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Corporate Acquisitions and Bank Relationships *

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Abstract

We study the dynamics of firm-bank relationships following corporate acquisitions using a novel firm-bank dataset for 23 European countries over 2008-2014. Our data allows us to track changes in both firm ownership and bank relationships over time. To examine the effect of ownership change on bank relationships we combine a difference-in-differences approach with matching. We find that majority acquisitions are associated with substantial changes in bank relationships of target firms. Acquiring firms actively change the composition of these relationships, incorporating banks with superior knowledge of the target's local market or with expertise in the target's industry. This reallocation appears to mitigate informational frictions associated with the acquisition. Our findings are consistent with theories of financial intermediation that emphasize the role of banks in accumulating and providing soft information about the real economy.

JEL: G21; G34; F36; E51

Keywords: Bank relationships; corporate acquisitions; information asymmetry; soft information; bank specialization

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1 Introduction

The bank relationships that firms maintain are not static. Acquisitions, strategic shifts, or changes in scale may prompt firms to reassess and reconfigure their banking partnerships. When firms replace or add banks, they do not merely seek capital—they may be targeting lenders with superior knowledge of their industry, geographic market, or strategic needs. For example, well-informed specialized banks make it easier for firms to finance trade across borders and adjust supply chains (Paravisini et al., 2023, Alfaro et al., 2025). This informational motive underlies a broader theory of financial intermediation: banks accumulate soft information through repeated interactions and play a crucial role in screening, monitoring, and advising clients in the absence of transparent public signals (Leland and Pyle, 1977, Diamond, 1984, 1991). Such information not only improves banks' own lending decisions, but also facilitates external financing more broadly, as investors often delegate the provision of firm-level credit to banks allowing banks to intermediate capital and perform monitoring that would be too costly for dispersed investors to undertake directly (Ramakrishnan and Thakor, 1984, Rajan, 1992, Allen and Carletti, 2015). While informational asymmetries are more severe for smaller or less transparent firms, these mechanisms are relevant across a broad range of firm types and financial structures.¹

In this paper, we study information asymmetry as a potential motive to change bank relationships. Identifying the drivers of such changes is challenging, as bank switching decisions are typically endogenous to firm characteristics and prevailing market conditions. To address this, we focus on majority-control corporate acquisitions as quasi-exogenous shocks to the structure of firms' bank relationships. These events typically trigger shifts in governance and strategic priorities, since controlling shareholders often exert influence beyond their cash flow rights (Shleifer and Vishny, 1986, La Porta et al., 1999). The new controlling owner may help overcome the "hold-up problem" posed by the incumbent banks (Sharpe, 1990, Rajan, 1992)², allowing the addition of new banking relationships or the severing of entrenched ones, and potentially easing the target's access to external finance.

In this context, post-acquisition changes in bank relationships are more likely to reflect

¹See also Williamson (1986), Krasa and Villamil (1992), Hellwig (2000) on intermediation as delegated monitoring. Dang et al. (2017) emphasize banks' superior information but question the extent to which they use it for active oversight or pricing, in contrast to classic monitoring models. Liberti and Petersen (2018) survey the literature on the role of information in financial markets in general.

²Incumbent banks may exert hold-up power over borrowers by building an information monopoly relative to outside banks, as argued by Sharpe (1990) and Rajan (1992) and empirically demonstrated by Petersen and Rajan (1994) and Ioannidou and Ongena (2010). Schäfer (2018) shows that even relationship lenders that have shown leniency toward struggling firms by extending financial support in times of distress engage in rent extraction and secure future business in return.

the acquiring firm's objectives and informational needs than the target's prior performance or unobserved creditworthiness. This conceptual distinction sets our approach apart from the supply-side literature in the tradition of Khwaja and Mian (2008), which focuses on shocks originating outside the firm, such as changes in credit supply or lender behavior. By contrast, we study how changes in control due to corporate acquisitions result in internally driven realignments of financial services, as the new owner reorganizes the target's bank relationships in line with its own strategic and informational priorities. Also, we focus on each firm's and each bank's set of relationships and the characteristics of the firms and banks that shape these relationships, because, while we can track changes in relationships and in ownership over time, our data does not capture data on individual loans. The otherwise detailed panel data allow us study whether acquirers integrate targets into their existing bank networks or replace incumbent lenders that lack relevant geographic or sectoral expertise. These decisions reflect not only financing needs, but also strategic alignment, information access, and post-acquisition monitoring efficiency (Fee and Thomas, 2004). While supply-side responses, such as reassessment of credit risk by banks, may still occur (Gopalan et al., 2007, Matvos and Seru, 2014), our focus remains on demand-side adjustments originating from within the firm. By analyzing these changes, we provide new evidence on how informational asymmetries shape firms' banking decisions following changes in control.

To structure our empirical analysis, we draw on theories of financial intermediation that highlight the informational role of banks. A central question is why acquirers restructure the bank relationships of newly acquired firms. Apart from better borrowing terms, one possibility is that they seek to replace incumbent institutions with banks that are better positioned to address informational frictions faced by the acquirer, particularly when it lacks familiarity with the target's local market or industry. While the target firm may also benefit from improved information provision and banking services, the key decisions are made by the acquiring firm, which exercises control following the change in ownership. We empirically test three related hypotheses, derived from these theories. First, we examine whether acquisitions lead to a reconfiguration (churn but especially expansion) of bank relationships, consistent with an active demand-side response. Second, we assess whether these adjustments are more pronounced when the acquirer faces greater informational distance from the target, such as differences in geographic location or sectoral focus. Third, we test whether banks with stronger geographic presence in target's market or industry expertise are more likely to be retained or added in the aftermath of the acquisition.

To operationalize these mechanisms, we construct new measures of "bank-specific knowl-

edge" based on the bank's corporate client base: (i) the aggregate size of a bank's clients in the target's local market, (ii) the geographic spread of the bank's operations, and (iii) bank's degree of industry specialization. These proxies capture banks' capacity to accumulate and deploy soft information. We then examine how the composition of firm-bank ties following an acquisition varies along these dimensions, allowing us to assess whether acquirers shift toward banks with informational advantages.

In the empirical implementation, we treat majority-control acquisitions as plausibly exogenous shocks to firms' demand for banking services and apply difference-in-difference regressions to compare changes in the composition of bank relationships for acquired versus non-acquired firms, while accounting for both firm-level and temporal heterogeneity. We examine changes in bank relationships from the year prior to the acquisition to the year following it, using non-acquired firms as a control group. By estimating changes in relationships around these events, we effectively difference out time-invariant firm characteristics (both observed and unobserved) that may confound cross-sectional comparisons. To further address endogeneity concerns, we include sector-year fixed effects and time trends, and use coarsened exact matching (CEM) to ensure that acquired and non-acquired firms are similar along key pre-acquisition characteristics—firm size, performance, leverage, ownership structure, and existing bank relationships. This design improves comparability across groups and strengthens the causal interpretation of the observed post-acquisition adjustments.³

To isolate the role of informational frictions in shaping bank relationship structures post-acquisition, we focus on domestic acquisitions, where proximity and information asymmetries are most salient. In an extension we study foreign acquisitions, which involve distinct additional frictions, such as cross-border financing barriers, legal fragmentation, or acquirer unfamiliarity with the host environment.

For our empirical analysis, we construct a novel, large-scale firm-bank panel dataset covering 23 European countries over the period 2008-2014 using Orbis, Orbis Bank Focus (formerly Bankscope), and Orbis Ownership databases by Bureau van Dijk (BvD).⁴ For firms, our dataset contains information on firm variables from financial statements, the type and nationality of their owners, ownership changes, and stakes owned. For banks, we track all firms' bank re-

³We refrain from testing the subsequent effect of changes in bank relationships on firms' financial and non-financial outcomes, as doing so would require addressing a two-stage endogeneity problem, namely, the endogenous nature of both the acquisition and the subsequent banking adjustments.

⁴BvD's Orbis database is nationally representative and internationally comparable as was shown by Kalemli-Özcan et al. (2024) who described and validated this data. We rely on their harmonized dataset of firm-level financial and ownership information (covering the period 2000-2014) and augment it with firm-bank relationship data available in Orbis from 2010 onward. Bank names are manually verified to ensure accurate identification of unique banking institutions. Orbis Bank Focus superseded the Bankscope database, commonly used in the banking literature, after the acquisition of BvD by Moody's in 2017.

lationships over time, each bank's nationality (based on global headquarters), ultimate ownership, and characteristics of their client base, including client size, sectoral composition, and geographic distribution. These data enable us to characterize the types of banks that firms add or drop post-acquisition, with particular attention to banks' "knowledge", specialization, and geographic focus. The final dataset covers both listed and unlisted firms of varying sizes, capturing a broad cross-section of the European corporate sector across 23 countries. Among acquired firms, approximately 58% are small (fewer than 50 employees), 26% medium (50–250 employees), and 16% large (over 250 employees), a distribution closely mirrored in the matched control group or in the full (non-matched) sample. Firms in the sample maintain, on average, 1.7 bank relationships per year. The distribution is dominated by concentrated banking structures: 58% of firms report at most one bank relationship in a given year, 21% report two relationships, and the remaining 21% maintain ties with three or more banks. Despite this concentration, there is substantial churning over time: about a fifth of firms add at least one bank in a given year, a quarter drops a bank, and 12% both add and drop a bank while keeping the total unchanged. This variation enables us to explore whether post-acquisition restructuring of bank relationships differs across acquirers and firms with different informational needs.

We document substantial reshaping of bank relationships following corporate acquisitions. Relative to similar non-acquired firms, acquired firms are more likely to expand their banking networks. This expansion reflects deliberate restructuring by the acquiring firm, rather than passive continuation of the target's pre-existing relationships. These changes in the structure of bank relationships reflect not only a general tendency toward expansion but also distinct informational preferences on the part of the acquiring firm. The restructuring involves both the addition and removal of banks and is shaped by the acquirer's familiarity with the target's environment. Geographic distance plays a particularly important role: when the acquirer is located in a different region, there is a clear shift toward banks with local market knowledge, especially through the addition of domestic banks and the replacement of foreign ones. Sectoral distance appears to matter less systematically, though acquirers entering less familiar industries are more likely to engage banks with relevant sectoral expertise. Across both dimensions, acquirers selectively retain or bring in banks whose client base suggest stronger embedded knowledge in the target's market or industry. These patterns provide novel evidence that post-acquisition bank selection is driven by the demand to mitigate informational frictions, and that banks' accumulated knowledge (developed through repeated interactions with firms in similar geographic or sectoral spaces) plays a central role in these decisions.

We provide several extensions that reinforce the central findings. The observed adjust-

ments are more pronounced for larger target firms, where informational realignment is likely to be more valuable. The results also hold across both matched and full samples, and remain robust when disaggregating domestic and foreign bank relationships or measuring bank knowledge at various geographic or sectoral levels. An extension comparing domestic and foreign acquisitions reveals that informational restructuring is more systematic and targeted in domestic deals, where the institutional environment is more comparable and the acquirer can more effectively leverage bank-specific knowledge, confirming our assertion that information theories we test are more relevant within national boundaries. Taken together, the evidence points to the strategic use of bank relationships as a mechanism to address post-acquisition informational challenges.

Our work contributes to several strands of the literature. First, we contribute to the growing empirical literature on relationship banking and the determinants of changes in bank relationships.⁵ Prior research documents that many firms maintain a single bank relationship, while others engage with multiple banks and switch them over time (Detragiache et al., 2000, Ongena and Smith, 2000b), often to escape the informational monopoly of incumbent banks (the "hold-up problem") or to broaden financial access (Degryse and Ongena, 2001, Hale and Santos, 2009, Ioannidou and Ongena, 2010, Gopalan et al., 2011). These firm-level dynamics influence how financial frictions affect the transmission of monetary and banking shocks to the broader economy (Amiti and Weinstein, 2018). Despite extensive work on the determinants of relationship structures, there is limited evidence on how and why these relationships are reconfigured over time. We address this gap by examining changes in corporate control specifically, majority-stake acquisitions—as a distinct and previously unexplored trigger for restructuring bank ties. In contrast to studies focused on bank mergers and their impact on lending (e.g., Martinez Peria and Mody, 2004, Giannetti and Ongena, 2012), we analyze how acquisitions of non-financial firms reshape their bank relationships, likely through actions initiated by the new controlling shareholder. Our focus is on the composition and drivers of these changes, rather than their downstream effects on firm outcomes.

Second, we contribute to the literature on bank heterogeneity, which examines how differences in banks' size, scope, business model, and specialization shape their role in financial intermediation. Our analysis focuses on two dimensions of heterogeneity that are directly linked to the information channel: sectoral specialization and ownership origin. First, we distinguish between specialized and universal banks. While specialized banks may be better equipped to assess borrowers in familiar industries (Gopal, 2021, Paravisini et al., 2023, Blickle et al.,

⁵See Boot (2000), Ongena and Smith (2000a), Berger and Udell (2002) and Kysucky and Norden (2016) for surveys of relationship banking.

2023), they may also face diversification constraints that affect their risk exposure and lending terms (Winton, 1999, Acharya et al., 2006). We show that acquiring firms are more likely to retain or add banks with stronger industry specialization and a dense client base in the target's region, suggesting that these banks' accumulated soft information plays a critical role in post-acquisition financial reorganization. Second, we revisit the distinction between domestic and foreign banks. Prior research highlights both the benefits and vulnerabilities associated with foreign bank participation, including broader credit access, increased competition, and potential exposure to external financial shocks (e.g., Cetorelli and Goldberg, 2012, Giannetti and Laeven, 2012, Claessens, 2017). We find that domestic banks are systematically favored in post-acquisition restructuring, likely reflecting their informational advantage in both local market knowledge and sectoral expertise, in line with the evidence presented in Beck et al. (2018). By contrast, foreign banks are more likely to be dropped, especially in cases involving greater informational complexity. These results highlight that not only regulatory or funding concerns but also informational asymmetries play a central role in the reallocation of bank relationships following changes in ownership.

Finally, our work relates to the literature on mergers and acquisitions (M&As) and their implications for firm outcomes. Most finance research on M&As has focused on value creation and investor returns, with target firms typically realizing the bulk of gains (see surveys by Andrade et al., 2001, Betton et al., 2008). Other strands emphasize operational synergies, governance changes, or productivity gains, especially in cross-border settings (Hoberg and Phillips, 2010, Bena and Li, 2014, Javorcik, 2004, Guadalupe et al., 2012, Javorcik and Poelhekke, 2017, Fons-Rosen et al., 2021). We add to this literature by using M&A events as a quasi-exogenous shock to the structure of firm-bank relationships, revealing a novel channel through which acquisitions can reshape firm behavior. While bank ties have traditionally been viewed as vehicles for delivering financial services, we emphasize their informational role. Acquirers appear to restructure targets' banking portfolios to access soft information—particularly local knowledge and sectoral expertise—that supports post-acquisition integration and strategic market positioning.

The rest of the paper proceeds as follows. Section 2 describes the construction of our dataset and general patterns observed in bank relationships. In Section 3 we present our hypotheses and in Section 4 we discuss the empirical identification strategy. Section 5 presents the results and Section 6 concludes.

2 Data

2.1 Compiling the dataset

We construct a database of firm ownership over time, firm-bank relationships, and characteristics of firms and banks using the Orbis database by Bureau van Dijk. Every annual vintage provides information on firms' financial and operational activities from balance sheets and income statements, together with detailed information on firms' domestic and international ownership structure. We use the harmonized financial and ownership data from Kalemli-Özcan et al. (2024) (covering the period 2000-2014), which is cleaned to reduce survivor bias present in direct Orbis downloads, and ensures good coverage of historic data for ownership and financials. This results in a panel of firms covering 39 European countries over 1999-2014. We exclude firms that are owned by banks directly.

In addition, we collect information on the firms' banks, which has also been available in Orbis since the 2010 vintage. This records whether the firm has a relationship (an account) with one or more banks and states the name of each bank; these accounts may or may not represent a borrowing relationship. Similar to ownership data, bank data comes from individual vintages of the Orbis database. We collect all the bank information from the 2010-2015 vintages, which, using the timestamp of the financial data, results in bank relationship information for the years 2005-2014 but with the bulk of relationships covering 2009-2013. We observe both firms with multiple bank relationships (42% of observations) and firms with a single bank relationship (58% of observations).

This data originates from the Kompass database and has been used before by Ferrando et al. (2019) and Kalemli-Özcan et al. (2022). However, they used a cross-section of firm-bank relationships observed for eight Eurozone countries in 2014 and 2013, respectively, and focus their attention on the 'main bank' (assumed to be the bank that is listed first). Closer to our paper, Giannetti and Ongena (2012) used 2000 and 2005 vintages for 13 Eastern European countries to track changes in bank relationships over time, but focused on foreign bank entry through acquisition of a domestic bank and whether any relationships were added or dropped between these dates. They also show that the banker information from Kompass is broadly consistent with independent surveys, such as the EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS).

⁶The original variable is called 'banker name' and can take multiple entries. The date of banking information, per firm, is not codified separately, but from our conversation with the BvD representatives, we learned that the primary source of the bank data is firms' annual reports. Consequently, we assume that the date of banking information corresponds to the latest year of financials for each firm in a given vintage (for example, if the available variable 'latest year' for financials is 2013, we assume the same timestamp for the bank information).

Compared to these papers, we dramatically expand the coverage of banks and firms across 23 countries. We track all bank relationships over time using the panel structure of our firmlevel data. We can thus reveal novel descriptive evidence of substantial churning in bank relationships. In addition, we differentiate the nationality of the bank relative to that of the firm. We define the foreign status of a bank with respect to the host country of the target firm. For example, suppose a firm in Austria reports a bank relationship with Commerzbank AG, which Bankscope or Orbis Bank Focus lists as a German bank. In that case, we designate this relationship as foreign. Specifically, we investigate, in the order of priority, i) the nationality of the bank's shareholder from the most recent Orbis Bank Focus, ii) the nationality of the global ultimate owner of the bank from the same source, and iii) the legacy ID of the bank from the older vintage of the Bankscope database.⁸ Finally, we conservatively check whether the original spelling of the bank name contains foreign endings capturing the legal form (such as, for example, Dutch "BV" or "NV" meaning, correspondingly, a "private limited liability" or a "public limited liability" firm for banks operating outside of the Netherlands) or foreign parts of names (including mentioning the city name or similar). As in the case of the literature on firm-level foreign-direct investment (FDI), we assume that the bank is domestic if we cannot find the information on its nationality or its owners in our data or on the Internet.

Our treatment is a change in ownership in non-financial firms. We focus on changes where the new owner acquires a stake such that its ownership amounts to more than 50%. The threshold of 50% ensures a substantial majority influence over the firm, which has a meaningful potential impact on its bank relationships. Smaller stakes are conventionally considered portfolio investments. Control firms do not change owners (but we allow them to change small, i.e., <10%, stakes). For our analysis, we retain firms for which we know the bank name and firm ownership and which report data for at least five consecutive years, which results in 1.2 million observations and more than 400,000 after taking differences and conditioning on observables.

Tables A1.1 and A1.2 in the Appendix provide details for an example firm in Spain. We observe this firm's bank relationships for five consecutive years (as listed), but its ownership for more years, which shows that it was acquired by a domestic firm in 2009. Its bank relationships changed over time, with banks being dropped on three occasions and banks being added on three other occasions. One of these new banks, Banco Caixa General, has a foreign

⁷The 23 countries are Austria, Bulgaria, Germany, Denmark, Spain, Estonia, France, the UK, Greece, Hungary, Croatia, Ireland, Iceland, Lithuania, Latvia, Moldova, North Macedonia, Poland, Portugal, Russia, and Ukraine.

⁸All the Orbis Bank Focus data was matched to our banks by normalized name using the fuzzy-match app of Microsoft with a very stringent rule, ruling out multiple banks due to different spelling of the names. After the match, we manually reviewed the matches.

bank owner with Portugal as its home country.

2.2 Bank relationships across firms and time

In our sample of unlisted and listed firms, 58% report at most one bank in a given year, 21% of firms report two banks, and another 21% report at least three bank relationships in a given year. On average, firms have 1.7 bank relationships (see also summary statistics Table A2.1).

We track *total* bank relationships over time in terms of the net changes, and the number of banks added and banks dropped. Referring again to the example firm in Appendix A1, banks *added* is the number of *new* bank relationships that the firm reports. This count includes new relationships that replace existing relationships. Banks *dropped* is correspondingly the number of bank relationships abandoned over the chosen period.¹⁰

An examination of detailed changes reveals substantial churning of bank relationships. The mean of banks added is 0.31, while the mean of banks dropped is 0.35, each with substantial standard deviations. On average, 21% of firms increased the number of relationships by adding one or more banks in any given year, and 24% reduced relationships by dropping one or more banks. Moreover, in 12% of firm-years a relationships was replaced while keeping the total number of relationships constant. Even firms with only one bank replace their bank in 7% of firm-years. ¹¹

This churning results in a net reduction of the average number of bank relationships over time (by -0.04), driven by a reduction in domestic bank relationships (with a sample mean of -0.06), while foreign bank relationships increase slightly (+0.02). However, within the subsample of firms that are ever acquired, bank relationships increase on average, by 0.05 after acquisition. Many firms do not change the net total number of bank relationships from year to year, but those that do typically add one after acquisition (the median). We continue with developing hypotheses on the situations in which it is more likely that an acquired firm changes bank relationships.

⁹For comparison, firms listed on the Japanese stock market report a median of seven bank relationships between 1990 and 2010 (Amiti and Weinstein, 2018). The distribution of bank relationships is very skewed, with the 75th percentile equal to 2 banks and the maximum equal to 22 unique banks (or 2 and 14 banks, respectively, when excluding Russia). Given our large sample size, these average numbers are not surprising.

¹⁰As a more general example, suppose a firm has banks A and B in year t-1 and B, C, D, E in year t+1. In this example, the firm replaced one bank (A), retained B, and added three new banks (C, D, and E). Then, the total number of bank relationships went from 2 to 4, a net change of +2, although *Banks added* equals 3 (C, D, and E). *Banks dropped* is 1, because the relationship with A was terminated. While we are careful to clean bank names, some bank names may disappear over time because they no longer function separately from a new owner of the bank. We will assume that this is orthogonal to acquisition events among non-financial firms.

¹¹The share of firm-years in which single-bank firms switch banks differs greatly by country: it is only 1.3% in Russia, 6% in Germany, and 16% in Spain.

3 Hypotheses development

The literature following Khwaja and Mian (2008) primarily defines *the bank relationship* through lending volumes (loan supply to firms) and focuses on supply-side loan constraints and firms' substitution of borrowing across banks.¹² By contrast, our analysis adopts a broader view of the bank–firm relationship, which does not exclusively consist of borrowing and lending, and studies how these relationships evolve following acquisitions.¹³ In our setting, changes in bank relationships primarily reflect *demand-side* adjustments—driven by acquirer-initiated restructuring and the strategic preferences of new owners—rather than supply-side constraints on loan availability. Still, our broader focus encompasses two types of demand-side adjustments: one centered on firm-level borrowing behavior and the other on post-acquisition restructuring.

The first demand-side channel reflects the well-documented "firm borrowing channel" identified in prior research, whereby growing firms seek additional funding, consistent with pecking-order theory (Myers and Majluf, 1984), transaction cost economics (Williamson, 1975), and the firm life-cycle hypothesis (Mueller, 1972). At the same time, firms with strong fundamentals may become attractive acquisition targets (Eckbo, 2014), while distressed firms may pursue bank funding as part of a turnaround effort, potentially also attracting acquirers. These demand and selection effects would suggest a positive association between acquisitions and the number of bank relationships, ceteris paribus.

The second and less explored demand-side channel we focus on involves *acquirer-initiated adjustments* of target firms' bank relationships. New majority owners may actively restructure banking services to align them with new corporate strategies or to facilitate integration or growth plans for the new subsidiary (Fee and Thomas, 2004), potentially leveraging the target's existing bank relationships or initiating new ones. Restructuring may involve changing the financial services purchased through existing bank relationships, but also changing the set of banks with which the target has a relationship. We focus on the latter interpretation in this paper because we observe the relationships but not the contents of each relationship. Restructuring may also decrease the demand for bank relationships if new owners replace external bank lending with internal capital markets (Gertner et al., 1994, Stein, 1997).¹⁴

¹²Khwaja and Mian (2008) study bank liquidity shocks triggered by reductions in dollar-denominated deposits caused by unexpected nuclear tests in Pakistan. Also Gan (2007) and Jimenez et al. (2012) explore loan supply shocks resulting from declines in real estate prices and increases in short-term policy rates, respectively. More recently, Acharya et al. (2018, 2019) examine the real effects of the sovereign debt crisis and unconventional monetary policy.

¹³Å limitation of our data is that it does not allow us to disaggregate the specific functions banks serve in the firmbank relationships—such as lending, trade and export finance, advisory, FX, and transaction services. Nevertheless, the scope of services captured in our data is broader than lending alone, enabling us to study the continuity, change, or reorganization of the firm's overall set of bank relationship.

¹⁴New owners frequently restructure acquired firms. Arnold and Javorcik (2009) document productivity im-

Acquisitions may also lead to an increase in the supply of banking services, as lenders reassess the target firm's risk profile and creditworthiness in light of new ownership (Gopalan et al., 2007, Matvos and Seru, 2014, Santioni et al., 2019). However, the primary mechanism we examine is a demand-driven reorganization of bank relationships. In acquisitions where the acquirer assumes majority control, it is the acquirer's strategic preferences—rather than unsolicited supply of banking services—that predominantly determine which bank relationships are retained, dropped, or initiated.

While the supply-side channel (in the sense of Khwaja and Mian) is less relevant for our study, we still make steps to mitigate potential concerns that changes in bank relationships are driven by selection into acquisition (e.g., acquirers cherry-picking targets with certain banking needs) or by shifts in financing needs unrelated to the acquisition event (the "baseline" financing demand trends). Our empirical methodology, detailed in Section 4.1, aims to isolate reorganizations in bank relationships *triggered by the acquisition event* and more closely focus on the hypotheses aligned with the informational role of banks, specifically: (i) the overall change in bank relationships post acquisition, (ii) how this change differs when informational asymmetries exist between the acquirer and the target, and (iii) bank characteristics that may help resolve such informational frictions.

3.1 Restructuring of bank relationships post-acquisition

As part of the post-acquisition integration process, acquiring firms may actively restructure the target firms' bank relationships. Such restructuring may reflect efforts to align banking partners with the acquirer's preferences, existing relationships, or information advantages. Our first empirical question is whether acquisitions are associated with changes in the composition of firm-bank relationships. A change in the composition of bank relationships as a result of strategic restructuring is not limited to acquirers expanding or reducing the target firm's set of bank relationships: in many instances observed in our data, a bank is replaced by another, yet the total number of bank relationships remains constant (such as in single-bank firms). This leads to the following hypothesis:

Hypothesis 1: The composition of target firms' bank relationships is more likely to change following acquisition.

provements four years after majority acquisitions by foreign firms, potentially driven by technological knowledge transfers (Aitken and Harrison, 1999), enhanced management practices (Bloom et al., 2012), or headquarter services (Javorcik and Poelhekke, 2017).

¹⁵As we argue, a majority acquisition constitutes a significant corporate event that can prompt banks to reevaluate their client relationships. This contrasts with the status quo, in which firms—especially small ones—face considerable switching costs when changing lenders (Hubbard et al., 2002, Khwaja and Mian, 2008).

3.2 Information asymmetries between acquirer and target

We observe that a substantial share of acquisitions involve acquirers headquartered in different geographic regions or operating in different sectors than the target. Distance in physical or product/technological space can create informational asymmetries, because remote or cross-industry acquirers may have less experience with local markets (consumer behavior, regulatory frameworks, etc.) and sector-specific dynamics. Compared to acquirers that are local firms or industry peers, informational asymmetries hinder other acquirers' ability to assess potential post-acquisition synergies and risks. Moreover, the period that we study was shaped by the financial crisis and sovereign debt crisis, when several acquisitions could have been distress-driven and informational frictions potentially more acute. Building on the early theoretical work of Leland and Pyle (1977), Diamond (1984, 1991), and Ramakrishnan and Thakor (1984) research recognized that banks that have established relationships with borrowers are uniquely positioned to gather soft information over time through repeated interactions with their clients (Berger et al., 2017, Blickle et al., 2023, Paravisini et al., 2023). Liberti and Petersen (2018) and Dang et al. (2017) highlight that this soft information is qualitative and difficult to document and, thus, cannot be easily replaced or transferred. This "informational capital" is often bank-specific and organizationally embedded (Berger and Udell, 1995, 2002) and used by banks strategically to retain profitable relationships, deter entry by rivals, and extend their market share (Hauswald and Marquez, 2006). Acquirers facing informational disadvantages may seek to add new banks or retain the target firm's incumbent bank(s) to build up or preserve proprietary soft information—knowledge accumulated through prior interactions, which is not easily accessible to outsiders—leading to the following conjecture:

Hypothesis 2: Acquirers that are informationally distant from the target are more likely to restructure bank relationships in order to mitigate their informational disadvantage.

3.3 Bank relationships as a source of information advantage

When acquirers change the bank relationships of their targets, they presumably do so to enhance the quality of financial services available to the acquired firms. Building on Hypotheses 1 and 2, we explore the mechanisms driving the reshuffling of bank relationships by focusing on the bank's role in mitigating information asymmetries, most frequently mentioned by the banking literature. Prior research has shown that banks develop valuable informational advantages by working with firms that share similar characteristics (such as industry) or operate in the same geographic regions (Degryse and Ongena, 2005, Hauswald and Marquez, 2006). This accumulated knowledge enables more informed assessments of client firms. Using

unique features of our dataset, we examine two distinct bank characteristics that, we argue, reflect the *stock of accumulated bank knowledge* gained through relationships with other clients. This knowledge may be particularly useful for acquirers confronting specific types of informational asymmetry.

Bank knowledge of local market: The first type of bank knowledge we consider draws on the idea that geographic proximity between capital providers and borrowers reduces information asymmetry (Sufi, 2007), and that banks with a large local client base are better equipped to assess local shocks and competitive dynamics (Agarwal and Hauswald, 2010, Nguyen, 2019, Bonfim et al., 2021, Duquerroy et al., 2022, Amberg and Becker, 2024). Such banks may play a key advisory role, facilitate the dissemination of market-relevant information, and alleviate financing constraints by more effectively managing local risks. However, distant acquirers acting on behalf of newly acquired firms may be less able, or less inclined, to engage banks with this type of knowledge. As shown by Hauswald and Marquez (2006), the value of a bank's proprietary information is highest when new firm clients are located in close geographic proximity. Remote acquirers may therefore face adverse selection. Lacking the ability to directly assess banks' informational advantages, they may inefficiently select partners based on visibility or scale rather than genuine local expertise. They may also favor more aggressive banks due to short-term pricing incentives, or even avoid local banks altogether—particularly if the acquirer operates across multiple regions (Dell'ariccia et al., 1999, Boot and Thakor, 2000). These frictions can lead to weaker matches, underutilization of banks' informational capital, or even strategic avoidance of highly embedded local banks if they are perceived as misaligned with the acquirer's broader integration plans.

To capture these dynamics empirically, we use the bank's local corporate customers base, computed as the number of corporate clients a bank serves within a specific geographic area, weighted by those firms' assets. ¹⁶ We refer to this measure as the *bank knowledge of local market* based on the premise that a bank with broader corporate relationships and greater exposure to larger firms in a given market possesses deeper insights into that market. Importantly, this measure is conceptually distinct from conventional proxies for 'bank size': it is defined at the level of a specific local market (e.g., country, region, or city) and reflects the aggregated assets of the bank's *clients* rather than the bank's own assets, which is largely composed of its loan portfolio.

 $^{^{16}}$ Alternatively, we use the number of cities, within a given geography, in which the bank operates.

Industry-specific bank knowledge: Our second type of bank knowledge recognizes the fact that banks may specialize by serving clients in a particular industry, leading to more industryspecific bank knowledge. When a firm establishes a relationship with a bank that has extensive experience serving firms in the same industry, such banks may be more willing to extend credit, offer more favorable lending terms (Bonfim et al., 2023, Blickle et al., 2023), and provide tailored financial services that go beyond standard banking functions. Repeated interactions with firms in a particular sector enhance a bank's ability to assess business models, evaluate collateral quality, and structure financing arrangements that align with industry-specific risks and opportunities (Gopal, 2021, Giometti and Pietrosanti, 2022, Di and Pattison, 2023, Paravisini et al., 2023). Moreover, specialist banks can act as strategic advisors, leveraging their industry knowledge to help acquiring firms navigate the competitive dynamics, optimize capital structures, and exploit synergies. However, sector-focused banks may also face limitations. Unlike more diversified institutions, specialist banks may be less able to spread risk efficiently across industries or provide stable financing during industry downturns, potentially leading to higher lending costs (Winton, 1999, Acharya et al., 2006) and making them less attractive as long-term financial partners for firms concerned about cyclical fluctuations.

Examining these distinct characteristics of banks, we investigate the information channel in more detail. Specifically, we test whether changes in bank relationships following acquisition result in a preference for banks with geographic or industry expertise (their stock of knowledge), by formulating the following hypothesis:

Hypothesis 3: Acquirers adjust the target's composition of bank relationships to incorporate banks that provide knowledge about the local market and/or specialized expertise in the target's industry.

4 Empirical specifications

4.1 Identification

The key challenge in estimating the effect of acquisitions on bank relationships is that parent firms choose which target firms to acquire based on past, current, and expected future observed and unobserved target firm characteristics (and their own financing options), while these may also affect the set of bank relationships that a target firm maintains. Moreover, while we observe all shareholders and changes in ownership over time, we do not observe the parent firms' motivation for the acquisitions. To circumvent this source of endogeneity we would ideally run an experiment by randomly assigning the acquisition event to firms. This is however not feasible given our setting of relatively rare acquisitions combined with coverage of

various countries. To make progress on this challenge, we exploit the panel nature of our data and estimate the following difference-in-difference specification, where we examine how the portfolio of a firm's bank relationships changes over time for firms that were acquired relative to firms that were not acquired:

$$\Delta \mathbf{BY}_{i,c,t+1} = \beta_1 \mathbf{ACQ}_{i,c,t} + \mathbf{X}_{i,c,t-1} \,\beta_2 + \rho_{b,t-1} + \delta_{s4,t} + \zeta_{i,c,t} \tag{1}$$

where for firm i in country c the outcome variable $BY_{i,c,t}$ stands for one of the measures of bank relationships and Δ is calculated from t-1 to t+1, where t is the year of acquisition.¹⁷ The $\mathbf{ACQ}_{i,c,t}$ (for "acquisition" event) compares the shareholders of the firm in year t and after with the shareholders in year t-1: we code a dummy equal to 1 if the set of shareholders changed such that one existing or new shareholder acquired a majority stake in the firm. In the dataset, firms remain separately identifiable entities as long as they continue to report information, including immediately after an acquisition.¹⁸

The identifying assumption is that acquiring firms do not select target firms based on underlying trends in the development of the target's bank relationships over time. To control for systematic changes in bank relationships that are not due to acquisition, our empirical model includes the matrix of target-level characteristics $X_{i,c,t-1}$ that correlate with changes in bank relationships and the probability of acquisition: lagged levels and growth rates of key firm performance indicators, such as employment, output, and asset size. We also include a control for the existence of a shared bank relationship between a target and an acquirer *before* the acquisition event. This is important, because a smaller degree of asymmetric information between the target and the acquirer may make acquisition more likely in the first place and mechanically reduce the likelihood of a change in bank relationships. We also introduce a set of fixed effects $\rho_{b,t-1}$, one for each number of initial bank relationships at t-1 (separately for foreign and domestic banks), because firms with many existing relationships may be less inclined to add more banks. Finally, we control for four-digit sector-by-year effects $\delta_{s4,t}$ that capture the sector's business-cycle stance, which may be correlated with access to finance and bank relationships and with M&A activity in the sector. Although treatment is at the firm level,

¹⁷We focus on a two-year period and on more persistent changes to exclude the possibility that we merely capture investment banks involved in the acquisition itself and hence not the relationships we are interested in.

¹⁸This is a feature of the data rather than a modeling choice. Our analysis focuses on a two-year window that spans from one year prior to one year following the acquisition, which means that firms that disappear within this horizon do not enter the estimation sample. A potential concern is that rapid post-acquisition integration, wherein the target is absorbed and ceases reporting shortly after the deal, may disproportionately affect certain types of firms. However, given the short horizon considered, such instances are likely rare. Moreover, there is no ex-ante reason to expect that these cases are systematically related to firm-bank relationship patterns in a manner that would bias our estimates.

we always cluster standard errors at the country×sector×year level, because sectors tend to experience waves of consolidation.

By regressing changes in bank relationships on changes in majority ownership, we also difference out firm fixed effects and all observed and unobserved firm characteristics that do not change over time. We prefer this over an equation in levels because the count of the number of bank relationships is highly persistent, leading to serious serial correlation. First differencing takes care of serial correlation and improves the disturbance term to be closer to white noise. Moreover, it is straightforward to decompose bank relationships in banks added and dropped when considering changes. We thus compare the acquired firm to its pre-acquisition period (the first difference) and the baseline group of non-acquired firms in both periods (the second difference).

We exclude firms that were sold more than once but retain firms that have never been acquired. We do not track changes in ownership shares where these shares are below the 50 percent threshold. Such events are thus also part of the baseline group of firms. For example, consider a hypothetical firm with three owners, each holding a third of shares. If a shareholder sold its one-third share to a fourth (and thus new) owner, we do not consider this a majority acquisition because no single owner gained control of the firm. If, instead, either of the three owners sold its stake to one of the other existing owners, the firm would have two owners in the next period. One of them would have a controlling stake, which we then count as a majority acquisition (by an existing owner). In the robustness tests we drop from the control group all firms where the ownership shares change hands but stay below 50 percent.

4.2 Matching estimator

Our rich set of fixed effects and target-firm controls, in combination with first differencing, allows us to control for a host of observed and unobserved factors that both influence the decision of the acquirer to buy the target firm and the characteristics of target firms that determine the ease with which they can change bank relationships. To further strengthen this approach, we build a sample of *matched* firm pairs where we match on observables, before taking first differences to absorb firm fixed effects. This approach builds on similar identification strategies in the empirical corporate finance literature (see Roberts and Whited, 2013, for a review), except that we apply the so-called *coarsened exact matching* (CEM; see Iacus et al., 2011) in place of propensity-score matching. The CEM creates exact matches on all binary and count variables and exact matches within bins of continuous variables. Our matched pairs of firm-years will

¹⁹The equation in levels reads: $BY_{i,c,t+1} = \beta_1 I(\text{Majority shareholder stake})_{i,c,t} + \alpha_i + \epsilon_{i,c,t}$, where $I(\cdot)$ is an indicator equal to one from year t onward that the firm i has a new majority shareholder and α_i are firm fixed effects.

be equal in all observable characteristics, including the number of bank relationships at t-1, and only differ by being 'treated' by the acquisition event. The benefits of the CEM approach are automatic balancing on (bins of) matching variables and safeguarding against the model mis-specification. For example, it does not have to assume a probit model as is the case with propensity-score matching.

We match exactly on count variables, such as the initial number of bank relationships, and on binary variables, such as year×industry×country dummies. For continuous variables, we split each variable into bins to build exact matches to the extent that treated and control firms are observed in the same bin. Our matching variables are: a proxy for sector-specific credit demand (the "firm borrowing channel" discussed in the literature) adapted from Degryse et al. (2019) and captured by year×2-digit industry×country bins²⁰, seven bins of lagged employment (of 0-10, 11-20, 21-50, 51-150, 151-250, and 251-2,500 workers²¹), percentile-based bins of lagged operating revenue (0-10, 11-25, 26-50, 51-75, 76-90, 91-99.9 percentile), ten equally spaced bins of: lagged log asset size, one and two lags of output growth, one lag of employment growth, and exact matches on the lagged number of bank relationships and whether target and acquirer share the same bank before acquisition. After matching, we verify that all original non-binned continuous control variables are mean-balanced between treated and control groups, which is discussed in Online Appendix OA1 together with summary statistics. We additionally include all continuous variables and lagged leverage as control variables in all regressions, and control for fixed effects for each 4-digit sector × year bin and for each count of the initial number of domestic and of foreign banks.²² We also consider two alternative and more stringent matched samples where we add the following matching observables: 'Matched sample 2' is the result of adding the ten bins of lagged leverage (long-term debt plus loans scaled by assets), while 'Matched sample 3' adds the initial number of, separately, foreign and domestic banks and the percentile-based bins of lagged leverage and assets. These yield greatly reduced sample sizes.

 $^{^{20}}$ Degryse et al. (2019) propose year×2-digit industry×city×asset deciles. We replace cities with countries to increase the matched sample size and ensure a reasonable number of firms in each matching cell, and match on assets separately.

²¹2,500 corresponds to the 99th percentile.

²²Note that we do not match for additional lagged financial variables: doing so further reduces the sample severely and (if persistent) these are less likely to be exogenous to changes in bank relationships. However, we show in Table OA1.2 that matched pairs of firms are nevertheless balanced in terms of lagged growth of total liabilities and leverage.

4.3 Measuring bank relationships and bank knowledge

We focus on several dimensions of bank relationships to substitute the placeholder outcome variable *BY* in equation 1:

Number of bank relationships: For Hypotheses 1 and 2 our outcome variable is $\Delta \mathbf{BR}_{i,c,t+1}$, representing the (net) change in the number of bank relationships for firm i in country c from year t-1 to t+1. We also split $\Delta \mathbf{BR}_{i,c,t+1}$ into the number of dropped and added banks, which would allow to verify if zero net change in the number of banks masks reshaping of bank relationships as our hypotheses propose.

Bank knowledge: To test Hypothesis 3, we introduce measures for two distinct but complementary dimensions of information asymmetry that banks may help mitigate: familiarity with the target's local market and sector-specific bank expertise.

We construct a measure of the *bank knowledge of target's local market* by quantifying the bank's local corporate customers base, using all firm-bank relationships identified in our data within target firm *i*'s geographic area *geo* (a country, a region within a country, or a city), as:

$$\mathcal{BK}_{i,t}^{\text{geo}} = \frac{1}{|\mathbf{BR}_{i,t}|} \sum_{b \in \mathbf{BR}_{i,t}} \left(\sum_{j \in C_{b,i,t}^{\text{geo}}} \mathbf{Assets}_{j,t} \right)$$
(2)

where: $\mathbf{BR}_{i,t}$ is the number of all banks b with which firm i has a relationship in year t; $C_{b,i,t}^{\text{geo}}$ is the set of other firms $j \neq i$ that are clients of bank b, located in the same geographic area geo as firm i in year t; and $\mathbf{Assets}_{i,t}$ is the total assets of client-firm j in year t.²³

Since we use the size of the bank's clients—not the bank's own loan portfolio or assets—our measure is conceptually distinct from a conventional measure of 'bank size.' The measure proxies for the extent of a bank's embeddedness and potential information advantage in the target firm's geographic area. A higher value of $\mathcal{K}_{i,t}^{\text{geo}}$ suggests that firm i's banks have greater informational exposure to the local market through their other clients, potentially enhancing their capacity to evaluate and serve firm i. As seen, changes in this measure are driven by the changes in the number of bank relationships **BR** plus the combined economic size of each bank's non-financial client base, which in turn depend on the number and size of the other firms that the bank services. We examine several versions of bank geographic knowledge by limiting bank client base $C_{b,i,t}^{\text{geo}}$ to target's country, region, NUTS1, NUTS2 or city.²⁴

²³We focus on the firms' size in terms of assets, as opposed to, for example, employment, because this is closer to the role of banks in providing capital for investment.

²⁴The *NUTS* regions follow Eurostat's official Nomenclature of Territorial Units for Statistics, where level 1 corre-

As an alternative measure of geographic market knowledge, based on the geographic breadth of the client base of firm i's banks, we define $\mathcal{BK}_{i,t}^{\text{breadth}} = \frac{1}{|\mathbf{BR}_{i,t}|} \sum_{b \in \mathbf{BR}_{i,t}} \mathbf{Cities}_{b,t}$, where Cities $_{b,t}$ denotes the number of distinct cities (within firm i's country) in which bank b serves other clients in year t. This measure, which we define at the level of country only, proxies the geographic scope of a bank's client base and may reflect greater exposure to informational flows or institutional familiarity across national markets. In the regressions, we take the inverse hyperbolic sine transformation of all measures of bank knowledge of local market to be able to include observations where a firm has no bank or its bank has no other clients in a particular geography.²⁵

Our second bank knowledge measure reflects the *industry-specific bank knowledge*. It reflects the degree of relative bank specialization in firm i's main 2-digit industry sector. The measure is inspired by the methodology of Paravisini et al. (2023) who measure banks' export-market specialization, but we adapt it to our data and purpose. First, for each year t, we identify the 2-digit NACE (Nomenclature of Economic Activities) revision 2 classification sectors in which each bank b of firm i has client firms. We then compute the distribution of each bank's client portfolio (using the client-firm assets) across sectors. For each sector-year pair, we classify a bank as relatively specialized if the share of clients' assets (the client base) in that sector is above the cross-bank median.²⁶ Finally, we construct $\mathcal{BK}_{i,t}^{\text{sect}}$ as the number of banks with which firm i maintains a relationship in year t and that are relatively specialized in the same main sector as firm *i*:

$$\mathcal{BK}_{i,t}^{\text{sect}} = \sum_{b \in \mathbf{BR}_{i,t}} 1 \left\{ \text{Sector}_i = \text{Sector}_{\text{specialized},b,t} \right\}$$
(3)

where $1\{.\}$ is an indicator taking a value of 1 if the firm i's bank b is relatively specialized in main sector of i. We consider several alternative definitions where we consider alternatively NACE section (letter-coded) or 4-digit sectors,²⁷ and alternatively characterize banks' client

sponds to 'major socio-economic regions' such as (groups of) states or provinces, and level 2 to larger districts. We construct Region as a hybrid measure based on the textual geographic region reported in Orbis, typically referring to subnational areas such as provinces (e.g., Bavaria in Germany, Catalonia in Spain, or Odessa oblast in Ukraine). If this Orbis-based region is missing, we substitute the name of the corresponding standardized NUTS2 region. In these cases, we may use either NUTS2 or NUTS1 regions, depending on availability—particularly since, in smaller European countries, NUTS1 regions often cover the entire country.

²⁵Taking logs would drop these observations, while the inverse hyperbolic sine transformation is defined at zero and very similar to log for positive values, while being potentially less arbitrary than adding ones to zero observations. For a discussion on elasticities in relation to a log transformation, see Bellemare and Wichman (2020). Results are robust to adding 1 before taking logs.

²⁶Compared to Paravisini et al. (2023), we proxy the banks' portfolio by using clients' asset sizes rather than loans because we do no observe loans. Furthermore, our focus is on banks' sectoral client distribution rather than their clients' export destinations. We thus also measure the distribution of banks across sectors rather than across export destinations. ²⁷For example, NACE section C "Manufacturing," 2-digit division "24. Manufacture of basic metals," and 4-digit

bases by measuring their clients' asset sizes within these sectors either globally (across all countries in Europe), or within the same country as the firm.

5 Results

5.1 Changes in bank relationships following acquisition

To test Hypothesis 1, we begin by estimating how the number of bank relationships changes for acquired firms compared to non-acquired firms. Table 1 reports the results from estimating equation (1) for outcome $\Delta BR_{i,c,t+1}$, changes in the number of bank relationships from t-1 to t+1, where we condition on controls that reflect the initial set of bank relationships (an indicator of a shared bank between a target and acquirer and fixed effects for the number of domestic and foreign bank relationships), key initial real and financial characteristics and lagged growth rates of output, employment, asset size, and sector-year effects to proxy industry demand shocks.

Across all specifications, we find a robust and statistically significant result that firms that went through a majority acquisition increased the number of bank relationships. In the full sample (Column 1), acquisitions are associated with an average increase of 0.056 relationships from the pre- to post-deal year and relative to an average non-acquired firm in the same country and same 4-digit industry-year.²⁸. This result is statistically significant at the 1% level and quantitatively meaningful when benchmarked against the control group, where firms on average reduce bank relationships by 0.04 over the same horizon (Table A2.1). Acquired firms thus tend to often retain bank relationships. The magnitude of the effect remains stable in matched samples (Columns 2-4), constructed using the coarsened exact matching method of Iacus et al. (2012), where we also match on a proxy of firm's credit demand (Degryse et al., 2019). The three samples are progressively more stringent in their match requirements. Together, they show that target firms robustly increase bank relationships following acquisition and that the magnitude is only slightly smaller than the OLS estimate. This suggests that the observed relationship expansion is not driven by firm selection into acquisition but reflects a post-acquisition restructuring process. To preserve sample size and variation, we continue with the 'Matched sample 1' from here on.

In Table 1 we estimate an average effect across both large and small firms, and we find that both small and large firms change ownership in our sample: small firms are not under-

class "24.52 Casting of steel."

 $^{^{28}}$ The results in this table are robust to replacing the simple change in bank relationships by the log-difference and to clustering by country×2-digit-sector×year. We find that an acquisition event increases bank relationships by 1.8%.

represented among the treated relative to controls. In the baseline sample, 5,683 distinct firms are acquired, of which 3,277 are small (< 50 employees), 1,491 have between 50 and 250 employees, 426 have between 250 and 500 employees, and 489 are large (> 500 employees). This distribution is very similar to the distribution of firm size among the controls, also if we define small as less than 20 or less than 10 employees. In Section 5.4.3 we further discuss results when splitting the sample by firm size.

In Online Appendix Table OA2.1 we show that the positive effect of acquisition on bank relationships in the unmatched sample is robust to clustering on alternative levels of aggregation; to limiting the sample to a set of control firms and firms that are treated in the same year such that treatment is no longer staggered over time; and to applying the Sun and Abraham (2021) estimator to address staggered and potentially heterogeneous treatment effects.²⁹ The result is also robust to excluding minority changes in ownership among the controls, and to applying the de Chaisemartin and D'Haultfœuille (2024) event-study estimator.

In Table 2, we decompose the net change into bank relationships *added* and *dropped*. In both the full and matched samples (which better controls for credit demand), acquisitions are associated with a statistically significant increase in the number of banks added, but no significant change in the number dropped (Panels A and B, Columns 1–3). This suggests that the expansion of bank relationships is for the average target firm not primarily about replacing old lenders with new ones, but rather about supplementing existing relationships. This pattern is consistent with an interpretation where acquisitions—by increasing firm size, integration needs, or investment opportunities—lead to greater need for financing and banking services.

However, this interpretation is incomplete. When we restrict the sample to firms that had only one bank prior to acquisition (Columns 4–6), we find a different pattern. Among this subsample, acquisitions lead not only to an increase in added banks but also a statistically significant increase in dropped banks (Column 6 in Panel A). This suggests that for single-bank firms, acquisitions do result in the replacement of existing bank relationships. While this replacement effect becomes smaller and statistically marginal in the matched sample (in Panel B, Column 6, the p-value is 0.137), the pattern still points to an *active reorganization* of bank relationships when the initial relationship set is limited or potentially suboptimal. The heterogeneity by initial bank structure is theoretically meaningful. For multi-banked firms, the post-acquisition expansion is largely additive, consistent with increased financing demand or relationship diversification. For single-banked firms, however, the acquirer may be more likely

²⁹Future treated firms may act as controls for currently treated firms, requiring the assumption that future treated firms are not on a systematically different path. However, a Goodman-Bacon (2021) decomposition reveals that 92% of variation underlying the main estimate comes from comparing the treated to the never treated, alleviating such concerns.

to reassess the suitability of the incumbent lender and opt to replace rather than merely add.

In sum, the evidence supports Hypothesis 1 in a nuanced way. Acquisitions lead to a systematic expansion of bank relationships. For firms with limited initial banking scope, they also trigger replacement of incumbent banks. We next look at the characteristics of acquirers in deciding on the bank relationships of target firms, and at the type of knowledge that banks provide through these relationships.

5.2 Informationally distant acquirers

To examine how informational distance between acquirer and target affects changes in bank relationships post-acquisition, Table 3 interacts the acquisition indicator with proxies for geographic and sectoral distance. In Panel A, using the full sample, we find that acquisitions involving geographically distant acquirers, measured by a different NUTS2 region, are associated with a significantly larger increase in the number of bank relationships post-acquisition (Column 1). This effect remains statistically significant in the matched sample (Panel B, Column 1), suggesting robustness to both credit demand and selection bias. To further understand the mechanism, Online Appendix Table OA3.1 decomposes these effects into the number of banks added and dropped. In the full sample, the marginal effect of an acquisition across regions on banks added is +0.064, while the effect on dropped banks is statistically insignificant. In the matched sample, the added-bank margin shrinks and becomes insignificant, but dropped relationships actually become less likely (-0.029, significant at the 1% level), suggesting that relationship retention may play a more important role in better-identified comparisons. These findings supports the idea that informational frictions lead acquirers to retain and supplement the target's banking network rather than restructure it aggressively, and that incumbent banks serve as important source of local knowledge when the acquirer lacks familiarity with the local market.

The sectoral dimension of acquirer's informational distance yields a more nuanced pattern. Importantly, because we include two interaction terms—'Different Level-1 Sector' (lettercoded NACE section such as C "Manufacturing") and 'Same Level-1 Sector, different 2-digit sector'—the baseline effect of the acquisition dummy captures the correlation with pure horizontal acquisitions, within the target's 2-digit NACE sector. These are precisely the cases in which the acquirer is most likely to possess industry-specific knowledge. Relative to this benchmark, we find no statistically significant differences in the number of relationships over time for acquisitions involving some sectoral distance (different level-1 sector or same level-1/different 2-digit sector). Interestingly, Appendix Table OA3.2 shows that acquisitions in the

same level-1 but different 2-digit sector are associated with a modest reduction in added and dropped banks (that is, retaining the existing structure of bank relationships), though the estimates are only marginally significant. The evidence implies that sectoral distance does not trigger major restructuring of bank relationships.

Taken together, the evidence partially supports Hypothesis 2, but highlights that *geographic* rather than *sectoral* informational asymmetry is the primary channel shaping post-acquisition bank relationship outcomes. However, the mechanism seems to operate more through expansion than retention alone, and the effects are attenuated when matching is used to better control for firm-level differences.

5.3 Acquiring bank knowledge

We now test Hypothesis 3, which posits that banks with superior informational advantage, either through geographic proximity or sectoral specialization, are more attractive to acquirers when they adjust the target's composition of bank relationships. In the main text, we focus on the matched sample regressions to ensure comparability between acquired and non-acquired firms and control for firm credit demand and selection into acquisitions. Full sample results, which are broadly consistent, are presented in the Online Appendix.

Bank knowledge of target's market. Table 4 presents estimates of changes in the bank knowledge of the target's geographic market after acquisition, as proxied by the size and breadth of their local client base ($\Delta\mathcal{BK}_{i,t+1}^{\text{geo}}$). The market is defined increasingly narrowly, from *geo* covering the target country in Column 1 to its city in Column 5, and with the alternative country-level "breadth of the client base" measure in Column 6 ($\Delta\mathcal{BK}_{i,t}^{\text{breadth}}$, see equation 2 in Sec 4.3 for details). In Panel A, we estimate a positive and significant increase in bank knowledge across all geographic levels: from the national level (Column 1) to the narrow city level (Column 5), despite excluding the target firm itself from all of these measures. The increase is particularly pronounced when we move from broader region in Column 2 to narrower areas in Column 3-5. As an alternative to Column 1, we also find a significant increase in the number of distinct cities in which the target's banks serve other clients (Column 6), suggesting geographic breadth of bank relationships slightly expands after acquisition. These results support the view that acquirers tend to retain or add banks with strong existing local market presence, in line with informational efficiency motives.

Panel B introduces an interaction for geographic asymmetry we considered in Table 3. We find that the increase in local market bank knowledge is concentrated in same-region acqui-

sitions. This can be because target firms adopt the existing bank relationships of their new parent or these acquirers adding more knowledgeable local banks.

In contrast, when the acquirer is from a different region, the positive acquisition effect on local bank knowledge is attenuated (but not reversed). These results suggest that geographically distant acquirers may find it more difficult—or be less inclined—to retain locally embedded banks. One potential explanation is that distant acquirers, who act as the new decision-makers on behalf of target firms, may lack the awareness, incentives, or ability to identify and engage the most locally informed banks. Geographic distance may also hamper the acquirer's capacity to monitor or capitalize on bank relationships that involve more localized and tacit information and create an adverse selection problem, consistent with the model of Hauswald and Marquez (2006). In such cases, the distant acquirer may rely more heavily on its pre-existing banking network, which may not include banks with detailed knowledge of the target's immediate market. Alternatively, if the acquirer's strategic focus lies elsewhere (e.g., integrating operations or scaling access to non-local credit), they may be less attracted to locally informed banks, especially when these are viewed as redundant, costly, or less valuable. These results hold in the full (non-matched) sample, as reported in Online Appendix Table OA3.3, where the estimated effects are generally larger in magnitude, including significant margins for acquisitions from different regions.

Sectoral bank specialization. Table 5 examines changes in the number of banks relatively specialized in the target's industry ($\Delta B \mathcal{K}_{i,t+1}^{\text{sect}}$ as defined in equation 3) using both global and local (within-country) benchmarks. Across all sector definitions, we find that acquisitions are followed by a statistically significant increase in the number of sector-specialized banks (Columns 1–3). For example, Column 2 shows an increase of 0.031 banks specialized in the target's 2-digit sector, and Column 3 shows a 0.030 increase in locally specialized banks. These findings suggest that acquirers not only expand their bank relationships, but actively shift toward banks with deeper expertise in the target's core industry. Additional evidence from the full sample, reported in Online Appendix Table OA3.4, reinforces this finding. The estimated effects in the full sample are both larger in magnitude and more precisely estimated, especially at the more granular (2- and 4-digit) sector levels.

Columns 3 and 4 introduce heterogeneity by acquirer-sector similarity. Here, we find that acquisitions where the acquirer operates in a different level-1 NACE sector are associated with a significantly stronger increase in sector-specialized bank relationships, compared to the baseline category of horizontal acquisitions within the same 2-digit sector (marginal effect: +0.075, p < 0.01). This pattern supports the interpretation that informational asymmetries at the sec-

toral level lead acquirers to retain or seek out banks with greater industry knowledge. In contrast, when the acquirer is from the same level-1 sector but a different 2-digit sub-sector, the marginal effects are smaller and not statistically significant, consistent with less pressing informational frictions. It looks like the acquirers compensate for limited sectoral familiarity by retaining or adding banks that are well-versed in the target's line of business. Online Appendix Table OA3.5 shows that these results for 2-digit sector specialization are robust in the full sample.

Taken together, these results lend support to Hypothesis 3, suggesting that post-acquisition restructuring of bank relationships is guided by the acquirer's informational needs, particularly when entering unfamiliar industries. The larger full-sample estimates highlight that such informational realignments may be even more pronounced in less comparable firm pairs. This difference likely reflects the broader heterogeneity of firms in the full sample, particularly those with greater need or ability to reconfigure bank relationships. Because the matching procedure balances firms on proxies of credit demand and pre-acquisition characteristics, it mitigates concerns about selection into acquisition or differential demand for funding. Consequently, the matched estimates offer more conservative, internally valid estimates of the informational motivations behind bank retention, while the larger full-sample effects suggest that acquisitions may trigger especially large shifts in bank relationships for firms otherwise different from the average.

5.4 Extensions

In this section we introduce several extensions to reinforce our case for the information role of banks for corporate clients.

5.4.1 Domestic and foreign banks

Descriptive statistics in Appendix Table A2.2 show that most foreign banks added after acquisition are already active in both the country and the acquiring firm's banking network. Domestic banks, by contrast, are occasionally new to the acquirer, but such cases are relatively rare. These patterns suggest that target firms largely adopt the existing bank relationships of their new parent, particularly in the case of foreign banks. To further explore the informational restructuring of bank relationships, we distinguish between domestic and foreign banks. Table 6 presents regression results from the matched sample, separately for domestic (Column 1) and foreign (Column 2) banks.³⁰

³⁰Online Appendix Table OA3.7 reports the results in full sample with qualitatively similar results.

We first consider how the number of domestic and foreign bank relationships evolves post-acquisition, repeating the aggregate analysis in Table 3, Panel B, Column 1. Consistent with Hypothesis 1, we find that foreign bank relationships increase significantly, while domestic bank relationships do not change on average. This suggests that acquirers, especially those with established foreign banking ties, expand the target's banking network by integrating their own banks. Furthermore, consistent with the asymmetric information mechanism in Hypothesis 2, we observe a substantial increase in domestic bank relationships (+0.058) when the acquirer is located in a different NUTS2 region, alongside a decline in foreign relationships (-0.022). These results indicate partial substitution and suggest that the geographical distance of the acquirer plays a role in how the target's banking network is reconfigured.

Panels B and C evaluate how these patterns relate to changes in banks' knowledge as posited by Hypothesis 3. Panel B follows the analysis in Table 4 for bank's knowledge of the target's local market. We do not find evidence that acquisitions significantly affect the involvement of domestic banks with regional knowledge. Foreign banks, by contrast, contribute significantly to regional knowledge about the target's local market, unless the acquirer is regionally distant. In that case, we observe a significant decline in both regional knowledge from foreign banks.³¹ This underscores the constraint that geographic distance places on the acquirer's ability to mobilize informed foreign banks.

Finally, Panel C considers whether post-acquisition restructuring brings in banks with sector-specific knowledge, as examined earlier in Table 5. Acquisitions are associated with a statistically significant increase in the number of domestic banks specialized in the target's 2-digit sector, whereas no significant changes are observed for foreign banks. This suggests that acquirers enhance informational efficiency by strengthening ties with sector-informed domestic banks, while foreign banks—though newly added—do not typically provide comparable sectoral specialization. These findings reinforce the interpretation that informational synergies in bank relationships are selectively exploited, particularly via domestic channels.

5.4.2 Domestic versus foreign acquisitions

Our main focus has been on domestic acquisitions, which provide the most suitable and novel setting to examine the traditional theories of bank-based information acquisition, both geographic and sectoral. To broaden the scope, we now compare outcomes for firms acquired by foreign versus domestic acquirers, limiting the sample to acquired firms only. This creates a setting where the informational frictions differ in nature and origin and allows us to isolate the

³¹Both results for domestic and foreign bank local knowledge are robust at more narrow, city-level definition of local target's market.

effects of acquirer nationality, without matching to non-acquired firms.

Foreign acquirers typically face more pronounced informational frictions about the host country, such as being unfamiliar with regulatory frameworks, credit norms, or relationship-based financial systems (e.g., Gordon and Bovenberg, 1996, Brennan and Cao, 1997). In this context, the decision is less about choosing among local banks and more about whether to retain or replace the target's domestic bank relationships, given limited local knowledge and access.³² This setting brings into focus a different informational channel: knowledge of the local banking environment, rather than knowledge about the target firm per se. At the same time, foreign acquirers, especially multinationals, may possess stronger financial capabilities or benefit from internal capital markets and access to global banks (Desai et al., 2004, Manova et al., 2015, Erel et al., 2022). These firms may substitute away from local bank relationships entirely. In addition, informational advantages in the form of industry knowledge or management practices held internally may reduce the need for external sector-specialist banks, particularly in the case of knowledge spillovers from acquirer to target (Javorcik, 2004, Guadalupe et al., 2012, Javorcik and Poelhekke, 2017, Fons-Rosen et al., 2021).

Table 7 compares outcomes for targets acquired by foreign versus domestic entities, where we focus on relationships involving domestic banks.³³ All specifications retain the baseline structure and controls used in earlier tables. In Columns 1-3, targets of foreign acquisitions add significantly fewer domestic banks relative to targets acquired by domestic firms. This effect is driven by fewer new additions rather than due to dropping relationships. These findings suggest that foreign acquirers are less embedded in the domestic financial ecosystem. This interpretation is confirmed by Columns 4–5 where we do not find significant differences among targets of foreign and domestic acquirers in terms of changes in bank knowledge of the local market. Foreign acquirers neither seek nor avoid banks with superior geographic knowledge, despite being informationally more distant than domestic acquirers (whether local or non-local to the target region). This is in contrast with the baseline findings in Table 4, where informationally distant domestic acquirers also added locally informed banks (but less so than local acquirers). This discrepancy may reflect a reduced capacity or incentive among foreign acquirers to identify and access such informed intermediaries, either due to institutional unfamiliarity or because local knowledge is less valuable because they rely more heavily on internal capital markets or global banking partners, bypassing domestic financial intermediation even

³²It has long been established in international finance literature that asymmetric information is one of the key reasons for international capital market failures. See early evidence for the mutual fund investors in Coval and Moskowitz (2001); Portes and Rey (2005) in the context of bilateral capital flows, and Wei and Wu (2002) for FDI and bank lending.

³³Results using all banks as in the rest of the paper are qualitatively similar but yield slightly more negative, though insignificant, coefficients for local bank knowledge in Columns 4-5.

when informational frictions remain. Finally, Columns 6-7 show that foreign acquirers are significantly less likely to add banks with strong sectoral specialization. This stands in contrast to domestic acquirers, who appear to reinforce the stock of sector-specific bank knowledge following acquisitions (Table 5). One plausible interpretation is that foreign acquirers (especially multinationals) possess more internal knowledge about the target's industry, which substitutes for external expertise offered by domestic sector-specialist banks.

Taken together, these findings demonstrate that while domestic acquirers actively restructure bank relationships in response to informational frictions (Hypothesis 2 and 3), foreign acquirers follow a different logic. Their reduced reliance on local, informed banks supports a substitution mechanism with internal knowledge and capital, consistent with the notion in the literature on trade and FDI that foreign acquirers are much more productive than domestic (acquiring) firms.

5.4.3 Firm size and bank restructuring

Do smaller firms experience more pronounced changes in their bank relationships after being acquired? One potential reason for anticipating such changes is that smaller firms often face tighter constraints in accessing finance due to limited collateral, shorter credit histories, and greater informational opacity (Fazzari et al., 1988, Petersen and Rajan, 1994, Khwaja and Mian, 2008). Acquisition by a larger parent may mitigate these constraints, potentially triggering restructuring of existing bank relationships. At the same time, smaller firms may benefit more from bank knowledge, especially local or sectoral expertise, due to their relatively limited internal resources and information-processing capacity. Conversely, larger firms typically engage in multiple bank relationships for diverse operational needs and may already possess stronger internal capacity for managing financial relationships. Whether smaller or larger firms are more likely to restructure their banking networks post-acquisition is thus an empirical question. To address this, we split the sample by firm size and estimate our baseline specifications within each subsample. We use two classification thresholds: the OECD definition ("very small" firms with fewer than 50 employees and "small" firms with fewer than 250) and the U.S. Small Business Administration (SBA) definition ("small" firms with fewer than 500 employees and "large" firms with 500 or more employees). Small firms comprise the majority of our sample (93%), with very small firms (fewer than 50 employees) accounting for 56%, consistent with European firm size distributions reported by Kalemli-Özcan et al. (2024).

Table 8 presents results on changes in the number of bank relationships around acquisition, by firm size, in both the full and matched samples. Panel A shows that the increase in

total bank relationships is more pronounced among large firms (Columns 1-3). While very small firms (fewer than 50 employees) show evidence of relationship churn, the increase in added bank relationships is notably larger than the number dropped, indicating a modest net expansion in their banking network (Columns 5-6).³⁴ Large targets tend to retain (drop fewer) existing relationships while adding new ones (Columns 7-8). This pattern persists in Panel B in the matched samples, which balances firms on observed pre-acquisition characteristics. Attenuation of results for small firms in the smaller matched samples suggests that the restructuring among smaller targets may partly reflect selection into acquisition based on unobserved heterogeneity in funding needs. In contrast, the expansionary shift among large firms is robust across both samples, pointing to a deliberate strategy by acquirers to scale and diversify financial intermediation by banks.

Table 9 turns to the informational content of post-acquisition bank relationships. Panel A shows that acquirers of large firms substantially increase exposure to banks with knowledge of the target's local market, at the regional level. By contrast, changes for very small firms are statistically weaker and economically smaller, suggesting that geographic proximity of banks plays a less systematic role in their post-acquisition relationships. In Panel B, large targets also experience significantly larger increases in the number of banks specialized in their sector, at both coarse and granular classification levels. This again contrasts with the muted effects among very small firms, for whom the gains in industry-specific intermediation are statistically insignificant. These patterns are consistent with the interpretation that acquiring large firms triggers deliberate efforts to align bank relationships with both geographic and sectoral information advantages. Online Appendix Table OA3.8 confirms the robustness of these findings in the full sample.

Taken together, these results are broadly consistent with Hypothesis 1 and provide supporting evidence for Hypotheses 2 and 3 in the context of acquisitions involving larger targets, who appear to engage more systematically in post-acquisition restructuring of bank relationships, particularly in ways that enhance access to geographic and sector-specific information. The patterns for smaller targets are less pronounced, and in the matched samples, the evidence for Hypotheses 2 and 3 is largely absent. This suggests that informational motivations for bank restructuring are more relevant for acquisitions of larger, more complex firms. For smaller firms, post-acquisition changes in bank relationships tend to be more modest and less consistently targeted, which may reflect lower informational gains from such restructuring

³⁴In most of the analysis in this section we distinguishes only between very small (less than 50 employees) and large targets. We skip reporting the results for other definitions of the 'small' firm since they are qualitatively similar.

for the acquirer, higher transaction costs relative to expected benefits, or a predominance of financing-driven motives.

6 Conclusions

We investigate how corporate acquisitions reshape firm-bank relationships, using a novel dataset that links firm-level ownership changes, relationship structures, and bank characteristics across 23 European countries between 2008 and 2014. Majority-stake acquisitions serve as plausibly exogenous shocks to the structure of banking partners used by target firms, and we condition on firm, industry, country, and time fixed effects to account for unobserved heterogeneity and isolate variation attributable to the acquisition events.

Following acquisition, target firms are more likely to expand their set of bank relationships relative to control firms. This increase is not uniform but reflects an active restructuring process, in which acquirers terminate some relationships and initiate new ones. These changes are systematic and align with the strategic preferences of the acquiring firm. In particular, bank selection appears to be guided by the "informational capital" embedded in the client base of retained, added, and dropped banks, especially in terms of geographic proximity and industry specialization. Acquirers with limited familiarity with the target's region or sector are more likely to retain incumbent banks and engage new banks with deeper local or sector-specific expertise.

These findings offer novel empirical evidence on the informational role of banks in the post-acquisition period. They underscore the strategic use of bank relationships as a mechanism to mitigate informational frictions that emerge during changes in corporate control. More broadly, our results highlight the value of accumulated bank knowledge—developed through repeated interactions with firms in the same markets or sectors—as a form of intangible capital that can be leveraged in complex corporate transactions. These insights contribute to a growing literature that views banks not merely as providers of external finance, but as key information intermediaries in the corporate landscape.

Finally, or findings underscore the importance of managing bank relationships as a key component of corporate strategy. That bank relationships vary systematically with geographic reach, sectoral specialization, and bank nationality points to promising directions for future research on how specific bank characteristics shape firm outcomes following organizational change.

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Tables

Table 1: Do acquired firms change the number of bank relationships?

Sample \rightarrow	Full	Matched 1	Matched 2	Matched 3					
Dependent variable $ ightarrow$	Change in the number of bank relationships (t-1 to t+1)								
	(1)	(1) (2) (3) (4)							
Acquisition	0.056***	0.040***	0.036**	0.037**					
	(0.011)	(0.013)	(0.015)	(0.014)					
log Operating Revenue, t-1	0.026***	0.001	-0.003	-0.009					
	(0.002)	(0.007)	(0.008)	(0.009)					
log employment, t-1	-0.038***	-0.007	-0.018**	-0.018**					
	(0.003)	(0.005)	(0.007)	(0.007)					
log total assets, t-1	0.021***	0.014**	0.029***	0.025***					
	(0.002)	(0.006)	(0.008)	(0.008)					
Leverage, t-1	0.039***	0.047***	0.103***	0.044*					
	(0.005)	(0.018)	(0.033)	(0.026)					
Growth Operating Revenue, t-1	-0.008***	0.016	0.000	0.035					
	(0.003)	(0.017)	(0.021)	(0.023)					
Growth employment, t-1	0.065***	-0.021	-0.102**	-0.057*					
	(0.005)	(0.029)	(0.048)	(0.034)					
Growth assets, t-1	0.016***	0.023**	-0.011	0.016					
	(0.003)	(0.011)	(0.018)	(0.017)					
Growth Operating Revenue, t-2	0.011***	0.033***	0.020	0.057***					
	(0.002)	(0.012)	(0.016)	(0.017)					
Shared bank, t-1	-0.096*** (0.028)	\checkmark	\checkmark	✓					
Observations	439,031	77,861	37,244	29,376					
R-squared	0.129	0.126	0.133	0.143					
4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	√ √ √	√ √ √	✓ ✓ ✓					

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on changes in the number of its bank relationships. Acquisition is a dummy equal to one in the year of acquisition and after. t-1 is the year before the acquisition, and t+1 is the year following the acquisition. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. \checkmark denotes that a variable or fixed effect is controlled for in the matching or regression procedure. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 2: Acquisition and bank relationships: Decomposition of changes

Dependent	Number of bank relationships (t-1 to t+1)						
variable	Changed	Added	Dropped	Changed	Added	Dropped	
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A]	Full Sampl	e	of which single-bank firms in t-1			
Acquisition	0.056*** (0.011)	0.061*** (0.011)	0.007 (0.010)	0.055*** (0.011)	0.072*** (0.014)	0.013** (0.006)	
Observations R-squared	439,031 0.129	439,031 0.098	439,031 0.297	248,022 0.026	248,022 0.040	248,022 0.041	
Panel B	Ma	itched Sam	ple	of which single-bank firms in t-1			
Acquisition	0.040*** (0.013)	0.028** (0.013)	-0.009 (0.009)	0.036** (0.014)	0.046*** (0.017)	0.010 (0.007)	
Observations R-squared	77,861 0.126	77,861 0.216	77,861 0.380	49,342 0.154	49,342 0.185	49,342 0.165	
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	√ √ √ √	√ √ √	√ √ √	√ √ √	√ √ √	

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of its bank relationships, bank relationships added, and bank relationships added between t-1 and t+1, where t refers to the acquisition year. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 3: Information asymmetries between acquirer and target and bank relationships

Dependent variable		Change in the number of bank relationships (t-1 to t+1)					
	(1)	(2)	(3)				
Panel A	I	Full Sample					
Acquisition	0.038*** (0.014)	0.050*** (0.012)	0.051*** (0.012)				
Acquisition×Different Region	0.031*						
Acquisition × Different 1-dgt Sector	(0.018)	0.020 (0.022)	0.019 (0.022)				
$Acquisition \times Same\ level-1\ \ Different\ 2-dgt\ Sector$			-0.026 (0.044)				
Observations R-squared	439,031 0.129	439,031 0.129	439,031 0.129				
Panel B	Ma	ntched samp	ole				
Acquisition	0.019 (0.016)	0.031** (0.014)	0.033** (0.015)				
Acquisition × Different Region	0.036* (0.021)						
Acquisition×Different Level-1 Sector		0.037 (0.025)	0.035 (0.025)				
$Acquisition \times Same\ level-1 \ \ Different\ 2-dgt\ Sector$			-0.055 (0.039)				
Observations R-squared	77,861 0.126	77,861 0.126	77,861 0.126				
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	✓ ✓ ✓	√ √ √				

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of its bank relationships between t-1 and t+1, where t refers to the acquisition year. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. The *Different Level-1 Sector* is an indicator variable if acquirer's main sector of operation at level-1 (letter-coded) NACE rev. 2 is different from that of the target, and zero otherwise. The indicator *Same Level-1* | *Different 2-dgt Sector* takes the value of 1 if acquirer operates in the same level-1 but different 2-digit sector than the target, and zero otherwise. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, ** p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 4: Acquisitions and bank knowledge of target's local market (Matched Sample)

Dependent variable \rightarrow	Change of bank knowledge of target's local market (t-1 to t+1)								
Measure $ ightarrow$	Е	Bank's clier	nt assets wi	thin target'	s	Nr. cities served			
Target's local market \rightarrow	Country	Macro Region	Region NUTS1	Region NUTS2	City	Country			
	(1)	(2)	(3)	(4)	(5)	(6)			
Panel A									
Acquisition	0.031* (0.018)	0.067** (0.030)	0.129*** (0.026)	0.144*** (0.043)	0.130** (0.061)	0.018** (0.009)			
Observations R-squared	77,495 0.114	77,426 0.151	44,857 0.154	44,830 0.179	77,495 0.097	77,859 0.120			
Panel B									
Acquisition	0.034 (0.028)	0.152*** (0.056)	0.219*** (0.046)	0.271*** (0.079)	0.245*** (0.090)	0.031** (0.013)			
$Acquisition \times Different\ Region$	-0.005 (0.036)	-0.138** (0.065)	-0.141*** (0.053)	-0.198*** (0.076)	-0.188 (0.116)	-0.021 (0.017)			
Marg.eff.Acq. if Different Region	0.029 (0.023)	0.014 (0.033)	0.079*** (0.029)	0.073** (0.037)	0.057 (0.079)	0.009 (0.012)			
Observations R-squared	77,495 0.114	77,426 0.151	44,857 0.154	44,830 0.180	77,495 0.097	77,859 0.120			
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	√ √ √ √	√ √ √ √	√ √ √	✓ ✓ ✓	√ √ √			

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the bank knowledge of local market of the target firm in matched sample (Matched 1), between t-1 and t+1, where t refers to the acquisition year. The measures of bank knowledge are transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. The statistics 'Marg.eff. Acq. | Different Region' reports the estimate of the total effect of acquisition in the subset of target-firms in different region. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 5: Acquisitions and bank specialization in target's sector (Matched sample)

Dependent variable $ ightarrow$	Change of number of banks, specialized in target's sector (t-1 to t+1)						
Scope of dependent var. \rightarrow	Glo	obal	al Local Global				
Target sector \rightarrow	level-1		2-0	digit			
	(1)	(2)	(3)	(4)	(5)		
Acquisition	0.023* (0.014)	0.031** (0.013)	0.030** (0.013)	0.016 (0.014)	0.018 (0.015)		
Acquisition×Different 1dgt				0.060** (0.025)	0.058** (0.025)		
Acq.×Same 1dgt Different 2dgt			-0.0 (0.025)				
Marg.eff. Acq. if Different 1dgt				0.075*** (0.023)	0.075*** (0.023)		
Marg.eff. Acq. if Same 1dgt Different 2dgt					-0.048 (0.050)		
Observations R-squared	77,861 0.175	77,861 0.154	77,861 0.125	77,861 0.154	77,861 0.154		
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓	√ √ √ √		

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in its number of banks who are specialized in the sector of the target in matched sample (Matched 1), between t-1 and t+1, where t refers to the acquisition year. The bank is considered specialized in the sector of target (1-, 2-digit NACE revision 2 classification, under the 'Target sector') if the total assets of its other clients who operate in the same sector lie above median of the total assets of this bank's clients. We aggregate the assets of bank clients globally, across all sample countries, or locally (in col. 3), within the target's country. The measure follows Paravisini et al. (2023) but is adapted to represent industry specialization using the bank's client base as opposed to the bank's specialization in financing of export destination. The Different 1-dgt is an indicator variable if acquirer's main sector of operation at level-1 (letter) NACE rev. 2 is different from that of the target, and zero otherwise. The indicator Different 1-dgt | Same 2-dgt takes the value of 1 if acquirer operates in the same level-1 but different 2-digit sector than the target, and zero otherwise. The statistics 'Marg.eff. Acq.(1)' reports the estimate of the total effect of acquisition in the subset of target-firms in different level-1 sector (in col. 4-5). The statistics 'Marg.eff. Acq.(2)' is for marginal effect of acquisitons in level-1 but different 2-digit sector (in col. 5). Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 6: Extension: Domestic and foreign bank relationships (Matched sample)

Nationality of bank \rightarrow	Domestic bank	Foreign bank				
	(1)	(2)				
Panel A: Dependent variable	Change in number of bank relationships (t-1 to t+1)					
Acquisition	0.000 (0.015)	0.018*** (0.007)				
Acquisition×Different Region	0.058*** (0.021)	-0.022*** (0.009)				
Marg.eff.Acq. if Different Region	0.058*** (0.017)	-0.004 (0.005)				
Observations R-squared	77,861 0.169	77,861 0.243				
Panel B: Dependent variable	Change (t-1 to t+1) in bank knowledge of target's local marke					
Target's local market \rightarrow	Macro Region	Macro Region				
Acquisition	0.052 (0.093)	0.489*** (0.162)				
Acquisition×Different Region	0.029 (0.107)	-0.712*** (0.208)				
Marg.eff.Acq. if Different Region	0.081 (0.059)	-0.223* (0.124)				
Observations R-squared	77,440 0.121	77,804 0.240				
Panel C: Dependent variable	Change (t-1 to t+1 specialized in targ	l) in nr. of banks et's 2-digit sector				
Acquisition	0.028** (0.013)	0.003 (0.004)				
Observations R-squared	77,861 0.173	77,861 0.230				
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	\' \' \' \' \' \'				

Note: In Panel A, the table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of, separately, domestic and foreign bank relationships of the firm, bank relationships added, and bank relationships dropped between t-1 and t+1 in matched sample (Matched 1), where t refers to the acquisition year. In Panel B, the table shows the results of OLS regressions of the effect of acquisition on net changes in domestic and foreign bank knowledge of local market of the target firm, between t-1 and t+1. The measure is transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. In Panel C, the table shows the results of OLS regressions of the effect of acquisition on net changes in number of banks who are specialized in the sector of the target, between t-1 and t+1. The measures of bank knowledge are defined in Section 4.3. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 7: Extension: Domestic versus foreign acquisitions and domestic bank relationships

$Sample \to$	Firms acquired by foreign or domestic entities, non-matched									
Dependent variable $ ightarrow$	Number of target's domestic bank relationships (t-1 to t+1)		know	ge of bank rledge of 's market	Change of nr banks specialized in target sector					
	Changed	Added	Dropped	Country	MacroReg.	level 1	2 digit			
	(1)	(2)	(3)	(4)	(5)	(5)	(6)			
Foreign acquisition	-0.095*** (0.024)	-0.094*** (0.021)	-0.004 (0.022)	0.037 (0.146)	0.186 (0.163)	-0.079*** (0.029)	-0.086*** (0.026)			
Observations R-squared	6,369 0.199	6,369 0.183	6,369 0.398	6,274 0.173	6,274 0.162	6,369 0.201	6,369 0.201			
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	✓ ✓ ✓	√ √ √	√ √ √ √	√ √ √	✓ ✓ ✓	√ √ √ √			

Note: This table shows the results of OLS regressions in the sample of the firms acquired by domestic entities (as in the rest of this paper) or foreign entities, relative to the target's country, comparing the effect of foreign acquisition to the effect of domestic acquisition of a target-firm on net changes in the following target bank's outcomes between t-1 and t+1, where t refers to the acquisition year. In column 1-3, on net changes in the number of, domestic bank relationships of the firm, bank relationships added, and bank relationships dropped; in column 4-5, on net changes in domestic bank knowledge of local market (country or region) of the target firm (the measure is transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$.); and in column 5-6 the number of domestic banks who are specialized in the sector of the target. These measures are defined in Section 4.3. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 8: Extension: Acquisitions and bank relationships: Small and large firms

Dependent variable $ ightarrow$			Numb	er of bank re	lationships ((t-1 to t+1)			
•	Change				Added	Dropped	Added	Dropped	
Target firm size \rightarrow	Small			Large	Sr	nall	Large		
Firm employees \rightarrow	<50	<250	<500	>500 <50 <50 >500		>500	>500		
	(1)	(2)	(2) (3) (4) (5) (6)		(7)	(8)			
Panel A	Full Sample								
Acquisition	0.036*** (0.012)	0.034*** (0.010)	0.043*** (0.011)	0.168*** (0.043)	0.059*** (0.014)	0.025* (0.013)	0.074* (0.041)	-0.102*** (0.030)	
Observations R-squared	247,772 0.121	382,486 0.140	409,561 0.138	28,980 0.131	247,772 0.095	247,772 0.258	28,980 0.165	28,980 0.338	
Panel B				Matche	ed sample				
Acquisition	0.028* (0.015)	0.026** (0.013)	0.034*** (0.013)	0.151** (0.059)	0.004 (0.017)	-0.019 (0.013)	0.097* (0.057)	-0.062** (0.030)	
Observations R-squared	51,259 0.148	70,875 0.134	74,450 0.129	3,147 0.462	51,259 0.204	51,259 0.366	3,147 0.420	3,147 0.535	
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	✓ ✓ ✓	√ √ √	√	√ √ √ √	√ √ √	√ √ √ √	✓ ✓ ✓	

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in its number of bank relationships, bank relationships added, and bank relationships added between t-1 and t+1, where t refers to the acquisition year. The samples of target firms are split by the size of acquired firm, where firms with < 50 employees are considered very small; firms with < 250 are small according to the OECD; firms with < 500 are small according to the U.S. SBA; and firms with \ge 500 are large. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table 9: Extension: Acquisitions and bank knowledge: Small and large firms (Matched sample)

Target firm size \rightarrow	Small	: <50 emp	loyees	_Large:	Large: >500 employees					
	(1)	(2)	(3)	(4)	(5)	(6)				
Panel A	Dependent variable: Change of bank knowledge of target's local market (t-1 to t+1)									
Target's local market $ ightarrow$	Macro Region	Region NUTS2	City	Macro Region	Region NUTS2	City				
Acquisition	0.010 (0.026)	0.051* (0.026)	0.090 (0.079)	0.393* (0.224)	0.898** (0.408)	0.394 (0.325)				
Observations R-squared	51,031 0.087	38,826 0.077	51,081 0.083	3,131 0.528	936 0.268	3,131 0.410				
Panel B	Dep			ange of nur t's sector (t		nks,				
Target sector $ ightarrow$	level 1	2 digit		level 1	2 digit					
Acquisition	0.022 (0.017)	0.026 (0.017)		0.107** (0.052)	0.143** (0.059)					
Observations R-squared	51,018 0.181	51,018 0.153		3,503 0.468	3,503 0.466					
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	√ √ √	✓ ✓ ✓	✓ ✓ ✓				

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the bank knowledge in matched sample (Matched 1). The samples of target firms are split by the size of acquired firm, where firms with < 50 employees are considered very small and firms with \ge 500 are large.

In Panel A, the dependent variable is net changes in bank knowledge of local market of the target firm, between t-1 and t+1, where t refers to the acquisition year. The measures of bank knowledge are transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. In Panel B, the dependent variable is net changes in its number of banks who are specialized in the sector (level-1 letter coded and 2-digit numeric) of the target, between t-1 and t+1, where t refers to the acquisition year. These measures are defined in Section 4.3. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, *** p < 0.05, ** p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Appendix

A1 Example firm

Table A1.1: Example firm ES000207064: Bank names

Year	Bank Name	Code	Event	Foreign Owner	Country
2009 2009 2009	Banco Mare Nostrum Cajamar Caja Rural Caixabank	502 1432 1574			
2010 2010 2010	Banco Mare Nostrum Cajamar Caja Rural Caixabank	502 1432 1574	dropped		
2011 2011	Cajamar Caja Rural Caixabank	1432 1574	dropped		
2012 2012	Caixabank Cajas Rurales Unidas	1574 1659	dropped added		
2013 2013 2013	Banco Caixa General Banco Mare Nostrum Cajas Rurales Unidas	462 502 1659	added added	Caixa Geral de Depositos	Portugal
	<u> </u>			<u> </u>	<u> </u>

Note: *ES000207064* denotes a Spanish (target) firm. *Dropped* is an event where the bank is no longer a relationship next year. It is counted as having been dropped in the next year in Table A1.2. *Added* is an event where the bank was not yet a relationship in the previous year. *Foreign Owner* lists the ultimate owner bank of the bank in the third column, and *Country* that ultimate owner's home country.

Table A1.2: Example firm ES000207064: Bank relationships and acquisitions

Year		Bank tions	ships			Bank Ships	Foreign Bank relationships		Acquis	Acquisition	
	Total	+	-	Total	+	-	Total	+	-	Domestic	Foreign
2009	3			3			0			1	0
2010	3	0	0	3	0	0	0	0	0	0	0
2011	2	0	1	2	0	1	0	0	0	0	0
2012	2	1	1	2	1	1	0	0	0	0	0
2013	3	2	1	2	1	1	1	1	0	0	0

Note: ES000207064 denotes a Spanish (target) firm. + denotes an addition, while - denotes a bank that is dropped, both relative to the previous year. Domestic stands for a majority acquisition event where the buyer was a domestic firm, and Foreign stands for a majority acquisition event where the buyer was a foreign firm, both from the perspective of the target firm.

A2 Summary statistics

Table A2.1: Summary statistics: Regression sample of Table 1

Variable	N	mean	s.d.	min	max
№ Bank relationships	439,031	1.71	1.04	1.00	22.00
$\Delta N^{\underline{0}}$ Bank relationships $\Delta N^{\underline{0}}$ Domestic bank relationships $\Delta N^{\underline{0}}$ Foreign bank relationships	439,031 439,031 439,031	-0.04 -0.06 0.02	0.63 0.64 0.26	-15.00 -14.00 -3.00	20.00 17.00 4.00
Domestic acquisition	439,031	0.01	0.11	0.00	1.00
Shared bank, t-1 Nº Bank relationships, t-1 Nº Domestic bank relationships, t-1 Nº Foreign bank relationships, t-1 Nº Banks added (t-1 to t+1) Nº Domestic banks added (t-1 to t+1) Nº Foreign banks added (t-1 to t+1) Nº Banks dropped (t-1 to t+1) Nº Domestic banks dropped (t-1 to t+1) Nº Toreign banks dropped (t-1 to t+1) Nº Foreign banks dropped (t-1 to t+1)	439,031 439,031 439,031 439,031 439,031 439,031 439,031 439,031	0.00 1.73 1.66 0.07 0.31 0.26 0.05 0.35 0.33 0.03	0.03 1.02 1.01 0.27 0.68 0.61 0.22 0.73 0.69 0.16	0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00	1.00 22.00 19.00 6.00 20.00 17.00 4.00 15.00 14.00 3.00
log output, t-1 log employment, t-1 log total assets, t-1 Δlog output, t-1 Δlog employment, t-1 Δlog assets, t-1 Δlog output, t-2 Leverage ((LTD+Loans)/Assets), t-1	439,031 439,031 439,031 439,031 439,031 439,031 439,031	15.06 3.81 14.81 -0.05 0.01 -0.00 -0.03 0.20	1.91 1.42 2.04 0.49 0.28 0.32 0.53 0.25	-0.22 0.00 4.47 -11.63 -9.23 -7.34 -11.63 0.00	25.67 12.93 26.42 11.94 9.36 8.56 17.39 1.14
Domestic acquisition × Different Region Domestic acquisition × Different 1-dgt Domestic acquisition × Different 2-dgt Domestic acquisition × Same 1-dgt Different 2-dgt	439,031 439,031 439,031 439,031	0.01 0.00 0.00 0.00	0.08 0.06 0.07 0.02	0.00 0.00 0.00 0.00	1.00 1.00 1.00 1.00
ΔBank knowledge of country (t-1 to t+1) ΔBank knowledge of region (t-1 to t+1) ΔBank knowledge of NUTS1 (t-1 to t+1) ΔBank knowledge of NUTS2 (t-1 to t+1) ΔBank knowledge of city (t-1 to t+1) ΔBank knowledge in Nr. cities served (t-1 to t+1)	429,496 428,629 237,931 237,795 429,492 438,987	-0.00 0.06 0.07 0.07 -0.04 -0.05	1.08 2.07 1.31 1.48 3.22 0.65	-28.84 -28.40 -28.80 -28.36 -29.47 -7.89	28.87 28.42 27.40 26.52 31.59 7.79
ΔN^{o} banks specialized target's global 1-dgt sector ΔN^{o} banks specialized target's global 2-dgt sector ΔN^{o} banks specialized target's national 2-dgt sector	439,031 439,031 439,031	0.01 -0.00 -0.01	0.71 0.68 0.71	-8.00 -15.00 -12.00	13.00 17.00 17.00

Note: This table shows summary statistics for firm-year observations where we can track bank relationships for at least five years and two-period changes in bank relationships (from t-1 to t+1) for at least three observations per firm. The sample corresponds to Table 1. " Δ " is the simple difference between t-1 and t+1. N_0 is short for "number of". Bank relationships are in number of individual unique banks. All financial variables are in constant US dollars with the base being 2005.

Table A2.2: Decomposing added banks

Panel A: Majority acquisitions (Group 3)	where 1 or more bank was added	missing
Nr Domestic banks added, t-1 to t+1 of which: new to acquirer, t-1 to t+1	1,415 52	0 657
Nr Foreign banks added, t-1 to t+1 of which: new to country, t-1 to t+1 of which: new to acquirer, t-1 to t+1	490 2 8	0 0 1
Panel B: Minority ownership change (Group 2)	where 1 or more bank was added	missing
Nr Foreign banks added, t-1 to t+1 of which: new to country, t-1 to t+1 of which: new to acquirer, t-1 to t+1	20,002 238 6	0 0 28

Note: The second column counts the number of observations where one or more banks were added of the type listed in the first column. *Missing data* implies that we do not have sufficient information, such as when the nationality of the bank is unknown, or if we do not know the bank of the acquirer, such as when the acquirer is an individual.

Internet Appendix (not for publication)

for "Corporate Acquisitions and Bank Relationships"

September 10, 2025

This Appendix contains additional results, figures, and tables referred to but not included in the main text.

OA1 Matching

This section discusses summary statistics and balancing of continuous matching variables included in the CEM matching procedure.

Table OA1.1 shows summary statistics for the main matched sample. Compared to the unmatched sample, see Table A2.1, matched pairs of firms have somewhat fewer bank relationships, but add bank relationships over time (mostly by dropping fewer banks). Treated firms represent a larger share of the sample and firms are of somewhat smaller size on average. Matched pairs of firms show smaller absolute minimum and maximum values on almost all variables.

In Table OA1.2 we test whether the mean of variables is different among the treated and the control firms, using CEM's weights, for each of the three proposed matched samples. * denote variables that are included in the matching procedure: these are all mean-balanced. The only potentially problematic variable is lagged leverage (but not its growth rate). In the largest matched sample the t-test value suggests a significant difference, which is however reduced by half when a different definition of leverage is used, and is due to a small difference in the second digit of the leverage ratio. However, when computing the variance ratio, yielding 1.09, we find that it is very close to 1 and therefor of "no concern" according to Rubin (2001); we also include this variable as a control variable in all regressions.

Table OA1.1: Summary statistics for sample Matched 1

Variable	N	mean	s.d.	min	max
№ Bank relationships	78,122	1.56	0.88	1.00	12.00
ΔN° Bank relationships ΔN° Foreign bank relationships ΔN° Domestic bank relationships	78,122	0.03	0.51	-7.00	17.00
	78,122	0.04	0.23	-2.00	3.00
	78,122	-0.01	0.52	-6.00	16.00
Domestic acquisition	78,122	0.06	0.23	0.00	1.00
Shared bank, t-1	78,122	0.00	0.00	0.00	0.00
Nº Domestic bank relationships, t-1	78,122	1.50	0.81	0.00	10.00
Nº Bank relationships, t-1	78,122	1.53	0.80	1.00	10.00
Nº Foreign bank relationships, t-1	78,122	0.03	0.18	0.00	3.00
№ Domestic banks added (t-1 to t+1) № Banks added (t-1 to t+1) № Foreign banks added (t-1 to t+1) № Domestic banks dropped (t-1 to t+1) № Banks dropped (t-1 to t+1) № Foreign banks dropped (t-1 to t+1)	78,122	0.24	0.59	0.00	16.00
	78,122	0.29	0.67	0.00	17.00
	78,122	0.05	0.22	0.00	3.00
	78,122	0.26	0.58	0.00	6.00
	78,122	0.26	0.59	0.00	7.00
	78,122	0.01	0.09	0.00	2.00
log output, t-1 log employment, t-1 log total assets, t-1 Δlog output, t-1 Δlog employment, t-1 Δlog assets, t-1 Δlog output, t-2 Leverage ((LTD+Loans)/Assets), t-1	78,122	14.90	1.67	7.18	22.78
	78,122	3.48	1.30	0.00	10.61
	78,122	14.42	1.78	7.21	22.94
	78,122	-0.03	0.27	-5.37	3.49
	78,122	0.02	0.18	-2.83	4.03
	78,122	-0.01	0.29	-4.55	7.17
	78,122	-0.02	0.29	-5.68	3.92
	78,122	0.20	0.24	0.00	1.14
Domestic acquisition × Different Region Domestic acquisition × Different 1-dgt Domestic acquisition × Different 2-dgt Domestic acquisition × Different 4-dgt Domestic acquisition × Same 1-dgt Different 2-dgt Domestic acquisition × Same 2-dgt Different 4-dgt	78,122	0.03	0.18	0.00	1.00
	78,122	0.01	0.12	0.00	1.00
	78,122	0.02	0.12	0.00	1.00
	78,122	0.02	0.13	0.00	1.00
	78,122	0.00	0.04	0.00	1.00
	78,122	0.00	0.04	0.00	1.00
ΔBank knowledge of country ΔBank knowledge of region ΔBank knowledge of NUTS1 ΔBank knowledge of NUTS2 ΔBank knowledge of city ΔBank knowledge in Nr. cities served	77,755	0.04	0.92	-27.30	27.29
	77,687	0.05	1.48	-27.37	24.87
	45,160	0.01	1.18	-27.37	27.40
	45,133	0.02	1.32	-27.37	24.87
	77,755	0.01	2.75	-27.22	25.27
	78,120	0.01	0.51	-7.79	7.11
ΔN_{2} Banks specialized target's global 1-dgt sector ΔN_{2} Banks specialized target's global 2-dgt sector ΔN_{2} Banks specialized target's global 4-dgt sector ΔN_{2} Banks specialized target's national 2-dgt sector	78,122	0.15	0.63	-5.00	13.00
	78,122	0.09	0.60	-6.00	10.00
	78,122	0.03	0.56	-7.00	8.00
	78,122	0.07	0.60	-5.00	8.00

Note: This table shows summary statistics for firm-year observations in the matched sample of Table ??. " Δ " is the simple difference between t-1 and t+1. N² is short for "number of". Bank relationships are in number of individual unique banks. All financial variables are in constant US dollars with the base being 2005.

Table OA1.2: Balancing test for matched samples 1-3

Variable	Means o	Means of variables			quality of eans
	Treated	Controls	% bias	t-stats	p-value
Matched 1 (78,254 obs.)					
*log Employment, t-1 *log Output, t-1 *Δlog Employment, t-1 *Δlog Output, t-1 *Δlog Output, t-2 *log Assets, t-1 Δlog Assets, t-1 Δlog Total Liabilities, t-1 Leverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (Cur. Liab.)/Assets, t-1	3.673 15.176 0.008 -0.023 -0.010 14.882 -0.007 -0.025 0.232 0.445 -0.003 -0.001	3.660 15.169 0.011 -0.028 -0.014 14.869 -0.007 -0.022 0.210 0.434 -0.005 -0.001	0.9 0.4 -1.6 1.5 1.3 0.7 0.2 -0.5 8.9 3.8 1.9 -0.3	0.56 0.26 -0.96 0.87 0.8 0.48 0.1 -0.34 5.85 [†] 2.46 1.26 -0.23	0.574 0.793 0.335 0.383 0.426 0.630 0.919 0.736 0.000 0.014 0.208 0.816
Matched 2 (37,533 obs.)				0.20	
*log Employment, t-1 *log Output, t-1 *Δlog Employment, t-1 *Δlog Output, t-1 *Δlog Output, t-2 *log Assets, t-1 Δlog Assets, t-1 Δlog Total Liabilities, t-1 *Leverage: (LTD+Loans)/Assets, t-1 Leverage: (Cur. Liab.)/Assets, t-1 ΔLeverage: (Cur. Liab.)/Assets, t-1	3.623 15.106 0.010 -0.025 -0.013 14.757 -0.014 -0.038 0.183 0.443 -0.009 -0.000	3.610 15.092 0.011 -0.027 -0.015 14.748 -0.005 -0.024 0.182 0.437 -0.007	1 0.9 -0.7 0.7 0.5 -3.1 -2.6 0.6 2 -1.3 0.4	0.52 0.49 -0.36 0.36 0.39 0.27 -1.74 -1.58 0.3 1.14 -0.71 0.23	0.606 0.626 0.716 0.717 0.694 0.784 0.082 0.113 0.766 0.254 0.480 0.822
Matched 3 (29,606 obs.)					
*log Employment, t-1 *log Output, t-1 *Δlog Employment, t-1 *Δlog Output, t-1 *Δlog Output, t-2 *log Assets, t-1 Δlog Assets, t-1 Δlog Total Liabilities, t-1 *Leverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (LTD+Loans)/Assets, t-1 ΔLeverage: (Cur. Liab.)/Assets, t-1	3.619 15.117 0.014 -0.020 -0.014 14.755 -0.013 -0.034 0.218 0.450 -0.004 -0.001	3.605 15.107 0.012 -0.023 -0.014 14.753 -0.007 -0.021 0.218 0.440 -0.004 -0.002	1.1 0.5 1.2 0.8 0.2 0.1 -2.3 -2.4 0.0 3.5 0.3	0.54 0.30 0.65 0.44 0.10 0.07 -1.21 -1.36 0.01 1.87 0.13 0.48	0.593 0.761 0.518 0.659 0.917 0.948 0.226 0.173 0.991 0.061 0.898 0.628

Notes: The table reports the means of the companies that experienced a change in ownership (treated) and companies without such change (controls) in three matched samples (see also Table 1). * denotes variables included in the matching procedure. Growth rates of x_t are computed as log-difference. The "standardized % bias" is the difference of the sample means in the treated and controls in matched sample as a percentage of the square root of the average of the sample variances in the treated and control groups. The t-tests for equality of means are based on a regression of the variable on a treatment indicator; the regression is weighted using the importance weight estimated by the coarsened exact matching (CEM) methodology described in Iacus et al. (2011). The details of the CEM methodology are described in Section 4.2.

[†] In the large matched sample, the variance ratio of *Leverage* between treated and control firms is 1.09, which is very close to 1 and therefor of "no concern" according to Rubin (2001); we include this variable as a control variable in all regressions.

OA2 Further robustness

Table OA2.1 shows further robustness tests of the effect of acquisition on bank relationships. In columns 1-3 we cluster at different levels of aggregation to allow for correlated errors at higher levels. Standard errors are however very similar and only increase somewhat when clustering by country, but since we have only 22 countries in the sample, the number of cluster groups is less than is typically recommended. In columns 4 and 5 we address concerns that treatment is staggered over time, see also the main text. Column 4 restricts the sample to treatments that happen in 2012 (thus dropping 1,567 firms that are treated in other years)¹, and column 5 applies the Sun and Abraham (2021) estimator, which both yield very similar results. In column 6 re-estimates the baseline specification but drops firms with minority shareholder changes where such changes did not lead to a change of majority owner. For example, when a 20% stake changes owner but neither owns more than 50% of the firm before or after the transaction. It is possible that such a substantial share is nevertheless influential enough to change bank relationships in the firm. Column 6 excludes this channel and shows a very similar result. Finally, in column 7 we apply the de Chaisemartin and D'Haultfœuille (2024) estimator (did_multiplegt_dyn in Stata), which however cannot deal with high-dimensional fixed effects or multi-way clustering, which is why we replace 4-digit-sector×year fixed effects with a set of 2-digit-sector and year fixed effects and we cluster by firm instead.

¹72% of all acquisitions in the main sample take place in 2012, followed by 18% in 2010, 8% in 2011, and the remainder in 2009 and 2013. This varies a lot by country: it is more skewed towards 2012 in Russia but is not at all skewed towards any one year in Germany, for example. The underlying reason is the five-year period of analysis, in combination with the demands of data availability for control variables and tracking changes over time in ownership and bank relationships.

Table OA2.1: Further robustness tests

Dependent variable $ ightarrow$	Change in the number of bank relationships						
Cluster level \rightarrow	Country× NACE2× year	Country× NACE2	Country	Country×NACE4×year			firm
$Sample/Estimator \rightarrow$				non- staggered	S&A	no minority change	dCDH
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Acquisition	0.056*** (0.011)	0.056*** (0.011)	0.056** (0.020)	0.052*** (0.014)	0.059** (0.010)	0.060*** (0.011)	0.054*** (0.007)
Observations R-squared 4dgt sector-year FE 2dgt sector & year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	439,031 0.129 ✓	439,031 0.129 ✓	439,031 0.129 ✓	436,926 0.124 ✓	420,632 0.8629 ✓	303,642 0.151 ✓	426,034 - - - - -

Notes: *NACE* refers to the 2 or 4 digit NACE industry classification. *Non-staggered* is a sample where all treatments happen in the same year (2012). *S&A* refers to the Sun and Abraham (2021) estimator. *dCDH* refers to the de Chaisemartin and D'Haultfœuille (2024) estimator.

OA3 Extended versions of tables in the manuscript

Table OA3.1: Acquirer familiarity with the local market and bank relationships

Dependent variable \rightarrow	Number of bank relationships (t-1 to t+1)					
-	Changed	Added	Dropped			
	(1)	(2)	(3)			
Panel A		Full Sample				
Acquisition	0.038***	0.057***	0.021			
	(0.014)	(0.016)	(0.014)			
Acquisition×Different Region	0.031*	0.007	-0.024			
	(0.018)	(0.022)	(0.018)			
Marg.eff. Acq. if Different Region	0.069***	0.064***	-0.003			
	(0.014)	(0.015)	(0.013)			
Observations	439,031	439,031	439,031			
R-squared	0.129	0.098	0.297			
Panel B	1	Matched Samp	le			
Acquisition	0.019	0.039**	0.024*			
	(0.016)	(0.018)	(0.013)			
Acquisition×Different Region	0.036*	-0.018	-0.053***			
	(0.021)	(0.025)	(0.018)			
Marg.eff. Acq. if Different Region	0.054***	0.021	-0.029**			
	(0.017)	(0.018)	(0.013)			
Observations	77,861	77,861	77,861			
R-squared	0.126	0.216	0.380			
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	√ √ √	√ √ √			

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of its bank relationships, bank relationships added, and bank relationships added between t-1 and t+1, where t refers to the acquisition year. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. The statistics 'Marg.eff. Acc | Different Region' reports the estimate of the total effect of acquisition in the subset of target-firms in different region and its significance. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.2: Acquirer familiarity with target sector and bank relationships

Dependent variable		Numbe	r of bank rela	ationships (t-	1 to t+1)	
•	Changed	Added	Dropped	Changed	Added	Dropped
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A			Full S	ample		
Acquisition	0.050*** (0.012)	0.062*** (0.013)	0.011 (0.012)	0.051*** (0.012)	0.065*** (0.014)	0.013 (0.012)
Acquisition \times Different 1-dgt	0.020 (0.022)	-0.002 (0.024)	-0.013 (0.019)	0.019 (0.022)	-0.007 (0.024)	-0.017 (0.019)
$Acq. \times Same 1-dgt \mid Different 2-dgt$				-0.026 (0.044)	-0.092* (0.051)	-0.074* (0.040)
Marg.eff. Acq. if Different 1dgt	0.070*** (0.020)	0.059*** (0.021)	-0.002 (0.016)	0.070*** (0.020)	0.058*** (0.021)	-0.003 (0.016)
Marg.eff. Acq. if Same 1d.\Diff 2d.	(0.020)	(0.021)	(0.010)	0.026 (0.043)	-0.027 (0.049)	-0.060 (0.040)
Observations R-squared	439,031 0.129	439,031 0.098	439,031 0.297	439,031 0.129	439,031 0.098	439,031 0.297
Panel B			Matcheo	d Sample		
Acquisition	0.031** (0.014)	0.019 (0.016)	-0.012 (0.011)	0.033** (0.015)	0.021 (0.016)	-0.011 (0.011)
Acquisition × Different 1-dgt	0.037 (0.025)	0.038 (0.028)	0.012 (0.020)	0.035 (0.025)	0.036 (0.029)	0.011 (0.020)
Acq. × Same 1-dgt Different 2-dgt				-0.055 (0.039)	-0.077 (0.058)	-0.036 (0.044)
Marg.eff. Acq. if Different 1dgt	0.068*** (0.022)	0.057** (0.024)	0.000 (0.016)	0.068*** (0.022)	0.057** (0.024)	0.000 (0.016)
Marg.eff. Acq. if Same 1d. Diff 2d.	(0.022)	(0.021)	(0.010)	-0.022 (0.037)	-0.056 (0.055)	-0.047 (0.043)
Observations R-squared	77,861 0.126	77,861 0.216	77,861 0.380	77,861 0.126	77,861 0.216	77,861 0.380
Other controls 4dgt sector-year FE	√	√	√	√	√	√
FE: Nr of domestic banks, t-1	√	\checkmark	√	\checkmark	\checkmark	\checkmark
FE: Nr of foreign banks, t-1	√	✓	<u>√</u>	√	√	√

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of its bank relationships, bank relationships added, and bank relationships added between t-1 and t+1, where t refers to the acquisition year. The \times Different 1-dgt is an indicator variable if acquirer's main sector of operation at level-1 (letter) NACE rev. 2 is different from that of the target, and zero otherwise; The \times Different 2-dgt is defined similarly using 2-digit numeric sector. The indicator \times Different 1-dgt | Same 2-dgt takes the value of 1 if acquirer operates in the same level-1 but different 2-digit sector than the target, and zero otherwise. The statistics 'Marg.eff. Acc | {.}' reports the estimate of the total effect of acquisition in the subset of target-firms defined by {.} and its significance. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.3: Acquisitions and bank knowledge of target's local market (Full sample)

Dependent variable $ ightarrow$	Change of bank knowledge of local market (t-1 to t+1)						
$\text{Measure} \rightarrow$	Client	Client assets of domestic bank within target's					
	Country	Region	NUTS1	NUTS2	City		
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A.1		Fu	ll Sample: 1	Average ac	quirer		
Acquisition	0.045*** (0.016)	0.063** (0.026)	0.167*** (0.024)	0.147*** (0.029)	0.075 (0.056)	0.042*** (0.008)	
Observations R-squared	429,489 0.115	428,622 0.073	237,799 0.088	237,663 0.076	429,485 0.055	438,985 0.077	
Panel A.2	Full Sar	nple: Acqı	uirer famili	ar with the	target's loc	al market	
Acquisition	0.051** (0.024)	0.124*** (0.046)	0.282*** (0.043)	0.244*** (0.049)	0.169** (0.086)	0.062*** (0.011)	
Acquisition×Different Region	-0.010 (0.031)	-0.103* (0.052)	-0.191*** (0.049)	-0.162*** (0.054)	-0.158 (0.108)	-0.035** (0.016)	
Observations R-squared	429,489 0.115	428,622 0.073	237,799 0.088	237,663 0.077	429,485 0.055	438,985 0.077	
Marg.eff. Acq. if Different Region	0.041** (0.020)	0.022 (0.029)	0.091*** (0.026)	0.082*** (0.030)	0.011 (0.070)	0.028*** (0.011)	
Other controls 4dgt sector-year FE	√	√	√	√	√	√	
FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	V V V	V V V	√ ✓	V V V	∨ ✓	v v v v	

Note: This table is a version of Table 4 in main text, using the full (non-matched) sample. shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the bank knowledge of local market of the target firm, between t-1 and t+1, where t refers to the acquisition year. The measures of bank knowledge are transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.4: Acquisitions and bank specialization in target's sector

Dependent variable $ ightarrow$	Change of number of banks, specialized in target's sector (t-1 to t+1)					
Scope of measure \rightarrow		Global		Local		
Target sector \rightarrow	level 1	2 digit	4 digit	2 digit		
	(1)	(2)	(3)	(4)		
Panel A		Full	Sample			
Acquisition	0.063*** (0.012)	0.048*** (0.011)	0.042*** (0.011)	0.041*** (0.011)		
Observations R2	439,031 0.132	439,031 0.113	439,031 0.087	439,031 0.089		
Panel B		Matche	ed Sample			
Acquisition	0.023* (0.014)	0.031** (0.013)	0.029** (0.013)	0.030** (0.013)		
Observations R2	77,861 0.175	77,861 0.154	77,861 0.128	77,861 0.125		
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	√ √ √	√ √ √	√ √ √ √		

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in its number of banks who are specialized in the sector of the target, between t-1 and t+1, where t refers to the acquisition year. The bank is considered specialized in the sector of target (1-, 2- or 4-digit NACE revision 2 classification, under the 'Target sector') if the total assets of its other clients who operate in the same sector lie above median of the total assets of this bank's clients. We aggregate the assets of bank clients across all sample countries (under the Scope of measure 'global') or within the target's own country (under the 'local' scope of measure). The measure follows Paravisini et al. (2023) but is adapted to represent industry specialization using the bank's client base as opposed to the bank's specialization in financing of export destination. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.5: Acquirer specialization and bank specialization in target's sector

Dependent variable $ ightarrow$	Change of number of banks, specialized in target's sector (t-1 to t+1)						
Target sector \rightarrow	level 1 (1)	2 digit (2)	$\frac{\text{level 1}}{\text{(3)}}$	2 digit (4)			
Panel A		Full Sa	mple				
Acquisition	0.052*** (0.013)	0.030** (0.012)	0.061*** (0.014)	0.038*** (0.012)			
Acquisition×Different 1dgt	0.012 (0.025)	0.039* (0.022)	0.016 (0.025)	0.044* (0.022)			
Acq.×Same 1dgt Different 2dgt			-0.094* (0.056)	-0.067 (0.050)			
Marg.eff. Acq. if Different 1dgt	0.063*** (0.021)	0.069*** (0.019)	0.076*** (0.023)	0.082*** (0.020)			
Marg.eff. Acq. if Different 2dgt	(0.021)	(37323)	-0.033 (0.056)	-0.029 (0.050)			
Observations R-squared	439,031 0.132	439,031 0.113	439,031 0.132	439,031 0.113			
Panel B		Matched	sample				
Acquisition	0.013 (0.016)	0.016 (0.014)	0.016 (0.016)	0.018 (0.015)			
Acquisition×Different 1dgt	0.039 (0.028)	0.060** (0.025)	0.036 (0.028)	0.058** (0.025)			
Acq.×Same 1dgt Different 2dg			-0.100* (0.060)	-0.065 (0.052)			
Marg.eff. Acq Different 1dgt	0.053** (0.024)	0.075*** (0.023)	0.053** (0.024)	0.075*** (0.023)			
Marg.eff. Acq Different 2dgt	(0.021)	(0.020)	-0.084 (0.059)	-0.048 (0.050)			
Observations R-squared	77,861 0.175	77,861 0.154	77,861 0.175	77,861 0.154			
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √ √	√ √ √	√ √ √	√ √ √			

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in its number of banks who are specialized in the sector of the target, between t-1 and t+1, where t refers to the acquisition year. The bank is considered specialized in the sector of target (1-, 2-digit NACE revision 2 classification, under the 'Target sector') if the total assets of its other clients who operate in the same sector lie above median of the total assets of this bank's clients. We aggregate the assets of bank clients globally, across all sample countries. The measure follows Paravisini et al. (2023) but is adapted to represent industry specialization using the bank's client base as opposed to the bank's specialization in financing of export destination. The Different 1-dgt is an indicator variable if acquirer's main sector of operation at level-1 (letter) NACE rev. 2 is different from that of the target, and zero otherwise. The indicator Different 1-dgt | Same 2-dgt takes the value of 1 if acquirer operates in the same level-1 but different 2-digit sector than the target, and zero otherwise. The statistics 'Marg.eff. Acc | {.}' reports the estimate of the total effect of acquisition in the subset of target-firms defined by {.} and its significance. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.6: Acquisitions and bank specialization in target's sector (Full sample)

Dependent variable \rightarrow	Change of number of banks, specialized in target's sector (t-1 to t+1)					
Scope Dependent var. $ ightarrow$	Glo	bal	Local	Glo	bal	
Target sector \rightarrow	level-1		2-d	igit		
	(1)	(2)	(3)	(4)	(5)	
Acquisition	0.063*** (0.012)	0.048*** (0.011)	0.041*** (0.011)	0.035*** (0.012)	0.038*** (0.012)	
Acquisition×Different 1dgt	, ,	, ,	, ,	0.047** (0.022)	0.044* (0.022)	
Acq.×Same 1dgt Different 2dgt				,	-0.067 (0.050)	
Marg.eff. Acq. if Different 1dgt Marg.eff. Acq. if Same 1dgt Different 2dgt				0.082*** (0.020)	0.082*** (0.020) -0.029 (0.050)	
Observations R-squared	439,031 0.132	439,031 0.113	439,031 0.089	439,031 0.113	439,031 0.113	
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	√ √ √	√ √ √	

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in its number of banks who are specialized in the sector of the target, between t-1 and t+1, where t refers to the acquisition year. The bank is considered specialized in the sector of target (1-, 2-digit NACE revision 2 classification, under the 'Target sector') if the total assets of its other clients who operate in the same sector lie above median of the total assets of this bank's clients. We aggregate the assets of bank clients globally, across all sample countries, or locally (in col. 3), within the target's country. The measure follows Paravisini et al. (2023) but is adapted to represent industry specialization using the bank's client base as opposed to the bank's specialization in financing of export destination. The Different 1-dgt is an indicator variable if acquirer's main sector of operation at level-1 (letter) NACE rev. 2 is different from that of the target, and zero otherwise. The indicator Different 1-dgt | Same 2-dgt takes the value of 1 if acquirer operates in the same level-1 but different 2-digit sector than the target, and zero otherwise. The statistics 'Marg.eff. Acq.(1)' reports the estimate of the total effect of acquisition in the subset of target-firms in different level-1 sector (in col. 4-5). The statistics 'Marg.eff. Acq.(2)' is for marginal effect of acquisitons in level-1 but different 2-digit sector (in col. 5). Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.7: Domestic and foreign bank relationships (Full sample)

Nationality of bank \rightarrow	Domestic banks	Foreign banks	
	(1)	(3)	
Panel A: Dependent variable	Change ir of bank relations		
Acquisition	0.026* (0.014)	0.012** (0.006)	
Acquisition x Different NUTS2	0.046** (0.018)	-0.015** (0.007)	
Marg.eff.Acq. if Different Region	0.072*** (0.014)	-0.004 (0.005)	
Observations R-squared	439,031 0.132	439,031 0.187	
Panel B: Dependent variable	Change (t-1 to t+1) in bank knowledge of target's local mark		
Target's local market \rightarrow	Macro Region	Macro Region	
Acquisition	0.058 (0.080)	0.360** (0.142)	
Domestic acquisition x Different Region	0.025 (0.093)	-0.460*** (0.173)	
Marg.eff.Acq. if Different Region	0.084 (0.052)	-0.100 (0.109)	
Observations R-squared	428,738 0.069	437,981 0.179	
Panel C: Dependent variable	Change (t-1 to t+ specialized in targ		
Acquisition	0.048*** (0.011)	0.003 (0.004)	
Observations R-squared	439,031 0.113	439,031 0.140	
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	√ √ √	✓ ✓ ✓	

Note: In Panel A, the table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the number of, separately, domestic and foreign bank relationships of the firm, bank relationships added, and bank relationships dropped between t-1 and t+1, where t refers to the acquisition year. In Panel B, the table shows the results of OLS regressions of the effect of acquisition on net changes in domestic and foreign bank knowledge of local market of the target firm, between t-1 and t+1. The measures of bank knowledge are transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. Different Region is an indicator if the acquirer's headquarters is registered in the different NUTS2 region than the target firm. In Panel C, the table shows the results of OLS regressions of the effect of acquisition on net changes of domestic and foreign banks who are specialized in the sector of the target, between t-1 and t+1, where t refers to the acquisition year. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, *** p < 0.05, ** p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.

Table OA3.8: Acquisitions and bank specialization in target's sector: Small and large firms (Full sample)

Target firm size \rightarrow	Small: <50 employees			Large:	>500 emp	loyees			
	(1)	(2)	(3)	(4)	(5)	(6)			
Panel A	De _j	Dependent variable: Change of bank knowledge of local market (t-1 to t+1)							
Target's local market $ ightarrow$	Macro Region	Region NUTS2	City	Macro Region	Region NUTS2	City			
Acquisition	0.015 (0.025)	0.071*** (0.026)	0.048 (0.073)	0.352*** (0.134)	0.539*** (0.149)	0.130 (0.224)			
Observations R-squared	241,998 0.063	163,874 0.071	242,588 0.049	28,468 0.117	13,515 0.174	28,482 0.106			
Panel B	Dep	oendent va specializ	riable: Cha ed in target	nge of num	ber of ban 1 to t+1)	ks,			
Target sector \rightarrow	level 1	2 digit		level 1	2 digit				
Acquisition	0.044*** (0.014)	0.038*** (0.014)		0.190*** (0.044)	0.173*** (0.044)				
Observations R-squared	246,172 0.117	246,172 0.101		31,105 0.139	31,105 0.127				
Other controls 4dgt sector-year FE FE: Nr of domestic banks, t-1 FE: Nr of foreign banks, t-1	✓ ✓ ✓	√ √ √		√ √ √	√ √ √				

Note: This table shows the results of OLS regressions of the effect of domestic acquisition of a target-firm on net changes in the bank knowledge in full (non-matched) sample. The samples of target firms are split by the size of acquired firm, where firms with < 50 employees are considered very small and firms with \ge 500 are large. In Panel A, the dependent variable is net changes in bank knowledge of local market of the target firm, between t-1 and t+1, where t refers to the acquisition year. The measures of bank knowledge are transformed using the inverse hyperbolic sine function, $\ln\left(x+\sqrt{x^2+1}\right)$. In Panel B, the dependent variable is net changes in its number of banks who are specialized in the sector (level-1 letter coded and 2-digit numeric) of the target, between t-1 and t+1, where t refers to the acquisition year. These measures are defined in Section 4.3. Other controls shown in Table 1 are included but not shown. Robust standard errors (clustered by country-4-digit sector-year) in parenthesis: *** p < 0.01, ** p < 0.05, * p < 0.10. Table A2.1 contains summary statistics. See Section 4.3 for variable definitions and sources.