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Help in a Foreign Land: Internationalized Banks and Firms' Export

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DISCUSSION PAPER SERIES

IZA DP No. 15458

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Emanuele Brancati

JULY 2022

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ABSTRACT

Help in a Foreign Land: Internationalized Banks and Firms' Export*

The lack of information is a relevant obstacle to the export activity of small and medium enterprises. This paper analyzes whether banks can support firms' export by reducing informational asymmetries about foreign markets. We exploit a large sample of Italian firms for which we merge custom data with information on their lender banks. We identify a shock exogenous to firms' export decisions by relying on preexisting lending relationships and exploiting the acquisition of a firm's domestic bank by an internationalized banking group. Our results show that, after the acquisition, firms have a significantly higher probability of starting export in countries where the consolidated bank has a foreign branch, which proxies for the amount of information accumulated that can be shared with client firms. Conversely, the effect on the intensive margins of previously-exporting companies is largely insignificant. We interpret these findings as evidence of information spillovers that mainly reduce firms' fixed entry costs in a foreign market. The analysis also shows that other channels, such as bank credit availability or trade-finance supply, are unlikely to drive our results.

JEL Classification: F23, F14, G21, G00

Keywords: firms, export, informational barriers, banks

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1 Introduction

Whether and how banks affect firms' export decisions was at the center of the economic debate that followed the financial crisis and the trade collapse of 2009. Great attention was devoted to the supply of credit and to the idea that international banks are an important transmission channel of adverse shocks. However, there is still scant evidence on whether banks can affect export by sharing information on potential destination markets. This paper addresses this research question by taking advantage of a large sample of Italian SMEs and exploiting the acquisition of a firm's lender bank by an internationalized banking group as an exogenous shock. We show that banks' foreign branches that result from an M&A have significant effects on the export decisions of their client firms, and we provide suggestive evidence that this is linked with a reduction in informational barriers to trade.

Firms engaging in international activities face sizable fixed entry costs (Melitz, 2003; Bernard et al., 2003; Melitz and Ottaviano, 2008). To become exporters, firms must devote substantial resources to identify export markets, gather data on the destination countries, adapt their products to foreign tastes or regulations, and set up distribution networks. In this process, the lack of information is frequently perceived as a major barrier to entering new foreign markets. This is especially so for small and medium-sized enterprises whose limited resources preclude the identification of profitable export opportunities (De La Cruz et al., 2010). The provision of export-related information is, therefore, a central objective of the many export-promotion initiatives offered by institutions worldwide. For instance, the U.S. government supports SMEs' exports through a range of programs that include market research gathered by local offices in foreign markets.¹ President Obama, in 2010, also signed the National Export Initiative with the intent of improving information and giving technical support to first-time exporters. Similar actions were adopted by the EU and most OECD countries, emphasizing the central relevance of non-financial assistance in the policy discussion on how to reduce export informational barriers.

Besides providing credit and trade-finance instruments, banks can potentially affect firms' export by also reducing informational asymmetries about foreign markets. Banks specialize in acquiring and processing information about their client

¹In addition to stimulating access to finance and insurance programs, the U.S. government supports SMEs' exports through several agencies that gather data and information about foreign markets. For instance, the Foreign Agricultural Service of the U.S. Dept of Agriculture has 101 offices in 81 countries, and the U.S. Commercial Service –part of the Dept of Commerce– has 126 offices in more than 80 countries. In addition, the U.S. Dept of State Personnel provides in-country services at approximately 100 embassies overseas where either the Dept of Agriculture or the Dept of Commerce lacks a presence.

firms, often through long-lasting relationships that provide soft-information advantages (Degryse and Van Cayseele, 2000). As a result, banks have not only a deep knowledge of their client firms but also of their operating markets and potential opportunities abroad. This information can be effectively transmitted to other firms through assistance or financial/legal advice, allowing to bridge the informational and institutional distance between the home and destination countries.

In this regard, Caballero et al. (2018) present macro evidence that bank connections can mitigate information asymmetries hindering international trade. In their view, banks' linkages present similar characteristics to social and information networks that help match buyers and sellers in different markets (see, for instance, Rauch, 2001; Combes et al., 2005; Bastos and Silva, 2012). Our paper builds on this strand of research by exploring the role of banks' foreign branches in a firm's decision to export. The underlying idea is that, because banks' collection of soft information critically depends on the geographical distance from the market (Petersen and Rajan, 2002), their presence in a foreign country through subsidiaries and branches should result in a higher accumulation of knowledge. Once passed on to client companies, this can decrease information asymmetry and lower barriers to export.

To identify such an effect, we take advantage of a shock exogenous to firms' export decisions. We rely on preexisting banking relationships and exploit the acquisition of a local bank (i.e., with no foreign branch) by an internationalized banking group. As such, our focus on long-lasting relationships (see, for instance, Chodorow-Reich, 2014) identifies a shock on the bank side and excludes the possibility that firms select their lenders to exploit some advantages in future export. Moreover, we analyze first-time exporters to rule out reverse causality and issues related to the selection of the targeted bank in the acquisition process (see section 4 for a discussion).

We test this channel using confidential custom data between 2006 and 2019 from the COE dataset (Italian National Institute of Statistics, ISTAT), which we merge with survey-based information on the lender bank of more than 76,000 companies (MET survey). Due to its composition, the Italian economy represents an ideal laboratory for our research question. This is because most firms are SMEs that are very bank dependent, rely on single banking relationships, and typically suffer from sizable information costs jeopardizing their export activity. Moreover, in this period, the Italian banking system underwent a substantial restructuring that often involved the acquisition of local banks by internationalized banking groups (mainly Intesa Sanpaolo, BNP Paribas, and Credit Agricole). We exploit this exogenous source of variation in the information available to test whether the presence of

the consolidated bank in both domestic and foreign countries affects firms' export choices.

We start our analysis by looking at the extensive aggregate margins of export in a difference-in-differences framework. Our results show that treated firms enjoy a 6-percentage-points (pp.) increase in the probability of starting export activities in the following years. Moreover, falsification tests on the date of the M&A suggest that this is not driven by the acquirer's choice of the target bank (i.e., the selection of banks with better clients in a deal). While this finding is broadly consistent with banks' information sharing, it may also come from shocks to the availability of bank credit or the supply of trade finance (namely, letters of credit and documentary collections). Although differentiating these channels is notoriously hard, we show that information sharing is a plausible mechanism by adopting several different perspectives.

We begin exploiting unique information from the MET survey on the factors that limited or prevented a firm's export in the past. We show that firms' *perceived* benefits attached to the shock are mainly linked to information sharing, while there is no effect for other limiting factors such as the lack of financial resources or excessive riskiness of trade.

To corroborate this direct finding, we expand the sample and account for specific destination countries. We include interacted firm-time fixed effects that capture any (observable or unobservable) time-varying characteristics—including the availability of bank credit—and test whether the relationship holds *within a firm*. This means that in each year for a given company, we estimate the differential effect of starting export in a country where the consolidated bank has a foreign branch. Our results show that treated firms have a 2.5-pp. higher probability of starting export in those markets where the merged bank has some deep roots, suggesting that there is something special about banks' foreign branches that drives a firm's exporting choice. This is likely due to banks' prior knowledge accumulated through interactions in the host country.

One alternative explanation for our results may be linked to the supply of trade finance. Note, however, that this is unlikely in our framework because letters of credit and documentary collections entail sizable fees that make them rarely used by SMEs (see section 5.2). To further exclude this channel, we test heterogeneities across exporting countries and show that the effect decreases with a country's riskiness. This evidence is not consistent with the use of trade finance, which should be more common for destinations where contracts are less likely to be honored (Antras and Foley, 2015; Caballero et al., 2018). Moreover, we show no significant effect of

the treatment on the intensive margins of export (value, volume, or array of products exported) of previously-exporting companies. This provides additional evidence that our results are due to information spillovers reducing firms' fixed entry costs in a foreign market.

The remainder of the paper is as follows. Section 2 discusses the related literature and our main contributions. In section 3, we present the dataset, while in section 4 we outline the identification strategy and discuss the baseline results. Section 5 provides suggestive evidence on the channel by looking at bank credit and survey-based measures. In section 6, we move to a country-specific analysis and present the results for intensive margins and exit rates. Finally, section 7 concludes the paper.

2 Related literature

This paper speaks to several strands of research exploring the role of banks in firms' international trade. The first field adopts a macro perspective to emphasize how bank linkages can convey informational advantages and reduce export risk. In this regard, [Portes and Rey \(2005\)](#) show that proxies for information transmission—including the presence of banks' foreign branches—are significantly correlated with trade in goods and assets. In a domestic context, [Michalski and Ors \(2012\)](#) explore how the removal of U.S. interstate banking restrictions affects aggregate trade between those states that become integrated. They make the point that the positive effect attached to multi-regional banks is driven by their collection and sharing of information. With a different perspective, [Caballero et al. \(2018\)](#) exploit banks' connections formed through the participation in syndicated loans. They show that new international linkages increase trade flows between the countries involved and bring a diversion from markets competing for similar imports. They interpret their results with a reduction in export risk and show a positive association between banks' connections and the use of letters of credit.²

Other papers focus their attention on banks' provision of trade finance, which can be used to balance the risk of international trade (e.g., importers defaulting on exporting firms or exporters not delivering the goods as specified; [Antras and Foley, 2015](#)). [Niepmann and Schmidt-Eisenlohr \(2017b\)](#) show that adverse shocks to a country's supply of letters of credit have significant effects on U.S. exports. However, [Niepmann and Schmidt-Eisenlohr \(2017a\)](#) also provide evidence that the use of trade finance is limited to large transactions and is less prevalent than previously

²In a similar spirit, [Muendler and Rauch \(2018\)](#) focus on employee spinoffs and show that information spillovers from large firms exporting to foreign markets help related (spinoff) firms break into those markets.

suggested. This is somewhat confirmed by [Demir et al. \(2017\)](#).

A different strand of research explores the effect of credit supply on firms' trade. This emphasis is motivated by theoretical studies suggesting that export is particularly vulnerable to financial imperfections (see, for instance, [Manova, 2013](#)). At the empirical level, several papers analyze how banks' funding shocks in a downturn reduce firms' access to credit and, through this channel, impact international trade. [Amiti and Weinstein \(2011\)](#) find that the fragility of domestic banks during financial crises has substantial effects on the export performance of Japanese firms. Similarly, [Paravisini et al. \(2015\)](#) focus on the 2008 financial crisis in Peru and show that credit shocks impact the intensive margin of export but have no sizable effects on firms' entry or exit. Also on the nexus between financial conditions and firms' internationalization, [Greenaway et al. \(2007\)](#) link firms' financial health and their participation in export markets, while [Manova et al. \(2015\)](#) show that financial imperfections hinder international trade.³ Specifically on the Italian economy, [Minetti and Zhu \(2011\)](#) and [Del Prete and Federico \(2014\)](#) find that credit rationing and supply-side credit shocks have severe implications for firms' export. Finally, [Claessens and Van Horen \(2021\)](#) show that the entrance of a foreign banks in a country significantly boosts firms' export, and this is especially so for sectors that are more dependent on external finance.

None of these papers explore at the micro level the effect of banks' information transmission on the export activity of their client firms. More closely related to our work, [Paravisini et al. \(2015\)](#) provide direct evidence that banks have market-specific advantages in lending. Exploiting loan and customs data on Peruvian exporters, they construct an index of bank specialization using the concentration of bank lending toward exporters in a given country.⁴ They provide evidence that when an exporter expands its sales in a market, it substantially tilts its credit demand towards a bank specialized in that country. They conclude that specialization confers a lending advantage to certain banks, making specialized debt difficult to substitute.

Consistently with our paper, their results support the idea that banks have market-specific expertise and knowledge that can be passed on to client firms. Their emphasis, however, is on firms' credit demand and the selection of the best lender to satisfy their export needs. Our analysis nicely complements their findings by taking a different direction and focusing on a shock to the international dimension of the

³See also [Minetti et al. \(2018\)](#), who show that bank-oriented financial systems boost export more than market-oriented financial systems.

⁴[Inui et al. \(2015\)](#) use a somewhat less precise bank measure based on the share of other client firms' exporting in macro-geographical areas.

lender bank that has nothing to do with firms' export choices. We also rely on a sample with very different characteristics. While [Paravisini et al. \(2015\)](#) focus on exporters only, characterized by a large share of multiple banking relationships, our analysis is entirely based on previously non-exporting firms, most of which are small and have connections with one bank only (see section 3.2). These characteristics help identify our shock and allow us to highlight an important channel through which the external competitiveness of SMEs' can be increased.

3 Data

Our analysis combines several sources of firm-level data. First, we exploit information on firms' international trade from the COE dataset built by the Italian National Institute of Statistics (ISTAT). The COE business register (Integrated International Trade Database) provides the annual value of bilateral foreign trade for Italian exporting and importing firms, together with a breakdown by export destination and import origin countries. We match this information with the business register FrameSBS (Structural Business Statistics), containing data on firms' number of employees, 6-digits sector, location (at the NUTS3 level), age, value-added, and turnover. Both sources provide yearly data on the entire universe of Italian firms operating in the manufacturing and service sectors (excluding finance and public administration). For sensitivity reasons, data is accessible only upon formal request for authorization and exclusively within the ISTAT offices (*Laboratorio ADELE*).⁵

We combine this data with the MET survey on Italian firms conveying information on the lender banks of each company. The original sample is fully representative at the firm size (four classes), region (20 NUTS-2 areas), and industry levels.⁶ Unlike other recurring surveys, MET covers every size class, including micro-sized companies with less than ten employees. This is relevant because small firms account for more than 95% of the Italian population as well as 47% and 63% of the total value-added and employment (as of 2019). This characteristic is doubly important for our research question because smaller firms are more likely to suffer from informational barriers that can be a relevant constraint to their export activity.

Our paper exploits data from the 2008, 2009, 2011, 2013, 2015, 2017, and 2019 waves of the MET survey, made of about 24,000 observations in each cross-section with a substantial share of panel interviews. At each point in time, firms provide information on their connections with banks and the length of each relationship. We

⁵We sincerely thank Stefano De Santis (ISTAT) for running the codes in our place.

⁶The survey covers the manufacturing sectors (60% of the sample) and the production-service industry (40%), which are stratified into 12 macro-sectors (NACE rev.2 sub-sections).

use this piece of data to build a yearly panel of firm-bank relationships between 2006 and 2019. Because some firms are interviewed in early waves only, we maximize the number of observations by assuming that outstanding relationships are stable in the following years. This hypothesis should not pose a threat to our empirical strategy because Italian firms are characterized by stable banking relationships (D’Auria et al., 1999). Nevertheless, our robustness checks show that results are broadly consistent if we avoid this assumption.

We match this information with the localization of banks’ foreign branches from the Supervisory register of the Bank of Italy (for Italian banks) and Orbis Bankfocus Bureau van Dijk (for foreign-owned banks).⁷ Finally, we complete our dataset with firms’ and banks’ balance sheets from CRIBIS/CRIF D&B and Orbis Bankfocus, respectively. The final sample comprises yearly data on 76,100 firms between 2006 and 2019, with approximately 780,000 firm-year observations.

3.1 Treatment

In addition to providing credit, banks can affect export by reducing informational asymmetries about foreign markets. Since lending relies on the acquisition of a wide array of information, banks tend to have a deep knowledge of the operating environment of their borrowers and are able to identify potential opportunities abroad that can be shared with other client firms. In this regard, the 2010 Unicredit survey on Italian small businesses (Bartoli et al., 2011) indicates that banks provide various services supporting firms’ export activities. Beyond ordinary services, banks give support in the form of counterparty signaling, legal and financial advisory, in-loco assistance, consultancy on investment opportunities abroad, and personnel training services. By sharing such information, banks help managers assess the attractiveness of foreign countries and decide whether to engage in export activities, thus reducing the fixed start-up costs attached to firms’ entry into a new market. This can be especially valuable for small and medium-sized enterprises whose limited resources preclude them from identifying export opportunities, establishing relationships with foreign buyers, understanding regulations, and evaluating the compliance with the rules of importing countries (for U.S. SMEs, see De La Cruz et al., 2010).⁸

Since the information collection critically depends on the distance from a market, banks’ presence in a country through foreign branches should be positively

⁷Data on Italian branches can be accessed at: <https://www.bancaditalia.it/compiti/vigilanza/albi-elenchi/>.

⁸Larger businesses, on the other hand, are more likely to be part of organizations that pool resources and share such information. Moreover, the marginal incidence of the sunk costs attached to information acquisition is also likely to be decreasing with firm size.

correlated with the accumulated knowledge that can be passed on to client firms (Portes and Rey, 2005). Our analysis tests this channel by focusing on a shock that is orthogonal to firms’ ex-ante choices. We take advantage of preexisting relationships with national banks —only operating on the Italian territory— and exploit their acquisition by internationalized banking groups as an exogenous shock to the information that can be shared.

Compared to the U.S. and other European economies, the Italian banking industry started its consolidation process with some delay: the share of the largest five banks, in terms of total assets, passed from 26% to 50% between 2006 and 2020.⁹ This substantial restructuring often involved the acquisition of domestic banks by internationalized groups. In the 2007–2019 period, for instance, Intesa Sanpaolo (nowadays the leading banking group in Italy) and Credit Agricole acquired, respectively, 17 and six national banks. The largest acquisition was carried on by BNP Paribas in 2006, although the acquired BNL group was already operating internationally (we take care of this issue in our empirical analysis).¹⁰

In our sample, 15.9% of the firms had preexisting relationships with banks later acquired by internationalized banking groups (*Treated*, in Table 1). If we exclude firms with multiple relationships that were already connected with other international banks, the share of treated firms lowers to about 8.3% (*Treated: no intz bank*). In order to have more statistical power, we base our benchmark analysis on the broader definition of the treatment variable. This is because even for firms that are already connected with an international group, our shock may still convey information on new markets —i.e., countries that were not penetrated by the first internationalized bank. However, we also test the robustness of our results to the subsample of firms with single relationships or the exclusion of companies connected with persistently-internationalized banks (section 4.2.1). As for the rest of the sample, 64% of firms have relationships with internationalized groups —most commonly Intesa Sanpaolo and Unicredit— while 28% rely on banks only operating domestically.

3.2 Descriptive evidence and characteristics of the sample

Table 1 presents additional descriptives for the main variables employed. Two features of the data are worth highlighting. First, the statistics confirm that our sample

⁹Statistical Data Warehouse, European Central Bank: Supervisory and prudential statistics/Macroprudential Database/Bank sector variables/Banking structure.

¹⁰Table A23 of the Online Appendix summarizes the main acquisitions, while Figure A1 reports the geographical distribution of the foreign branches of Italian banks. Table A24 provides a comprehensive list of all the lender banks of the firms in our sample.

is, indeed, made of a large fraction of small and micro-sized firms. The average number of employees (*Employees*) is 31, but the median value is around eight, and the 75th percentile is still at 20 workers. Second, most firms in our sample have single banking relationships: 65% borrow from one bank, 21% rely on two banks, and only 14% on three banks or more. This composition is largely in line with official statistics from the Bank of Italy Credit Registry and is, therefore, reassuring about the representativeness of our data.¹¹ Moreover, most of these relationships are long-lasting, with an average length of about 14 years.

Concerning firms' internationalization, 23% of our sample exports in at least one country, with an average value of 2.02 million euros (M€) and a very skewed distribution (the median value for exporters only is 0.61 M€). In terms of destinations, there are significant heterogeneities across geographical areas. The most popular markets are in the eurozone, involving 16% of the companies and an average exported value of 1.14 M€. European extra-EU markets follow with similar extensive margins but roughly one-fifth of the value exported in the EU. As for the other areas, we observe a comparable penetration in North America and Asia, paired with a lower propensity to export in Center and South America.

In terms of coverage, our dataset accounts for 15% of the total number of exporters and about 50% of aggregate export values in Italy. This implies that even though the sample is skewed toward smaller firms, we are somewhat over-representative of larger companies compared to the population of Italian exporters (our econometric analysis takes care of this issue). When collapsed at the yearly level, the correlation between our data and national aggregates is substantial (about 95%), comforting about the representativeness of the average dynamic of Italian exports.

At the descriptive level, 12.6% of the treated firms were already exporting before the acquisition of their domestic bank by an internationalized banking group. This is broadly in line with the share of exporting firms connected with persistently-domestic banks (11.8%). After the acquisition, we observe a significant jump for treated firms (21.8%) which makes them closer to client companies of internationalized banking groups (24.7% of which are exporters).¹² In the remainder of the paper, we dig deeper into this evidence and explore the channels underlying our

¹¹Bonaccorsi Di Patti et al. (2019) focus on the universe of Italian non-financial firms in the period 2008–2016 and document comparable shares of single, double, and multiple relationships (62%, 21%, and 17%, respectively).

¹²For simplicity of interpretation, data refers to firms with single banking relationships only. In terms of size, treated firms are somewhat larger than their untreated counterparts and smaller than firms that do business with internationalized banks. Our analysis deals with this issue with firm-specific controls for size and firm or interacted firm-time fixed effects.

finding.

Table 1: Descriptive statistics

	Mean	SD	Min	Max
Employees	31.53	111.42	1.00	2,028
Banking relationships: 1	0.65	0.48	0.00	1.00
Banking relationships: 2	0.21	0.41	0.00	1.00
Banking relationships: ≥ 3	0.14	0.35	0.00	1.00
Length of the relationship (years)	14.07	9.34	1.00	49.00
Treated	0.16	0.37	0.00	1.00
Treated: no intz bank	0.08	0.28	0.00	1.00
Always intz bank	0.64	0.48	0.00	1.00
Always domestic bank	0.28	0.45	0.00	1.00
Extensive margins of export				
Export	0.23	0.42	0.00	1.00
Export: Europe EU	0.16	0.37	0.00	1.00
Export: Europe extra-EU	0.15	0.36	0.00	1.00
Export: North America	0.10	0.30	0.00	1.00
Export: Center/South America	0.08	0.26	0.00	1.00
Export: Asia	0.11	0.31	0.00	1.00
Export: Other countries	0.14	0.35	0.00	1.00
Intensive margins of export				
Export M€	2.02	30.66	0.00	5,298.26
Export M€: Europe EU	1.14	17.80	0.00	3,865.05
Export M€: Europe extra-EU	0.22	6.35	0.00	2,017.28
Export M€: North America	0.17	3.96	0.00	1,265.47
Export M€: Center/South America	0.07	1.59	0.00	525.11
Export M€: Asia	0.18	3.68	0.00	959.31
Export M€: Other countries	0.24	7.13	0.00	2,092.20

Notes: descriptive statistics for the main variables employed.

4 Baseline

In this section, we present the baseline results of the paper. First, we provide evidence on the overall extensive margins of export and discuss heterogeneities along firms' characteristics. We then assess the robustness of our results to alternative samples, falsification tests, and the use of staggered DID techniques.

4.1 Econometric model

Our benchmark specification reads as follows:

$$\text{pr}(y_{i,t}|y_{i,t_0} = 0) = \alpha + \beta \text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t} + \gamma^\top X_{i,t-1} + \delta^\top Z_{i,t-1}^b + \mu_i + \mu_{i,b} + \lambda_t + \varepsilon_{i,t} \quad (1)$$

where $y_{i,t}$ is a binary variable that takes the value of one if firm i exports its products in at least one foreign country at time t , and zero otherwise. $\text{Branch}_{i,\tau-1}^b$ is a

dummy that equals one if the lender bank of firm i is acquired by a banking group with foreign branches before the acquisition ($\tau - 1$), while $\text{Post}_{i,t}$ is an indicator variable for the post-acquisition period ($t \geq \tau$). $X_{i,t-1}$ is a vector of firm-level controls traditionally linked with export (e.g., [Bernard and Jensen, 2004](#)); this includes firms' size (log number of employees), age (in log), and productivity (hyperbolic sine transformation of value-added per worker). We purposefully adopt a parsimonious specification to limit the number of bad controls. In section 6, however, we will account for any firm-specific and time-varying characteristic by means of interacted firm-time fixed effects.

$Z_{i,t-1}^b$ is a set of balance sheet ratios controlling for other fundamentals of the lender bank.¹³ We include fixed effects for the firm and for the match between each firm and its bank (μ_i and $\mu_{i,b}$, respectively), as well as time effects (λ_t) that are common across firms or specific to their 6-digits sector and NUTS-3 geographical area (province). This extensive set of controls accounts for persistent firm-specific characteristics, time-invariant heterogeneities in the composition of banks' client portfolios (i.e., the match between a firm and its bank), common cyclical factors, or shocks that are specific to the operating environment of the company —either based on the sector or geographical area. Equation 1 is estimated via linear probability models (high-dimensional fixed effects) with standard errors two-way clustered at the firm and bank level.

There are two main challenges we need to tackle to identify the effect of banks' foreign branches on firms' trade. The first and most important has to do with self-selection, whereby firms that already intend to start exporting cherry-pick their lender bank to ease this process. Such a mechanism concerns, for instance, the possible market-specific advantages in lending documented by [Paravisini et al. \(2015\)](#). The second issue, instead, is about reverse causality and regards the opening of banks' international branches in the exporting countries of their domestic client firms ([Goldberg and Grosse, 1994](#)). For example, banks may follow their main customers abroad to avoid losing their business to financial intermediaries in the host country. Both issues likely entail an upward bias in our estimates of interest.

As for the first point, our strategy takes advantage of a shock largely orthogonal to firms' decisions. We rely on preexisting lending relationships with local banks later acquired by an internationalized banking group. As such, we exclude the possibility that firms select their lenders because of some advantage in the future exporting process. Note that Italy is an ideal laboratory to implement our strategy

¹³This vector includes: leverage, tier1 capital, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. For firms with multiple banking relationships, we employ an unweighted average of each financial ratio.

because most firms have long-lasting relationships with a single bank. This feature rules out confounding factors that may come from other lenders and assures that a selection process does not take place.¹⁴

Concerning the second point, we exclude this possibility by focusing on previously-non-exporting companies ($y_{i,t}|y_{i,t_0} = 0$) and dating the existence of banks' international branches before the acquisition of the local lender ($\text{Branch}_{i,\tau-1}^b$).¹⁵ Note that these constraints also take care of issues related to the selection of the targeted bank in the acquisition process. Indeed, internationalized banks may target local lenders with a client portfolio of exporting firms. Our focus on companies that have never been internationalized and with a long-lasting relationship with a domestic bank makes, again, the M&A largely exogenous to their export activities. Moreover, the vector $Z_{i,t-1}^b$ further controls for the selection of banks with better clients in an M&A deal.

Finally, one residual concern has to do with the geographical proximity between exporters and banks. If exporting firms are geographically clustered, and the acquired bank has a significant presence in that region, we may capture some spurious relationships linked to time-varying shocks even if we focus on previously-non-exporting firms. The same argument holds if the acquired bank was specialized in financing sectors with a higher export probability. To account for this possibility, we include time fixed effect interacted with granular information on firms' location (1,987 fixed effects) and operating sector (12,586 effects). These and other potential factors are further taken care of in section 6, where we perform a country-specific analysis that includes interacted firm-time fixed effects. We also test the validity of the parallel-trends assumption and show that treated firms did not have a higher probability of exporting also before the M&A.

4.2 Baseline results

Table 2 presents the results for our baseline specification.¹⁶ Treated firms, whose local bank was acquired by an internationalized group, enjoy an average 6-pp. in-

¹⁴Note, however, that even for shorter relationships and in the presence of rumors about the future acquisition by an internationalized bank, it is hard to envisage a mechanism in which firms select a domestic bank only to benefit from export advantages after the merge takes place, instead of directly starting a relationship with the international banking group. Even if this were an issue, we should observe stronger effects for firms with shorter banking relationships, while our results in Table 3 suggest that this is not the case.

¹⁵In our baseline, we condition the analysis to firms that were not exporting at the beginning of the sample or before the treatment takes place. However, our results are qualitatively unchanged if we restrict the analysis to non-exporting firms in each year (i.e., $y_{i,t-1} = 0$ or $y_{i,c,t-1} = 0$ in Tables A11 and A20, respectively).

¹⁶For expositional purposes, we omit $\text{Post}_{i,t}$ and the subscripts from all the tables.

crease in the probability of starting export activities in the following years. Such effect is largely robust if we progressively saturate the model with: i) firm and bank fixed effects, ii) firm-specific characteristics (size, age, and productivity), iii) banks' balance-sheet ratios that may capture the lender's credit policies, as well as iv) time-specific shocks at the 6-digits sector or NUTS-3 area levels. This effect is also economically sizable, given that the unconditional probability of entering foreign markets is about 8.4%.

Table 2: Extensive margins of export

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0675*** [0.0171]	0.0571*** [0.0162]	0.0574*** [0.0142]	0.0604*** [0.0150]	0.0606*** [0.0142]	0.0622*** [0.0153]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.512	0.550	0.549	0.562	0.572	0.562
Observations	609,757	505,375	425,283	420,970	419,976	420,960

Notes: the dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,t-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table 3 presents heterogeneities along several firm-level characteristics. In column 1, we allow non-linearities across quartiles of the size distribution. Our results show that micro-sized firms with less than four employees (three is the value of the 25th percentile) do not have any significant export benefit from the acquisition of their local lender by an internationalized bank. The effect becomes significant and sizable from the second quartile onward: it reaches 12.5 pp. for firms between eight and 20 employees (the 75th percentile), but then it tends to decrease for larger companies. A continuous quadratic specification shows a maximum impact around 30 employees and insignificant effects for firms in the very right tail of the size distribution (see Figure A2 in the Online Appendix). In column 2, we also show that the estimate monotonically increases with firms' productivity. Taken together, these results are consistent with informational barriers being especially binding for small and medium-sized companies, provided that they are efficient enough to compete

in international markets. As for micro-sized firms, they may rely on local market niches or not be sufficiently equipped to deal with international competition.

In columns 3 and 4, we allow heterogeneities along firms' creditworthiness and length of the relationship with the bank. This exercise is meant to provide preliminary evidence on whether our effect is due to differential access to credit after the treatment. In this regard, the existing literature points to an average negative impact of banks' M&As on the credit availability of SMEs, mainly due to a reduced reliance on soft information accumulated via relationship lending (see the discussion in section 5.1). Our findings in columns 3 and 4, instead, show no clear pattern in the effect along quartiles of the Altman Z-score—a measure of creditworthiness based on hard information—and an impact that is not decreasing with the length of the banking relationship—the most commonly used proxy for relationship lending.¹⁷ In the following sections, we provide additional evidence that credit is unlikely to be the mechanism underlying our main findings.

4.2.1 Alternative samples

We start assessing the robustness of our results by exploring variations in the estimating sample (Table A3): i) we focus on firms with single banking relationships to rule out confounding factors coming from other banks and to make sure to identify the shock correctly;¹⁸ ii) for a similar purpose, we also exclude firms connected to previously-internationalized banks (including clients of BNL that was operating internationally before the acquisition by BNP Paribas); and iii) we exclude intermittent exporters—i.e., firms that display discontinuous export activity across years. In all cases, results are broadly consistent. Our results also hold if we restrict the analysis to firms with balance-sheet data (Table A7) or if we avoid the assumption of stability of the banking relationship by dropping firms for which we do not observe the lender bank at time t (Table A8). Finally, our results are largely confirmed if we focus on companies with longer banking connections, as defined by the cross-sectional median length of the relationships (ten years, in Table A9).

¹⁷To construct the Altman Z-score, we employ balance sheet data, which is available for roughly half of the sample. This is because unincorporated firms (*Società di persone*) do not fill balance sheets.

¹⁸On the importance of analyzing single bank relationships separately from multiple relationships, see Degryse et al. (2011). They show that the former firms have a higher likelihood of experiencing relationship discontinuation after a bank merge. This is an additional suggestion that our result has little to do with bank funding.

Table 3: Heterogeneities by firms' characteristics

$y_{i,t}$:	Export			
	(1)	(2)	(3)	(4)
Branch \times Q1(X)	0.0146 [0.00832]	0.0332* [0.0161]	0.0446** [0.0165]	0.0482** [0.0162]
Branch \times Q2(X)	0.0635** [0.0220]	0.0400** [0.0147]	0.0634*** [0.0141]	0.0507** [0.0172]
Branch \times Q3(X)	0.122*** [0.0314]	0.0662*** [0.0176]	0.0491*** [0.0129]	0.0579*** [0.0173]
Branch \times Q4(X)	0.0530*** [0.0139]	0.0811*** [0.0229]	0.0423*** [0.0115]	0.0662*** [0.0192]
Interacting variable (X):	Size	Productivity	Z-score	Length rel.
Firm FE	Y	Y	Y	Y
Firm controls	Y	Y	Y	Y
T FE	Common	Common	Common	Common
Adj R-squared	0.554	0.552	0.618	0.550
Observations	505,375	505,375	218,797	505,375

Notes: the dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. This table allows the effect to vary across quartiles of the distribution of firms' size, productivity, Z-score, and length of the banking relationship (in columns 1, 2, 3, and 4, respectively). The Z-score is computed as in Altman et al. (2013). Unreported controls follow the specification in column 2 of Table 2, augmented with the lagged values of the interacting variables. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

4.2.2 Cross-validation and staggered DID

We performed a number of tests to cross-validate our difference-in-differences exercise. First, a reader may be concerned that acquisitions of local banks are somewhat endogenous to firms' export activity. For instance, internationalized banking groups may target the acquisition of banks with more efficient client portfolios, making firms of the acquired bank ex-ante more likely to export. While we focus only on previously-non-exporting companies, our results may still reflect heterogeneous compositions of client firms that we are not able to adequately control with our extensive set of fixed effects and time-varying regressors. Note, however, that if this were the case, one should observe a higher probability of entering foreign markets also before the acquisition of the domestic bank. For this purpose, we cross-validate our DID exercise by augmenting the model with three leads and lags of the treatment variable (Table A4 in the Online Appendix). The coefficients of the leads are largely insignificant, reassuring that our findings are not due to the violation of the parallel-trends assumption.

As an additional exercise, we saturate our specification with a set of time fixed effects specific to the quartiles of each element in $Z_{i,t-1}^b$. In essence, we construct a synthetic control group and compare firms connected to local banks with similar fundamentals. Results are largely consistent, suggesting that our findings are not due to the selection of better banks (more profitable or with a sounder client portfolio) in an M&A deal (Table A5).

One final concern may have to do with the estimator employed and with up-surgling literature on staggered difference-in-differences. The potential problem is that when the treatment occurs at different times (as in our setup), the parallel-trends assumption may be violated, and the resulting average treatment effect for the treated (ATT) could be biased. To assuage such a concern, we implement several variations of the Callaway and Sant’Anna (2021) estimator. Essentially, they obtain consistent estimates for the ATT by exclusively using “not-yet treated” or “never-treated” firms as controls. Noticeably, when applied to our setup, the staggered DID estimator delivers effects that are virtually identical to our main findings in Table 2, with a 6.5% (7%) higher probability of entering foreign markets when we use “not-yet treated” (“never-treated”) firms as a control group (Table A6 in the Online Appendix). Figure 1 summarizes the estimated ATTs by time horizon. Importantly, treated firms do not display a higher propensity to start exporting before the acquisition occurs, further reassuring about the validity of the parallel-trends assumption. Again, our results are largely consistent if we focus on firms with single banking relationships or exclude borrowers of previously-internationalized banks.

Given the close correspondence between our baseline model and the Callaway and Sant’Anna (2021) estimator, the remainder of the paper will continue employing standard DID techniques. This is because it is easier to model non-linearities in the effect, and they allow for the introduction of firm-time interacted fixed effects needed to explore the mechanism driving our findings.¹⁹

5 Possible channels

In this section, we discuss the possible channels underlying our main results. We start focusing on bank credit to analyze whether the effect operates through firms’ availability of funding. Next, we provide direct evidence of the channel at stake by exploiting survey-based information on the constraints that limited firms’ export in

¹⁹Moreover, the Callaway and Sant’Anna (2021) estimator assumes controls to be time-invariant, which may be nonoptimal in our framework. Moreover, it does not allow for multiple treatments, which, in principle, are possible in our setup. While this is irrelevant for firms with single banking relationships, it may play a role in the country-specific analysis of section 6.

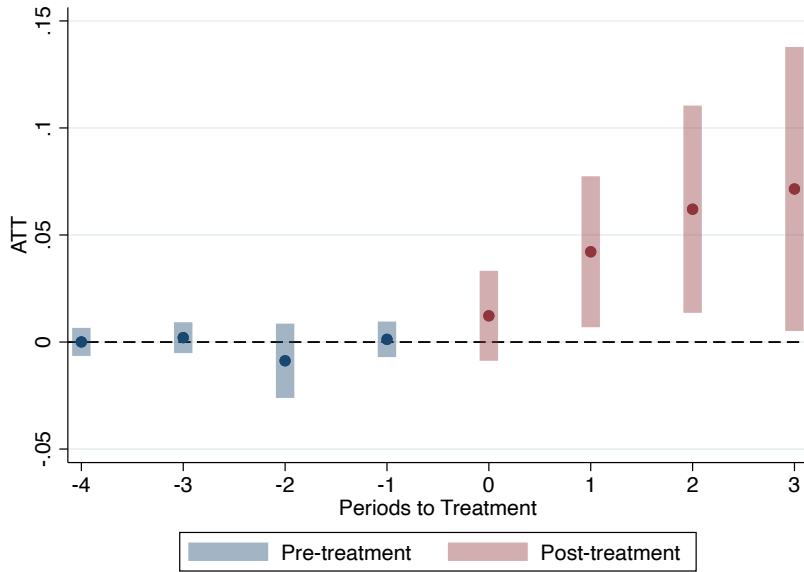


Figure 1: Staggered DID

Notes: average treatment effect for the treated (ATT) by event horizon. Callaway and Sant’Anna (2021) difference-in-differences with multiple periods estimator, using Abadie (2005) inverse probability weighting DID estimator and “never treated” as a control group.

the past.

5.1 Bank credit

The existing literature suggests that, as a result of an M&A, banks tend to restrict their credit supply, especially to small and medium-sized firms (Berger et al., 1998; Peek and Rosengren, 1998; Sapienza, 2002; Bonaccorsi Di Patti and Gobbi, 2007; Degryse et al., 2011).²⁰ The proposed rationale has mainly to do with shocks induced by the process of consolidation. On the one hand, mergers enhance banks’ ability to screen borrowers, improving the estimate of a firm’s default risk (Panetta et al., 2009). On the other, consolidation comes with organizational changes and employee turnover that can induce a loss in the knowledge accumulated via relationship lending (Stein, 2002). In essence, merges cause underinvestment in relationship-building activities needed to accumulate soft information and finance small and informationally opaque borrowers (Berger and Udell, 1995; Petersen and Rajan, 1995).²¹

Taken together, these arguments make it unlikely that the greater export propen-

²⁰On the other hand, Strahan and Weston (1998) find no adverse impact of bank consolidation on the credit available to small businesses.

²¹A parallel strand of the literature also showed that international banks are more inclined to lend to large firms (Mian, 2006; Berger et al., 2001, 2008; Giannetti and Ongena, 2012).

sity of our treated SMEs is due to positive shocks on their availability of bank credit. We employ balance-sheet information on the outstanding amount of bank credit to further shed light on this issue. Column 1 of Table 4 shows that firms whose domestic lender is acquired by an internationalized bank are not associated with larger availability of bank credit. In columns 2-5, we allow for non-linearities along quartiles of the distribution for size, productivity, Z-score, and length of the banking relationship. Our estimates are always largely insignificant, except for the left tail of the Z-score distribution. The negative effect attached to less creditworthy firms is broadly consistent with the idea that merged banks reassess their loan portfolio and tend to cut credit to riskier firms (see, for instance, Panetta et al., 2009).

Note, however, that these results cannot be generalized and should be taken with a grain of salt. Indeed, since complete balance sheets are not available for unincorporated firms, which are on average smaller, more opaque, and less creditworthy, we leave out of our estimation a sizable segment of the economy, which is also likely to be more affected by shocks on banking funds. Nevertheless, our results show that there is no clear role played by bank credit in explaining the evidence presented so far. Not only the average effect is largely insignificant, but there is not even a clear pattern in the heterogeneities along firms' characteristics that matches the results in Table 3.²² In section 6, we further take care of this issue by moving to a country-specific analysis that allows for ruling out time-varying availability of bank funds.

5.2 Direct evidence on the channel

Next, we provide direct evidence about the mechanisms by exploiting specific information from the last wave of the MET survey. In particular, the questionnaire asks whether there have been factors in the past that limited or prevented a firm's penetration into international markets. In case of a positive answer, firms were allowed to choose among the following options: i) lack of financial resources (*Finance*, 7.8% of the sample), ii) excessive riskiness of trade (*Risk*, 6.7%), iii) lack of specific information on the destination country (*Information*, 6.3%), iv) characteristics of the goods produced by the firm that are not suitable for foreign markets (*Product*, 11.5%), and v) a residual option for other factors (*Other*, 14.9%). Since this question refers to the past, we project firms' answers backward in time and interact these binary measures with $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ (firm fixed effects absorb their baseline impact). Note that a positive interaction term in the export specification would

²²If we repeat our baseline and interacted analyses on the subset of firms with balance sheets, we get virtually unchanged results (Tables A7 and A10, in the Online Appendix).

Table 4: Bank credit

$y_{i,t}$	ln(bank credit)				
	(1)	(2)	(3)	(4)	(5)
Branch	-0.00510 [0.0396]				
Branch \times Q1(X)		0.291 [0.262]	-0.0487 [0.0860]	-0.213*** [0.0686]	-0.0301 [0.115]
Branch \times Q2(X)		-0.0272 [0.123]	-0.0564 [0.0994]	0.0410 [0.0555]	0.00145 [0.0893]
Branch \times Q3(X)		0.0222 [0.0524]	-0.0647 [0.0592]	0.0797 [0.0632]	-0.0674 [0.0613]
Branch \times Q4(X)		-0.0120 [0.0409]	0.0192 [0.0416]	0.0512 [0.0636]	0.00180 [0.0402]
Interacting variable (X):		Size	Productivity	Z-score	Length rel.
Firm FE	Y	Y	Y	Y	Y
Firm controls	Y	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Common
Adj R-squared	0.207	0.207	0.207	0.215	0.215
Observations	196,986	196,986	196,986	196,986	196,986

Notes: the dependent variable is the log of (1+) bank credit in time t . Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. In columns 2 to 5, we allow the effect to vary across quartiles of the distribution of firms' size, productivity, Z-score, and length of the banking relationship. The Z-score is computed as in [Altman et al. \(2013\)](#). Unreported controls follow the specification in column 2 of Table 2, augmented with the lagged values of the interacting variables. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

entail a disproportionate effect for treated firms perceiving that specific factor as a binding constraint to their expansion abroad. As such, this analysis allows us to shed light on the perceived benefits associated with the acquisition of the local lender by an internationalized bank.

Table 5 presents the results once we progressively add these interaction terms to the baseline model. First of all, column 1 confirms that our findings are unlikely to be driven by firms' availability of financial resources. In column 2, we explore effects operating through the reduction in the risk associated with trade activities. Our results suggest that sophisticated trade-finance products are not likely to explain our findings. This channel includes the use of letters of credit (LCs) and documentary collections (DCs), which have been shown to play a significant role in firms' management of export risk (see, for instance, [Antras and Foley, 2015](#); [Niepmann and Schmidt-Eisenlohr, 2017b](#)). However, [Niepmann and Schmidt-Eisenlohr \(2017a\)](#) also show that their use is somewhat limited, with LCs covering only 13% of the world trade value in 2012 (1.8% for DCs).²³ This relative underdevelopment is

²³In the Italian economy, they are even more infrequent and amount to 6% of total export

linked to the sizable fees and fixed costs of trade finance, which makes them mainly used by larger companies. Indeed, the average value of US export transactions employing LCs was roughly \$680k (\$120k for DCs), more than 16-times the average trade transaction. Although we do not have specific information on firms' use of letters of credit, the insignificant interaction term in column 2 suggests that such products are not the reason for our results. This is likely due to the composition of the Italian economy, mainly made of small and medium-sized firms.²⁴ We will provide further evidence excluding the risk channel in sections 6.1 and 6.2.

As for the other mechanisms, we document a disproportionate effect for firms declaring the lack of specific information on destination markets to have been a binding constraint for their export in the past (column 3). On the other hand, we find no significant effect for other factors. This result is largely confirmed when we jointly consider all the constraints in column 6. For firms identifying information as a limiting factor, the effect of our treatment amounts to a 15-pp. higher probability of starting export. These results are consistent with the idea that banks' foreign branches mainly reduce firms' informational barriers about destination countries.

6 More on the channel: country-specific analysis

In this section, we corroborate our previous findings by moving to a country-specific analysis that accounts for unobservable firm-specific shocks. We also explore heterogeneities along destination countries and discuss the effect on the intensive margins of export and exit rates.

While, in principle, internationalized banks can transfer know-how and assist their client firms' trade with any country, we expect the information exchange to be increasing with the amount of banks' prior knowledge accumulated on a specific market. This is more likely to occur if the lender bank has some roots in the destination country and is exposed to repeated interactions with foreign firms or with internationalized domestic clients. To explore this mechanism, we move to a firm-country-time unit of observation and estimate the following specification:

value, the lowest share among the top-ten exporting countries. See Figure 3 in [Niepmann and Schmidt-Eisenlohr \(2017a\)](#).

²⁴In our sample, *yearly* exports at the country level, which are much more aggregated than transaction data, have a median value of only €50k, which is 14-times lower than the average value documented in [Niepmann and Schmidt-Eisenlohr \(2017a\)](#). Moreover, if our results were due to trade finance, one should observe increasing effects along firms' size. Instead, the effect in Table 3 is found to be significantly reduced for the right tail of the size distribution.

Table 5: Possible channels

$y_{i,t}$	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0712*** [0.0168]	0.0697*** [0.0162]	0.0665*** [0.0160]	0.0713*** [0.0161]	0.0699*** [0.0158]	0.0640*** [0.0150]
Branch \times Finance	0.0117 [0.0203]					-0.00939 [0.0221]
Branch \times Risk		0.0464 [0.0273]				0.0233 [0.0334]
Branch \times Information			0.0884** [0.0306]			0.0871** [0.0354]
Branch \times Product				0.00609 [0.0153]		-0.00447 [0.0151]
Branch \times Other					0.0143 [0.0143]	0.0181 [0.0147]
Firm FE	Y	Y	Y	Y	Y	Y
Bank controls	Y	Y	Y	Y	Y	Y
Firm \times Bank FE	Y	Y	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Common	Common
Adj R-squared	0.540	0.540	0.541	0.540	0.540	0.541
Observations	162,866	162,866	162,866	162,866	162,866	162,866

Notes: the dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Finance, Risk, Information, Product, and Other, are dummy variables taking the value of one if the firm identifies specific factors that were limiting/preventing its export activity in the past (see section 5.2 for a definition). The vector of bank-level controls includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

$$\text{pr}(y_{i,c,t} | y_{i,c,t_0} = 0) = \alpha + \beta \text{Branch}_{i,c,\tau-1}^b \times \text{Post}_{i,t} + \mu_{i,t} + \lambda_{c,t} + \varepsilon_{i,c,t}. \quad (2)$$

Differently from equation 1, we now explore the export activity of firm i at time t in country c . This change of perspective implies the expansion of the sample size by a factor equal to the number of countries considered. To avoid excessive inflation of the sample, we restrict the analysis to the top 50 destination markets for Italian exporters (see Table A25 in the Online Appendix). In this context, we use $\text{Branch}_{i,c,\tau-1}^b$ as a treatment variable, a dummy that takes the value of one if the lender bank of firm i is acquired by a banking group with a branch in country c at time $\tau - 1$. As before, $\text{Post}_{i,t}$ identifies the post-acquisition period.

We exploit the expanded sample to include firm-specific time fixed effects ($\mu_{i,t}$) that account for any observable and unobservable time-varying characteristics of

the firm.²⁵ These include possible shocks (for instance to productivity) that we may have not perfectly captured with our set of interacted time effects and controls. Importantly, $\mu_{i,t}$ also takes care of residual concerns about changes in firms' availability of bank credit that may come with the treatment, which is by definition firm-specific and time-varying.²⁶ In essence, this setup allows for testing whether the relationship under examination holds *within a firm*. This means that for a given company in each year, we estimate the differential effect of starting export activities in a country where the consolidated bank has a branch. Our specification also accounts for country-specific time fixed effects ($\lambda_{c,t}$) to absorb heterogeneities in foreign countries' import demand and in their bilateral exchange rates with Italy.

Our results show that treated firms have a 2.5-pp. higher probability of starting export in those countries where the merged bank has some deep roots (column 1 of Table 6). If we split the sample to allow for heterogeneities across destination areas, we find somewhat stronger effects for countries in the eurozone and North America. However, the effect is sizable and significant also for Europe extra-EU, Center/South America, and Asia.

Table 6: Country-specific effects

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Branch _c	0.0246*** [0.00289]	0.0252*** [0.00480]	0.0179*** [0.00261]	0.0264*** [0.00585]	0.0152*** [0.00239]	0.0166*** [0.00246]	0.0140*** [0.00155]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y
Adj R-squared	0.293	0.469	0.361	0.327	0.259	0.353	0.257
Observations	45,249,887	14,903,505	3,544,342	1,641,778	4,673,527	9,195,394	10,142,384

Notes: the dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms not exporting in country c at the beginning of the period or before the treatment. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). A detailed list of the countries included in the analysis is provided in the Online Appendix. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

²⁵This is in the spirit of the Khwaja and Mian (2008) estimator, broadly employed in the literature on the bank-lending channel. Clearly, in this context, we no longer have to include $X_{i,t-1}$, $Z_{i,t-1}$, μ_i , and μ_b in our specification.

²⁶Note that it is not conceptually feasible to target firms' funds to a specific destination country because bank credit is fungible; namely, it can be employed to finance the expansion in any other market, foreign or even domestic.

To assess the robustness of our results, we performed a number of additional tests that are reported in the Online Appendix. First, we account for possible destination-specific demand shocks by saturating the model with country-time effects specific to the 6-digits operating sector of the firm (Table A12). Moreover, we repeat the analysis on the different subsamples discussed in section 4.2.1 (Table A13) or employ alternative clustering for the standard errors (Table A14). In all cases, results are found to be broadly consistent.²⁷ Again, we get similar results if we employ the Callaway and Sant’Anna (2021) DID estimator with multiple periods (+2.62 pp. in Figure A4).

To cross-validate our exercise, we also augmented the model with leads and lags of the treatment variable. Results confirm the validity of the parallel-trends assumption even in this setup (Figure A5). Notably, the insignificant effect of the leads suggests that, before the acquisition, soon-to-be-treated firms were not characterized by a higher probability of exporting in countries penetrated by the acquiring bank. This evidence further reassures about potential endogeneity linked to the selection of the target bank in the acquisition process; namely, if internationalized groups acquire banks with a client portfolio that is ex-ante more likely to export to those countries.

Strictly connected with this point, a reader may wonder whether our findings are driven by some spurious relationship with banks’ choice of localization for their foreign branches. For instance, if Italian banks follow the same selection criteria as Italian exporting companies, our results may simply reflect such comovements. While this does not explain the change in firms’ export probability around the treatment, we performed two additional exercises to assuage any residual concern. First, we repeat the analysis of Table 6 by excluding, in turn, the top-five, ten, 15, 20, or 25 destination countries for Italian exporters. The estimated effects get somewhat smaller, but they are always very significant and sizable (1.8% in the most conservative specification of Table A18), suggesting that our results are not driven by the correspondence of banks’ branch localization with firms’ most popular destination markets. To provide additional evidence on this point, we performed a placebo experiment scrambling firms’ relationships with the banks. In each country and year, we assign a random treatment so as to match the observed frequency of first treatments in the data (i.e., the share of firms whose domestic bank is acquired by a group with a foreign branch in country c). We then construct $\text{Placebo}_{i,c} \times \text{Post}_{i,t}$ and estimate equation 2. We repeat this procedure 2,000 times and recover the empirical

²⁷Heterogeneities along firms’ characteristics are in line with those in Table 3 (see Table A19). As done in section 4.2.1, results also hold if we avoid the assumption of stability of the firm-bank relationships (Table A15) or exclude firms with shorter banking relationships (Table A16).

distribution of the placebo effect. Note that, having targeted the randomization to the observed frequency of treatments (branches) in a specific country, if our results were driven by branches being localized in common destination markets, one should expect a positive and significant effect also in this falsification test. Figure 2, instead, shows that its distribution is centered around zero, and the associated p-value does not allow to reject the null $H_0: \beta_{\text{placebo}} \leq 0$ (0.497 in the one-side test). Furthermore, we get insignificant results even if we perform an alternative placebo by reshuffling country branches only among treated firms (Figure A6).

Taken together, our findings show that there is something special about banks' foreign branches that affects a firm's exporting choices. Our analysis also suggests that this is unlikely to be linked with the availability of bank credit, which is accounted for by the firm-time fixed effects. In the next section, we present additional evidence on the underlying channel by exploring country heterogeneities.

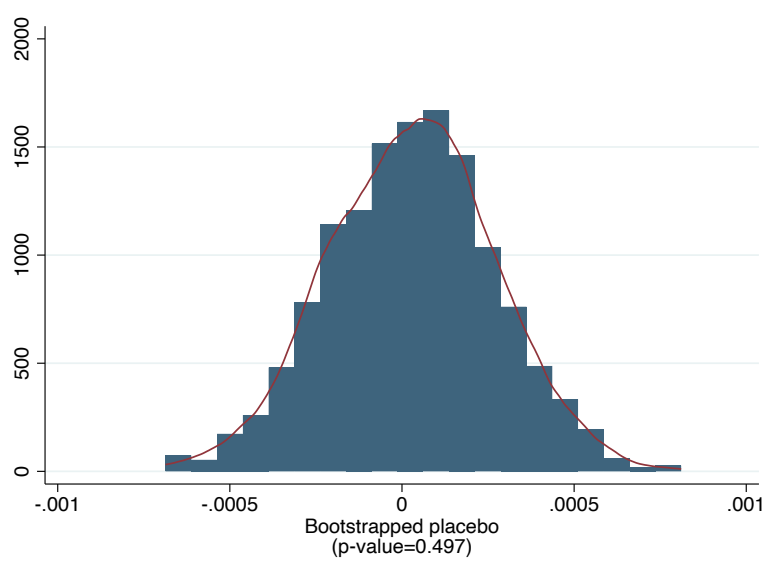


Figure 2: Placebo: randomizing treatment by country and year.

Notes: empirical distribution of the placebo effect. In each year, we assign a random treatment so as to match the observed frequency of first treatments in each country (i.e., the share of firms whose bank is acquired by a group with a branch in country c). We construct $\text{Placebo}_{i,c} \times \text{Post}_{i,t}$ and estimate the same specification of column 1, Table 6. We repeat this procedure 2,000 times and recover the empirical distribution of the placebo effect (Epanechnikov kernel density). The share of negative estimates is reported as the p-value of the one-tail test under $H_0: \beta_{\text{placebo}} \leq 0$.

6.1 Country heterogeneities

First, we test whether treated firms have a higher likelihood of starting export also in countries where the acquirer bank has no direct connection. For this purpose, we

exclude firm-country pairs with $\text{Branch}_{i,c,\tau-1}^b = 1$ and run our analysis on the broad treatment dummy employed in section 4. In this exercise, we do not include firm-time fixed effects because $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ varies across firms and time, but not across markets. Column 1 of Table 7 shows that its impact is largely insignificant, suggesting that the treatment effect on firms' export activity is limited to countries where the internationalized bank has a foreign branch. This is consistent with the idea that banks accumulate some form of market-specific knowledge that can be passed on to client firms.

Note that one alternative explanation for such a result may have to do with the supply of trade-finance products, which could be linked with a bank's presence in the foreign market. While we have already discussed how the use of such instruments is infrequent across SMEs (see section 5.2), we explore country heterogeneities to confirm that this is not driving our findings.

If the channel operates through the reduction in export risk due to trade finance, we should observe effects that are increasing with the riskiness and opacity of the destination country (see, for instance, Caballero et al., 2018). To test for this mechanism, we employ several indicators from the International Country Risk Guide (ICRG) that proxy the degree of risk faced by investors in a specific market (see, for instance, Berkowitz et al., 2006; Antras and Foley, 2015). We take advantage of a broad composite indicator (*Composite*) to capture a country's risk due to political, financial, and economic factors, together with an aggregate index for its socio-economic conditions (*Socio/Economic*).²⁸ Moreover, we exploit two additional statistics that may correlate with export risk. *Investment profile* is an assessment of the factors affecting investment risk and includes the extent of payment delays that represent a relevant concern for exporting companies. *Law & order* synthesizes the strength and impartiality of the legal system as well as the observance of the law. The underlying idea is that in countries with weak law enforceability, firms may face higher risks attached to the choice of the wrong business partners (Anderson and Marcouiller, 2002), and the role of trade finance should be enhanced.

In columns 2-5 of Table 7, we present the results obtained by interacting our country-specific treatment variable with these indexes expressed in units of standard deviations. Because such measures are decreasing with the riskiness of a country, the positive interaction terms indicate that the effect of bank foreign branches on

²⁸The International Country Risk Guide (ICRG) rating comprises 22 variables in three subcategories of risk: political, financial, and economic. A separate index is created for each of the subcategories. The composite score is a weighted average of the former categories and ranges from zero (the highest degree of risk) to 100 (no risk). For additional information, see <https://www.prsgroup.com/wp-content/uploads/2014/08/icrgmethodology.pdf>.

a firm’s export activity is significantly stronger for safer destination markets. In column 2, the estimates imply an impact that ranges between zero and 2.72% across the exporting countries of our sample. The magnitude in the other specifications is similar, with a maximum effect for countries with high law enforceability (3.2%).

As such, this result confirms that the effect of banks’ foreign branches is not linked with firms’ use of trade finance, which should be more frequent for those destinations where contracts are less likely to be honored (Antras and Foley, 2015) and for which we should observe the opposite sign. This is consistent with the analysis at the macro-level of Caballero et al. (2018), suggesting that issuing letters of credit is not the only way bank linkages may facilitate exports. However, such heterogeneity also points to some limitations in the effect of banks’ acquisitions on firms’ exports. Transferring banks’ market-specific knowledge accumulated through foreign branches effectively impacts a firm’s probability of entering new markets only if the destination country is not excessively risky. This is reasonable considering the general type of information that can be passed on to client companies and that we are focusing on first-time exporters. For riskier destination countries, banks’ information sharing may not be sufficient, and specialized instruments are likely to be needed.

6.2 Intensive margins and other outcome variables

In this section, we sharpen our understanding of the mechanism at place by exploring alternative outcome variables. First, we run the same regression of section 6 on several measures for the intensive margins of export. We employ the exported value (*Export €*), the volume (*Export Q*), as well the number of products (at 8-digits, CN8) sold in foreign markets (*Export N*), all in logs (1+).

Columns 1, 3, and 5 of Table 8 show that, after the acquisition, the existence of a foreign branch in a country has a positive and significant effect across all specifications. However, this result is not surprising as the focus on previously non-exporting companies implies a jump in the intensive margins due to firms’ entry into a market. Instead, when we repeat the analysis on the sample of previously-exporting firms, our estimate is found to be largely insignificant (columns 2, 4, and 6).²⁹ Note that this represents a further indication that the main effect is not due to trade finance, whose usage should be increasing with the size of the transaction and be reflected in the intensive margins of export. Instead, our results are consistent with the idea

²⁹In unreported analyses, we have also experimented with the extensive and intensive margins of import. In all cases, our estimate of interest is largely insignificant, suggesting that banks’ information sharing mainly operates through the search for new export markets. This result may signal the lower relevance of informational barriers for import activities.

Table 7: Heterogeneities by country

$y_{i,c,t}$	Export (1)	(2)	(3)	Export (4)	(5)
Branch	0.00173 [0.00141]				
Branch _c		-0.00335 [0.0115]	-0.00198 [0.00497]	-0.00428 [0.00585]	-0.0107*** [0.00399]
Branch _c × R _c		0.00252** [0.00122]	0.00537*** [0.00132]	0.00511*** [0.00133]	0.00774*** [0.00129]
R _c :	–	Composite	Socio/ economic	Investment profile	Law & order
Sample:	Branch _c =0	Entire	Entire	Entire	Entire
Firm FE	Y	–	–	–	–
Firm×T FE	N	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y
Adj R-squared	0.234	0.310	0.311	0.311	0.311
Observations	40,305,919	43,359,692	43,283,668	43,283,668	43,283,668

Notes: the dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the broad treatment identifier and the post-treatment dummy. Branch_c is short for $\text{Branch}_{i,c,\tau-1}^b \times \text{Post}_{i,t}$ in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. Considered markets are in the top 50 destination countries for Italian exporters. In column 1, we exclude from the analysis the firm-country pairs with $\text{Branch}_{i,c,\tau-1}^b = 1$. In columns 2-5, we interact Branch_c with country-specific indexes (R_c) that are decreasing with the riskiness of the destination market. We employ: i) a composite index linked with political, financial, and economic factors (*Composite*, in column 2), ii) an aggregate index for socio-economic conditions (*Socio/economic*, in column 3), iii) a proxy for investment risk (*Investment profile*, in column 4), and iv) a measure about the strength and impartiality of the legal system as well as observance of the law (*Law & order*, in column 5). Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

that information on foreign markets provided by banks can significantly lower the fixed entry cost of exporting, which only affects the extensive export margins (see, for instance, [Chaney, 2008](#)).

If banks reduce informational barriers about new destination countries, better judgment on the viability of export activities should also imply a lower probability of exiting foreign markets. To explore this, we construct a dummy taking the value of one for firms interrupting export activities with country c at time t , and zero otherwise. To avoid capturing intermittent exporters, we condition *Exit* to a stable discontinuance of export, as measured in the three years that follow the switch. Since new entrants may have a different likelihood of exit compared to persistent exporters, we restrict the analysis to firms that started exporting in country c within

our observed sample.³⁰ Results in column 7 show that treated firms benefit from a significantly lower probability of exiting foreign markets, although the effect is somewhat small (-0.31%). Note, however, that such an impact is still meaningful and can be regarded as a lower bound; this is because treated companies may not have entered international markets at all, and therefore a comparison with other exporting firms may not be a “fair” counterfactual.

Table 8: Intensive margins and other outcomes

$y_{i,c,t}$:	Export €		Export Q		Export N		Exit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Branch _c	0.244*** [0.0289]	-0.0140 [0.0404]	0.169*** [0.0202]	-0.0264 [0.0439]	0.0224*** [0.00474]	0.00852 [0.00799]	-0.00306** [0.00147]
Sample:	$y_{t-1} = 0$	$y_{t-1} > 0$	$y_{t-1} = 0$	$y_{t-1} > 0$	$y_{t-1} = 0$	$y_{t-1} > 0$	Entrants
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y
Adj R-squared	0.303	0.614	0.286	0.429	0.582	0.533	0.315
Observations	45,249,084	838,970	45,249,084	838,970	45,249,084	838,970	1,721,538

Notes: the dependent variable in columns 1-2 is the log (1+) exported value in country c at time t . In columns 3-4, it is the log (1+) exported quantity, while in columns 5-6 is the log (1+) number of exported products. In column 7, the dependent variable is a binary measure taking the value of one for firms interrupting export activities with country c at time t , and zero otherwise. To avoid capturing intermittent exporters, we condition Exit to the absence of export activity in the three years that follow the switch. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. In columns 1, 3, and 5, the estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. In columns 2, 4, and 6, we focus on the subsample of previously-exporting companies in country c (as of $t - 1$). In column 7, we restrict the sample to new entrants, i.e., firms that started exporting in country c between 2007 and 2019. Considered markets are in the top 50 destination countries for Italian exporters. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

7 Concluding remarks

The lack of information represents a relevant obstacle to the trade activity of SMEs. In this paper, we analyze whether, besides the provision of credit and trade finance, banks can support firms’ export by reducing informational asymmetries about foreign markets. The mechanism envisaged relies on banks accumulating knowledge through international branches and transmitting it to client firms, therefore decreasing informational barriers and easing their penetration in a new market.

We explore this channel by taking advantage of a large sample of Italian firms for which we match custom data and survey information on their lender banks between

³⁰We essentially compare treated firms with a control group that entered the market in the same period. Our results are largely robust if, instead, we employ the entire set of exporting companies.

2006 and 2019. We identify a shock exogenous to firms' decisions by relying on preexisting banking relationships and exploiting the acquisition of a domestic bank by an internationalized banking group. We implement a difference-in-differences exercise around the M&A and show that bank international connections can have sizable effects in mitigating information asymmetries that hinder international trade.

Our results show that firms have a significantly higher probability of starting export in countries where their lender banks have some deep roots. On the other hand, we find no significant effect on the intensive margins of previously-exporting companies. Such findings are not driven by other channels like bank credit availability or the supply of trade finance.

We interpret these results as evidence that information spillovers mainly reduce firms' fixed entry costs in a foreign market. As such, our paper gives insights on the effectiveness of export-related information and, therefore, provides indirect support to the many export-promotion initiatives implemented by governments worldwide. Importantly, our paper documents the existence of some form of information sharing that is already embedded in the market and operates through firms' connections with international banks.

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**Help in a Foreign Land:
Internationalized Banks and Firms' Export
Online Appendix**

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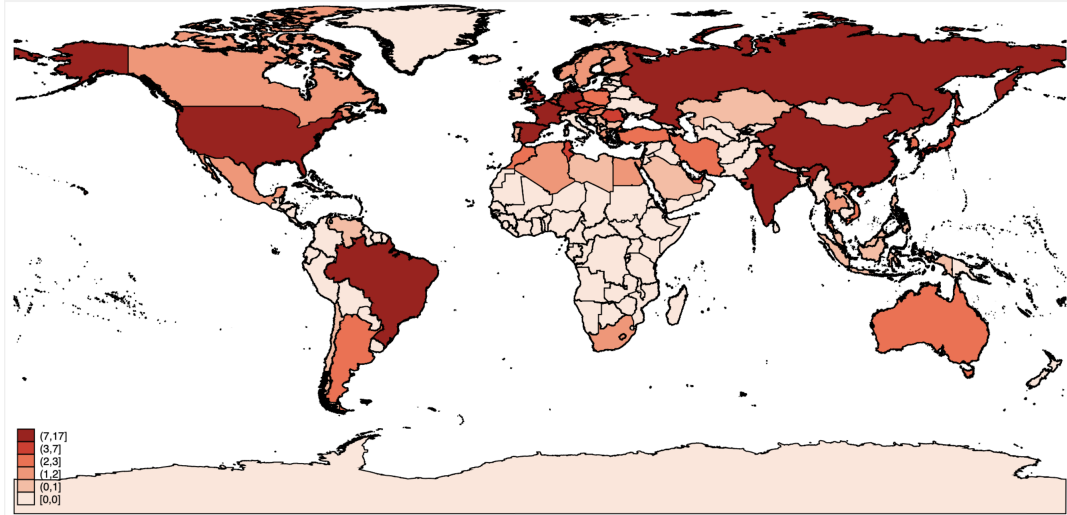


Figure A1: Distribution of foreign branches for Italian banks.

Notes: number of foreign bank branches by country.

Table A1: Descriptive statistics

	Average	Stdev	Min	Max	N obs.
Export	0.23	0.42	0.00	1.00	984,548
Export €	3.02	5.66	0.00	22.39	982,971
Export Q	2.42	4.72	0.00	23.05	982,971
Export N	0.35	0.88	0.00	7.25	918,173
Import	0.19	0.40	0.00	1.00	984,548
ln(bank credit)	10.52	6.00	0.00	17.91	242,243
Size	2.23	1.34	0.00	6.05	951,159
Age	2.85	0.82	0.00	4.16	899,282
Productivity	9.41	5.20	-11.41	13.03	913,084
Z-score	-0.00	0.01	-0.04	0.03	561,088
Length rel.	4.79	4.34	0.00	20.86	953,676
Finance	0.08	0.27	0.00	1.00	317,736
Risk	0.07	0.25	0.00	1.00	317,736
Information	0.06	0.24	0.00	1.00	317,736
Product	0.12	0.32	0.00	1.00	317,736
Other	0.15	0.36	0.00	1.00	317,736
Leverage ^b	6.74	1.38	2.95	11.15	847,746
Tier-1 capital ^b	11.25	2.76	5.83	20.13	847,615
Liquid assets ^b	0.15	0.07	0.03	0.46	847,746
Loans ^b	58.85	10.46	23.68	84.80	847,746
NPL ^b	0.13	0.07	0.01	0.39	847,615
Impaired ^b	12.62	6.61	1.22	38.63	847,615
log assets ^b	19.31	1.56	13.77	21.42	847,746
ROA ^b	-0.03	0.83	-2.80	1.70	847,746
ROE ^b	-1.36	14.35	-63.25	20.67	847,746

Notes: descriptive statistics for the main variables in the sample.

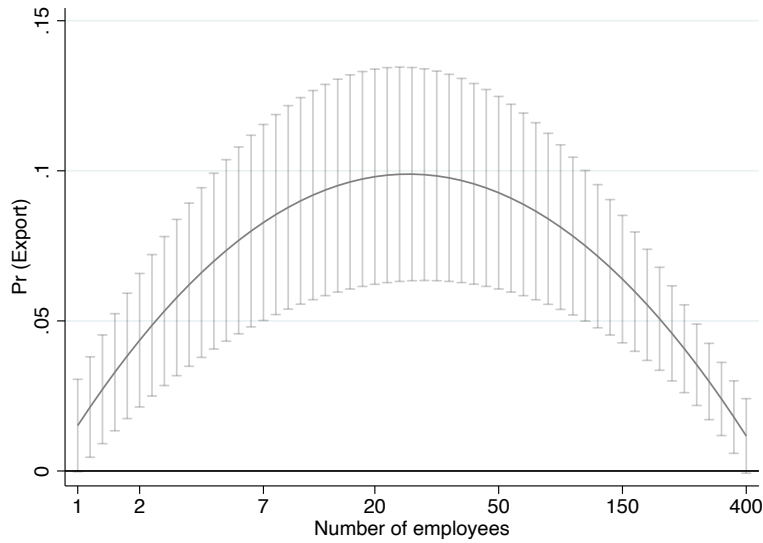


Figure A2: Heterogeneity by firms' size.

Notes: this figure reports the marginal effect of treatment as a function of firms' size. Estimates come from the same specification of Table 2 (column 2) after interacting Branch with the log of firms' employees and its squared value. The absolute number of employees is reported.

Table A2: Alternative clustering

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	Sector-6D & Firm & Bank					
Branch	0.0673*** [0.0177]	0.0571*** [0.0167]	0.0574*** [0.0148]	0.0604*** [0.0157]	0.0606*** [0.0150]	0.0622*** [0.0160]
Panel B:	NUTS-3 & Firm & Bank					
Branch	0.0673*** [0.0171]	0.0571*** [0.0122]	0.0574*** [0.0143]	0.0604*** [0.0152]	0.0606*** [0.0144]	0.0622*** [0.0154]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3

Notes: this table allows for alternative clustering of the standard errors. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are three-way clustered at the Sector (6-digits)–firm–bank level, in Panel A, or NUTS3–firm–bank level, in Panel B. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A3: Alternative samples

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	Single banking relationships only					
Branch	0.0851*** [0.0278]	0.0754** [0.0285]	0.0814** [0.0271]	0.0900** [0.0342]	0.0867** [0.0305]	0.0925** [0.0336]
Adj R-squared	0.488	0.526	0.525	0.520	0.533	0.520
Observations	454,224	363,720	284,831	283,393	282,235	283,388
Panel B:	Excluding borrowers of previously-internationalized banks					
Branch	0.0673*** [0.0217]	0.0602** [0.0237]	0.0568** [0.0203]	0.0501* [0.0244]	0.0475** [0.0210]	0.0492* [0.0226]
Adj R-squared	0.498	0.534	0.532	0.540	0.561	0.542
Observations	254,688	213,243	135,859	134,594	132,958	134,594
Panel C:	Excluding intermittent exporters					
Branch	0.0532*** [0.0121]	0.0462*** [0.0117]	0.0459*** [0.00954]	0.0459*** [0.00993]	0.0468*** [0.00973]	0.0476*** [0.0103]
Adj R-squared	0.281	0.354	0.354	0.354	0.372	0.355
Observations	608,833	503,665	423,588	423,588	422,618	423,578
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3

Notes: this table assesses the robustness of our results to alternative estimating samples. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,t-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. In Panel A, we restrict the sample to firms with single banking relationships. In Panel B, we exclude client firms of previously-internationalized banks (independently of whether they are subject to the M&A, or not). In Panel C, we exclude intermittent exporters, defined as those firms that, despite being non-exporters in $t - 1$, were already exporting in previous years. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A4: Cross-validation

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Lag 3	0.00861 [0.0161]	0.00979 [0.0176]	0.00922 [0.0177]	0.00913 [0.0177]	0.00799 [0.0174]	0.00579 [0.0184]
Lag 2	0.0255 [0.0190]	0.0237 [0.0175]	0.0258 [0.0171]	0.0255 [0.0171]	0.0264 [0.0169]	0.0275 [0.0180]
Lag 1	0.0337 [0.0193]	0.0319 [0.0205]	0.0330 [0.0210]	0.0329 [0.0212]	0.0314 [0.0200]	0.0343 [0.0222]
Branch	0.0278** [0.0103]	0.0261** [0.00993]	0.0259** [0.00935]	0.0247** [0.00912]	0.0268** [0.00875]	0.0246** [0.00909]
Lead 1	-0.000392 [0.0105]	-0.00121 [0.00993]	-0.00155 [0.00998]	-0.00158 [0.00958]	-0.00140 [0.00952]	-0.00112 [0.00994]
Lead 2	-0.00627 [0.00818]	-0.00546 [0.00737]	-0.00484 [0.00747]	-0.00441 [0.00711]	-0.00442 [0.00702]	-0.00456 [0.00751]
Lead 3	0.000324 [0.00315]	-0.000153 [0.00292]	-0.000354 [0.00275]	-0.000281 [0.00262]	-0.000257 [0.00263]	-0.000184 [0.00257]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.599	0.613	0.613	0.613	0.620	0.613
Observations	455,987	387,469	326,899	326,899	326,133	326,891

Notes: this table validates our DID exercise by augmenting the baseline specification with three leads and three lags of the treatment variable. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

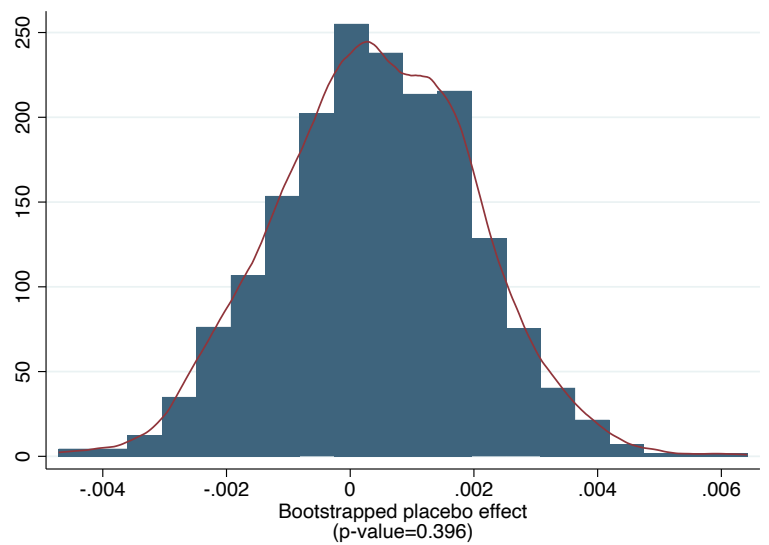


Figure A3: Placebo.

Notes: empirical distribution of the placebo effect. In each year, we assign a random treatment so as to match the observed frequency of first treatments in the data (i.e., the share of firms whose bank is acquired by an internationalized group in time t). We construct $\text{Placebo}_i \times \text{Post}_{i,t}$ and estimate the same specification of column 3, Table 2. We repeat this procedure 5,000 times and recover the empirical distribution of the placebo effect (Epanechnikov kernel density, bandwidth=0.0003). The share of negative estimates is reported as the p-value of the one-tail test under $H_0: \beta_{\text{placebo}} \leq 0$.

Table A5: Controlling for time-varying fundamentals of the lender bank

$y_{i,t}$	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0809*** [0.0165]	0.0654*** [0.0127]	0.0662*** [0.0134]	0.0948*** [0.0216]	0.0931*** [0.0192]	0.0964*** [0.0219]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Q($Z_{i,t-1}^b$)	Q($Z_{i,t-1}^b$)	Q($Z_{i,t-1}^b$)	Q($Z_{i,t-1}^b$)	Q($Z_{i,t-1}^b$) & Sector-6D	Q($Z_{i,t-1}^b$) & NUTS-3
Adj R-squared	0.529	0.560	0.558	0.569	0.579	0.569
Observations	603,264	500,332	420,256	415,852	414,839	415,842

Notes: this table augment the model with a set of time fixed effects specific to the fundamentals of the lender bank. We construct quartiles for each element in $Z_{i,t-1}^b$ (i.e., leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE), which are then interacted with time effects. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A6: Staggered DID

$y_{i,t}$	(1)	(2)	Export (3)	(4)
Panel A:	All firms			
ATT	0.0703*** [0.00368]	0.0701*** [0.00403]	0.0664*** [0.00348]	0.0653*** [0.00377]
Controls	N	Y	N	Y
Control group	Never treated		Not yet treated	
Panel B:	Single banking relationship			
ATT	0.0936*** [0.00573]	0.0978*** [0.00647]	0.0869*** [0.00531]	0.0883*** [0.00586]
Controls	N	Y	N	Y
Control group	Never treated		Not yet treated	
Panel C:	Excluding borrowers of previously-internationalized banks			
ATT	0.0887*** [0.00514]	0.0930*** [0.00592]	0.0831*** [0.00481]	0.0846*** [0.00541]
Controls	N	Y	N	Y
Control group	Never treated		Not yet treated	

Notes: Callaway and Sant’Anna (2021) Difference in Differences with multiple periods. Abadie (2005) inverse probability weighting DID estimator. As a control group, we employ “never treated” firms in columns 1 and 2, and “not yet treated” firms in columns 3 and 4. Results are virtually identical if we use the Sant’Anna and Zhao (2020) doubly robust DID estimator based on stabilized inverse probability weighting and ordinary least squares, or a multiplicative wild-bootstrap procedure for the standard errors. In Panel A, we employ the entire sample. In Panel B, we restrict the sample to firms with single banking relationships. In Panel C, we exclude client firms of previously-internationalized banks (independently of whether they are subject to the M&A, or not).

Table A7: Alternative sample: firms with balance-sheet data only

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0656*** [0.0190]	0.0604*** [0.0176]	0.0587*** [0.0149]	0.0576*** [0.0145]	0.0585*** [0.0132]	0.0592*** [0.0147]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.580	0.598	0.597	0.598	0.611	0.599
Observations	243,829	222,274	196,979	196,979	195,582	196,972

Notes: this table limits the analysis to firms with available balance-sheet data. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A8: Alternative sample: excluding imputed firm-bank relationships

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0793*** [0.0213]	0.0653** [0.0215]	0.0625*** [0.0188]	0.0603** [0.0198]	0.0629*** [0.0194]	0.0620*** [0.0198]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.537	0.571	0.571	0.585	0.595	0.585
Observations	488,973	408,499	345,751	340,889	339,728	340,885

Notes: this table avoids the assumption of stability of the firm-bank relationships and drops observations for which we cannot observe the actual lender of firm i at time t . The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A9: Alternative sample: excluding firms with shorter banking relationships

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0642*** [0.0187]	0.0555*** [0.0168]	0.0550*** [0.0139]	0.0610*** [0.0154]	0.0597*** [0.0142]	0.0629*** [0.0158]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.540	0.567	0.567	0.579	0.591	0.579
Observations	381,197	333,156	290,783	288,497	287,201	288,485

Notes: this table restricts the analysis to firms with long-lasting banking relationships (i.e., firms whose relationship with a lender bank is longer than the cross-sectional median observed in our sample, ten years). The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A10: Heterogeneities by firms' characteristics: firms with balance-sheet data only

$y_{i,t}$:	Export			
	(1)	(2)	(3)	(4)
Branch \times Q1(X)	0.0116 [0.0138]	0.0268 [0.0208]	0.0517** [0.0178]	0.0430** [0.0157]
Branch \times Q2(X)	0.0665** [0.0262]	0.0297* [0.0157]	0.0661*** [0.0156]	0.0548** [0.0189]
Branch \times Q3(X)	0.110*** [0.0336]	0.0689*** [0.0192]	0.0511*** [0.0134]	0.0633*** [0.0200]
Branch \times Q4(X)	0.0470*** [0.0127]	0.0826*** [0.0236]	0.0453*** [0.0120]	0.0727*** [0.0224]
Interacting variable (X):	Size	Productivity	Z-score	Length rel.
Firm FE	Y	Y	Y	Y
Firm controls	Y	Y	Y	Y
T FE	Common	Common	Common	Common
Adj R-squared	0.600	0.600	0.628	0.598
Observations	222,274	222,274	196,454	222,274

Notes: this table limits the analysis to firms with available balance-sheet data. The dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. In this table, we allow the effect to vary across quartiles of the distribution of firms' size, productivity, Z-score, and length of the banking relationship (in columns 1, 2, 3, and 4, respectively). The Z-score is computed as in Altman et al. (2013). Unreported controls follow the specification in column 2 of Table 2, augmented with the lagged values of the interacting variables. The estimation is performed on the sample of non-exporting firms at the beginning of the period or before the treatment. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A11: Extensive margins of export: conditioning the sample to non-exporting firms in $t - 1$

$y_{i,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch	0.0444*** [0.0113]	0.0409*** [0.0111]	0.0406*** [0.00953]	0.0422*** [0.00993]	0.0427*** [0.00975]	0.0435*** [0.0101]
Firm FE	Y	Y	Y	Y	Y	Y
Firm controls	N	Y	Y	Y	Y	Y
Firm \times Bank FE	N	N	N	Y	Y	Y
Bank controls	N	N	Y	Y	Y	Y
T FE	Common	Common	Common	Common	Sector-6D	NUTS-3
Adj R-squared	0.181	0.188	0.188	0.189	0.202	0.190
Observations	604,733	500,359	420,267	415,992	414,984	415,982

Notes: the dependent variable is the overall extensive margin of export, a binary measure taking the value of one for firms exporting in at least one foreign country at time t , and zero otherwise. Branch is short for $\text{Branch}_{i,\tau-1}^b \times \text{Post}_{i,t}$ in equation 1, the interaction between the treatment identifier and the post-treatment dummy. Unreported firm-level controls (from column 2 onward) are: size (log number of employees), age (in log), and productivity (sine transformation of the value-added per worker). The vector of bank-level controls (from column 3 onward) includes: leverage, tier1 capital ratio, liquid assets to total assets, loans to total assets, NPL to gross loans, impaired loans to gross loans, log assets, as well as ROA and ROE. The estimation is performed on the sample of non-exporting firms in $t - 1$. All variables are defined in Appendix. Standard errors in brackets are two-way clustered at the firm and bank levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A12: Country-specific effects: controlling for demand shocks

$y_{i,c,t}$:	Export						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Branch _c	0.0242*** [0.00262]	0.0243*** [0.00431]	0.0176*** [0.00239]	0.0252*** [0.00525]	0.0150*** [0.00205]	0.0162*** [0.00234]	0.0141*** [0.00145]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm \times T FE	Y	Y	Y	Y	Y	Y	Y
Country \times Sector-6D \times T FE	Y	Y	Y	Y	Y	Y	Y
Adj R-squared	0.308	0.479	0.370	0.334	0.271	0.362	0.269
Observations	43,571,870	14,336,395	3,410,450	1,576,174	4,504,915	8,858,086	9,771,930

Notes: this table accounts for country-time fixed effects specific to the 6-digits sector of the company. The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for $\text{Branch}_{i,c,\tau-1}^b \times \text{Post}_{i,t}$ in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A13: Country-specific effects: alternative samples

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Panel A:	Single banking relationships only						
Branch _c	0.0185*** [0.00372]	0.0268*** [0.00758]	0.0158*** [0.00415]	0.0304*** [0.00791]	0.00874*** [0.00187]	0.0118*** [0.00274]	0.0117*** [0.00219]
Adj R-squared	0.226	0.427	0.264	0.208	0.191	0.264	0.177
Observations	30,620,316	10,212,644	2,416,535	1,136,714	3,131,954	6,185,404	6,815,067
Panel B:	Excluding borrowers of previously-internationalized banks						
Branch _c	0.0236*** [0.00367]	0.0323*** [0.00680]	0.0203*** [0.00499]	0.0394*** [0.00632]	0.00865*** [0.00275]	0.0144*** [0.00274]	0.0159*** [0.00222]
Adj R-squared	0.224	0.433	0.259	0.174	0.195	0.256	0.168
Observations	16,990,217	5,674,638	1,344,547	633,492	1,736,215	3,432,045	3,776,166
Panel C:	Excluding intermittent exporters						
Branch _c	0.0124*** [0.00142]	0.0124*** [0.00243]	0.0103*** [0.00146]	0.0170*** [0.00332]	0.00797*** [0.00130]	0.00952*** [0.00125]	0.00779*** [0.000891]
Adj R-squared	0.177	0.348	0.237	0.213	0.178	0.235	0.156
Observations	44,980,117	14,776,790	3,517,916	1,625,214	4,655,856	9,147,605	10,098,012
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y

Notes: this table assesses the robustness of our results to alternative estimating samples. The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. In Panel A, we restrict the sample to firms with single banking relationships. In Panel B, we exclude client firms of previously-internationalized banks (independently of whether they are subject to the M&A, or not). In Panel C, we exclude intermittent exporters, defined as those firms that, despite being non-exporters in $t - 1$, were already exporting in previous years. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A14: Country-specific effects: alternative clustering

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Panel A:	Firm & Bank & Country-Time						
Branch _c	0.0246*** [0.00289]	0.0252*** [0.00480]	0.0179*** [0.00261]	0.0264*** [0.00585]	0.0152*** [0.00239]	0.0166*** [0.00246]	0.0140*** [0.00155]
Panel B:	Firm & Bank & Country-Sector6D-Time						
Branch _c	0.0253*** [0.00255]	0.0256*** [0.00465]	0.0184*** [0.00244]	0.0269*** [0.00536]	0.0156*** [0.00199]	0.0170*** [0.00190]	0.0144*** [0.00130]
Panel C:	Firm & Bank & Country-NUTS3-Time						
Branch _c	0.0253*** [0.00255]	0.0256*** [0.00465]	0.0184*** [0.00244]	0.0269*** [0.00535]	0.0156*** [0.00198]	0.0170*** [0.00190]	0.0144*** [0.00130]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y

Notes: this table employs alternative clustering of the standard errors. The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). Standard errors in brackets are clustered differently across panels. We employ three-way clustering at the firm, bank, and country-time level (in Panel A); firm, bank, and country-sector-time (Panel B); or firm, bank, and country-province-time (Panel C). *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A15: Country-specific effects: excluding imputed firm-bank relationships

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Branch _c	0.0288*** [0.00317]	0.0300*** [0.00558]	0.0212*** [0.00293]	0.0325*** [0.00668]	0.0172*** [0.00235]	0.0195*** [0.00270]	0.0160*** [0.00159]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y
Adj R-squared	0.293	0.467	0.359	0.324	0.258	0.351	0.258
Observations	36,803,565	12,111,758	2,881,547	1,330,832	3,803,410	7,481,107	8,255,450

Notes: this table avoids the assumption of stability of the firm-bank relationships and drop observations for which we cannot observe the actual lender of firm i at time t . The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A16: Country-specific effects: excluding firms with shorter banking relationships

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Branch _c	0.0328*** [0.00295]	0.0282*** [0.00388]	0.0221*** [0.00234]	0.0289*** [0.00531]	0.0212*** [0.00253]	0.0224*** [0.00312]	0.0179*** [0.00138]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y
Observations	10,153,154	3,450,118	812,177	405,686	1,015,794	2,031,699	2,234,012

Notes: this table restricts the analysis to firms with long-lasting banking relationships (i.e., firms whose relationship with a lender bank is longer than the cross-sectional median observed in our sample, ten years). The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

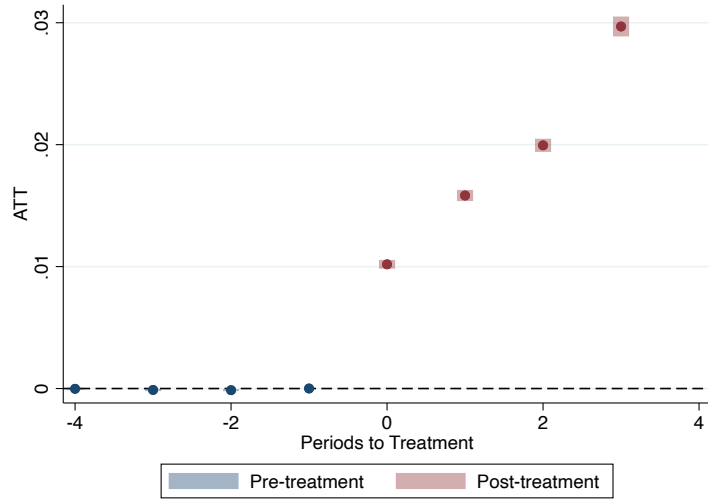


Figure A4: Staggered DID: country specific analysis

Notes: average treatment effect for the treated (ATT) by event horizon. Callaway and Sant’Anna (2021) difference-in-differences with multiple periods estimator, using Abadie (2005) inverse probability weighting DID estimator and “not yet treated” as a control group. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The sample considers the top 50 destination countries for Italian exporters. The overall ATT estimated is 2.62 percentage points, which is significant at the 1% level.

Table A17: Country-specific effects: staggered DID

$y_{i,c,t}$	Export	
	(1)	(2)
Panel A: All firms		
ATT	0.0262*** [0.00297]	0.0247*** [0.00319]
Control group	Never treated	Not yet treated
Panel B: Single banking relationship		
ATT	0.00980*** [0.000244]	0.00927*** [0.000264]
Control group	Never treated	Not yet treated
Panel C: Excluding borrowers of previously-internationalized banks		
ATT	0.00760*** [0.000241]	0.00719*** [0.000261]
Control group	Never treated	Not yet treated

Notes: Callaway and Sant’Anna (2021) Difference in Differences with multiple periods. Abadie (2005) inverse probability weighting DID estimator. As a control group, we employ “never treated” firms in column 1, and “not yet treated” firms in column 2. Results are virtually identical if we use the Sant’Anna and Zhao (2020) doubly robust DID estimator based on stabilized inverse probability weighting and ordinary least squares, or a multiplicative wild-bootstrap procedure for the standard errors. In Panel A, we employ the entire sample. In Panel B, we restrict the sample to firms with single banking relationships. In Panel C, we exclude client firms of previously-internationalized banks (independently of whether they are subject to the M&A, or not).

Table A18: Country-specific effects: excluding most common destination markets

$y_{i,c,t}$	Export				
	(1)	(2)	(3)	(4)	(5)
Branch _c	0.0213*** [0.00245]	0.0205*** [0.00231]	0.0191*** [0.00214]	0.0181*** [0.00203]	0.0177*** [0.00203]
Excluded countries:	Top 5	Top 10	Top 15	Top 20	Top 25
Firm×T FE	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y
Adj R-squared	0.284	0.274	0.264	0.251	0.242
Observations	41,056,678	37,548,484	33,147,765	28,681,630	25,062,949

Notes: this table assesses the robustness of our results to the exclusion of top-destination countries from the sample. The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. Compared to Table 6, we progressively exclude from our sample the top-five, ten, 15, 20, and 25 destination countries, in columns 1-to-5, respectively. A detailed list of the excluded and included countries is provided in Table A25. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

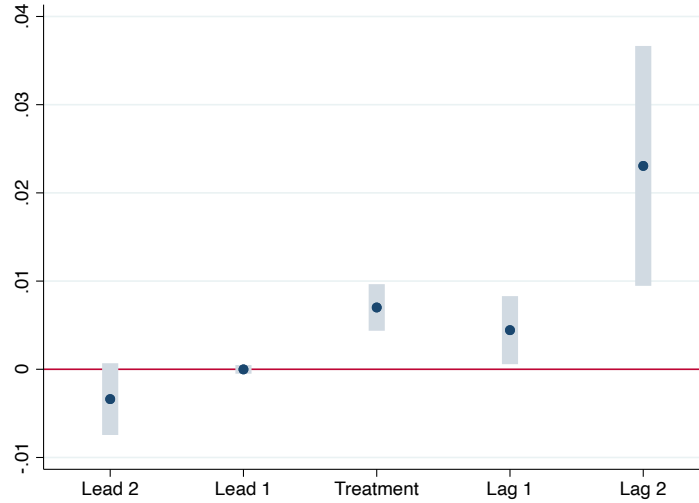


Figure A5: Country-specific effects: leads and lags

Notes: this figure reports the estimated effects of the baseline specification in Table 6 (column 1), augmented with two leads and lags of the treatment variable. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The sample considers the top 50 destination countries for Italian exporters.

Table A19: Country-specific effects: heterogeneities by firms' characteristics

$y_{i,c,t}$	Export			
	(1)	(2)	(3)	(4)
Branch $_c \times$ Q1(X)	0.00555*** [0.00168]	0.0238*** [0.00491]	0.0265*** [0.00477]	0.0182*** [0.00366]
Branch $_c \times$ Q2(X)	0.0403*** [0.00584]	0.0130*** [0.00303]	0.0425*** [0.00777]	0.0175*** [0.00299]
Branch $_c \times$ Q3(X)	0.0560*** [0.0140]	0.0217*** [0.00342]	0.0380*** [0.00651]	0.0237*** [0.00400]
Branch $_c \times$ Q4(X)	0.0290** [0.0129]	0.0363*** [0.00730]	0.0156*** [0.00333]	0.0354*** [0.00770]
Interacting variable (X):	Size	Productivity	Z-score	Length rel.
Firm \times T FE	Y	Y	Y	Y
Country \times T FE	Y	Y	Y	Y
Adj R-squared	0.554	0.552	0.618	0.550
Observations	505,375	505,375	218,797	505,375

Notes: this table repeats the analysis in Table 3 on the expanded sample at the firm-country-year level. The dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch $_c$ is short for Branch $_{i,c,\tau-1}^b \times$ Post $_{i,t}$ in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. We allow the effect to vary across firms' size class (micro [1-9 employees], small [10-49], medium [50-249], or large [≥ 250]) or quartiles of the distribution of productivity, Z-score, and length of the banking relationship (in columns 1, 2, 3, and 4, respectively). The Z-score is computed as in Altman et al. (2013). The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. The sample includes the top 50 destination countries for Italian exporters. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A20: Country-specific effects: conditioning the sample to non-exporting firms in $t - 1$

$y_{i,c,t}$:	(1)	(2)	(3)	Export (4)	(5)	(6)	(7)
Branch _c	0.0107*** [0.00125]	0.0103*** [0.00190]	0.00818*** [0.00131]	0.0132*** [0.00302]	0.00669*** [0.00107]	0.00880*** [0.00134]	0.00688*** [0.000827]
Market:	All countries	Europe EU	Europe extra-EU	North America	C/S America	Asia	Other countries
Firm×T FE	Y	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y	Y
Adj R-squared	0.153	0.303	0.245	0.168	0.178	0.216	0.150
Observations	44,993,380	14,785,145	3,519,340	1,624,526	4,657,334	9,148,882	10,099,701

Notes: the dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch_{i,c,τ-1}^b × Post_{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms not exporting in country c in $t - 1$. The main sample in column 1 considers the top 50 destination countries for Italian exporters (All countries). In columns 2-7, we split the sample across geographic areas of the destination country: Europe EU, Europe Extra-EU, North America, Center and South America, Asia, and a residual macro area (Other countries). A detailed list of the countries included in the analysis is provided in the Online Appendix. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

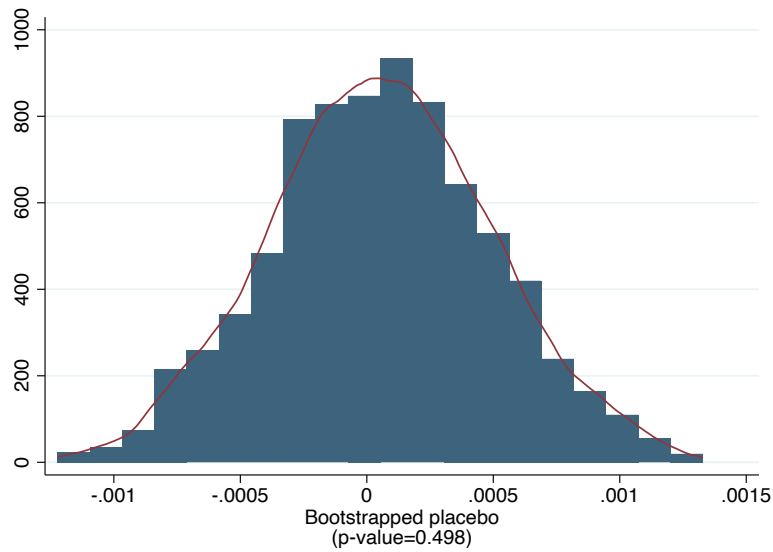


Figure A6: Placebo: reshuffling treatment across treated.

Notes: empirical distribution of the placebo effect. In each year, we reshuffle bank foreign branches among treated firms so as to match the observed frequency of first treatments in each geographical area. We construct Placebo_{i,c} × Post_{i,t} and estimate the same specification of column 1, Table 6. We repeat this procedure 2,000 times and recover the empirical distribution of the placebo effect (Epanechnikov kernel density). The share of negative estimates is reported as the p-value of the one-tail test under $H_0: \beta_{\text{placebo}} \leq 0$.

Table A21: Country-specific effects: direct evidence on the channel

$y_{i,c,t}$:	Export					
	(1)	(2)	(3)	(4)	(5)	(6)
Branch _c	0.0295*** [0.00276]	0.0294*** [0.00281]	0.0285*** [0.00267]	0.0295*** [0.00282]	0.0298*** [0.00281]	0.0280*** [0.00279]
Branch _c × Finance	0.00302 [0.00357]					-0.00480 [0.00990]
Branch _c × Risk		0.0106 [0.00760]				0.0120 [0.00760]
Branch _c × Information			0.0206*** [0.00541]			0.0208*** [0.00548]
Branch _c × Product				0.00103 [0.00212]		0.00662 [0.0102]
Branch _c × Other					-0.000444 [0.00238]	-0.00589 [0.0101]
Firm×T FE	Y	Y	Y	Y	Y	Y
Country×T FE	Y	Y	Y	Y	Y	Y
Adj R-squared	0.282	0.282	0.282	0.282	0.282	0.282
Observations	14,612,654	14,612,654	14,612,654	14,612,654	14,612,654	14,612,654

Notes: the dependent variable is the extensive margin of export, a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise. Branch_c is short for Branch _{$i,c,\tau-1$} ^b × Post _{i,t} in equation 2, the interaction between the country-specific treatment identifier and the post-treatment dummy. The estimation is performed on the sample of firms that were not exporting in country c at the beginning of the period or before the treatment. Finance, Risk, Information, Product, and Other, are dummy variables taking the value of one if the firm identifies specific factors that were limiting/preventing its export activity in the past (see section 5.2 for a definition). The sample includes the top 50 destination countries for Italian exporters. All variables are defined in Appendix. Standard errors in brackets are three-way clustered at the firm, bank, and destination country levels. *, **, *** indicate statistical significance at the 10%, 5%, and 1%, respectively.

Table A22: Variable description

Variable name	Definition
Export $_{i,t}$	overall extensive margin of export. It is a binary measure taking the value of one for firms exporting in at least one country at time t , and zero otherwise.
Export $_{i,c,t}$	country-specific extensive margin of export. It is a binary measure taking the value of one for firms exporting in country c at time t , and zero otherwise.
Export $\epsilon_{i,c,t}$	country-specific intensive margin of export. It is defined as the log of 1+ the value of firm exported goods in country c at time t .
Export $Q_{i,c,t}$	country-specific intensive margin of export. It is defined as the log of 1+ the volume of firm exported goods in country c at time t .
Export $N_{i,c,t}$	country-specific intensive margin of export. It is defined as the log of 1+ the number of firm exported goods (at 8-digits, CNS) in country c at time t .
Exit $_{i,c,t}$	country-specific exit rate. It is a binary measure taking the value of one for firms interrupting export activities with country c at time t , and zero otherwise. The positive value of Exit is conditioned to the absence of export activity in the three years that follow the switch (to avoid capturing intermittent exporters).
Import $_{i,c,t}$	country-specific extensive margin of import. It is a binary measure taking the value of one for firms importing from country c at time t , and zero otherwise.
$\ln(\text{bank credit})_{i,t}$	it is the log of 1+ the outstanding bank credit of firm i at time t , as reported in balance-sheet data.
Branch $_{i,\tau-1}^b$	overall treatment variable. It is a dummy that equals one if the lender bank of firm i is acquired by a banking group with international branches (independently of the location) before the acquisition takes place ($\tau - 1$).
Branch $_{i,c,\tau-1}^b$	country-specific treatment variable. It is a dummy that takes the value of one if the lender bank of firm i is acquired by a banking group with a branch in country c at time $\tau - 1$.
Post $_{i,t}$	post-treatment indicator. It is a dummy that takes the value of one if the lender bank of firm i is acquired by a banking group with international branches and the time falls in the post-acquisition period ($t \geq \tau$), and zero otherwise.
Size $_{i,t-1}$	is the log of 1+ the number of employees of firm i at time $t - 1$.
Age $_{i,t-1}$	is the log of 1+ the age of firm i at time $t - 1$.
Productivity $_{i,t-1}$	is the inverse hyperbolic sine transformation of the value-added-per-worker of firm i at time $t - 1$.
Z-score $_{i,t-1}$	is a proxy for firms' creditworthiness of firm i at time $t - 1$, computed as the first principal component of the working-capital-to-total-assets, retained-earnings-to-total-assets, EBIT-to-total-assets, and book-value-of-equity-to-total-liabilities ratios, the factors in the Altman Z-score computed by Altman et al. (2013) on the Italian economy. The first PC loads positively on each factor and explains 30% of the total variance. We get unchanged results if we employ the original loadings in Altman et al. (2013) : $Z_{i,t} = 6.56X_{1,i,t} + 3.26X_{2,i,t} + 6.72X_{3,i,t} + 1.05X_{4,i,t}$.
Length rel $_{i,t-1}$	length of the banking relationship (in years) of firm i at time $t - 1$. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
Finance $_i$	it is a dummy taking the value of one if firm i declared that the lack of financial resources represented a major factor in the past that limited or prevented its penetration into international markets. This information is gathered in the 2021 wave of the MET survey and it is projected backward (therefore, it is time-invariant).
Risk $_i$	it is a dummy taking the value of one if firm i declared that the excessive riskiness of trade represented a major factor in the past that limited or prevented its penetration into international markets. This information is gathered in the 2021 wave of the MET survey and it is projected backward (therefore, it is time-invariant).
Information $_i$	it is a dummy taking the value of one if firm i declared that the lack of specific information on the destination country represented a major factor in the past that limited or prevented its penetration into international markets. This information is gathered in the 2021 wave of the MET survey and it is projected backward (therefore, it is time-invariant).

Product _{<i>i</i>}	it is a dummy taking the value of one if firm <i>i</i> declared that the characteristics of the goods produced being not suitable for foreign markets represented a major factor in the past that limited or prevented its penetration into international markets. This information is gathered in the 2021 wave of the MET survey and it is projected backward (therefore, it is time-invariant).
Other _{<i>i</i>}	it is a dummy taking the value of one if firm <i>i</i> declared that other factors in the past that limited or prevented its penetration into international markets. This information is gathered in the 2021 wave of the MET survey and it is projected backward (therefore, it is time-invariant).
Composite _{<i>c</i>}	composite indicator from the International Country Risk Guide that proxies for the degree of risk faced by investors in country <i>c</i> due to political, financial, and economic factors.
Socio/Economic _{<i>c</i>}	aggregate index from the International Country Risk Guide that captures country <i>c</i> 's risk attached to its socio-economic conditions. It is the sum of three components linked to unemployment, consumer confidence, and poverty.
Investment profile _{<i>c</i>}	index from the International Country Risk Guide that provides an assessment of the factors affecting investment risk in country <i>c</i> . It is the sum of three components linked to contract viability, expropriation, profits repatriation, and payment delays.
Law & order _{<i>c</i>}	index from the International Country Risk Guide synthesizing the strength and impartiality of the legal system in country <i>c</i> , as well as the observance of the law.
Leverage ^{<i>b</i>} _{<i>i,t-1</i>}	total-debt-to-equity ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
Tier-1 capital ^{<i>b</i>} _{<i>i,t-1</i>}	Tier-1 capital ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
Liquid assets ^{<i>b</i>} _{<i>i,t-1</i>}	liquid-assets-to-total-assets ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
Loans ^{<i>b</i>} _{<i>i,t-1</i>}	gross-loans-to-total-assets ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
NPL ^{<i>b</i>} _{<i>i,t-1</i>}	non-performing-loans-to-gross-loans ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
Impaired ^{<i>b</i>} _{<i>i,t-1</i>}	impaired-loans-to-gross-loans ratio of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
log assets ^{<i>b</i>} _{<i>i,t-1</i>}	log assets of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
ROA ^{<i>b</i>} _{<i>i,t-1</i>}	return on assets of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.
ROE ^{<i>b</i>} _{<i>i,t-1</i>}	return on equity of the lender bank of firm <i>i</i> at time <i>t</i> - 1. In the case of multiple relationships, it is computed as a simple average across lender banks. Our results are unchanged if we employ, instead, the maximum or the minimum.

Table A23: Acquisitions by groups (since 2006)

Acquisitions by international groups	
BNP PARIBAS GROUP	
Bca Nazionale del Lavoro (BNL)*	February 2006
CREDIT AGRICOLE GROUP	
CR di Parma e Piacenza (Cariparma)	March 2007
Bca Pop FriulAdria	March 2007
CR della Spezia (Carispezia)	February 2010
CR di Rimini (Carim)	December 2017
CR di Cesena (Caricesena)	December 2017
CR di San Miniato (Carismi)	December 2017
INTESA SANPAOLO GROUP	
CR di Forlì e della Romagna (Cariforlì)	March 2007
CR di Firenze	July 2007
CR di Civitavecchia (through CR di Firenze)	July 2007
CR di Pistoia e della Lucchesia	January 2008
Bca CIS (Credito Industriale Sardo)	March 2009
Bca Monte Parma	October 2010
Fideuram	July 2015
CR dell'Umbria (CR di Spoleto)	Nvember 2015
CR di Terni e Narni (through CR Umbria)	Nvember 2015
CR Città di Castello (through CR Umbria)	Nvember 2015
CR di Foligno	Nvember 2015
Bca ITB (Bca 5)	December 2016
Veneto Bca	June 2017
CR di Fabriano e Cupramontana (CARIFAC, through Veneto Bca)	June 2017
Bca Pop di Vicenza	June 2017
Bca Nuova (through Bca Pop di Vicenza)	June 2017
Bca Apulia	June 2017
MPS GROUP	
Bca Antonveneta	May 2008
BPM GROUP/Banco BPM	
Bca Pop di Mantova	December 2008
Bca di Legnano	September 2013
CR di Alessandria (through Bca di Legnano)	September 2013
Bco Popolare GROUP (merge)	January 2017
UBI GROUP	
Nuova Bca delle Marche	January 2017
CR di Loreto (through Bca delle Marche)	January 2017
Bca dell'Etruria e del Lazio	May 2017
Bca Federico del Vecchio	May 2017
CR di Chieti (Carichieti renamed Bca Teatina)	May 2017
BPER GROUP	
CR di Bra	January 2013
Serfina Bca	January 2013
CR di Ferrara	June 2017
Unipol Bca	January 2019
Acquisitions by domestic groups	
CREDITO VALTELLINESE	
CR di Fano (Carifano)	July 2008
Bca Cattolica	December 2009
Bca della Ciociaria (Credito del Lazio)	May 2010
BANCO DESIO GROUP	
Bca Pop di Spoleto	April 2014
CR DI ASTI GROUP	
Biver Bca (CR di Biella e Vercelli)	December 2012
Bca Pop DI BARI GROUP	
Cassa di risparmio di Orvieto	March 2009
Banca Tercas	October 2014
Banca Caripe (Through Tercas)	October 2014
LA CASSA	
Bco di Lucca e del Tirreno	February 2008

Notes: complete list of acquisitions for the lender banks in the sample. * indicates banks that were already internationalized before the acquisition.

Table A24: Other groups and individual banks in the sample

Bank name	Belonging group	Bank name	Belonging group
Intesa Sanpaolo	Intesa	CR di Savona	CARIGE
Ambrosiano Veneto	Intesa	Credito Emiliano (CREDEM)	CREDEM
Bca Adriatico	Intesa (- 2013)	Bca Sella	Sella
Bca Commerciale Italiana (Intesa)	Intesa	Bca Pop di Sondrio	Bca Pop di Sondrio
Bca di Trento e Bolzano	Intesa	CR di Ravenna	LA CASSA
Bca Prossima	Intesa	Bca di Imola	LA CASSA
Bco di Napoli	Intesa	Credito Valtellinese	Credito Valtellinese
CR del Friuli Venezia Giulia	Intesa	Banco di Desio e della Brianza	Banco Desio
CR del Veneto	Intesa	CR di Asti	CR di Asti
CR delle Provincia Lombarde	Intesa	Bca Pop di Bari	Bca Pop di Bari
CR di Bologna (Carisbo)	Intesa	Bca Pop dell'Alto Adige (VOLKSBANK)	VOLKSBANK
CR di Rieti	Intesa	Bca Pop di Marostica	VOLKSBANK
CR di Venezia	Intesa	Allianz Bca	-
CR di Viterbo	Intesa	Bca del Fucino	-
Unicredit	Unicredit	Bca del Piemonte	-
Fineco Bank	Unicredit (- 2019)	Bca di Asti	-
Monte dei Paschi di Siena (MPS)	MPS	Bca di Azzoaglio	-
Unione di Banche Italiane (UBI)	UBI	Bca di Macerata	-
Bca Carime	UBI	Bca Etica	-
Bca di Valle Camonica	UBI	Bca Generali	-
Bca Pop Commercio e Industria	UBI	Bca Mediolanum	-
Bca Pop di Ancona	UBI	Bca Piacenza	-
Bca Pop di Bergamo	UBI	Bca Pop del Cassinate	-
Bca Regionale Europea	UBI	Bca Pop del Frusinate	-
Bco di Brescia	UBI	Bca Pop del Lazio	-
Bco San Giorgio	UBI	Bca Pop delle provincie Molisane	-
Bca Pop dell'Emilia Romagna (BPER)	BPER	Bca Pop di Cortona	-
Bca della Campania	BPER	Bca Pop di Fondi	-
Bca Pop del Mezzogiorno	BPER	Bca Pop di Lajatico	-
Bca Pop di Aprilia	BPER	Bca Pop di Puglia e Basilicata	-
Bca Pop di Lanciano e Sulmona	BPER	Bca Pop di Ragusa	-
Bca Pop di Ravenna	BPER	Bca Pop Pugliese	-
Bco di Salerno	BPER	Bca Pop Valconica	-
Bco di Sardegna	BPER	Bca Pop Vesuviana	-
Bco di Sassari	BPER	Bca Reale	-
CR della provincia dell'Aquila (Carispaq)	BPER	Bca Valsabbina	-
CR di Saluzzo	BPER	Bco 3 Venezie	-
BNP Paribas	BNP Paribas	Bco Passadore	-
Credit Agricole	Credit Agricole	Bco Sanfelice	-
Deutsche Bank	Deutsche Bank	C rurale Bolzano Raiffeisen	-
Bco Popolare	Bco Pop./BPM ('16)	CR di Bolzano Sparkasse	-
Bca Bipielle	Bco Pop./BPM ('16)	CR di Cento	-
Bca Popolare del Trentino	Bco Pop./BPM ('16)	CR di Cividale	-
Bca Pop di Verona e Novara	Bco Pop./BPM ('16)	CR di Fermo	-
Bca Pop Italiana	Bco Pop./BPM ('16)	CR di Fossano	-
CR di Imola	Bco Pop./BPM ('16)	CR di Savigliano	-
CR di Lucca Pisa e Livorno	Bco Pop./BPM ('16)	CR di Volterra	-
CR di Pescara e di Loreto (Caripe)	Bco Pop./BPM ('16)	Hypo Alpe Adria	-
Credito Bergamasco	Bco Pop./BPM ('16)	IFIS	-
CR di Genova (CARIGE)	CARIGE	ING bank	-
Bca Monte di Lucca	CARIGE	Mediobanca	-
CR di Carrara	CARIGE	Poste Italiane	-

Notes: other banks in the sample by belonging group.

Table A25: Top 50 destination countries included in the analysis

Rank	Country	Rank	Country
01	Germany	26	India
02	France	27	South Korea
03	United States	28	Slovenia
04	United Kingdom	29	Portugal
05	Spain	30	Canada
06	Switzerland	31	Algeria
07	Belgium	32	Tunisia
08	China	33	Egypt
09	Poland	34	Croatia
10	Turkey	35	Denmark
11	Netherlands	36	Slovakia
12	Austria	37	Libya
13	Russia	38	Israel
14	Romania	39	Singapore
15	Japan	40	South Africa
16	Czech Republic	41	Finland
17	Sweden	42	Morocco
18	Greece	43	Bulgaria
19	Brasil	44	Norway
20	Hungary	45	Islamic Republic of Iran
21	Australia	46	Ukraine
22	United Arab Emirates	47	Malta
23	Saudi Arabia	48	Lebanon
24	Mexico	49	Ireland
25	Hong Kong	50	Thailand

Notes: top 50 destination markets. Countries are ranked according to the cumulated exported value of our firms between 2007 and 2019.