Subsidiary financing choices: The roles of institutional distances from home countries

Subsidiary Financing Choices: The Roles of Institutional Distances from Home Countries

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Abstract

We examine how the institutional distance between home and host countries is associated with the characteristics of foreign subsidiary debt, including leverage, debt maturity choices, and cash holdings. We utilize the multidimensionality of institutional distances to examine ten different distance dimensions. We use a sample of 3,139 foreign subsidiaries operating in France and being headquartered in 44 different countries. We find that while subsidiaries' financing choices are partially explained by standard determinants, they are also significantly associated with different forms of institutional distance. Regarding the heterogeneity of institutional distances, results show the dominance of financial and cultural distances for leverage levels; knowledge and political distances for debt maturities; and a dominance of demographic, geographic, and political distances for cash holdings levels.

Keywords: Capital structure; Debt maturity; Institutional distance; Liability of foreignness; Subsidiaries financing

JEL Codes: G15, G30, G32

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The authors would like to thank Dimitris Andriosopoulos, Shantanu Banerjee, Marc Deloof, Martin Gregor, Jana P.Fidrmuc, Karolis Liaudinskas, Jakob Müllner, Panagiotis Politsidis, Snejina Panayotova, Serafeim Tsoukas, Yue Zhang, participants at the 16th Corporate Finance Day at University of Groningen, the European International Business Academy (EIBA) 2020 Conference, 37th International Conference of the French Finance Association (AFFI), and the European Financial Management Association (EFMA) 2021 Conference for their helpful comments.

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1. Introduction

We investigate the effects of the home (headquarter) country institutional and cultural environments on the financing choices of foreign subsidiaries, examining how institutional distance between home and host countries is associated with foreign subsidiary leverage, debt maturities, and cash holdings.[2] We consider the heterogeneities of different institutional-distance measures, using a sample of 3,139 foreign subsidiaries operating in France and being headquartered in 44 different countries. We find that while subsidiary financing choices are partially explained by standard determinants, they are also significantly associated with different forms of institutional distance. We evidence the significance of financial and cultural distances for leverage levels; knowledge and political distances for debt maturities; and demographic, geographic, and political distances for cash holdings levels. Of particular interest, we find that leverage levels of subsidiaries are more levered when the parent has greater cultural distance from France.

The foreign subsidiaries of multinational corporations (MNCs) are separate legal entities and can directly access debt resources through local banks and financial institutions in respective host countries. The advantage of raising debt abroad via foreign subsidiaries potentially reduces the agency costs of monitoring and facilitates financial flexibility. However, foreign subsidiaries tend to be at a disadvantage when accessing local debt (Bell et al., 2012; Gu et al., 2019). Primarily, the differences in the institutional environment and cultural values lead to the outcomes where local lenders may lack familiarity with foreign subsidiaries' brands and products, and thus have less trust in these foreign subsidiaries.

Research suggests that country-level institutional environment (De Jong et al., 2008; Joeveer, 2013; Simintzi et al. 2014; Alves and Francisco, 2015; Mc Namara et al., 2017), including cultural values (Kwok

[2] Institutional distance is defined as the extent to which institutions between countries are different (Xu and Shenkar, 2002). Scott (1995) defines institutions as "cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior."

and Tadesse, 2006; Ramírez and Tadesse, 2009; Aggarwal and Goodell, 2009; Gao et al., 2011), explain the financial structures of standalone firms. However, less is known regarding whether the differences in institutional environments, including differences in cultural values, between home and host countries matter for foreign subsidiary financing decisions.

Alongside investigations of standalone firms, a related stream of literature has also been devoted to the financing choices of domestic subsidiaries. Mehrotra et al. (2003) document substantial differences in the leverage ratios between parents and subsidiaries, with such variation arising from three factors: asset tangibility, and the level and variability of cash operating profits. Dittmar (2004) reports that the average leverage levels of subsidiaries are significantly lower than those of their corporate parents. Mehrotra et al. (2005) evidence that the financing of subsidiaries is better explained by trade-off theory than pecking order theory, finding a positive correlation between profitability and leverage and a negative correlation between leverage and cash flow volatility.

Our study is motivated by the fact that, despite relevant insights into the determinants of financial structure in standalone firms and domestic subsidiaries, there are few investigations into the factors that may explain the financial structure of foreign subsidiaries. Notable exceptions are examinations of the role of international taxation (e.g., Desai et al., 2004; Foley et al., 2007; Huizinga et al., 2008). These studies suggest that MNCs set capital structures of individual subsidiaries out of reaction to the tax rate of local countries. Despite these valuable insights about MNCs' financing strategy tax motives, tax rate differences alone do not explain the heterogeneity among foreign subsidiary capital structure. In addition to the tax regulation, Desai et al. (2004) find that foreign subsidiaries of U.S. MNCs use parent debt as a substitute for external debt, especially in countries where access to external financing is limited or expensive. Similarly, Aggarwal and Kyaw (2008) document that subsidiaries use internal capital markets to substitute external debt with parent debt to avoid weak external financial markets and institutional environments. However, we know relatively little about other factors explaining foreign subsidiary capital structure heterogeneity.

Furthermore, we are motivated by literature evidencing that firms face liabilities of foreignness when doing business overseas (Bell et al., 2012; Filatotchev et al., 2019). Zaheer (1995) defines the liability of foreignness as "all additional costs a firm operating in a market overseas incurs that a local firm would not incur." The focus of liability of foreignness is on the "social costs of access and acceptance" (Zaheer, 2002). MNCs' liability of foreignness is of central concern when expanding products, services, and operations abroad (Zaheer, 1995). An essential source of the liability of foreignness is the differences in cultural values between home and host countries, which Reus and Lamont (2009) label as a double-sword.

To date, numerous studies have examined the effect of cultural distance on MNC product market strategies, such as location choices when doing business abroad (Kim and Hwang, 1992; Berry et al. 2010), cross-border acquisition performance (Dikova et al., 2010; Dikova and Sahib, 2013, Li et al., 2020), entry mode (Kogut and Singh, 1988; Tihanyi et al., 2005), cross-listing decisions (Dodd et al, 2015), and subsidiary control issues (Roth and O'Donnell, 1996; Gong, 2003; Wilkinson et al., 2008). However, few studies examine the impact of institutional distance on MNC financing policies. Gu et al. (2019) examine cultural distance along with a more-widely defined institutional distance, finding that institutional distance increases the liability of foreignness that firms face in international debt markets. Hence, our study extends this stream of research on the liability of foreignness and distance, examining how dimensions of institutional distance are associated with the debt financing of foreign subsidiaries.

In the light of previous studies, we fill a gap in the literature by examining whether the differences in the institutional environments between home and host countries matter for foreign subsidiary financing decisions. Previous literature emphasizes the need for acknowledging the multidimensionality of institutional distance and consequent examination of each separate dimension (Gu et al., 2019). We build upon the studies of Berry et al. (2010) and Gu et al. (2019) in the context of using different conceptualizations of institutional distance (cultural, administrative, demographic, economic, financial, knowledge, geographic, connectedness, and political). Economic and financial distances are expected to affect the financing decision of subsidiaries as economic and financial factors are essential components of corporate governance mechanisms (Cumming et al., 2017). Further, the impact of political and demographic

distances is reflected in the uncertainty of the business environment (Gaur and Lu, 2007; Salomon and Wu, 2012).[3]

Cultural and knowledge dimensions constitute an important part of informal institutions and are expected to affect investor behavior and financing decisions (Zhu and Cai, 2014; Zingales, 2015). Geographic distance refers to geographical dispersion that might influence corporate strategies such as tax avoidance (Chen et al., 2022) or agency costs of debt of multinational firms (Doukas and Pantzalis, 2003).

The administrative dimension relates to legal systems and corresponding languages. Therefore, differences between countries in this dimension are expected to affect financing decisions of subsidiaries in terms of regulation interpretation and dealing with the legal system in the host country (Denk et al., 2012). We extend Berry et al. (2010) by adding one new conceptualization related to administrative distance, namely governance distance, as measured by differences in the rule of law between host and home countries. The rule of law is defined as the perception of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. We include governance distance as a distinct form of institutional distance since it represents a formal component of national institutions (see e.g., North, 1991 and Scott, 1995).[4]

Regarding cultural institutions, in addition to the traditional cultural dimension of Hofstede (2001), we also utilize a novel conceptualization of cultural distance, namely tightness distance. The tightness distance, introduced by Gelfand et al. (2011), refers to the differences between tight and loose cultures (tight cultures are characterized with many strong norms and a low tolerance of deviant behavior, while loose cultures have weak social norms and a high tolerance of deviant behavior). The tightness measure is

[3] The literature also provides evidence that for instance, corruption level affects business environment and performance of firms with different ownership settings (Hoang et al., 2022).

[4] North (1991) and Scott (1995) discuss formal and informal components of national institutions. Formal institutions are defined in terms of explicity and enforceability (rules, laws, and property rights). For instance, literature in international business documents the importance of regulation as a part of formal institutions by showing that regulatory distance plays role in foreign firm strategy of mitigating disadvantages when operating abroad (Salomon and Wu, 2012).

constructed from survey responses regarding the presence and severity of social norms and the freedom to act outside of those norms. Hence, our study focuses on the multidimensionality of institutional distance and its impact on foreign subsidiaries' financing decisions. We specifically concentrate on three aspects of financing decisions: leverage, debt maturity, and cash holdings.[5]

To investigate our research questions, it is essential to observe a setting where the debt market is well-developed. We choose France as an appropriate setting because France is a leading global center and FDI destination for MNCs.[6] Additionally, as a civil law country, France has a creditor-oriented financial system (La Porta et al., 1998; Djankov et al., 2007), with firms being financed mainly through internally generated resources and private bank debt. Given the private nature of foreign subsidiaries and their limits on financing alternatives, bank debt is the primary external financing resource for foreign subsidiaries. Further, the institutional environment in France is characterized by concentrated ownership structures and comparatively less legal protection of creditor rights (La Porta et al., 1998; Djankov et al., 2007). France ranks only 82nd globally for the ease of getting credit in 2017 (Doing Business, 2017), highlighting the challenges of foreign subsidiaries accessing financing through local capital markets.

By focusing on subsidiaries from a single host country (France), we are able to hold constant host country-level institutional and cultural factors. This facilitates focus on the effects of the home country institutional distance on subsidiary debt decisions. Using data from 3,139 foreign subsidiaries operating in France and headquartered in 44 different countries (13372 firm-year observations) during the period of 2008–2014, we evidence that foreign subsidiaries financing choices are explained by different dimensions of the institutional distance between host and headquarters countries.

This study contributes to the literature in several ways. First, finance literature shows the importance of the institutional settings in explaining firm-level capital structure decisions in publicly listed firms (De Jong et al., 2008; Acharya et al., 2011; Alves and Francisco, 2015) and privately held firms (Hall et al., 2004; Matsa, 2010; Joeveer, 2013; Simintzi et al. 2014; McNamara et al., 2017). Furthermore, Gu et

[5] We follow Fan et al. (2012) in measuring debt maturity as the proportion of long term debt to total debt.
[6] https://www.economist.com/news/2014/10/24/the-big-chill

al. (2019) emphasize the importance of the multidimensionality of institutional distance between home and host country, showing that institutional distance impacts the liability of foreignness that MNCs face in the process of raising capital in international debt markets.

However, less is known regarding the impact of country-level institutional background on foreign subsidiary capital structure and debt maturity choices. Our study complements this line of research by examining the effects of different dimensions of institutional distance on the foreign subsidiary financing choices in the context of leverage, debt maturity, and cash holdings. Hence, we extend the burgeoning literature on subsidiary-level capital structure (Desai et al., 2004; 2008; Huizinga et al., 2008) by identifying non-tax reasons that explain the financing choices of foreign subsidiaries.

Further, we extend the finance literature on the multidimensionality of institutional distance by utilizing a novel conceptualization of cultural distance based on tightness (introduced by Gelfand et al., 2011). The tightness distance is defined as the difference between tight and loose cultures, where tightness is measured by the strength of norms and tolerance level of deviant behavior. The tightness measure is compiled with a survey methodology. Survey questions involve assessing the presence and severity of social norms and the freedom to act outside of those norms. To our knowledge, this is the first study to use the tightness distance in the literature on capital structure. In this way, we contribute to understanding the role that culture plays in the context of international finance.[7]

Additionally, we extend the domain of research on the liability of foreignness to foreign subsidiary financing decisions, addressing the question of whether foreign subsidiaries incur the liability of foreignness when attempting to seek bank debt in host countries. To date, a considerable body of international business research has investigated the sources and ways to overcome foreign liability (Caves, 1971; Hymer, 1976; Luo et al., 2002, Trang, 2018). However, most studies focus on product markets, with less attention paid to the foreign liability faced by firms when raising capital abroad. Bell et al. (2012) extend the liability of foreignness literature from product markets to capital markets, highlighting the

[7] See Lucey and Zhang (2010); Karolyi (2016); and Goodell (2019) for comprehensive discussions on the importance of culture in financial-decision making.

liability of foreignness faced by firms attempting to secure overseas financing. Rooted in this strand of research, Gu et al. (2019) examine whether firms incur the liability of foreignness when attempting to issue foreign bonds. Lindorfer et al. (2016) study the spillover effects between the factor-market and capital-market strategies on the foreign listings of European firms. Although these studies provide new insights on challenges firms face in the capital market beyond their domestic boundaries, less is known regarding the implications of liability of foreignness for foreign subsidiary financing decisions. Hence, we fill this gap in the literature.

The paper is organized as follows. Section 2 discusses the hypothesis development. Section 3 presents the data and methodology. Section 4 reports the empirical results and Section 5 concludes.

2. Hypotheses development

2.1. Leverage

To assess the role of institutional distances from home countries on subsidiary debt, we focus on three debt-related characteristics: leverage, firm debt maturity, and cash holdings. Studies on capital structure considering cross-national differences in institutional environments show that differences in bankruptcy law, legal origin, creditor rights protection, employment protection, and financial development, among many institutional factors, help explain firm capital structure (De Jong et al., 2008; Acharya et al., 2011; Alves and Francisco, 2015). This is especially the case for small privately held firms (Hall et al., 2004; Beck et al., 2008; Matsa, 2010; Joeveer, 2013; Simintzi et al., 2014; Mc Namara et al., 2017; Demirgüç-Kunt et al., 2020) as these firms face more capital constraints (Holmstrom and Tirole, 1997).

However, comparatively few studies examine the capital structure choices of foreign subsidiaries of MNCs, with notable exceptions in the context of the role of international taxation (e.g., Desai et al., 2004; Foley, 2007; Huizinga et al., 2008). In particular, Desai et al. (2004) and Foley (2007) find that the host country tax rate, the accessibility to host country financing, and tax costs associated with the repatriation of the foreign income are considered necessary in explaining MNCs' financial structure policy in their subsidiaries. However, tax rate differences alone do not explain foreign subsidiary capital structure

heterogeneity. In this study, we extend the literature by taking into account the institutional distance between foreign subsidiaries and the headquarters. Therefore, we test the following hypothesis.

H1*: Foreign subsidiaries will be less levered when there is greater institutional distance from the home country.*

Alternatively, we consider that institutional distance may establish a liability of foreignness with the parent company that may inhibit the flow of equity to subsidiaries out of agency concerns. This possibility has only been very lightly investigated (see especially Zhang et al., 2020). In this case, subsidiaries might be forced to accept the pecuniary penalties of liability of foreignness by seeking greater leverage in local markets. We offer the following alternative hypothesis.

H1a*: Foreign subsidiaries will be more levered when there is greater institutional distance from the home country.*

2.2. Debt maturity

Regarding the role of institutional distances from home countries on debt maturity, we consider that managers of riskier firms may prefer long-term debt (Diamond, 1991) or prefer to avoid frequent monitoring by lenders (Datta et al., 2005). Short-term debt helps to mitigate the agency cost of managerial discretion (Rajan and Winton, 1995). Drawing upon agency theory, we consider that institutional distance increases agency problems between subsidiary and headquarter managers, making it more difficult for headquarters to control the behavior of subsidiaries (Eisenhardt, 1989; Jensen and Meckling, 1976). Consequently, headquarters may not be willing to provide internal debt to distant foreign subsidiaries.

According to the pecking order theory of Myers and Majluf (1984), foreign subsidiaries with insufficient internal funding will seek to finance their activities by external debt. However, local lenders are less familiar with the work-related values and business norms of foreign subsidiaries, thereby reducing the level of trust in the creditworthiness of foreign subsidiaries and increasing the transaction costs of vetting asymmetric information between creditors and lenders. Substantial institutional differences create difficulties for foreign firms attempting to achieve legitimacy in a host country (Kostova and Zaheer, 1999).

In particular, the liability of foreignness impedes foreign subsidiaries from accessing local bank debt. Because local banks are less familiar with the institutional settings of foreign subsidiary home countries, they perceive higher uncertainty and risks when considering the probability of default. In addition, comparative corporate governance research suggests that de facto governance practices are embedded within the broader context of formal and informal institutions, such as laws, regulations, and cognitive expectations of the governance participants (Bell et al., 2012; Cumming et al., 2017). Therefore, it is expected that local banks will anticipate higher monitoring costs for foreign subsidiaries, especially when foreign subsidiaries' headquarters are located in institutionally distant countries. To compensate for increased agency costs of debt, we consider that local banks will have greater predilection to grant short-term debt, rather than long-term debt, to more distant foreign subsidiaries. Based on the theory predictions, we propose the following hypothesis.

H2*: Foreign subsidiary debt will have greater maturity when there is greater institutional distance from the home country.*

2.3. Cash holdings

Regarding the impact of institutional distance from home countries on cash holdings, we consider that direct contracting of bank debt at the subsidiary level mitigates agency costs of monitoring and reduces the risk of financial distress (Dewaelheyns and Van Hulle, 2010). With reduced risk of financial distress, subsidiaries can not only take on more leverage but maintain less cash holdings. Additionally, literature (Beuselinck and Du, 2017) suggests that parent firms increase monitoring of subsidiaries out of concern for 'foreign cash.' On the other hand, with less institutional distance there might be less need to maintain cash as there will be greater access to local financing. Therefore, we consider a competing set of hypotheses.

H3*: Foreign subsidiaries will maintain greater cash holdings when there is greater institutional distance from the home country.*

H3a*: Foreign subsidiaries will maintain less cash holdings when there is greater institutional distance from the home country.*

3. Data and methodology

3.1. Data

Our research sample consists of foreign subsidiaries operating in France. France provides an appropriate setting for this study because the European financial system is strongly creditor-oriented, where banks monitor debt, and external capital markets are relatively less emphasized than the Anglo-Saxon world. Thus, for private foreign subsidiaries operating in France, the most important external financing resource is likely to be bank debt. We collect data on foreign subsidiaries operating in France using the Orbis database, supplied by Bureau van Dijk. This dataset provides a comprehensive financial statement and ownership data on MNCs and foreign subsidiaries. We first retrieve all foreign subsidiaries located in France with an ultimate global owner. We follow the Orbis classification of ultimate owners and define an ultimate owner as an independent parent firm in which no single corporate shareholder holds more than 25% of the firm's shares. Second, we exclude micro-firms (firms with revenue less than two million EUR, according to the European Commission definition), because these firms disclose very limited financial information on Orbis and are often not qualified for external finance. Third, we exclude firms operating in financial industries. Finally, we exclude firms for which Orbis only has limited financial data. All financial variables that we use in the empirical analysis are scaled by the total assets, and they are winsorized at one and ninety-nine percentiles of the distribution.

3.2. Variable definitions and measurements

3.2.1. Dependent variable

Since our research focuses on the financing of foreign subsidiaries, we use three different dependent variables in the regression analysis framework to reflect different aspects of the financing choices. In particular, we use leverage, debt maturity, and cash holdings as dependent variables in three separate regression specifications.

3.2.2. Independent variables

Our main independent variables of interest can be grouped into two categories: (i) characteristics of the global ultimate owner; and (ii) measures of institutional distance. The main variables of interest representing global ultimate owner are size, age, profitability, and leverage.

Regarding the institutional distance variables, we follow Berry et al. (2010) in terms of using nine different conceptualization of institutional distance (administrative, demographic, economic, financial, knowledge, geographic, connectedness, political, and cultural). We utilize a dataset on institutional distance variables calculated by the Mahalanobis method and provided by Berry et al. (2010).[8] *Administrative distance* is the difference in four components: colonizer-colonized link (indicating whether home and host country share a colonial tie), common language (% population that speaks the same language in the home and host country), common religion (% population that shares the same religion in the home and host country), and legal system (whether home and host country share the same legal system). *Demographic distance* is composed of differences in four components: life expectancy at birth, birth rate, population ages 0–14 (% total population), and population ages 65 and above (% total population). *Economic distance* amalgamizes differences in four components: per capita GDP, inflation rate, exports of goods and services expressed as a percentage of GDP, and imports of goods and services expressed as a percentage of GDP. *Financial distance* is comprised of differences in the three components: the amount of domestic credit to the private sector as a percentage of GDP, the market capitalization of listed companies as a percentage of GDP, and the number of listed companies (per 1 million population). *Knowledge distance* is defined in terms of differences in two components: the number of patents and the number of scientific articles (both

[8] See Berry et al. (2010) for a comprehensive discussion on distance calculation methods. Two main methods are Euclidian and Mahalanobis. Euclidian distance (the shortest possible distance between two points in geometrical context) meets criteria of symmetry, non-negativity, identification, definiteness, and triangle inequlity, but it does not take into account correlation between indicators used in computing distance, and it is scale invariant. Mahalanobis distance method represents improvement over Euclidian distance in terms of accounting for correlation and differences in scale measurement. Dataset of institutional distance variables calculated by using Mahalanobis method is available on Berry's website:
http://www.management.wharton.upenn.edu/guillen/Distance_Data_Downloads.htm

components expressed per 1 million population). *Geographic distance* is defined in terms of the Great circle distance between two countries according to the coordinates of the geographic centers of the countries. *Connectedness distance* represents differences in three components: international tourism expenditure as a percentage of GDP, international tourism receipts as a percentage of GDP, and internet users per 100 people. Differences in five components determine *political distance*: political stability in terms of independent institutional factors with veto power, democracy score of the country, government consumption expressed as a percentage of GDP, membership of the country in the World Trade Organization, and regional trade agreement.

Cultural distance employs the cultural dimension by Hofstede (2001). We use four components of cultural dimension: power distance, uncertainty avoidance, individualism, and masculinity.[9] The cultural distance is calculated by using Euclidian distance[10] measure (the shortest possible distance between two points in geometrical context), which is a widely used measure of distance in domain of social science research. Lucey and Zhang (2010) utilize the same calculation of distance measures when examining international stock market comovements, Gu et al. (2019) use it when examining how institutional distance affects the cost of debt, while Guo and Tu (2021) use the same calculation for investigating how several dimensions of institutional distance affect stock market synchronization.

Cultural distance is given by the following formula:

$$CD_{i-y,t} = \left\{\sum_{n=1}^{4}(C_{nit} - C_{nyt})^2 / Var(C_{nt})\right\}/4 \quad (1)$$

where CD denotes cultural distance, i and y denote home and host countries respectively, C_{nit} denotes cultural components of home country, C_{nyt} denotes cultural components of host countries, n stands

[9] We do not include long-term orientation component due to data availability issue.

[10] The reason for not utilizing data on cultural distance based on Mahalonobis measure and provided by Berry et al. (2010) is unavailability of data for France for the years in our sample. Berry et al. (2010) utilize data by the World Values Survey (WVS) and measure power distance in terms of questions on obedience and respect for authority; uncertainty avoidance in terms of questions on trusting people and job security, individualism in terms of questions on independence and the role that government plays in providing for the citizens, while masculinity in terms of the questions on how important is family and work.

for each cultural component, and $Var(C_{nt})$ represents variance of cultural components n across all participating countries in the sample. In other words, distance is calculated as the sum of squared differences between components of a cultural dimension in the home country and host country divided by the variance of a given dimension across all participating countries, and then divided with four (number of components).

We extend Berry et al. (2010) in terms of adding one new conceptualization, namely governance distance, as measured by differences in the rule of law between host and home countries. The governance distance is calculated in the same manner as cultural distance using the Euclidian distance method (see Equation 1), as Berry et al. (2010) do not provide data for this variable.

In a robustness check, we replace Hofstede's cultural dimension with a novel measure of cultural distance, namely tightness distance. The tightness distance has been introduced by Gelfand et al. (2011), and it refers to the differences between tight and loose cultures. In particular, we use the following formula to calculate the tightness distance:

$$\text{Tightness distance} = (\text{Tightness}_{home\ country} - \text{Tightness}_{France})^2 / Variance_{tightness} \quad (2)$$

where variance is the simple variance of tightness for all countries in the sample.[11] All of our regressions include control variables representing capital structure determinants widely used in the literature. In particular, we include firm characteristics represented by ROA, ROA volatility, size, age, sales growth, tangibility and tax rate.

A full description of the names, definitions, and sources of all variables used in the study is provided in Table 1.

(Insert Table 1 here)

[11] Since Gelfand et al. (2011) provide tightness measure for 33 countries around the world, we use tightness distance only for those countries that are available in Gelfand et al. (2011) when running regressions that involve tightness distance variable in the model specification. Specifically, there are 26 countries with available tightness measure in our subsample (see Appendix A1 for a full list of the countries).

3.3. Descriptive statistics

Table 2 reports descriptive statistics for all variables used in the study. The full sample consists of 13,372 firm-year observations based on the performance of 3,139 foreign subsidiaries operating in France and headquartered in 44 different countries from 2008 to 2014.[12] Reported firm-related characteristics such as profitability, tangibility, and sales growth are at similar levels as in the literature on subsidiaries, except that we report a slightly lower average leverage level of 11.00% compared to the level 24.27% reported in a recent study of Faulkender and Smith (2016). The mean value of debt maturity (ratio of long-term debt to total debt) in our sample is 0.379, which is similar to reported median levels of 0.36 for developing and 0.61 for developed markets in Fan et al. (2012).

(Insert Table 2 here)

Administrative and political distance have much higher variability (standard deviations) relative to the other dimensions among the reported ten distance measures. To better understand the nature of the relationship between variables used in the study, we also report Pearson correlations in Table 3. While most of the correlations between distance dimensions are positive, an exception is an economic distance being negatively correlated with several other dimensions of distance. The magnitude of correlation in most of the cases is rather low. Exceptions are high correlation between connectedness and tightness distances (0.67), and administrative and cultural distances (0.62).

(Insert Table 3 here)

3.4. Methodology

We use pooled ordinary least square regressions to test how global ultimate owner characteristics and institutional distance variables (separately and collectively) affect leverage, debt maturity, and cash holdings of the foreign subsidiaries. All regressions control for year fixed effect and cluster for countries of the global ultimate owner. In particular, we have three separate models given in Equations (3)–(5).

[12] See Appendix A1 for a list of the countries in the sample.

$$Leverage_{i,t} = f\,(Firm\ characteristics_{i,t,}, Size\ (guo)_{i,t,} Age\ (guo)_{i,t,} ROA\ (guo)_{i,t,} Leverage\ (guo)_{i,t,} DISTANCE_{n,\ i,t}) \quad (3)$$

where i refers to the foreign subsidiaries, t to time, Firm characteristics denote a set of control variables (ROA, ROA volatility, size, age, sales growth, tangibility, and tax rate), *guo* variables represent characteristics of global ultimate owner, while DISTANCE represents set of different dimensions of institutional distance (cultural, administrative, demographic, economic, financial, knowledge, geographic, connectedness, political, and governance) between the host (France) and the headquarters countries.

$$Debt\ maturity_{i,t} = f\,(Firm\ characteristics_{i,t,}, Size\ (guo)_{i,t,} Age\ (guo)_{i,t,} ROA\ (guo)_{i,t,} Leverage\ (guo)_{i,t,} DISTANCE_{n,\ i,t}) \quad (4)$$

$$Cash\ holdings_{i,t} = f\,(Firm\ characteristics_{i,t,}, Size\ (guo)_{i,t,} Age\ (guo)_{i,t,} ROA\ (guo)_{i,t,} Leverage\ (guo)_{i,t,} DISTANCE_{n,\ i,t}) \quad (5)$$

Denotation for Equations (4) and (5) is the same as in Equation (3), except that *Firm characteristics* include the additional variable of firm-average leverage level. For each regression model, we run different specifications, including baseline model specification without distance variables; model specifications with each dimension of institutional distance as a respective separate variable; and model specification with all institutional distance variables together.

4. Results

4.1. Leverage

This section reports estimation results of the regression model of Equation (3) with leverage as a dependent variable (Table 4). In particular, for our sample of foreign subsidiaries, we extend the set of identified capital structure determinants with a new set of explanatory variables that represent global ultimate owner characteristics and different dimensions of institutional distance variables. We control for year-fixed effects in all reported regressions and cluster for countries of the global ultimate owner. Table 4 reports 13 different specifications, where Columns (1)–(12) show the estimation results for the full sample

of 44 countries representing headquarters of subsidiaries, while Column (13) shows results of the robustness check for the subsample of countries with available tightness distance measure.

(Insert Table 4 here)

Column (1) displays the baseline model without institutional distance variables, where independent variables are seven standard firm characteristics determining leverage choices and four firms' characteristics of the global ultimate owner. There are 13,372 firm-year observations over the 2008-2014 period. The reported results are interesting, most of the determinants exhibit the statistical significance of the coefficients, and they are in line with the theories of capital structure choices. Coefficients on profitability, age, and tax rate are negative and statistically significant, suggesting that these characteristics of the French subsidiaries on average have a negative impact on leverage choices. Negative coefficient of profitability on leverage is a standard result in the vast empirical literature on capital structure choices (Titman and Wessels, 1988; Rajan and Zingales, 1995). This result has a theoretical foundation in Myers and Majluf (1984), where managers are better informed about their firms' value than outside investors and therefore are inclined to use available cash to lower debt levels. For our sample of French subsidiaries, this may be interpreted along with this asymmetric information story where managers of subsidiaries are lowering debt levels when cash holdings are adequate.

The reported coefficient on the size impact on leverage is positive and statistically significant. The finding is very similar to Titman and Wessels (1998) who find a positive but weak relationship between the size and leverage levels. Theoretically, larger firms find the fixed costs of refinancing more affordable and therefore, could take higher debt levels. For our settings, this may mean that managers of French subsidiaries are willing to take higher levels of the debt as they perceive their size and market share more viable.

The coefficient for the age variable shows that the longer time of operating in France, the lower is the leverage of subsidiaries in our sample. This result goes along with the interpretation that younger firms are more inclined to have higher leverage levels (Robb and Robinson, 2014), although in our setting, it

would be hard for these young intermediaries to establish favourable relations with debt providers quickly. Our growth proxy variable shows a positive relation with the leverage level. Lang et al. (1996) predict a general negative relationship between future growth and leverage, but not at every distribution range. Similarly, Billett et al. (2007) confirm negative relation among growth and leverage and suggest an introduction of covenants to mitigate potential agency costs. Notwithstanding, firms with good investment opportunities or covenants may have a positive relationship between growth and leverage. Accordingly, we conclude that these subsidiaries in France are on average firms with better than the average investment opportunities and, therefore more likely to undertake additional debt financing to fund these opportunities.

The positive impact of tangibility on leverage is well documented in the capital structure literature (e.g., Titman and Wessels, 1988; Rajan and Zingales, 1995; and Frank and Goyal, 2003), with theoretical underpinning where firms with a higher level of tangible assets have higher recovery value in a case of bankruptcy. In our specification, the increase in tangibility of assets of French subsidiaries increases their debt level. A potential explanation for this finding is that French bank lenders see these subsidiaries of companies with the higher level of tangible assets as more grounded in the local settings and therefore more likely as long term-lower risk customers. Consequently, this enables them to undertake more debt financing.

The reported impact of the tax rate on the leverage of French subsidiaries is negative, statistically significant, but economically very small. This result is very similar to findings in the standard capital structure literature (Titman and Wessels, 1998). Simply, tax benefits are not of the primary concern for managers of French subsidiaries while determining leverage levels.

Finally, Column (1) reports statistically significant coefficients for the size of global ultimate owner, the profitability of global ultimate owner and level of the debt of global ultimate owner. Coefficients on the size of the global ultimate owner are negative and so opposite in sign to the coefficients for the size of the subsidiary. We also report the opposite sign of the coefficient on profitability among the subsidiary and global ultimate owner. Finally, the leverage of the global ultimate owner positively impacts the leverage of subsidiary. These results generally reflect that larger MNCs are better able to fund subsidiaries without subsidiaries having as much need to seek local financing. Results are also consistent with the 'double

leverage' effect of parents taking on debt to supply equity to subsidiaries, thereby allowing subsidiaries to more freely access local debt (e.g., Bressan, 2018).

Columns (2)–(11) report results of regressions that include individual dimensions of institutional distance in addition to seven standard firm characteristics determining leverage choices, as well as and four firm-level characteristics of the global ultimate owner. Results evidence statistical significance of cultural and economic distances. The coefficient of our cultural distance measure based on Hofstede (2001) is positive, which indicates, contra our hypothesis *H1* regarding all distances, that greater cultural distance between France and headquarter countries leads to increased, not decreased, levels of subsidiary leverage. Somewhat, surprisingly, our results for cultural distance are consistent with Zhang et al. (2020), who evidence that parents are less forthcoming with equity to subsidiaries when there is greater cultural distance. We interpret this result as subsidiaries must then bear the liability-of-foreignness prejudice of local debt markets to compensate for less equity. And so they are more levered, in support of our alternative Hypothesis *H1a.* The positive and significant coefficient for economic distance indicates that leverage increases with the economic distance between France and headquarter countries. This result is consistent with Gu et al. (2019), who documented the role of economic distance in the liability of foreignness that firms face in global debt markets.

Column (12) shows the results obtained for the full sample by using all distance measures together (except tightness distance which is shown as a robustness check in Column (13) for the smaller subsample). This specification results show that two out of ten dimensions of institutional distance are statistically significant, with cultural and financial distances having positive coefficients. This indicates that a bigger cultural and financial distance leads to increases in subsidiary leverage. Column (13) shows the results of a robustness check with tightness distance measure instead of Hofstede's measure (2001) for the subsample of countries with available tightness measures. The estimated coefficient for tightness distance is negative but is not statistically significant. Overall, results suggest that institutional distance has an important role in shaping the leverage choices of foreign subsidiaries.

4.2. Debt maturity

To further examine the financing choices of foreign subsidiaries, we analyze debt maturity choices. Financing of foreign subsidiaries involves maturity choices for the financing securities. Maturities depend on the institutional relationship with host country banks and their financial markets. Given that financing of subsidiaries in France is most frequently done by local banks, the perception by these banks of the risk of borrowers is of the utmost importance. Certainly, local banks may perceive higher monitoring costs for foreign versus domestic subsidiaries, primarily when foreign subsidiaries' headquarters are located in institutionally distant countries. To compensate for the increasing agency costs of debt, local banks may prefer short-term debt instead of long-term debt to be able to monitor loan conditions more frequently.

Table 5 reports the results of regression modeling in which debt maturity is the dependent variable, as presented in Equation (4). Debt maturity is measured by the proportion of long-term debt to total debt. The set of independent variables includes the same set of subsidiary characteristics, global ultimate owner characteristics, and institutional distances used in the leverage regression. We add the firm-average leverage level to the set of regressors. Most of the reported regressions have 13,372 firm-year observations in the period 2008–2014, and in each of them we control for year fixed effects and cluster for the subsidiary country of origin. Table 5 also has 13 different specifications, defined in the same manner as in Table 4.

(Insert Table 5 here)

In all specifications, debt maturity is positively significantly associated with leverage levels, consistent with foreign subsidiaries in France using long term debt more frequently when they are increasing their level of leverage. These results are consistent with the contracting-cost hypothesis of Barclay and Smith (1995) and Guedes and Opler (1996) where large firms with fewer growth options have a larger proportion of the long-term debt in their capital structure. Another possible interpretation can stem from Fan et al. (2012) finding who report that firms in countries with explicit bankruptcy codes and the existence of deposit insurance exhibit higher leverage and a higher proportion of long-term debt.

Across the specifications in Table 5, we report highly statistically significant coefficients for profitability, size, and tax rate. More profitable foreign subsidiaries in France tend to finance their investment opportunities with long-term debt. This might signify intentions to stay in the respective countries for long periods. The larger the foreign subsidiaries in France are, the higher proportion of their liabilities is in long-term debt. This result is well documented in general debt maturity determinants literature (e.g., Goswami et al., 1995; Stohs and Mauer, 1996) and in European settings (Ozkan, 2000).

While the primary focus of our study is to analyze how institutional distance measures are affecting debt maturity choices, we note with interest that in all specifications, the size of the global ultimate owner has negative impact on the maturity choices and suggests that larger foreign companies tend to advise their subsidiaries in France to rely more on the short-term financing. We also note that across our regressions that only consider respectively different individual dimensions of institutional distance, only economic and political distance are statistically significant. On the other hand, knowledge and political distances are significant in the most comprehensive specification (Column 12). The significant and positive coefficient on political distance confirms its importance for foreign subsidiaries, consistent with Gaur and Lu (2007), who show that when firms enter politically distant countries, they face difficulties in business operations. The results for alternative modeling with a tightness distance measure replacing the Hofstede-based cultural distance measure evidence only knowledge distance as statistically significant.

4.3. Cash holdings

To further explain the financing choices of foreign subsidiaries operating in France we examine the determinants of their cash holding levels. Jensen (1986) suggests firms with inherent agency problems and lack of investment opportunities hoard cash. Empirical evidence is that cash holding levels of firms with strong growth opportunities and riskier cash flows are comparably higher related to total non-cash assets (Opler et al. 1999). This relation is confirmed for the sample of European firms in Ferreira and Vilela (2004) study, where they document that the companies in countries with superior investor protection and concentrated ownership hold less cash. At the same time, the degree of the development of capital markets has a negative impact on cash levels. Corporate cash holdings might differ between financially constrained

and unconstrained firms (Siddiqua et al., 2019). Bates et al. (2009) discuss phenomenon of increasing cash levels in US firms. They point out the importance of investigating whether the dramatic increase in cash holdings is due to agency problems or resulting from changes in characteristics of firms. The literature recognizes that the cash holding levels of the firms are increasing in countries with relatively weak investor protection (Dittmar et al., 2003).

The evidence on subsidiaries is that US multinationals hold significantly more cash than domestic firms (Gu, 2017), and that diversified firms hold more cash than focused firms (Bakke and Gu, 2017). Subsidiaries operating in China seem to hold higher levels of cash if there are growth opportunities and subsidiaries registered patents locally (Beuselinck & Du, 2017). Another reason for cash hoarding are repatriation issues (e.g. Xing, 2018). Literature also examines the relationship between national culture and corporate cash holdings. Chen et al. (2015) employ Hofstede's measures of cultural dimensions and document that corporate cash holdings are in a positive relationship with uncertainty avoidance. In addition, firms in states deemed as individualistic hoard less cash compared to firms in collective culture countries.

Table 6 reports the results from regression modeling in which the cash holding level of subsidiaries is the dependent variable, as presented in Equation (5). The set of independent variables includes the same firm characteristics, global ultimate owner characteristics, and institutional distance variables used in the debt maturity regression. Table 6 has 13 differing specifications, defined as in Table 4.

(Insert Table 6 here)

Overall, results indicate that foreign subsidiaries operating in France exhibit similar cash holding patterns as literature would predict. More profitable subsidiaries hold higher levels of cash. Similarly, levels of cash holdings are negatively related to firm size, age and asset tangibility. Aside from these standard results, our main interest is in interpreting the impact of the ultimate global owner characteristics and distance variables on financing outcomes.

In Table 6, Column (1) we report our baseline results from this regression modeling. The mother company's size, profitability, and leverage levels all have negative relations with the level of cash held on

the accounts of their subsidiaries in France. These results are generally persistent across the specifications where we include additional distance variables. Results on the impact of individual dimensions of institutional distance are presented in Columns (2)–(11). Results show an economically and statistically significant impact of economic (negative), knowledge, and geographic distances (positive). Our specifications in Columns (12) and (13) include all dimensions of institutional distance. Column 12 has a cultural distance based on Hofstede, while Column 13 uses tightness distance. In the specification with cultural distance based on Hofstede, demographic distance is statistically significant with negative impact, while geographic and political distance have a positive impact.

A significant impact of political distance is consistent with previous findings in the literature (e.g., Xing, 2018) that emphasize the importance of repatriation issues for cash flow levels. Furthermore, when the measure of the culture is the tightness distance, this variable is positively statistically significant, indicating that bigger differences in culture between France and headquarter countries lead to increases in cash holdings levels. Results from the specification in Column (13) also reveal that four dimensions out of ten are statistically significant, namely, connectedness, political, governance, and tightness distance. This indicates that, overall, institutional distance plays an important role in explaining subsidiary cash holdings levels and pointing out the relevance of considering multidimensionality of institutional distance as a source of liability of foreignness in foreign subsidiaries.

4.4. Robustness check

We consider a robustness check of our results. In particular, we conducted the robustness test for all our regression specifications by replacing clustering for countries of the global ultimate owner with clustering for continents of the global ultimate owner.[13] In the essence, the results are similar to those obtained by clustering for countries, but in this alternative specification we obtain significant results also for political distance in case of leverage regressions, governance distance in case of debt maturity regressions, and cultural and financial distances in case of cash holdings regressions.

[13] We thank the referee for suggesting this robustness test. All robustness check results are available upon request.

Furthermore, in order to account for geographical dispersion of the countries of the global ultimate owner, we performed additional check by splitting our sample into subsamples of different regions (Europe, Asia- Pacific, North America, South America, and Africa).[14] The European subsample is the largest, accounting for 24 countries and 8248 observations. In the nutshell, we observe a slight heterogeneity in the significance of certain distance measures. For instance, we observe significance of administrative distance for leverage and cash holdings in European subsample, while this has not been observed in the full sample. As one of the components of the administrative distance is measured by common language, it might be inferred that heterogeneity of languages in Europe might contribute to the significance of this type of distance in the context of Europe.

5. Conclusions

We investigate how the institutional distance between home and host countries is associated with foreign subsidiary financing decisions. Literature provides evidence that country-level institutional background adds additional explanatory power for firm-level capital structure decisions in both publicly listed firms and privately held firms. However, less is known regarding whether country-level institutional background also explains foreign subsidiary financing policies. In particular, foreign subsidiaries are embedded in both home and host countries' institutional settings. We introduce the concept of liability of foreignness into foreign subsidiary debt financing choices. Consequently, we identify an important source of liability of foreignness: the institutional distance between the home and host countries. A large data set of foreign subsidiaries operating in France is used to study the impact of liability of foreignness on foreign subsidiary debt financing choices. We focus on the multidimensionality of institutional distances, examining individual and collective impacts of ten different dimensions (cultural, administrative, demographic, economic, financial, knowledge, geographic, connectedness, political, and governance) on leverage levels, debt maturities, and cash holdings of foreign subsidiaries.

[14] We thank the referee for suggesting this robustness test. All robustness check results are available upon request.

Our results evidence the heterogeneity of impacts of differing dimensions of institutional distance on foreign subsidiary financing choices, with results showing the dominance of financial and cultural distances for leverage levels; knowledge and political distance for debt maturity; and dominance of demographic, geographic, and political distance for cash holdings levels. Additionally, we utilize a novel conceptualization of tightness distance defined as the difference between tight and loose cultures in the context of capital structure choices. Specifically, in addition to cultural distance based on the measure of Hofstede (2001), we identify tightness distance as a relevant determinant of cash holdings levels of foreign subsidiaries. Surprisingly, we find that leverage levels of subsidiaries are more, not less, levered when the parent has greater cultural distance from France. We interpret this result as consistent with parents, out of agency concerns, being less forthcoming with equity to more culturally distant subsidiaries. Culturally distant subsidiaries must contend with enhanced agency concerns of parent MNCs as well as the liability of foreignness with local debt markets. Our findings offer new insights into the extent to which foreign subsidiaries face liability of foreignness in terms of the financing choices.

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Table 1. Variable descriptions

This table provides variable definitions and data sources. Panel A contains definitions and sources for firm characteristics variables, while Panel B reports all distance measures and their components used in the calculation. See Bery et al. (2010) for further details on distance measures components and calculations (except for tightness distance that is based on Gelfand et al., 2011).

Variable	Definition	Data source
Panel A: Firm characteristics		
ROA	Ebit/net (or total) assets	Orbis Bureau Van Dijk
ROA Volatility	Standard deviation of Ebit/net (or total) assets	Orbis Bureau Van Dijk
Size	Log (net (or total) assets)	Orbis Bureau Van Dijk
Age	Log (firm age)	Orbis Bureau Van Dijk
Sales growth	(Sales in year t/sales in year t-1) – 1	Orbis Bureau Van Dijk
Tangibility	Tangible assets+inventories /net (or total) assets	Orbis Bureau Van Dijk
Tax rate	1 – (profit after tax/profit before tax)	Orbis Bureau Van Dijk
Leverage	(Current liabilities+non-current liabilities)/net (or total) assets	Orbis Bureau Van Dijk
Debt	Debt (excluding trade credit)/net or total assets	Orbis Bureau Van Dijk
Debt maturity	Proportion of long term debt to total debt	Orbis Bureau Van Dijk
Cash	Log(cash and cash equivalents/net (or total) assets	Orbis Bureau Van Dijk
Panel B: Distance measures and their components		
Cultural distance	Differences in attitudes towards authority, trust, individuality, and importance of work and family	Hofstede (2001)
Power distance	Extent to which the less powerful members of institutions accept that power is not equaly distributed	
Uncertainty avoidance	Extent to which people feel comfortable with uncertainty and try to avoid it	
Individualism	Extent to which individuals are integrated into groups	
Masculinity	Achievement, monetary rewards, and output	
Administrative distance		
Colonizer-colonized link	Sharing a colonial tie	CIA Factbook
Common language	% population speaking the same language	CIA Factbook
Common religion	% population sharing the same religion	CIA Factbook
Legal system	Sharing the same legal system	La Porta et al.(1998)
Demographic distance	Differences in demographic characteristics	World Development Indicators (WDI)
Life expectancy	Life expectancy at birth, total (years)	
Birth rate	Birth rate (per 1000 people)	
Population 0-14	Population ages 0-14(% of total population)	
Population above 65	Population ages >65 (% of total population)	

Economic distance	Differences in economic development and macroeconomic characteristics	WDI
Income	GDP per capita	
Inflation	Inflation rate, GDP deflator in %	
Exports	Exports of goods and services (% of GDP)	
Imports	Imports of goods and services (% of GDP)	
Financial distance	Differences in finacial sector development	WDI
Private credit	Domestic credit to private sector (% of GDP)	
Stock market capitalization	Market capitalization of listed companies (% of GDP)	
Listed companies	Number of listed companies (per 1 million population)	
Knowledge distance	Differences in pattents and scientific production	U.S. Patent Database - United States Patent and Trademark Office (USPTO), Publications database (WTI)
Patents	Number of patents per 1 million population	
Scientific output	Number of scientific articles per 1 mill. population	
Geographic distance		CIA Factbook
Great circle distance	Great circle distance between host and home country based on the coordinates of the geographic center of the countries	
Connectedness distance	Differences in tourism levels and internet use	WDI
International tourism	International tourism, expenditure	
International tourism	International tourism, receipts	
Internet usage	Internet users per 100 people	
Political distance	Diferences in political stability, democracy, and size of the state	WDI
Political stability	Independent institutional factors with veto power	
Democracy	Democracy score	
Size of the state	Government consumption (% of GDP)	
WTO membership	Membership in WTO	
Regional trade agreement	Membership in the same trade block	
Governance distance	Differences in governance systems. Distance between rule of law	World Governance Indicators (World Bank)
Rule of law	Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence	
Tightness distance	Differences between tight and loose cultures	Gelfand et al. (2011)

Table 2: Descriptive statistics

This table describes summary statistics (median, mean, standard deviation, minimum, maximum, and number of observations) for the main variables used in the study for 13372 firm years of French subsidiaries in period 2008-2014. The variables for leverage, ROA, ROA volatility, sales growth, tangibility, and tax rate are winsorized at one percentile of extremes on both sides. Size and age are scaled by logs. Variables denoted with (guo) refer to global ultimate owner characteristics of the headquarter countries. Distance variables are calculated by using Mahalanobis distance measures provided by Berry et al. (2010), with exception of cultural distance that is based on Hofstede (2001) and calculated using Euclidian distance measure due to unavailability of data for France in Berry's cultural distance dataset (based on World Value Survey). Tightness distance is based on Gelfand et al. (2011).

Variable	Median	Mean	Std	Minimum	Maximum	Observations
Leverage	0.032	0.110	0.159	0.000	0.896	13372
Debt maturity	0.021	0.379	0.433	0.000	1.000	13372
Cash holdings	0.041	0.100	0.135	0.000	0.633	12731
ROA	0.059	0.079	0.130	-0.323	0.509	13372
ROA volatility	0.053	0.064	0.043	0.003	0.242	13372
Size	9.523	9.534	1.417	4.247	14.154	13372
Age	3.332	3.311	0.520	1.386	4.575	13372
Sales growth	-0.002	0.052	0.415	-0.605	3.784	13372
Tangibility	0.280	0.305	0.237	0.000	0.958	13372
Tax rate	0.243	0.182	0.432	-1.923	2.312	13372
Size (guo)	14.758	14.333	2.596	-0.528	19.814	13372
Age (guo)	4.430	3.967	0.896	0.166	4.773	13372
ROA (guo)	0.068	0.065	0.677	-44.542	3.878	13372
Leverage (guo)	0.215	0.224	0.159	0.000	0.736	13372
Cultural distance	1.481	1.304	0.772	0.100	4.123	13084
Administrative distance	39.635	36.364	27.780	0.254	206.707	13351
Demography distance	1.214	2.115	2.956	0.113	47.909	13351
Economic distance	0.846	2.564	5.886	0.001	59.201	13351
Financial distance	2.287	2.323	3.249	0.029	120.567	12420
Knowledge distance	3.367	13.330	15.647	0.001	48.816	13351
Geographic distance	935	3879.444	4055.577	473	19187	13351
Connectedness distance	0.214	0.396	0.703	0.012	18.300	13351
Political distance	5.253	9.685	27.934	0.228	448.255	13340
Governance distance	0.185	0.294	0.301	0.002	2.194	13372
Tightness distance	0.123	0.312	0.500	0.000	4.608	10794

Table 3: Correlations

This table reports Pearson correlations of main variables used in the study. Numbers given in a headline of each column are corresponding to the order of variables that are listed in the rows of the table. Statistical significance at 1% level is denoted with *.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Leverage	1																								
Debt maturity	0.25*	1																							
Cash	-0.09*	0.02	1																						
ROA	-0.12*	-0.04*	0.18*	1																					
ROA vol	-0.04*	-0.04*	0.10*	0.09*	1																				
Size	0.09*	0.11*	-0.25*	-0.24*	-0.30*	1																			
Age	-0.11*	0.04*	-0.11*	-0.03*	-0.10*	0.26*	1																		
Sales growth	0.04*	0.00	0.02	0.06*	0.04*	0.00	-0.13*	1																	
Tangibility	0.24*	0.10*	-0.24*	-0.05*	-0.05*	0.07*	0.09*	-0.04*	1																
Tax rate	-0.05*	0.00	0.04*	0.15*	-0.01	-0.06*	0.01	0.00	-0.04*	1															
Size guo	0.00	-0.04*	-0.12*	0.11*	-0.02	0.28*	0.07*	0.00	0.01	0.00	1														
Age guo	-0.02	0.00	-0.09*	0.03*	0.00	0.11*	0.08*	-0.01	0.02	0.02	0.42*	1													
ROA guo	0.01	-0.01	-0.06*	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.11*	0.04*	1												
Leverage guo	0.07*	0.00	-0.10*	0.07*	-0.02	0.01	0.00	-0.02	0.14*	0.00	0.23*	0.08*	0.02	1											
Cultural D.	0.00	0.00	-0.05*	0.05*	0.02	0.19*	0.08*	0.02	-0.05*	0.01	0.48*	0.36*	0.05*	0.10*	1										
Administrat. D.	-0.04*	0.00	-0.03	0.00	-0.02	0.18*	0.06*	0.00	0.00	0.00	0.46*	0.39*	0.04*	0.05*	0.62*	1									
Demograph. D.	0.00	-0.01	0.00	-0.02	-0.03*	0.05*	-0.06*	0.00	-0.01	-0.01	0.19*	0.08*	0.01	0.11*	0.22*	0.31*	1								
Economic D.	0.04*	0.03*	-0.01	-0.06*	0.00	-0.01	-0.06*	0.01	0.01	-0.03	-0.19*	-0.18*	-0.02	-0.09*	-0.16*	-0.21*	0.25*	1							
Financial D.	0.02	0.00	0.00	0.06*	0.04*	0.03*	0.03*	0.01	-0.04*	-0.02	0.13*	0.08*	0.02	0.02	0.32*	0.06*	0.07*	0.10*	1						
Knowledge D.	-0.01	-0.01	0.04*	0.07*	-0.01	0.09*	-0.03*	0.01	-0.03	0.00	0.42*	0.06*	0.04*	0.03*	0.26*	0.47*	0.26*	-0.10*	0.14*	1					
Geography D.	-0.02	-0.04*	0.03	0.06*	-0.02	0.07*	0.00	0.00	0.00	0.00	0.37*	0.13*	0.03*	0.13*	0.33*	0.44*	0.45*	-0.17*	0.24*	0.69*	1				
Connect. D.	0.00	0.03	-0.02	-0.04*	-0.02	0.00	-0.02	-0.01	0.03*	0.01	0.00	0.13*	0.00	0.12*	0.07*	0.15*	0.67*	0.14*	-0.03*	-0.12*	0.14*	1			
Political D.	0.00	0.01	0.02	-0.01	-0.01	0.03	-0.03*	0.02	0.00	-0.02	0.02	-0.04*	-0.02	-0.02	0.01	0.01	0.14*	0.37*	0.00	0.09*	0.12*	0.02	1		
Tightness D.	0.00	0.01	0.00	-0.06*	-0.04*	0.07*	-0.04*	-0.01	0.01	-0.01	0.18*	0.25*	0.00	0.07*	0.26*	0.47*	0.63*	0.32*	-0.08*	0.17*	0.34*	0.67*	0.38*	1	
Governance D.	0.00	0.02	-0.05*	-0.06*	-0.02	0.03*	0.00	-0.01	0.05*	-0.01	-0.04*	0.07*	0.00	0.11*	0.13*	0.00	0.42*	0.09*	-0.11*	-0.31*	-0.12*	0.6174	-0.03*	0.29*	1

Table 4: Leverage regressions

Table 4 presents regression results with leverage as dependent variable and the following set of independent variables: firm characteristics, global ultimate owner characteristics, and institutional distance variables. Columns (1)-(12) report the estimation results for the full sample of 44 countries representing headquarters of subsidiaries. Column (1) shows the baseline model without institutional distance variables. Columns (2)-(11) report regression results from individual institutional distance variables. Column (12) reports estimation results which include all variables for the full sample. Column (13) shows results for subsample with tightness distance variable instead of cultural distance based on Hofstede (2001). The symbols *, **, and *** represent statistical significance of coefficients at 10%, 5% and 1% respectively. T-statistics is shown in parentheses. All regressions control for year fixed effect and cluster for countries of the global ultimate owner.

Dependent variable: leverage													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Firm characteristics													
ROA	-0.171***	-0.175***	-0.171***	-0.170***	-0.170***	-0.168***	-0.171***	-0.171***	-0.170***	-0.171***	-0.171***	-0.174***	-0.165***
	(-4.913)	(-4.986)	(-4.894)	(-4.870)	(-4.881)	(-4.363)	(-4.880)	(-4.821)	(-4.892)	(-4.912)	(-4.914)	(-4.405)	(-3.717)
ROA volatility	-0.026	-0.040	-0.024	-0.023	-0.024	-0.011	-0.024	-0.024	-0.022	-0.024	-0.026	-0.028	-0.037
	(-0.649)	(-0.977)	(-0.587)	(-0.558)	(-0.577)	(-0.280)	(-0.581)	(-0.586)	(-0.545)	(-0.591)	(-0.635)	(-0.649)	(-0.950)
Size	0.017***	0.016***	0.017***	0.017***	0.017***	0.016***	0.017***	0.017***	0.017***	0.017***	0.017***	0.015***	0.015***
	(7.551)	(7.543)	(7.555)	(7.552)	(7.380)	(7.367)	(7.550)	(7.556)	(7.575)	(7.502)	(7.561)	(7.207)	(6.866)
Age	-0.034***	-0.034***	-0.034***	-0.034***	-0.034***	-0.036***	-0.034***	-0.034***	-0.034***	-0.034***	-0.034***	-0.036***	-0.035***
	(-7.547)	(-7.648)	(-7.459)	(-7.258)	(-7.279)	(-7.654)	(-7.455)	(-7.319)	(-7.440)	(-7.493)	(-7.549)	(-6.932)	(-6.385)
Sales growth	0.009*	0.009	0.009*	0.009*	0.009*	0.009	0.009*	0.009*	0.009*	0.009*	0.009*	0.009	0.008
	(1.723)	(1.655)	(1.708)	(1.701)	(1.712)	(1.564)	(1.713)	(1.714)	(1.705)	(1.708)	(1.724)	(1.530)	(1.267)
Tangibility	0.136***	0.141***	0.136***	0.136***	0.136***	0.142***	0.136***	0.136***	0.136***	0.137***	0.136***	0.148***	0.145***
	(7.089)	(7.225)	(7.082)	(7.152)	(7.100)	(6.780)	(7.112)	(7.084)	(7.067)	(7.129)	(6.974)	(6.657)	(5.699)
Tax rate	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**	-0.009**
	(-2.360)	(-2.322)	(-2.356)	(-2.361)	(-2.335)	(-2.320)	(-2.360)	(-2.359)	(-2.384)	(-2.331)	(-2.368)	(-2.288)	(-2.280)
Global ultimate owner (guo) characteristics													
Size (guo)	-0.004***	-0.005***	-0.004**	-0.004***	-0.004**	-0.003***	-0.004**	-0.004**	-0.004***	-0.004***	-0.004***	-0.004**	-0.003
	(-2.773)	(-3.125)	(-2.560)	(-2.784)	(-2.567)	(-2.850)	(-2.267)	(-2.282)	(-2.752)	(-2.775)	(-2.721)	(-2.281)	(-1.643)
Age (guo)	0.003	0.002	0.003	0.003	0.004	0.002	0.003	0.003	0.003	0.003	0.003	0.002	0.002
	(0.893)	(0.517)	(0.957)	(0.874)	(0.965)	(0.684)	(0.863)	(0.861)	(0.780)	(0.865)	(0.830)	(0.525)	(0.445)
ROA (guo)	0.002**	0.002***	0.002**	0.002**	0.002**	0.001**	0.002**	0.002**	0.002**	0.002**	0.002**	0.001**	0.001
	(2.189)	(2.816)	(2.120)	(2.221)	(2.105)	(2.186)	(2.143)	(2.162)	(2.206)	(2.196)	(2.194)	(2.182)	(1.711)

Dependent variable: leverage													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Leverage(guo)	0.037**	0.037*	0.037**	0.037*	0.039**	0.036*	0.038**	0.038**	0.036*	0.038**	0.037*	0.036*	0.050**
	(2.016)	(2.009)	(2.061)	(2.007)	(2.102)	(1.776)	(2.050)	(2.038)	(1.943)	(2.055)	(1.994)	(1.811)	(2.451)
Institutional distance variables													
Cultural		0.002**										0.003**	
		(2.581)										(2.058)	
Administrative			-0.000									-0.000	-0.000
			(-0.404)									(-1.235)	(-0.388)
Demographic				0.000								0.000	0.001
				(0.419)								(0.043)	(0.365)
Economic					0.001*							0.001	0.003
					(1.729)							(1.577)	(1.483)
Financial						0.001						0.003**	0.005***
						(1.659)						(2.392)	(4.553)
Knowledge							0.000					0.001	0.000
							(0.087)					(1.511)	(1.211)
Geographic								-0.000				-0.000	-0.000
								(-0.128)				(-1.329)	(-0.890)
Connectedness									0.002			0.006	-0.001
									(0.750)			(1.485)	(-0.327)
Political										0.000		-0.000	0.000
										(0.486)		(-0.845)	(0.100)
Governance											0.003	-0.003	0.005
											(0.387)	(-0.295)	(0.830)
Tightness													-0.002
													(-0.271)
N	13372	13052	13351	13351	13351	12420	13351	13351	13351	13340	13372	12089	10751
r2	0.212	0.215	0.212	0.212	0.213	0.217	0.212	0.212	0.212	0.212	0.212	0.222	0.228

Table 5: Debt maturity regressions

Table 5 reports regression results with debt maturity (ratio of long-term debt out of total debt) as dependent variable. The set of the independent variables are the same as in Table 4 (firm characteristics, global ultimate owner characteristics, and institutional distance variables) with addition of firm-average leverage level. Description of columns is the same as in Table 4. The symbols *, **, and *** represent statistical significance of coefficients at 10%, 5% and 1% respectively. All regressions control for year fixed effect and cluster for countries of the global ultimate owner.

Dependent variable: debt maturity													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Firm characteristics													
Leverage	0.693***	0.684***	0.691***	0.691***	0.690***	0.699***	0.691***	0.691***	0.691***	0.692***	0.693***	0.688***	0.677***
	(20.499)	(20.421)	(20.408)	(20.447)	(20.356)	(20.128)	(20.479)	(20.306)	(20.383)	(20.379)	(20.547)	(19.859)	(17.903)
ROA	0.134***	0.129***	0.134***	0.134***	0.133***	0.137***	0.134***	0.132***	0.134***	0.134***	0.134***	0.129***	0.156***
	(3.444)	(3.581)	(3.412)	(3.395)	(3.420)	(3.185)	(3.399)	(3.558)	(3.423)	(3.417)	(3.458)	(3.275)	(3.399)
ROA volatility	0.146	0.107	0.151	0.154	0.151	0.165	0.152	0.149	0.153	0.153	0.148	0.127	0.078
	(1.043)	(0.778)	(1.078)	(1.108)	(1.077)	(1.173)	(1.088)	(1.090)	(1.110)	(1.101)	(1.063)	(0.934)	(0.496)
Size	0.027***	0.025***	0.027***	0.027***	0.027***	0.026***	0.027***	0.027***	0.027***	0.026***	0.027***	0.024***	0.023***
	(7.424)	(7.297)	(7.376)	(7.565)	(7.409)	(6.930)	(7.420)	(7.353)	(7.606)	(7.355)	(7.491)	(6.915)	(7.737)
Age	0.027*	0.029*	0.027*	0.028*	0.028*	0.022	0.027*	0.027*	0.028*	0.028*	0.027*	0.025	0.030
	(1.929)	(1.970)	(1.941)	(1.944)	(1.962)	(1.561)	(1.936)	(1.932)	(1.941)	(1.962)	(1.932)	(1.620)	(1.576)
Sales growth	-0.011*	-0.012**	-0.011*	-0.011*	-0.011*	-0.012**	-0.011*	-0.011*	-0.011*	-0.011*	-0.011*	-0.014**	-0.015**
	(-1.819)	(-2.168)	(-1.931)	(-1.876)	(-1.876)	(-2.078)	(-1.900)	(-1.880)	(-1.866)	(-1.932)	(-1.826)	(-2.613)	(-2.446)
Tangibility	0.025	0.036	0.026	0.027	0.026	0.029	0.027	0.026	0.026	0.027	0.023	0.039	0.053
	(0.531)	(0.709)	(0.549)	(0.562)	(0.553)	(0.595)	(0.566)	(0.543)	(0.550)	(0.557)	(0.496)	(0.759)	(0.982)
Tax rate	0.016***	0.017***	0.016***	0.016***	0.016***	0.018***	0.016***	0.016***	0.016***	0.016***	0.016***	0.019***	0.021***
	(2.924)	(3.142)	(2.916)	(2.923)	(2.958)	(3.453)	(2.935)	(2.935)	(2.908)	(3.053)	(2.933)	(3.785)	(3.764)
Global ultimate owner (guo) characteristics													
Size (guo)	-0.009***	-0.010***	-0.010***	-0.010***	-0.009***	-0.010***	-0.010***	-0.009***	-0.009***	-0.010***	-0.009***	-0.012***	-0.013***
	(-3.971)	(-3.567)	(-4.019)	(-3.936)	(-3.747)	(-4.079)	(-4.819)	(-3.893)	(-3.925)	(-3.957)	(-3.650)	(-3.775)	(-4.358)
Age (guo)	0.004	0.006	0.003	0.004	0.005	0.003	0.005	0.004	0.004	0.005	0.004	0.005	0.003
	(0.357)	(0.467)	(0.251)	(0.368)	(0.402)	(0.251)	(0.454)	(0.355)	(0.334)	(0.382)	(0.299)	(0.383)	(0.179)
ROA (guo)	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.001	-0.002
	(-1.629)	(-1.378)	(-1.397)	(-1.542)	(-1.652)	(-1.367)	(-1.405)	(-1.633)	(-1.642)	(-1.545)	(-1.589)	(-0.829)	(-0.897)

Dependent variable: debt maturity													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Leverage (guo)	0.036	0.047	0.037	0.035	0.038	0.040	0.038	0.036	0.034	0.036	0.031	0.039	0.025
	(0.585)	(0.729)	(0.609)	(0.567)	(0.608)	(0.629)	(0.611)	(0.587)	(0.551)	(0.584)	(0.505)	(0.585)	(0.320)
Institutional distance variables													
Cultural		0.001										0.002	
		(0.513)										(0.598)	
Administrative			0.000									-0.000	0.000
			(0.806)									(-0.819)	(0.489)
Demographic				0.001								-0.004	-0.004
				(0.449)								(-1.018)	(-0.846)
Economic					0.001*							0.001	0.002
					(1.797)							(1.592)	(0.402)
Financial						0.001						-0.000	0.000
						(0.925)						(-0.149)	(0.024)
Knowledge							0.000					0.001*	0.002**
							(0.931)					(1.837)	(2.387)
Geographic								-0.000				0.000	0.000
								(-0.290)				(0.317)	(0.153)
Connectedness									0.005			0.015	0.018
									(0.428)			(1.034)	(1.093)
Political										0.000*		0.000**	-0.002
										(1.921)		(2.229)	(-1.236)
Governance											0.022	0.027	0.037
											(1.000)	(1.212)	(1.347)
Tightness													-0.004
													(-0.291)
N	13372	13052	13351	13351	13351	12420	13351	13351	13351	13340	13372	12089	10751
r2	0.136	0.138	0.136	0.136	0.136	0.138	0.136	0.136	0.136	0.136	0.136	0.143	0.149

Table 6: Cash holdings regressions

Table 6 presents regression results with cash holdings as dependent variable. The set of the independent variables are the same as in Table 4 (firm characteristics, global ultimate owner characteristics, and institutional distance variables) with addition of firm-average leverage level. Description of columns is the same as in Table 4. The symbols *, **, and *** represent statistical significance of coefficients at 10%, 5% and 1% respectively. All regressions control for year fixed effect and cluster for countries of the global ultimate owner.

Dependent variable: cash holdings													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Firm characteristics													
Leverage	-0.027	-0.026	-0.026	-0.026	-0.025	-0.024	-0.027	-0.026	-0.026	-0.026	-0.027	-0.020	-0.022
	(-1.353)	(-1.290)	(-1.321)	(-1.326)	(-1.287)	(-1.114)	(-1.324)	(-1.298)	(-1.331)	(-1.327)	(-1.351)	(-0.921)	(-0.910)
ROA	0.093***	0.098***	0.097***	0.096***	0.095***	0.098***	0.096***	0.099***	0.095***	0.095***	0.093***	0.111***	0.128***
	(3.557)	(3.622)	(3.797)	(3.699)	(3.617)	(3.558)	(3.725)	(3.916)	(3.605)	(3.597)	(3.551)	(4.094)	(4.143)
ROA volatility	0.053	0.053	0.043	0.048	0.043	0.051	0.046	0.054	0.045	0.046	0.052	0.063*	0.070
	(1.219)	(1.210)	(1.032)	(1.145)	(1.015)	(1.256)	(1.186)	(1.401)	(1.052)	(1.082)	(1.211)	(1.777)	(1.714)
Size	-0.015***	-0.015***	-0.015***	-0.014***	-0.014***	-0.014***	-0.015***	-0.015***	-0.015***	-0.015***	-0.015***	-0.014***	-0.014***
	(-7.812)	(-7.827)	(-7.674)	(-7.597)	(-7.631)	(-7.171)	(-8.008)	(-7.910)	(-7.839)	(-7.812)	(-7.941)	(-7.302)	(-7.046)
Age	-0.007*	-0.007*	-0.006	-0.006	-0.007*	-0.005	-0.006	-0.005	-0.006	-0.006	-0.007*	-0.004	-0.004
	(-1.695)	(-1.826)	(-1.553)	(-1.517)	(-1.688)	(-1.366)	(-1.665)	(-1.468)	(-1.566)	(-1.576)	(-1.693)	(-1.061)	(-1.119)
Sales growth	0.002	0.001	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.003
	(0.629)	(0.500)	(0.582)	(0.673)	(0.690)	(1.267)	(0.568)	(0.584)	(0.694)	(0.653)	(0.632)	(0.880)	(1.194)
Tangibility	-0.129***	-0.131***	-0.128***	-0.127***	-0.128***	-0.128***	-0.127***	-0.127***	-0.128***	-0.128***	-0.129***	-0.131***	-0.136***
	(-10.749)	(-11.113)	(-10.163)	(-10.611)	(-10.559)	(-9.782)	(-11.128)	(-11.535)	(-10.500)	(-10.511)	(-10.816)	(-10.608)	(-9.267)
Tax rate	0.004*	0.004*	0.003*	0.004*	0.004*	0.004**	0.004*	0.004*	0.004*	0.004*	0.004*	0.004*	0.005***
	(1.992)	(1.826)	(1.746)	(1.908)	(1.821)	(2.180)	(1.834)	(1.898)	(1.885)	(1.987)	(2.004)	(1.863)	(2.934)
Global ultimate owner (guo) characteristics													
Size (guo)	-0.003**	-0.003**	-0.004**	-0.003**	-0.003**	-0.003**	-0.005**	-0.005***	-0.003**	-0.003**	-0.003*	-0.005**	-0.005**
	(-2.166)	(-2.348)	(-2.356)	(-2.334)	(-2.322)	(-2.083)	(-2.401)	(-2.699)	(-2.175)	(-2.237)	(-1.994)	(-2.539)	(-2.720)
Age (guo)	-0.001	-0.002	-0.003	-0.001	-0.001	0.001	0.000	-0.000	-0.001	-0.001	-0.001	0.000	-0.001
	(-0.119)	(-0.264)	(-0.543)	(-0.159)	(-0.204)	(0.126)	(0.057)	(-0.028)	(-0.160)	(-0.101)	(-0.105)	(0.067)	(-0.069)
ROA (guo)	-0.002**	-0.002**	-0.002*	-0.002**	-0.002**	-0.002**	-0.002	-0.002*	-0.002**	-0.002**	-0.002**	-0.002	-0.001

Dependent variable: cash holdings													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	(-2.278)	(-2.027)	(-1.845)	(-2.183)	(-2.160)	(-2.226)	(-1.655)	(-1.789)	(-2.274)	(-2.312)	(-2.275)	(-1.538)	(-1.422)
Leverage (guo)	-0.043***	-0.042***	-0.041***	-0.045***	-0.045***	-0.039***	-0.040***	-0.043***	-0.044***	-0.042***	-0.043***	-0.038***	-0.036***
	(-4.992)	(-5.419)	(-4.245)	(-5.323)	(-5.044)	(-4.201)	(-3.957)	(-5.335)	(-5.087)	(-4.767)	(-4.390)	(-3.713)	(-3.122)
Institutional distance variables													
Cultural		0.001										0.002	
		(1.066)										(1.397)	
Administrative			0.000									0.000	0.000
			(1.460)									(0.505)	(1.024)
Demographic				0.001								-0.003**	-0.002
				(1.132)								(-2.711)	(-1.179)
Economic					-0.001**							-0.000	-0.003
					(-2.262)							(-0.982)	(-1.507)
Financial						0.001						-0.002	0.000
						(0.873)						(-1.046)	(0.249)
Knowledge							0.001*					-0.000	-0.000
							(1.802)					(-0.880)	(-1.201)
Geographic								0.000**				0.000***	0.000
								(2.513)				(3.199)	(1.443)
Connectedness									0.002			0.002	-0.018***
									(0.428)			(0.230)	(-2.843)
Political										0.000		0.000***	0.002*
										(1.273)		(3.536)	(1.897)
Governance											-0.003	0.010	0.032***
											(-0.272)	(0.890)	(3.609)
Tightness													0.026***
													(3.662)
N	12731	12412	12710	12710	12710	11838	12710	12710	12710	12699	12731	11508	10254
r2	0.232	0.233	0.234	0.232	0.232	0.236	0.236	0.238	0.231	0.232	0.232	0.246	0.265

Appendix A1. List of countries in the full sample and subsample

This table shows the list of countries for the full sample (44 countries) and subsample (26 countries).

Countries (full sample)		Countries (subsample)
Austria	Malta	Austria
Belgium	Malaysia	Belgium
Brazil	Netherlands	Brazil
Canada	Norway	China
Switzerland	New Zealand	Germany
Chile	Poland	Spain
China	Portugal	Estonia
Czech Republic	Saudi Arabia	UK
Germany	Singapore	Greece
Denmark	Slovakia	Hong Kong
Spain	Slovenia	Hungary
Estonia	Sweden	India
Finland	Thailand	Iceland
UK	Taiwan	Israel
Greece	USA	Italy
Hong Kong	South Africa	Japan
Hungary		South Korea
India		Mexico
Ireland		Malaysia
Iceland		Netherlands
Israel		Norway
Italy		New Zealand
Japan		Poland
South Korea		Portugal
Kuwait		Singapore
Luxembourg		USA
Marocco		
Mexico		