-risk modules. Fourth, data continuity matters. The move from the EBA Transparency Exercise to the Pillar 3 Data Hub increases centralization, but may result in gaps in variable definitions and sample coverage. For credible ex-post policy evaluation, stable identifiers, historical vintages, and downloadable bank-level series are public infrastructure rather than optional transparency products.

10. Limitations

The realized analysis is an aggregate and descriptive analysis. It cannot identify state-ownership heterogeneity, bank-specific exposure effects, or causal sanctions impacts. The set of institutions varies over EBA publications, and some statistics are based on somewhat different regulatory bases or conventions. The observation for 2025Q2 is not an end-of-year observation and the actual 2020Q4 values are rounded in an EBA quarter-on-quarter statement. The sanctions episode overlaps with pandemic recovery, energy-market disruption, inflation, fiscal support, and monetary tightening. No matter how well-designed a bank is, it has to account for the country-quarter conditions and test the parallel trends. Business models that are correlated with future outcomes may be also endogenous to Russia exposure. Addressing exposure through 2021Q4 and adding bank fixed effects doesn't solve that issue. Ownership is multidimensional. A majority voting rights definition could include both promotional banks and regional public banks that may have a different mandate from commercially oriented banks. In a core robustness test result, should thus be reported by ownership type and exclude development banks. Lastly, off-balance-sheet, operational, reputational and legal sanctions costs may not be reflected well in the traditional EBA accounting ratios.

11. Conclusion

The 2022 sanctions escalation has led to a clear first response to the question of financial stability: Open EBA disclosures. No aggregate solvency/rupture of NPLs were observed among EU/EEA banks. Capital ratios improved from a slight decrease in 2022 to new highs, NPL ratios were under 2% and profitability improved due to the monetary tightening that led to higher net interest income. The pre-invaded exposure disclosure also sheds light on why: exposures from direct Russia, Ukraine and Belarus were disproportionately concentrated, mostly credit-based and small relative to the overall system. Yet aggregate resilience cannot establish whether sanctions-imposed material losses on highly exposed institutions or whether state ownership changed the response. This is a question that needs to be answered in a bank-level design which involves pre-war exposure, public control, and post-sanctions. The proposed event study provides that design and the standards of validation required for a "defensible" causal paper. This substantive conclusion is accurate, rather than broad-based: the impact of the first round of sanctions was not destabilizing for European banks; and, the ownership channel is an empirical question, and should be estimated from the disclosure of individual banks, rather than from averages.

Declaration

Data availability and reproducibility: This manuscript is accompanied by aggregate input data, a descriptive summary, and a script for reproducing the results. The underlying EBA Risk Dashboard and Transparency Exercise disclosures are public. A harmonised bank level panel is documented by Bun & Cuijpers (2026). To reproduce the bank-level extension, you must have the panel parquet file, the variable dictionary, the archived ownership crosswalk and the EU sanctions chronology. No confidential supervisory data are needed for the suggested baseline design.

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