National versus Local Banking Development. Who is the Winner? A European Study of Moderation Effect.

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Abstract

This article contributes to the financial literature by investigating the role of local banking development for SME financial policies in a cross-country European context, studying whether the financial policies of European SMEs are mainly driven from local or national banking development. Using a unique wide sample from 6 European countries, I find that higher levels of local banking development increase the amount of debt, cash holdings and trade credit used by SMEs. The results, supported by several robustness tests, suggest that both the local and the national banking institutions have a key role on SME financial decisions. However, the development of the banking markets at the national level shapes the influence of local banks on SME financial behaviour. Consequently, the European Commission and the Governments of the European Union should foremost improve the national banking institutions in order to reduce the financial constraints of SMEs and spur their economic growth.

1. Introduction

The role of the financial institutions on firm policies is one of the most important topics in corporate finance. Noteworthy authors found that the development of the financial system[1] at the national level has a crucial impact on corporate growth processes (Demirguc-Kunt and Maksimovic, 1998; Levine, 2002; Allen and Gale, 2000; Rajan and Zingales, 2001). These authoritative works generated much academic interest in this field, attracting the attention of the researchers all over the world. This resulted in a rapid increase of papers that investigated how financial institutions influence firm value in several respects. In this context, an important aspect studied by the extant literature is the role of local banking development on corporate growth (Guiso et al., 2004; Kendall, 2012). The pioneer paper in this field is the worthwhile work of Guiso et al. (2004), which has been enormously influential and set the direction for the subsequent researches. Thanks to this contribution, it turned out that despite contemporary globalisation local banking development significantly matters for firm growth. Moreover, the authors interestingly observed that the development of local banking markets matters only for Small and Medium-sized Enterprises (SMEs), which face more asymmetric information problems in debt contract negotiations (Berger and Udell 1998). Indeed, SMEs information opacity makes that such firms strongly rely on the development of the local banking system, which can alleviate their financial constraint problems (Pollard, 2003; Beck et al., 2005; Alessandrini et al., 2009). This is because the proximity between the SME and the outside lenders mitigates asymmetric information difficulties, as evidenced by Petersen and Rajan (2002). This is remarkable, since the access to finance is one of the most pressing problems after the financial crisis, as evidenced by the European Central Bank[2], and is particularly essential in the recent context of coronavirus (COVID-19) crisis. Therefore, local banking development might reduce the obstacles to the funding of SMEs, which have a main role in the economic growth as they represent 99% of businesses in the European Union[3]. Consequently, given the importance of SMEs and starting from the aforementioned contributions that have gone down in the financial literature history, a flourishing stream of research focused on the relationship between local banking development and corporate financial decisions of SMEs. With this regard, some works studied how well-functioning financial markets influence the use of debt (Palacín-Sánchez and Di Pietro, 2016; La Rocca et al., 2010; González and González, 2008; Utrero-González, 2007) or trade credit (Deloof and La Rocca, 2015). These articles highlight that the development of local banking institutions enhances the use of both debt and trade credit. However, the latter and all the other works inspired by the paper of Guiso et al. (2004), investigated the effects of local banking development in a single country setting of analysis, which rises the issue of generalizability of results.

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[1] Financial system is intended as the set of instruments, institutions and mechanisms that ensure the transfer of financial resources from surplus to deficit subjects (financial resources allocation function).

[2] European Central Bank, Economic Bulletin, Issue 4/2020, article "Access to finance for small and medium-sized enterprises since the financial crisis: evidence from survey data" Prepared by Katarzyna Bańkowska, Annalisa Ferrando and Juan Angel Garcia. Available at https://www.ecb.europa.eu/pub/economic-bulletin/articles/2020/html/ecb.ebart202004_02~80dcc6a564.en.html#toc1

[3] https://ec.europa.eu/growth/smes/sme-definition_en

In this paper, I provide a contribution to this body of literature, studying the effect of local banking development on corporate financial policies using a unique large dataset composed of SMEs from 6 different European countries. Differently from previous studies, I carry out a cross-country analysis to find out whether local banking development influences debt, cash holdings and trade credit decisions of SMEs.

In addition to that, my work provides another important novelty that consists in studying for the first time whether SMEs rely more on the banking development at the national or at the local level. Despite the extant literature suggests that both local and national banking systems are important, no study has yet investigated which of the two systems better drives SME financial policies. This interesting aspect is particularly relevant as the different influence of one or the other banking system has crucial implications for both SMEs and policy-makers.

The results show that local banking development significantly and positively affects debt, cash holdings and trade credit decisions of European small businesses. SMEs set in local environments with more developed banking institutions use more external debt, keep higher levels of cash holdings and provide more trade credit to their customers. Moreover, the findings suggest that the development of national banking markets conditions the effect of local ones on SME financial decisions. It seems that when the national banking setting is more developed, the relevance of local banking institutions is lower. *Vice versa*, when the national banking sector is less developed, the importance of local banking markets is greater. The implications of this research are crucial. First, in line with the findings of previous single-country studies, it confirms at the European level that local banking development matters for value creation processes of SMEs. Consequently, the government should carefully consider the development of the banking markets in order to spur SME growth. Second, my findings give an extraordinary importance to the actions of the European Governments, which should primarily improve the national channels of funding in order to mitigate SME financial constraints problems.

The remainder of the paper is structured as follows. Section 2 describes the main literature and the research hypotheses. Section 3 explains data, methodology, and variables, while Section 4 shows the descriptive statistics and correlations. Section 5 illustrates results, further tests and robustness tests. The paper ends with conclusions and implications in Section 6.

2. Literature Review and hypotheses development

2.1 Local banking development and SMEs financial policies

There is broad consensus in the extant literature that debt, cash holdings and trade credit represent three fundamental dimensions that play a significant role in shaping firm financial policies. While the importance of debt has been formerly studied starting from noteworthy and ancient contributions (see the review of Harris and Raviv, 1991), a relatively new stream of research investigate the role of cash holdings and trade credit. Most of empirical studies consider cash holdings as a substitute of debt, suggesting that it represents two faces of the same coin (e.g. Opler et al., 1999). Although there exists a substitution effect, in some circumstances (e.g. scarce creditor protection) indebted firms keep substantial cash reserves to prevent

financial distress and maintain their financial flexibility (Guney et al., 2007). However, it is undeniable that debt financing is more difficult to obtain when asymmetric information between borrowers and lenders is relevant. As a result, cash holdings are more important for those firms that are financially constrained (Acharya et al., 2007; Faulkner and Wang, 2006). This is the case of SMEs that are typically financially constrained firms, as they face asymmetric information problems and have high lending costs (Berger and Udell 1998). In this context, a strong tool that could mitigate SME financial restrictions and prevent from bankruptcy is the development of the banking system (Demirguc-Kunt and Maksimovic, 1998; Pollard, 2003; Beck et al., 2005; Arcuri and Levratto, 2020). These works suggest that SMEs seeking external funding are particularly influenced by the quality of the banking system in which they are embedded. More in detail, SMEs in countries with well-developed banking markets are more likely to obtain external financing than SMEs in countries with lower levels of banking development.

The above-reviewed contributions interestingly highlight the relevance of credit institutions for corporate financial policies. However, they investigate the role of banking development at the country level, ignoring that also at the local level there are different degrees of banking development (Guiso et al., 2004) that could affect SME finance decisions (Pollard, 2003). Inspired by such arguments, a novel and attractive line of study has started investigating how local banking development affects firm financial behavior. In this stream of research, Alessandrini et al. (2009), based on the Italian context, reveal that the physical distance between the firm and its financiers obstacles credit provision, especially for small firms. A year later, La Rocca et al. (2010) carried out an empirical analysis using the same Italian context. In this work, the authors point out that higher levels of provincial banking development in terms of bank branch concentration increase the use of debt by SMEs. The same results are observed in Span, where exactly as in Italy the differences in the level of debt of SMEs lie in the differences in the local banking institutions (Palacín-Sánchez and Di Pietro, 2016; González and González, 2008; Utrero-González, 2007).

These findings demonstrate that more developed banking markets facilitate the acquisition of 'soft' information on small entrepreneurs (Howorth and Moro 2006), reducing information asymmetries between the bank and the SME. Consequently, SMEs that have an easier access to external funds report higher levels of indebtedness. Building upon these arguments, I hypothesize that also in a cross-country context the proximity between the SME and the banking institution could increase the access to debt financing, for which I expect a positive effect of local banking development on debt (*Hypothesis 1*):

H.1 – Local banking development has a positive effect on European SME use of debt.

Cash holdings is often a substantial part of a firm assets (Dittmar and Mahrt-Smith, 2007; Bigelli and Sánchez-Vidal, 2011) and has a key role on corporate financial decisions. Bates et al. (2009) highlight four motives that explain why firms hold cash: the agency motive, the transaction motive, the precautionary motive, and the tax motive. The importance of cash holdings stimulated scholars to examine how the institutional finance environment affects cash

policies (Holmstrom and Tirole, 1998, 2000; Pinkowitz and Williamson, 2001; Ferreira and Vilela, 2004; Ozkan and Ozkan, 2004; Khurana et al., 2006; Wu and Rui, 2016). Nevertheless, little attention has been paid to the relationship between local banking development and corporate cash holdings. The work of Han et al. (2017) provides insights in this direction, asserting that banking market concentration reduces the amount of cash held by small firms. Also Cowling et al. (2020) recently deal with this issue, studying liquidity problems in the light of regional differences in the UK. However, the scarce literature in this field is surprising, since it can be expected that local banking development will have a significant impact not only on debt provisions of SMEs, as evidenced by La Rocca et al. (2010), but also on cash holdings. However, what is the expected effect of such relationship?

The above mentioned literature does not provide *a priori* a clear direction of such effect. Indeed, on the one hand, Holmstrom and Tirole (1998, 2000), and Khurana et al. (2006) suggest that the presence of underdeveloped banking systems leads SMEs to save a buffer of cash to preserve growth opportunities and maintain their financial flexibility in the event of adverse contingencies. Hence, as evidenced by the precautionary perspective (Lins et al., 2010), firms build up cash reserves to cover their investments if negative and unexpected contingencies impede the access to the capital markets. This, in turn, implies that firms hold less cash when a close bank relationship boosts them to raise external finance, as underlined by Ferreira and Vilela (2004), Ozkan and Ozkan (2004) and Fasano and Deloof (2021).

On the other hand, some works observe a positive effect of banking development on corporate cash holdings (Pinkowitz and Williamson, 2001; Dittmar et al., 2003; Wu and Rui, 2016). Pinkowitz and Williamson (2001), focusing on Japanese companies, reveal that more powerful banks encourage firms to hold more cash. The reason for this is that bank face agency costs, for which higher levels of cash allow banks to reduce their screening and monitoring costs. In line with these findings, also Dittmar et al. (2003) support the agency view, showing that an easier access to external finance stimulates firms to increase cash holdings. Moreover, according to Wu and Rui (2016), a better access to external finance allows firm to hold more cash.

In the light of the prior controversial findings, the effect of banking development on cash holdings is *a priori* not clear and requires further investigation. The dichotomous empirical evidences of the existing literature can be explained according to which of the four above mentioned reasons for holding cash prevails over the others. With this regard, I intend to deepen and enrich this debated topic through a study that involves a complete sample of European SMEs from different countries. Although previous contributions do not provide a unique direction of the relationship between local banking development and cash holdings, I expect that a close relationship between the firm and its lenders reduces the need to hold precautionary cash. Consequently, where the financial system supports the access to external debt, I hypothesize that SMEs save lower levels of cash holdings (*Hypothesis 2*):

H.2 – Local banking development has a negative effect on European SME use of cash holdings.

Finally, trade credit represents an important dimension of corporate financial policies. The financial literature provides three main theories to explain why firms use trade credit: the

5

financial motive (Emery, 1984), the operational motive (Emery, 1987) and the commercial motive (Brennan et al., 1988). Trade credit acts as a source of funding alternative or complementary to debt (McGuinness and Hogan, 2014) and cash holdings (Wu et al., 2011). With this regard, Carbó-Valverde et al., (2012), and McGuinness and Hogan (2014) point out that the substitution effect between bank debt and trade credit makes the latter essential for financially constrained SMEs, especially during crisis periods. The authors assert that large firms, which are less sensitive to the imperfections in the local financial markets, employ trade credit to redistribute financial funds to informationally opaque SMEs. These discoveries confirm that where the access to external funding is restricted, financially stronger firms redistribute capital via trade credit to their more financially constrained customers (Fisman and Love, 2003; Love et al., 2007; Cull et al., 2009). A separate stream of research investigates the key role of the financial institutions on the relationship between cash holdings and trade credit. For instance, Wu et al., (2011) suggest that where the financial markets are more developed, trade credit is used as an alternative source of short-term financing.

Regarding the role of banking development on trade credit policies, the former work of Petersen and Rajan (1997) highlights that trade credit is particularly important for SMEs in those less developed financial contexts where the access to external finance is more difficult. In a similar vein, Demirgüç-Kunt and Maksimovic (2001) find that in countries with larger national banking systems firms use more trade credit. Within this strand of literature, Deloof and La Rocca (2015) study for the first time the relationship between banking development and corporate financial policies in a local context of analysis, i.e. Italy. The two authors highlight that the higher the development of local banking markets the higher the trade credit used by SMEs. Consequently, firms operating in more developed banking environments provide more trade credit to their customers. Their contribution corroborates the former findings suggesting that the trade credit policies are strongly influenced by the banking institutions, but they focus on a single country setting. Moving to a larger European context, the arguments of Deloof and La Rocca (2015) lead me to expect that SMEs operating where the banking institutions are strongly developed use more trade credit. Therefore, in order to provide a more comprehensive framework in this literally context, this study aims to generalize the previous empirical results by hypothesizing that in the European context (*Hypothesis 3*):

H.3 – Local banking development has a positive effect on European SME use of trade credit.

2.2 The moderating effect of national on local banking development

The above arguments that led to the development of the first three research hypotheses highlight how firms financial decisions are determined by factors that are related to the local banking environment. A parallel and antecedent core literature suggests that also the national banking development has a key role on corporate financial policies. Noteworthy contributions focus on this field of research, which is a "hot topic" in the financial studies. For instance, Mayer (1990) and Rajan and Zingales (1998, 2001) find that higher levels of financial development reduce the cost of external finance. Chittenden et al. (1996), focusing on SMEs,

point out that the access to capital markets is an important determinant of debt choices. Likewise, Demirguc-Kunt and Maksimovic (1998) argue that the development of the financial markets increases the availability of debt, especially of longer maturity. Later, Giannetti (2003) suggests that debt ratios are influenced by the degree of the financial market development, while Utrero-Gonzàlez (2007) observe that prudential banking regulation enhances the probability of firms to obtain credit resources. Therefore, all these empirical evidences underline that well-performing national banking markets facilitate the access to external credit, as the efficiency of the banking system mitigates problems of asymmetric information.

However, the former contributions investigate the role of the banking systems focusing on the national scale. In a different way, the literature reviewed in the preceding sub-paragraph 2.1 highlights that also at the local level banking development has an important effect on corporate financial policies. It is thus clear that two streams of research coexist: one studying local banking markets, while the other studying national banking markets. Nevertheless, although the access to the capital markets is a major concern for SMEs in any country, previous contributions do not shed light on a critical issue still unresolved: is there a relationship between the effects of local and national banking development on SMEs financial policies? Does the big (national banking development) moderates the small (local banking development)? In the face of the discussion in the financial research, the questions naturally arises. From one side, one could expect that the totality of the provincial banking developments builds up the degree of national banking development (bottom-up effect). Consequently, SMEs in need of financial resources would rely more on the local banking system. However, from another perspective, the whole national banking development could drive the development of the underlying local banking institutions (up-bottom effect). Thus, national banking development would be more relevant than the local one. This works aims to respond for the first time to this intriguing gap of knowledge. What is sure is that the state of development of the financial sector depends from the overlying governmental policies. Such national development is supposed to affect the local (provincial) development that is at a lower level. Indeed, despite the presence of significant differences across provinces (Utrero-González, 2007; Guiso et al., 2004), the local banking development of European provinces is still likely to be a byproduct of the performance of national banking institutions. This because provinces represent a sub-national level under the same institutional conditions (e.g. banking regulation, legislation, etcetera) and, more in general, below the same macro-environment. This suggests that the national banking development moderates the effect of local banking development on corporate financial strategies of SMEs, and not *vice versa*. Therefore, on the basis of this reasoning, I expect that

H.4 – National banking development moderates the effect of local banking development on

European SME financial policies.

3. Research design: data, methodology, and variables

3.1 Data

The study is based on a sample of non-financial SMEs from 6 European countries: Finland, France, Germany, Italy, Spain and United Kingdom. It is important to notice that the sample contains bank-based economies and also one market-based economy (i.e. UK). SMEs are selected according the European Commission definition[4] in terms of employees (fewer than 250 persons), annual turnover (lower than EUR 50 million) and/or annual balance sheet total (not exceeding EUR 43 million). My dataset is derived from several sources. Firm-specific data are collected from the Amadeus database of Orbis Bureau Van Dijk, containing balance sheets of private and public companies across Europe. Orbis has the most extensive database of financial and business information for SMEs all over the world. Moreover, using NACE codes[5] it harmonizes the financial accounts to allow for accurate comparison of firms across countries. Additionally, data concerning local banking development are collected from the banks of the single European countries[6]. The Banks provide information about the density of bank branches per province, corresponding to the NUTS3 areas in the EU classification according to the statistical office of the European Union (Eurostat dataset). I use bank branch density as measure of local banking development because, despite the proliferation on fintech that reduces asymmetric information (Cappa et al. 2020), bank debt still remains the most used source to finance fixed assets investments in Europe[7]. Moreover, the database "World Development Indicators" provided by the World Bank makes available my measure of national banking development. Finally, data regarding enforcement, domestic product (GDP) and population at the provincial level come from the national statistical institutes of the single European countries[8].

Furthermore, I imposed restrictions on the data as follows. First, I selected only firms with accounting information over the sample period and I excluded economically meaningless observations with respect to accounting information. Then, I limited the impact of the outliers, winsorizing all the control variables at the first and 99th percentiles. Lastly, observations with errors (e.g. non-positive values for total book assets) and zero sales were removed. To sum up, I build an unbalanced panel set of 285,974 firm-year observations over the period 2004-2010.

3.2 Methodology

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[4] EUR-LEX: 2003/361/EC: Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium sized enterprises, Official Journal of the European Union L124/36, 20.5.2003, p. 36–41.

[5] NACE is the European statistical classification of economic activities. NACE groups organizations according to their business activities. Statistics produced on the basis of NACE are comparable at European level.

[6] Suomen Pankki (Finland), Banque de France (France), Deutsche Bundesbank (Germany), Banca d'Italia (Italy), Banco de Espana (Spain), Bank of England (United Kingdom).

[7] European Central Bank, Economic Bulletin, Issue 4/2020, article "Access to finance for small and medium-sized enterprises since the financial crisis: evidence from survey data" Prepared by Katarzyna Bańkowska, Annalisa Ferrando and Juan Angel Garcia. Available at https://www.ecb.europa.eu/pub/economic-bulletin/articles/2020/html/ecb.ebart202004_02~80dcc6a564.en.html#toc1

[8] Statistics Finland and Courts of Appeal (Finland), INSEE (France), Federal Statistical Office Germany (Germany), ISTAT (Italy), INE and Consejo General del Poder Judicial (Spain), Office for National Statistics (United Kingdom).

Following the approach of Deloof and La Rocca (2015), I investigate my hypotheses first using the ordinary least squares based on clustered standard errors (OLS cluster) in order to account for multiple dimensions at the same time[9]. This approach is important because it allows controlling for observations that are correlated under two dimensions (country and province). Hence, regressions correct the standard errors for the possible dependence of the residuals within clusters, as they consider that the variables measuring local and national banking development vary at the provincial and at the national level, respectively. Then, I perform additional tests in search of robustness of my findings. As first robustness analysis, I employ the traditional ordinary least squares (OLS) technique using standardized coefficients, so that the variances of dependent and independent variables are equal to 1. This approach indicates which of the differently calculated variables measuring local and national banking development has a greater effect on the dependent variables that measure SME financial policies. As additional robustness exam, I perform the structural equation models (SEMs) technique using the maximum likelihood method with robust standard errors. This empirical test allows for a very accurate estimation of standardized parameters. Finally, I applied a Placebo test to make sure that the high number of observations does not lead to false statistically significant results. Table 1 synthesizes hypotheses and model.

*** Table 1 about here ***

3.3 Variables definition

This study uses three dependent variables measuring SME financial policies. First, *Debt* is a proxy for the amount of bank debt used by SMEs. Following the capital structure literature (e.g., Rajan & Zingales, 1995), the financial level of indebtedness is calculated by the ratio of long-term and short-term interest-bearing bank debt scaled by total assets. As second dependent variable, I employ *Cash Holdings* that is the ratio between cash and cash equivalents scaled by total assets (e.g., Almeida et. al. 2004; Ozkan and Ozkan 2004). For my final dependent variable, I calculate *Trade Credit* as receivables minus payables over total assets (e.g., Deloof and La Rocca, 2015). This variable shows the net investment of SME in trade credit.

As first independent variable, following the approach of Guiso et al. (2004), Benfratello et al. (2008), Alessandrini et al. (2009), La Rocca et al. (2010), and others, I measure *Local Banking Development* considering the number of national bank branches scaled to 1,000 inhabitants in the province. This variable is widely used in the previous studies as it clearly explains the dimension of the banking development at the local level. Differently, *National Banking Development* is calculated, according to the World Bank approach, as the total domestic credit[10] provided by the financial sector to the private sector by banks as a percentage of GDP. This measure represents a standard proxy of banking development in the financial literature using panel data (e.g., Clarke et al. 2006; Nikoloski 2012) and measures the extent with which households and firms easily get external credit. Table 2 synthetize the variables description.

*** Table 2 about here ***

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[9] I used the Mitchell Petersen's Stata routine to cluster standard errors by two dimensions (available athttps://www.kellogg.northwestern.edu/faculty/petersen/htm/papers/se/se_programming.htm).

[10] With the exception of credit to the central government.

I also include a number of firm-specific variables that may influence the effects studied. *ROA* is a variable broadly used in the financial literature to measure SME performance. It is calculated as earnings before interest and taxes (EBIT) scaled by total assets. I use an accounting-based measure in reliance on the fact that no information about the market value of small businesses is available. Firms that are more profitable are likely to have a proactive approach versus financial strategies. *Size* is measured as the logarithm of total assets. Larger firms typically have a bargaining power with their lenders or suppliers. *Tangibility* is the ratio of tangible fixed assets to total assets. Tangible assets may increase firms financial capacity as they are used as collateral. *Age* is calculated as year minus year of incorporation. Older firms have a long history that reduces information asymmetries and facilitates credit provision. *Different Tax Shield* is calculated as earnings before interest, taxes, depreciation and amortization minus earnings before interest and taxes (EBITDA - EBIT) scaled by total assets. This variable is particularly important to control for the different tax regimes of the European countries. *Firm Growth* is measured as sales in year (t) minus sales in year (t-1). Growing SMEs generally require more financial resources (Binks and Ennew 1997). I also control for provincial characteristics that may affect the results. *GDP Growth* is measured as the growth in real GDP at the provincial level from year (t-1) to year (t). *Enforcement* represents the time required to enforce a right and takes into account the efficiency of the law courts at the local level. Industry and year fixed effects using dummies are also included in the econometric model.

4. Descriptive statistics and correlations

Table 3 shows the descriptive statistics for the variables. It presents mean, standard deviation, minimum value, 25th, 50th (median), 75th percentiles and maximum value for all the variables.

*** Table 3 about here ***

Descriptive Statistics show that my dependent variables play a very important role in the financing of European SMEs. In particular, on average debt represents 20.2% of total assets, cash constitutes 9.7% of total assets and net trade credit investments comprise 12.7% of total asset. Moreover, the standard deviation of *Debt* (0.197), *Cash Holdings* (0.131) and *Trade Credit* (0.206) indicates a large variability of the dependent variables across the SMEs in my sample. Table 3 shows that there is substantial variation also with respect to both local and national banking development, while the values for the control variables are in line with the existing financial literature studies.

Additionally I report descriptive statistics of the variables *Debt*, *Cash Holdings* and *Trade Credit* for high and low levels of both local and national banking development based on median[11]. Results, which are shown in Table A.1 and Table A.2 in the appendix, interestingly reveal that higher levels of both local and national banking development increase the use of debt, cash holdings and trade credit. This demonstrates that different degrees of the independent variables influence the financial policies of SMEs. Furthermore, I show (in Figure A.1 in the

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[11] We also observed the differences based on the 25th and 75th percentiles, obtaining the same results.

appendix) the trend of the *Debt*, *Cash Holdings* and *Trade Credit* during the years, observing a mostly stable trend throughout the period examined.

Table 4 reports the correlation matrix of the variables.

*** Table 4 about here ***

All the correlations different from 0.00 are statistically significant at the 0.01 level. Additionally, I tested possible multicollinearity among the independent variables by using the variance inflation factors (VIFs) that estimate how much the variance in the regression coefficients is inflated due to multicollinearity. The maximum VIF in the model is 2.63 (mean of 1.40) that is far below the generally accepted cutoff of 10 (or, more prudently, 5) for regression models. Therefore, no bias was detected in the significance of the results.

5. Empirical results

5.1 Local banking development and SMEs financial strategies

Table 5 shows the results of the study with standard errors clustered at the provincial and country level. The effect of local and national banking development is reported using separate regressions for debt (columns 1, 2 and 3), cash holdings (columns 4, 5 and 6) and trade credit (columns 7, 8 and 9). The p-values are based on heteroscedastic robust standard errors.

*** Table 5 about here ***

The main results are easily summarized. It is immediately possible to notice that both local and national banking development significantly affect my 3 measures of financial policies. However, while local banking development has a positive effect on debt (column 1) and trade credit (column 7), confirming my hypotheses 1 and 3, it seems that the development of local banking markets also has a positive effect on cash holdings (column 4), which is inconsistent with hypothesis 2. I discuss now the findings obtained for each single hypothesis.

Regarding my first dimension of SME financial policies, the results support the argument that the close proximity between SME and provincial bank branches stimulates credit provision in the European countries. Therefore, the banking development of the geographical area where a SME resides increases the availability of financial resources, since bank branches can easily obtain deep information and reduce information asymmetries. Additionally, the negative coefficient of the variable *Cash Holdings* (in columns 1) and the negative coefficient of the variable *Debt* (in columns 4) confirm that European SMEs use financial borrowing as a substitute for cash. The findings corroborate those of Alessandrini et al. (2009) and La Rocca et al. (2010). However, differently from previous contributions, I find for the first time that this positive important effect exists not only in a single country, but at the European level too.

Concerning my second hypothesis, results shed new light on the controversial findings of the existing literature. In particular, my empirical evidence reveals a positive effect of local banking development on European SME cash holdings. These findings are in line with those of

11

Pinkowitz and Williamson (2001), Dittmar et al. (2003) and Wu and Rui (2016), supporting the agency view. However, they are not consistent with the findings of Holmstrom and Tirole (1998, 2000), Fasano and Deloof (2021), Khurana et al. (2006), Ferreira and Vilela (2004), and Ozkan and Ozkan (2004), supporting the precautionary perspective. Thus, the empirical evidences reveal that when local banking institutions ensure an easier access to external funds, European SMEs increase their cash holdings. As a result, in the wide European context, cash holdings policies of SMEs seem to be driven by the agency perspective more than the precautionary motive. Hence, despite more developed banking institutions should alleviate asymmetric information difficulties and favor the use of debt, which is a substitute of cash, the presence of agency costs and the need to maintain the financial flexibility induces managers of European SMEs to hold higher levels of liquidity.

Finally, results highlight that the development of the banking sector has a positive impact on the trade credit policies of European SMEs, confirming my third hypothesis. The availability of financial credit in a geographical area encourages suppliers to provide commercial credit to their customers. Hence, financially constrained SMEs indirectly benefit from the greater accessibility of 'soft' information available in more developed financial provinces. Therefore, consistent with the findings Deloof and La Rocca (2015), I suggest that the development of the banking system facilitates the provision of trade credit, resulting in larger net investments in trade credit. However, the present study, differently from those of Deloof and La Rocca (2015), focuses on a cross-country setting and provides more generalizable results.

The evidences observed in Table 5 are also demonstrated through the following Figure 1 extract from regressions. Figure 1 interestingly shows that the positive effects of well-developed banking markets on corporate financial policies of SMEs increases with higher levels of local banking development.

Figure 1 Regression results: trend of debt, cash holdings and trade credit affected by different levels of local banking development
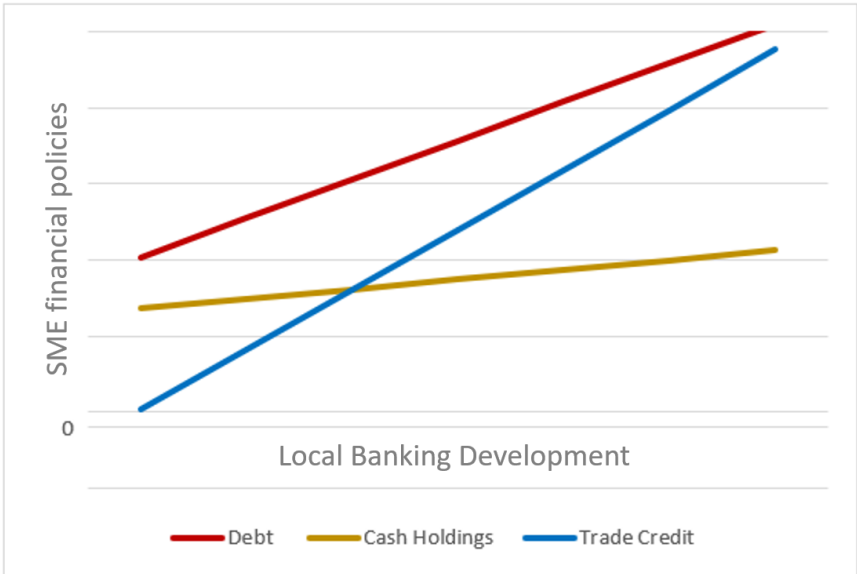
To sum up, I find that local banking development matters in the European countries even in a globalized world. The empirical results interestingly allow to generalize for the first time the noteworthy findings of Guiso et. al. (2004) and others single-country studies.

5.2 The moderating effect of national on local banking development

Turning to the second question of the paper, this paragraph investigates through a moderation analysis whether the financial policies of SMEs are more influenced by the local or the national banking development. Table 6 shows the regressions concerning the main model also including the interaction term that is my moderating variable based on the variable *Local Banking Development* multiplied by the variable *National Banking Development.* An F-test supports the hypothesis regarding the joint significance of *Local Banking Development* and its interaction term.

*** Table 6 about here ***

Table 6 estimates the marginal impact of local banking development for different levels of national banking development, in order to scrutinize whether the effect of local markets is different in magnitude according to different levels of national development. To calculate the interaction effects between two continuous variables it is indispensable to consider a graph, since the regression coefficients do not provide a correct interpretation of the marginal effect studied. Differently, a graph clearly shows the partial effect of local banking markets on SME financial policies conditional for high or low levels of national banking development. Therefore, for a better understanding of the results, the marginal effect of local banking development on debt, cash holdings and trade credit, conditioned by national banking development is graphically shown in the following Figures 2–4[12].

Figure 2 - Marginal effect of local banking development (LBD) on debt conditioned by national banking development

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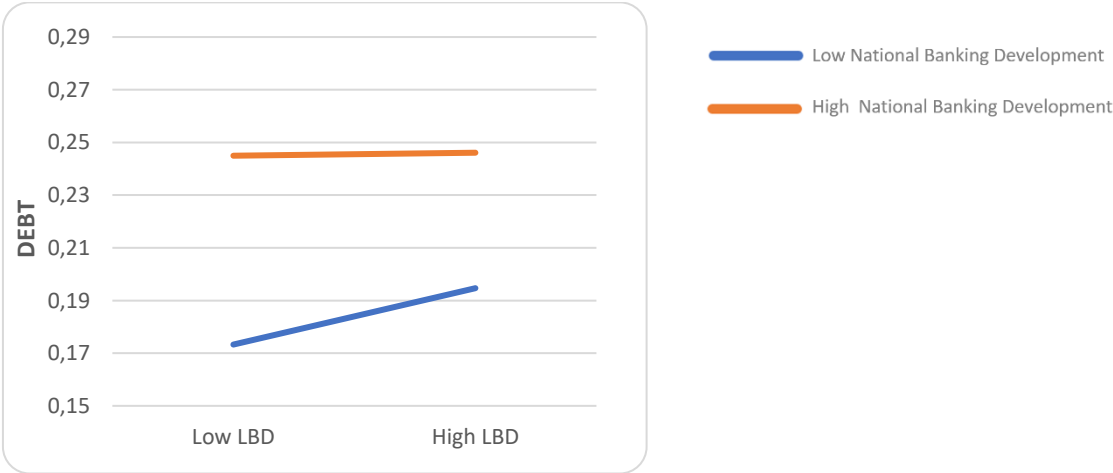
[12] Figures 2-4 are based on the Jeremy-Dawson graphs. For further information, see www.jeremydawson.co.uk/slopes.htm.

Figure 3 - Marginal effect of local banking development (LBD) on cash holding conditioned by national banking development
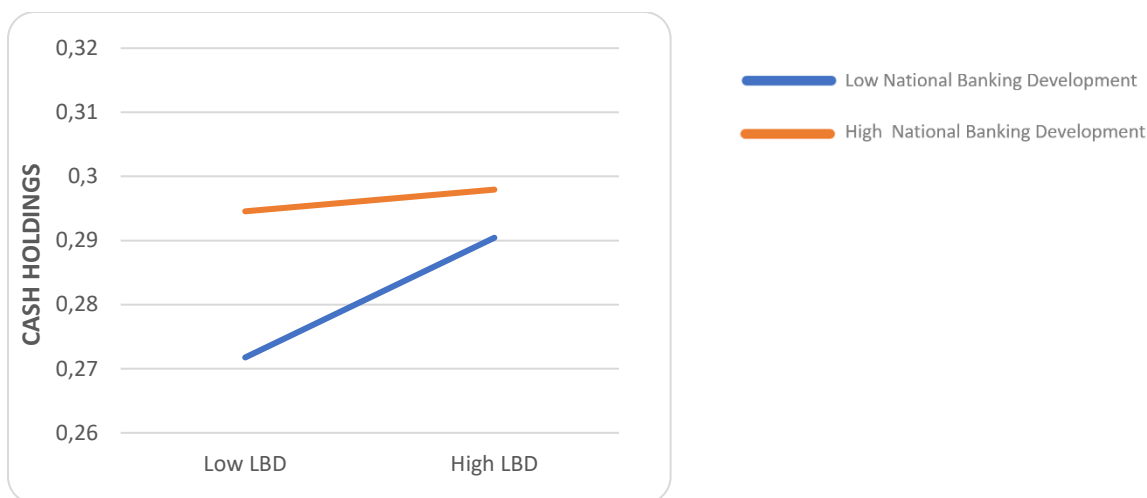

Figure 4 - Marginal effect of local banking development (LBD) on trade credit conditioned by national banking development
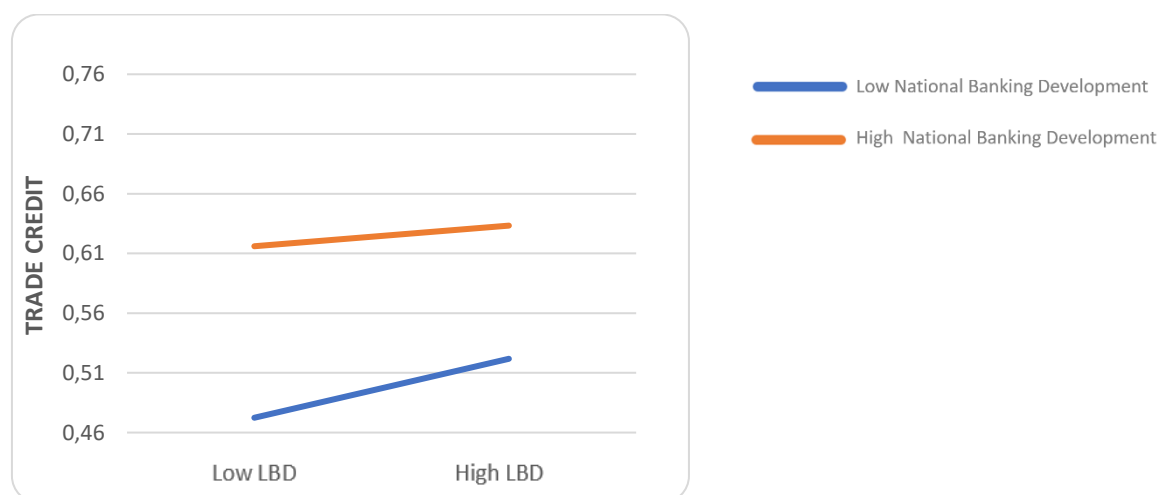
Table 6 and Figures 2-4 evidence that the role of local banking institutions on SME financial decisions is different in magnitude according to different levels of national banking development. In particular, the interaction term, which I measure at the 95% confidence interval in regressions, is negative and statistically significant, indicating that the positive effect of local banking development on SME financial policies tends to decrease as the level of national banking development rises. Therefore, national banking markets moderates the effect of local ones on the financial decisions of European SMEs and my fourth hypothesis is confirmed. These findings answer an important and unresolved question: SME financial policies are more

conditioned by local or national banking development? This article demonstrates that the national banking development reduces the effect of local banking institutions on SME debt, cash and trade credit choices. It seems that when national banking systems are more developed, the role of local markets is lower. Thus, well-functioning credit markets at the national scale reduce the relevance of local contexts. This result was observable also in Table 5 where in columns 3, 6 and 9 the standardized coefficients of the variable *National Banking Development* are higher than the standardized coefficients of the variable *Local Banking Development*. Therefore, the national banking markets drive European SME financial behaviour more than the local ones. It seems that the regulation of the banking institutions at the country level, together with the growth of globalization and integration of financial markets, make the national banking markets more influential than the local ones. However, this does not imply that the local context does not matter anymore, but it indicates that the financial policies of European SMEs are more favoured by the development of the national banking sector. Consequently, local banking markets remain still relevant, but to a lesser extent with respect to the national ones. Thus, answering the question which arises in the title of the present article, it is possible to conclude that the national banking markets win over the local ones.

5.3 Further and robustness tests

Further test

Following previous studies on corporate debt policies that drawn the attention to debt-maturity structure (Fan et al., 2012) also for SMEs (La Rocca et al., 2010; Hernandez-Canovas and Koeter-Kant, 2008), I run a further test distinguishing between long and short term bank debt. The following Table 7 reports the corresponding output.

*** Table 7 about here ***

Table 7 shows a very interesting result. Both local and national banking development seem to have no relevance on short-term bank debt ratios, while they significantly and positively impact on the use of long-term bank debt by SMEs. This is relevant, but not surprising. Indeed, as evidenced by the articles of Diamond (1991) and Barclay and Smith (1995), which represent two fundamental contributions in the financial literature, banks react to the underdevelopment of the financial markets by reducing the maturity of their loans. Shorter loans allow banks to frequently monitor SME and interrupt the bank-lending relationship if the firm becomes poor creditor. Differently, a longer loan maturity could cause greater losses in the event of insolvency. Therefore, where the banking systems (both local and national) are more developed and asymmetric information is limited, banks tend to increase debt-maturity. Consequently, the development of local and national banking sectors is a matter of importance only for long-term bank debt choices.

Robustness test: ordinary least square

As first robustness I run in Table 8 the traditional ordinary least squares (OLS) method using standardized coefficients that allows to compare the magnitude of the effect of each single independent variable.

*** Table 8 about here ***

Table 8 confirms the findings of the main model. In particular, columns 1, 4 and 7 evidence how the development of local banking institutions positively and significantly affect corporate financing decisions. Moreover, columns 3, 6 and 9 indicate that the independent variable measuring national banking development has greater standardized coefficients with respect to the independent variable measuring local banking development. It demonstrates once again that European SMEs benefit most from the development of national banking markets.

Robustness test: structural equation modelling

As additional robustness analysis, I performed in Table 9 the structural equation models (SEMs) technique using the maximum likelihood method with robust standard errors. This empirical test allows for a very accurate estimation of standardized parameters. Considering the dimension of my sample, it is possible to assume that the variables have a joint multivariate normal distribution.

*** Table 8 about here ***

Table 9 reports the SEM results with completely standardized parameters. Moreover, I tested the goodness of fit statistics using the Standardized Root Mean Square Residual (SRMR) index, whose average value is 0.007 for regression in column 1-9. Thus, it is possible to conclude that the model fits well, since the threshold value generally accepted is 0.09. Structural equation modelling corroborates the findings obtained through the cluster and OLS techniques. It confirms a positive effect of banking development on SME financial policies and shows that such positive effects is more influenced by the national rather than the local banking markets.

Robustness test: placebo test

As final robustness test, I run the placebo test. My sample has a very high number of observations which could affect the statistical significance of the findings (Athey and Imbens 2017). To make sure that this number does not lead to false statistically significant results I applied a placebo test, in which 200 times (for each dependent variable) I randomly assigned a branch density and a domestic credit provided by the financial sector by banks to each firm of the sample, and each time re-estimated the regression with the variables Local Banking Development and National Banking Development re-shuffled. I expect that in this setting local banking development and national banking development do not significantly influence SMEs' use of deb, cash holdings and trade credit. When I run the placebo test 200 times for each dependent variable, I find that the estimated coefficients of Local Banking Development and

National Banking Development are not statistically significant at the 10% level in more than 90% of the cases[13]. Hence, the results of placebo tests confirm the robustness of my findings, which are thus not influenced by chance.

6. Conclusion and implications

Starting from the milestone contribution of Guiso et al. (2004), the financial literature studied the relevance of local banking development for firm growth, with a particular attention on SMEs. However, previous studies, though extremely important, focus on single-country settings of analysis. In a more innovative manner, the present article investigates whether local banking markets matters in a wide European context. The empirical results reveal that the development of local banking institutions significantly and positively influences the financial policies of European SMEs. More in detail, I find that the geographic proximity of bank branches has a key role on the financing of SMEs, as it reduces information asymmetries and facilitates credit provision. Moreover, the presence of well-developed banking markets also increases the use of cash holdings by SMEs. In the European context, there appears to be relevant agency costs that are linked with more cash holdings held by SMEs Additionally, my evidences show that also local banking conditions affect trade credit policies too. In particular, higher levels of banking development in a province are associated with more trade credit provided by the suppliers. Therefore, the findings, which are robust to a number of robustness tests, interestingly reveal that local banking development plays an important role in SME finance policies in the large European scenery.

Assuming that local banking development is relevant also in a cross-country environment, this research addresses another important question still unresolved: European SMEs benefit most from local or national banking development? The findings suggest that notwithstanding the relevance of the local contexts, as indicated by the extant literature, the national dimension of the banking system seems to better drive the financial policies of European SMEs. In particular, my moderation study reveals that the relative importance of local banking development decreases with higher levels of national banking development. Consequently, in those contexts where the national banking institutions are more developed, local credit markets have a poorer influence on SME financial policies. Hence, despite local bank branches are still important, SMEs rely more on the development of the banking macro-system of a country.

My paper is at the crossroad of two lines of literature that parallelly study local and national banking development. At the same time it goes one step further in these strands of research, as it studies for the first time SME financial policies considering both local and national banking institutions in a wide European setting. The results highlight that the macro (national) banking environment moderates the role of the micro (provincial) context, suggesting to future researchers in this field to take into account the macro-level contingencies in which SMEs are embedded. Thus, the key findings of this article concern the need to jointly consider national and local banking development as crucial determinants of financial decisions of European SMEs. Moreover, the work has also implications for policy-makers. Indeed, given that the financial decisions of European SMEs are more influenced by the national rather than the local banking development, the Governments should primarily improve the national banking

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[13] The results of the 200x3 Placebo test regressions are available upon request to the author.

institutions. Governments should recognize the importance of the national banking system that drives the local baking sector. New regulations aimed at developing and making more attractive the national banking markets are important to ensure SMEs a priority channel to external resources without external frictions. This is especially important during this particular coronavirus (COVID-19) period, where European SMEs strongly need financial resources to recover from the crisis. According to my findings, the banking institutions of a country should act as a fellow traveller that accompanies SMEs towards value creation processes, rather than an obstacle to overcome. With this regard, I recommend policy makers to enhance the effectiveness of the banking systems, especially the national ones, in order to meet the credit need of the European small businesses. Decision-makers could improve European SME access to outside sources of financing making incentive policies and specialized credit patterns for SMEs. Moreover, the presence of strong national banking institutions should be encouraged. The European Commission and the Governments of the single counties of the European Union should move in this direction, with the final aim to reduce asymmetric information problems of SMEs and, more in general, all the financial constraints that impede the corporate growth. Moreover, Governments should upgrade the role of the banking institutions, making them not only credit providers, but also financial advisers that can provide support in understanding the appropriate financial strategies. This approach could increase not only the quantity, but also the quality of the external funds available for SMEs. It is particularly important, as the managers of SMEs are often in need of more financial skills (Van Auken, 2005) that could affect the quality of the financial decisions.

This without ignoring the relevance of the local banking sector, which is still important, despite the internalization of financial markets, and can significantly support SME business. Certainly, this work does not diminish the importance of the local contexts. Indeed, the growth of the national banking industry should be balanced by the contemporary growth of the provincial banking markets. The empirical evidences show that SMEs remain dependent from the level of local banking development, but they recognize that the big (national) context has a main role over the small (local) in determining the financial decisions of European small businesses. In conclusion, in the current context where a lot of attention is paid to the financial resources available for SMEs in severe difficulty caused by the coronavirus crisis, it is of importance that European policy-makers formulate policies that promote the development of national banking institutions. Indeed, "the state of development of the financial markets does indeed facilitate growth, and is not simply correlated with it" (Rajan and Zingales, 2001). Therefore, it should be strongly encouraged as it could positively affects the growth of the millions of European SMEs and, in turn, of the entire European economy.

Table 1 - Hypotheses and model.

Hypot.	Model
H.1	*Debt = f* (local banking development, control variables), cluster(country) cluster(province)
H.2	*Cash Holdings = f* (local banking development, control variables), cluster(country) cluster(province)
H.3	*Trade Credit = f* (local banking development, control variables), cluster(country) cluster(province)
H.4	*Debt = f* (local banking development, national banking development, control variables), cluster(country) cluster(province) *Cash Holdings = f* (local banking development, national banking development, control variables), cluster(country) cluster(province) *Trade Credit = f* (local banking development, national banking development, control variables), cluster(country) cluster(province)

Table 2 – Variables descriptions.

Dependent variable	Calculation
Debt	(Long-Term Bank Debt + Short-Term Bank Debt) / Total Assets
Cash Holdings	Cash & cash equivalents / total assets
Trade Credit	(Receivables – payables) / total assets
Explanatory variables	
Local Banking Development	(Total Bank Branches at provincial level $\times$ 1000) / Population at provincial level
National Banking Development	Domestic credit provided by financial sector by banks (% of GDP)
ROA	EBIT / Total Assets
Size	ln(total assets)
Tangibility	Tangible Assets / Total Assets
Age	year - year of incorporation
Different Tax Shield	(EBITDA - EBIT) / total assets
Firm Growth	$(\text{Sales}_t - \text{Sales}_{t-1}) / \text{Sales}_{t-1}$
GDP Growth	$[(\text{real GDP at provincial level})_t - (\text{real GDP at provincial level})_{t-1}] / (\text{real GDP at provincial level})_{t-1}$
Enforcement	Mean time required to enforce a right at the provincial level

Table 3 - Descriptive Statistics for the sample.

	Mean	Sd	min	p25	Median	p75	max
Debt	0.202	0.197	0.000	0.021	0.150	0.339	0.847
Cash Holdings	0.097	0.131	0.000	0.009	0.043	0.133	0.991
Trade Credit	0.127	0.206	-2.689	0.002	0.107	0.233	0.999
Local Bank Dev	0.736	0.260	0.172	0.568	0.708	0.880	2.253
National Bank Dev	1.065	0.376	0.637	0.815	0.885	1.360	1.921
ROA	0.060	0.101	-0.317	0.017	0.048	0.098	0.434
Size	8.697	0.903	1.946	8.034	8.706	9.367	10.669
Tangibility	0.226	0.198	0.000	0.067	0.172	0.335	0.996
Age	2.917	0.762	0.000	2.485	3.045	3.434	5.347
Different Tax Shield	0.039	0.027	0.002	0.018	0.033	0.054	0.104
Firm Growth	-0.056	0.319	-17.054	-0.146	-0.032	0.077	0.947
GDP Growth	0.240	0.019	0.136	0.233	0.240	0.255	0.271
Enforcement	0.082	0.041	0.023	0.040	0.052	0.121	0.139

Table 4 – Correlation matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	VIF
(1)	Debt	1.00													1.20
(2)	Cash Holdings	-0.33	1.00												1.21
(3)	Trade Credit	-0.03	-0.06	1.00											1.20
(4)	Local Bank Dev	0.06	0.03	0.21	1.00										1.73
(5)	National Bank Dev	0.06	0.07	0.26	0.62	1.00									2.63
(6)	ROA	-0.23	0.27	0.09	-0.00	-0.01	1.00								1.14
(7)	Size	0.20	-0.18	-0.15	-0.01	-0.04	-0.10	1.00							1.17
(8)	Tangibility	0.24	-0.21	-0.22	0.01	0.05	-0.11	0.12	1.00						1.44
(9)	Age	-0.05	0.00	-0.03	-0.03	-0.04	-0.04	0.16	0.07	1.00					1.06
(10)	Diff. Tax Shield	0.05	-0.08	-0.12	-0.03	-0.03	-0.07	-0.11	0.44	-0.04	1.00				1.31
(11)	Firm Growth	0.01	-0.01	0.00	0.01	0.03	-0.17	-0.07	0.05	0.12	0.03	1.00			1.06
(12)	GDP Growth	-0.12	0.08	0.09	0.19	0.18	-0.02	-0.06	-0.17	0.03	-0.10	0.01	1.00		1.09
(13)	Enforcement	0.12	-0.19	-0.12	-0.22	-0.58	-0.08	0.19	-0.01	0.02	-0.06	0.00	-0.05	1.00	1.73

Notes: Industry dummies are not reported. All the correlations different from 0.00 are statistically significant at the 0.01 level.

Table 5 - Main model: results concerning local banking development and SME financial policies

Estimation technique:	(1) OLS Cluster	(2) OLS Cluster	(3) OLS Cluster	(4) OLS Cluster	(5) OLS Cluster	(6) OLS Cluster	(7) OLS Cluster	(8) OLS Cluster	(9) OLS Cluster
Dependent Variable	Debt	Debt	Debt	Cash Holdings	Cash Holdings	Cash Holdings	Trade Credit	Trade Credit	Trade Credit
Local Bank Dev	0.062*** (0.017)		0.013 (0.019)	0.025*** (0.005)		0.015*** (0.002)	0.158** (0.065)		0.051*** (0.017)
Nat Bank Dev		0.085*** (0.025)	0.078** (0.033)		0.025*** (0.003)	0.017*** (0.002)		0.191*** (0.068)	0.164** (0.068)
Debt				-0.144*** (0.012)	-0.145*** (0.011)	-0.145*** (0.011)	0.028 (0.061)	0.009 (0.067)	0.008 (0.067)
Cash Holdings	-0.334*** (0.091)	-0.335*** (0.091)	-0.336*** (0.091)				-0.270*** (0.073)	-0.268*** (0.071)	-0.270*** (0.071)
Trade Credit	0.025 (0.056)	0.008 (0.062)	0.008 (0.061)	-0.103*** (0.015)	-0.106*** (0.015)	-0.107*** (0.015)			
ROA	-0.281*** (0.059)	-0.273*** (0.060)	-0.274*** (0.061)	0.258*** (0.030)	0.259*** (0.031)	0.259*** (0.031)	0.217*** (0.077)	0.221*** (0.077)	0.219*** (0.077)
Size	0.031*** (0.007)	0.029*** (0.007)	0.029*** (0.007)	-0.011* (0.006)	-0.011* (0.006)	-0.011* (0.006)	-0.034 (0.027)	-0.036 (0.028)	-0.036 (0.027)
Tangibility	0.167*** (0.029)	0.154*** (0.024)	0.154*** (0.023)	-0.108*** (0.014)	-0.111*** (0.014)	-0.110*** (0.014)	-0.175*** (0.033)	-0.194*** (0.029)	-0.193*** (0.028)
Age	-0.021*** (0.005)	-0.020*** (0.005)	-0.020*** (0.005)	0.006*** (0.002)	0.007*** (0.002)	0.006*** (0.002)	0.006 (0.010)	0.008 (0.010)	0.008 (0.010)
Diff. Tax Shield	-0.267** (0.130)	-0.235* (0.138)	-0.238* (0.142)	-0.199*** (0.044)	-0.189*** (0.044)	-0.193*** (0.044)	-0.409** (0.180)	-0.327** (0.154)	-0.339** (0.156)
Firm Growth	0.000 (0.006)	-0.001 (0.007)	-0.001 (0.007)	0.011*** (0.003)	0.011*** (0.004)	0.011*** (0.003)	0.011 (0.014)	0.008 (0.016)	0.008 (0.015)
GDP Growth	-0.954*** (0.262)	-1.076*** (0.157)	-1.087*** (0.166)	0.024 (0.099)	0.006 (0.084)	-0.007 (0.075)	0.151 (0.471)	-0.106 (0.250)	-0.151 (0.260)
Enforcement	0.302 (0.267)	0.657*** (0.174)	0.636*** (0.181)	-0.404*** (0.069)	-0.307*** (0.055)	-0.330*** (0.053)	-0.440 (0.374)	0.361 (0.242)	0.282 (0.232)
Adj. R2	0.220	0.227	0.227	0.240	0.240	0.240	0.203	0.229	0.231
Observations	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974

Notes: Industry and year fixed effects are the controls. The *p*-values in parentheses are based on standard errors clustered by countries and provinces. The superscripts denote significance as follows: *p< 0.10, **p< 0.05, ***p< 0.01. Regressions report standardized beta coefficients and standard errors in brackets.

Table 6 - results concerning the moderating effect of national on local banking development

Estimation technique:	(1) OLS Cluster	(2) OLS Cluster	(3) OLS Cluster
Dependent Variable	Debt	Cash Holdings	Trade Credit
Local Bank Dev	0.077** (0.032)	0.063** (0.031)	0.152 (0.117)
Nat Bank Dev	0.120*** (0.022)	0.049** (0.022)	0.230** (0.113)
Local * National Bank Dev (interaction)	-0.052** (0.020)	-0.039 (0.024)	-0.082 (0.077)
Debt		-0.146*** (0.011)	0.007 (0.067)
Cash Holdings	-0.337*** (0.091)		-0.271*** (0.071)
Trade Credit	0.007 (0.062)	-0.107*** (0.016)	
Control Variables	Yes	Yes	Yes
Adj. R2	0.228	0.241	0.232
Observations	285.974	285.974	285.974

Notes: Industry and year fixed effects are the controls. The *p*-values in parentheses are based on standard errors clustered by countries and provinces. The superscripts denote significance as follows: *$p< 0.10$, **$p< 0.05$, ***$p< 0.01$. Regressions report standardized beta coefficients and standard errors in brackets. Full Table is available upon request to the authors.

Table 7 – Further test: results concerning local banking development and SME financial policies distinguishing between long and short term bank debt

Estimation technique:	(1) OLS Cluster	(2) OLS Cluster	(3) OLS Cluster	(4) OLS Cluster	(5) OLS Cluster	(6) OLS Cluster
Dependent Variable	Short Debt	Short Debt	Short Debt	Long Debt	Long Debt	Long Debt
Local Bank Dev	0.009 (0.015)		-0.013 (0.020)	0.053*** (0.015)		0.025*** (0.003)
Nat Bank Dev		0.028 (0.033)	0.035 (0.039)		0.059*** (0.013)	0.045*** (0.011)
Cash Holdings	-0.237*** (0.078)	-0.238*** (0.077)	-0.238*** (0.078)	-0.097*** (0.036)	-0.097*** (0.036)	-0.098*** (0.036)
Trade Credit	0.026 (0.042)	0.017 (0.047)	0.018 (0.046)	-0.002 (0.017)	-0.010 (0.019)	-0.011 (0.019)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.176	0.179	0.179	0.210	0.214	0.215
Observations	285.974	285.974	285.974	285.974	285.974	285.974

Notes: Industry and year fixed effects are the controls. The *p*-values in parentheses are based on standard errors clustered by countries and provinces. The superscripts denote significance as follows: *$p< 0.10$, **$p< 0.05$, ***$p< 0.01$. Regressions report standardized beta coefficients and standard errors in brackets. Full Table is available upon request to the authors.

Table 8 – Robustness test: results concerning local banking development and SME financial policies

Estimation technique:	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) OLS	(9) OLS
Dependent Variable	Debt	Debt	Debt	Cash Holdings	Cash Holdings	Cash Holdings	Trade Credit	Trade Credit	Trade Credit
Local Bank Dev	0.082*** (0.001)		0.017*** (0.002)	0.051*** (0.001)		0.030*** (0.001)	0.198*** (0.002)		0.064*** (0.002)
Nat Bank. Dev		0.162*** (0.001)	0.149*** (0.002)		0.072*** (0.001)	0.049*** (0.001)		0.348*** (0.001)	0.298*** (0.002)
Debt				-0.216*** (0.001)	-0.219*** (0.001)	-0.219*** (0.001)	0.026*** (0.002)	0.009*** (0.002)	0.008*** (0.002)
Cash Holdings	-0.222*** (0.003)	-0.222*** (0.003)	-0.223*** (0.003)				-0.171*** (0.003)	-0.170*** (0.003)	-0.171*** (0.003)
Trade Credit	0.026*** (0.002)	0.009*** (0.002)	0.008*** (0.002)	-0.163*** (0.001)	-0.167*** (0.001)	-0.169*** (0.001)			
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.220	0.227	0.227	0.240	0.240	0.240	0.203	0.229	0.231
Observations	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974

Notes: Industry and year fixed effects are the controls. The p-values in parentheses are based on standard errors clustered by countries and provinces. The superscripts denote significance as follows: *$p< 0.10$, **$p< 0.05$, ***$p< 0.01$. Regressions report standardized beta coefficients and standard errors in brackets. Full Table is available upon request to the authors.

Table 9 – Robustness test: results concerning local banking development and SME financial policies

Estimation technique:	(1) SEM	(2) SEM	(3) SEM	(4) SEM	(5) SEM	(6) SEM	(7) SEM	(8) SEM	(9) SEM
Dependent Variable	Debt	Debt	Debt	Cash Holdings	Cash Holdings	Cash Holdings	Trade Credit	Trade Credit	Trade Credit
Local Bank Dev	0.092*** (0.001)		0.018*** (0.002)	0.048*** (0.001)		0.023*** (0.001)	0.198*** (0.001)		0.067*** (0.002)
Nat. Bank Dev		0.170*** (0.001)	0.157*** (0.001)		0.070*** (0.001)	0.054*** (0.001)		0.316*** (0.001)	0.267*** (0.002)
Debt				-0.215*** (0.001)	-0.219*** (0.001)	-0.219*** (0.001)	0.019*** (0.002)	-0.001 (0.002)	-0.002 (0.002)
Cash Holdings	-0.218*** (0.003)	-0.220*** (0.003)	-0.220*** (0.003)				-0.167*** (0.003)	-0.168*** (0.003)	-0.169*** (0.003)
Trade Credit	0.017*** (0.002)	-0.001 (0.002)	-0.002 (0.002)	-0.154*** (0.001)	-0.159*** (0.001)	-0.160*** (0.001)			
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.214	0.235	0.238	0.211	0.211	0.212	0.198	0.219	0.231
Observations	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974	285.974

Notes: Industry and year fixed effects are the controls. The p-values in parentheses are based on standard errors clustered by countries and provinces. The superscripts denote significance as follows: *$p< 0.10$, **$p< 0.05$, ***$p< 0.01$. Regressions report standardized beta coefficients and standard errors in brackets. Full Table is available upon request to the authors.

Appendix

Table A.1 – Descriptive Statistics of debt, cash holdings and trade credit for high and low levels of local banking development based on median

	Mean	Sd	min	p25	Median	p75	max
High Local Banking Development							
Debt	0.216	0.204	0.000	0.025	0.168	0.359	0.847
Cash Holdings	0.098	0.132	0.000	0.009	0.043	0.133	0.989
Trade Credit	0.164	0.218	-2.451	0.024	0.133	0.276	0.999
Low Local Banking Development							
Debt	0.188	0.188	0.000	0.017	0.133	0.317	0.847
Cash Holdings	0.095	0.129	0.000	0.008	0.042	0.133	0.991
Trade Credit	0.090	0.186	-2.689	-0.010	0.083	0.194	0.969

Table A.2 – Mean and median of debt, cash holdings and trade credit for high and low levels of national banking development based on median

	Mean	Sd	min	p25	Median	p75	max
High National Banking Development							
Debt	0.204	0.203	0.000	0.020	0.146	0.337	0.847
Cash Holdings	0.106	0.139	0.000	0.011	0.050	0.148	0.991
Trade Credit	0.157	0.219	-2.451	0.021	0.127	0.268	0.999
Low National Banking Development							
Debt	0.198	0.192	0.000	0.020	0.149	0.335	0.847
Cash Holdings	0.093	0.128	0.000	0.007	0.040	0.128	0.991
Trade Credit	0.097	0.189	-2.689	-0.005	0.088	0.199	0.991

Figure A.1 – Trend of Debt, Cash Holdings and Trade Credit during the years
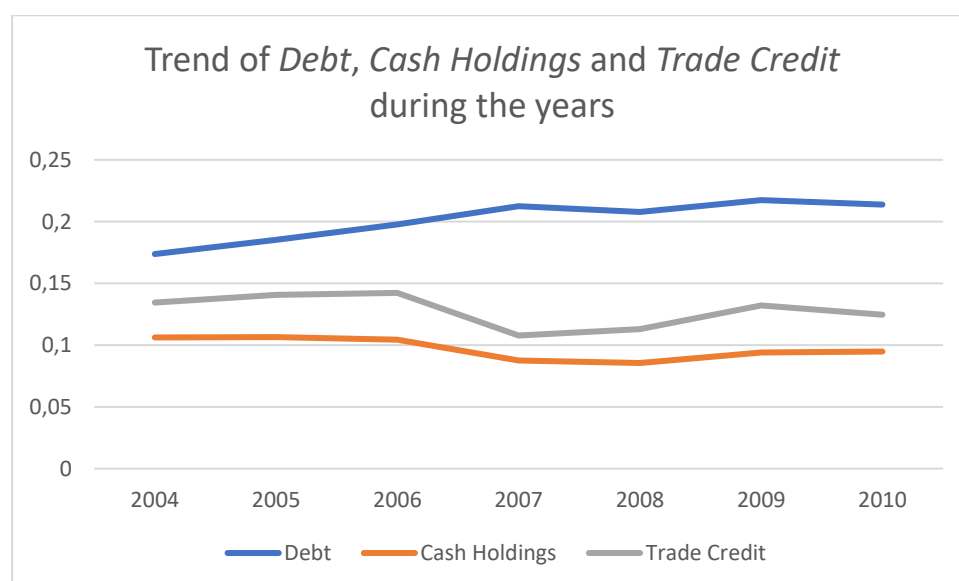
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