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Home–host distance in governance quality, foreign banks' lending, and emerging host markets' resilience[*]

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Abstract

In this study, we investigate how governance quality determines the lending behavior of foreign-owned banks in emerging host markets. We do this by employing a dataset that includes foreign banks from 45 developed markets operating in 58 emerging markets. We incorporate direct measures of governance quality as well as home–host country distance in governance quality. Additionally, we investigate foreign banks' lending behavior during the 2008-2009 financial crisis (GFC). We document that more micro-oriented governance dimensions, such as business regulatory quality and corruption control, play a role for foreign banks. Furthermore, we show that home–host distance in governance quality shapes lending behaviors to a greater extent than the quality in host markets itself. We also show that governance quality proximity between home and host markets fostered emerging economies' resilience during the GFC to a greater extent than quality as a standalone.

Keywords: foreign banks, lending, emerging markets, governance quality, crisis
JEL codes: G01, G21, G28

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1 Introduction

The issue of institutional quality has been at the center of economic debate since the 1990s, when Douglas North (1991) and Oliver Williamson (2000) presented institutions as one of the main drivers of economic growth and, most importantly, laid the foundations for new research directions. The definition of institutions, which is commonly used today in New Institutional Economics research, can be found in North's (2005) study, where he claims that institutions are "the rules of the game—both formal rules, informal norms, and their enforcement characteristics. Together, they define the way the game is played."

Theoretical scientific achievements were soon reflected in economic policy practice, and the need for unified institutional/governance quality measures emerged. As Thomas (2006) underlined, World Bank (WB) economists undertook the challenge of assessing governance quality comparatively and quantitatively, as there was a common opinion that foreign aid may be used effectively in a country if it is well governed. In their seminal studies, Kaufmann et al. (1999a, 1999b) introduced the Worldwide Governance Indicators (WGI) defined as "traditions and institutions by which authority in a country is exercised."[3] Discussion about the WGI framework is lively. The authors of the WGI have directly addressed some of the best known criticisms put forward, for example, by Thomas (2009) and Knack and Langbein (2010), in Kaufmann et al. (2010a; 2010b), respectively. However, the WGI framework has changed a little over the years; its core essence remains the same and is described in six dimensions: *voice and accountability*, *political stability and absence of violence*, *government effectiveness*, *regulatory quality*, *rule of law*, *and control of corruption*. One of the objections to the WGI was that the six dimensions constitute, in fact, one concept. In our paper we take the position that analysis of the measures Kaufmann introduced separately adds value to the research, at least in our field, and should be continued. As Thomas (2006) has admitted (with many examples), the WGI framework has been widely used in empirical economic research, which reflects a significant rise in interest in institutions, although institutions have also been proxied by other, often more specific, projected indicators, such as *creditors' rights* in financial development studies (Bae and Goyal, 2009).

In our study, we focus on a specific segment of banking activity. We draw from the WGI to investigate the behaviors of foreign banks from developed countries while conducting business in developing and emerging host countries. We verify how governance quality, measured by the WGI, is interconnected with foreign bank lending. Which dimensions play

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[3] https://info.worldbank.org/governance/wgi/

a major role? More importantly, we show that in many cases, it is not the governance quality in emerging host countries that is important; rather, the home–host country distance is the driver that shapes multinational banks' lending behaviors. Moreover, we analyze governance quality levels and distances as factors potentially enhancing banking system resilience during a crisis, with the 2008-2009 global financial crisis (GFC) as a crucial example.

The remainder of this paper proceeds as follows. Section 2 presents a short review of the relevant literature, which we divide into two main strands, and develops our hypotheses. Section 3 describes the data and presents the econometric strategy used in this study. Section 4 presents and discusses the results, and Section 5 provides concluding remarks.

2 Literature review and hypothesis development

Our study corresponds to two strands of financial–economic research. First, we focus on the relevant literature on foreign bank lending, its drivers, and potential consequences. Second, we refer to the literature that links institutional/governance quality and financial markets. We review both classic and recent papers and show how our study complements the existing literature.

2.1 Literature on foreign banks' lending in host emerging markets

Foreign banks' lending in emerging economies has been the subject of extensive research over the last two decades in the context of this financing's stability during financial crises. Cull et al. (2018) presented a comprehensive literature survey on foreign bank activities, including performance, lending, and financial stability. We discuss only those papers that are relevant to our research questions.

First, we need to pay attention to empirical studies that focus on the pre-GFC period. De Haas and van Lelyveld (2006) studied lending provisioned by domestic and foreign banks in Central Eastern Europe from 1993 to 2003. They showed that greenfield foreign banks did not curb financing during host country crises, while domestic banks did. Similarly, a very positive profile of foreign banks acting in developing and transition economies was reported by Clarke et al. (2006), who claimed that enterprises, including small and medium-sized enterprises (SMEs), faced lower financing obstacles in countries characterized by higher levels of foreign banks' presence.

In a later study, de Haas and van Lelyveld (2010) extended their research and investigated 45 international banks' internal credit markets from 18 home countries with subsidiaries in 46 host countries. The research was conducted for the period 1991–2004; it did

not cover the GFC. They showed that a healthy parent bank was a condition that helped subsidiaries expand their lending. More importantly, de Haas and van Lelyveld (2010) provided evidence that foreign bank subsidiaries did not contract their lending during host country crises, in contrast to domestic banks. In addition, they developed the concept of *internal capital markets* in international banking groups. In general, this was defined as a tool for the groups to manage lending growth by subsidiaries, and not all threats related to this mechanism were identified.

In their third relevant study, de Haas and van Lelyveld (2014) included the GFC experience and offered a much broader view of multinational banks' lending activities abroad. They indicated that during home country crisis, foreign parent banks were reluctant to support their subsidiaries, and they even withdrew financing from second markets in order to enhance their position in home markets. This refers, in particular, to multinational banks that used to obtain financing in the wholesale market. However, de Haas and van Lelyveld (2014) provided evidence that although foreign banks' presence may act countercyclically in the case of host country crises, the opposite actually happens when home country crises occur. Thus, foreign banks' market penetration may be a channel for shock transmission between countries, particularly from developed to emerging economies. In line with this, Claessens and van Horen (2014) showed that during the GFC, foreign banks contracted credit more in comparison to domestic banks, with the exception of host markets, where almost all economies were dominated by foreign banks. Contrarily, Bonin and Louie (2017), in a study on eight European Union (EU) countries in Central Europe, which is sometimes called emerging Europe, documented that foreign banks' lending behaviors were not homogenous during the GFC. In their study, they distinguished six large multinational banking groups that have a strong presence through subsidiaries in emerging Europe. They documented that the biggest multinational banking groups did not reduce lending in host countries during the GFC and the Eurozone crisis (2010), in contrast to smaller foreign banks. They showed that large foreign banks behaved countercyclically in the host markets, and they turned out to be similar to domestic banks in this respect, in contrast to smaller foreign banks that contracted credit.

The first strand of the literature related to foreign bank behaviors shows that they can actually act procyclically, especially if the home market is hit by the crisis, which happened, for example, during the GFC. Against this background, the question arises as to whether governance and institutional quality in the host market and home–host governance proximity

foster foreign banks' lending and prevent foreign banks from withdrawing financing from peripheral markets during crisis.

2.2   *Literature on institutional and governance quality and the financial system*

Research on the institutional and legal foundations of economic and financial development is tremendous and refers among others to legal system origin (La Porta et al., 2008) and legal system quality (Beck and Levine, 2004). Financial markets and banks have also been subjects studied in the context of institutional quality, particularly creditors' protection and enforcement effectiveness (Bae and Goyal, 2009). La Porta et al. (1999) and Stulz and Williamson (2003) expanded the investigation of institutional proximity between countries and described it through the prism of having the same main religion and using the same language.

Institutional and governance quality also appear in the financial literature in other contexts; for example, Müller and Uhde (2013) confirmed links between governance and the microfinance sector, that is, its economic and social success. In a recent paper, Saha and Debasis Dutta (2021) investigated links between institutional/governance quality and macroprudential policy and confirmed that high-quality institutions complement the macroprudential instruments public authorities use to mitigate cross-sectional risk. Hu and Gong (2019) related institutional quality in a given country with bank lending and economic policy uncertainty and found that policy uncertainty significantly hampers banks' credit growth.

With regard to financial markets, Brandao-Marques et al. (2018) investigated the role of transparency, that is, country-level opacity (information unavailability), in fostering shock transmission from financial centers to peripheral markets using a sample of 46 emerging and frontier markets on one side and 16 developed markets on the other side. They confirmed that increasing transparency, for example, by enhancing disclosure by governments and firms, can significantly reduce peripherals' response to shocks from global financial centers.

Chen et al. (2016) investigated the relationship between corruption and domestic government-owned banks' lending. They documented that government-owned banks have higher loan growth rates than private banks during a crisis. More importantly, they show that in countries with low levels of corruption, increased lending by government-owned banks is associated with better bank performance and is more favorable to the gross domestic product (GDP) and to employment growth during a crisis period. On the other hand, the results for countries with high levels of corruption are more consistent with the political view Sapienza (2004) presented; that is, in this case, government-owned banks' increased lending is less

efficient in comparison to privately-owned banks and creates no beneficial effects on the economy, neither where GDP growth nor employment is concerned. However, Chen et al. (2016) claimed that domestic government-owned banks may act as mitigation mechanisms during a crisis but conditionally on a given country's corruption level. There are also studies that associate banks' lending and the culture in a given country, such as Dheera-aumpon (2019) and Jackowicz et al. (2021).

In our study, we refer somehow to all the above-mentioned papers; however, our goal is narrower and more specific. We contribute to the literature on the role of foreign banks from developed home countries conducting business in emerging host markets. We are interested in the institutional perspective; thus, we investigate the interlinkages between foreign bank lending in host emerging countries and governance quality, particularly home–host quality distance in this area. In more detail, we present two papers that are directly linked to our study. One of the papers to which we refer in projecting our study is by Lensink et al. (2008), who had very different research goals; they investigated whether foreign banks' cost efficiency depends on institutional quality in the host country. However, they introduced the concept of institutional quality distance, which we also include in our study on foreign banks' lending behaviors. Lensink et al. (2008) introduced institutional quality distance into their model by adding a composite indicator: simple Euclidian distance computed for home–host country pairs using all six institutional quality dimensions, proxied by the WGI, together. We go into more detail and study and interpret all dimensions separately using the novel version of the same WB database, currently available on the WB website. Finally, Lensink et al. (2008) analyzed a sample of banks in 105 countries for the years 1998–2003 and showed that higher similarity between home and host country institutional quality reduces foreign bank inefficiency.

The second paper that is relevant to our study is that of Chen et al. (2019). They provided an accurate literature review in the field of interest and, more importantly, conducted a cross-country analysis of interlinkages between lending and institutional quality. Among others, they show that in countries with higher quality legal systems and governance, banks are less affected by the destabilizing impact of financial spillovers on their loan supply. Their study covers the period 2000–2013 and banking sectors in 129 countries. Chen et al. (2019) chose not to investigate emerging economies separately. In our opinion, only smaller groups of host countries, such as low- and middle-income countries, can represent a homogenous sample, where similar connections between variables occur. Consequently, we chose different research goals and focus on a group of countries, for which the presence of foreign banks is relatively

the most important; that is, our research includes subsidiaries belonging to foreign entities from highly developed economies that conduct business in emerging markets. We also carry out estimations on both narrower and wider samples of banks, but we treat those specifications only as robustness checks. We supplement and develop Chen et al.'s (2019) research by introducing a wider range of governance quality proxies and discussing them in more detail and, more importantly, by verifying whether the distance in institutional and governance quality determines foreign banks' lending behaviors, as well as by adding the GFC and its interactions with governance quality measures to the model. We hypothesize that the distance between home and host country governance quality may be the actual driver. Furthermore, we abandon the US financial stress shock indicators Chen et al. (2019) used and study foreign bank behavior during the GFC, as the substantial reviewed literature justifies putting this crisis at the center of the debate on the role of foreign-owned banks. Our study's specific goal, particularly focusing on emerging host markets, also has implications for our empirical strategy, such as dependent variable choice, which we describe further in this paper.

Overall, the literature survey shows that the two strands of research that we define have so far been kept quite separate; that is, most studies on foreign-owned bank behaviors do not include governance quality in host markets, while most studies on governance and institutional quality refer to the financial system or banking sector in general and not necessarily to foreign banks. However, the literature often links financial development issues to institutions, and the available studies in the field rarely investigate this aspect in the context of multinational banks' cross-border lending behaviors. Our study's ambition is quite specific: to shed additional light on the behaviors of foreign banks from developed countries in host developing countries, in reference to resilience during the GFC.

Thus, in our research, we strive to contribute by empirically verifying the following hypotheses:

H1. *Governance quality in emerging host countries contributed positively to lending by foreign banks from high-income economies*.

H2. A *large governance quality distance between home and host country may hamper foreign banks' lending, even more often than low governance quality in the host country.*

H3. *Governance quality, particularly home–host country quality distance, shaped emerging host countries' resilience during the GFC.*

3   Data and methodology

We retrieved bank-level data from Bureau van Dijk's BankScope and BankFocus databases. Our study focuses on the behaviors of specific banks, that is, foreign-owned banks from developed markets conducting business in emerging markets. We use countries' income level (WB framework) to establish groups of countries in our study, and we treat high-income economies as developed markets, while low- and middle-income countries are emerging markets. The research sample we used for the main estimation covers the period 1996–2018. We studied the behaviors of 686 bank subsidiaries owned by 174 foreign ultimate owners. Finally, we have 3,247 bank–year observations pertaining to foreign banks' lending behaviors from 45 developed markets operating in 58 emerging markets. However, we also perform robustness check estimations, including expanding and constraining the research sample having a maximum: (a) 6,199 bank–year observations, while investigating foreign banks from all home countries that are present and offer financial products in emerging host countries; (b) 2,952 bank–year observations, while investigating foreign banks from home emerging countries that run a financial business in other emerging economies; and (c) 6,438 bank year–observations for the sub-sample of foreign banks from high-income countries that have subsidiaries in other developed markets. For brevity, the tables reflecting the robustness test results are not presented; however, we discuss them in Section 4. All results are available upon request.

Our dependent variable is the percentage of real (inflation-adjusted) growth in total gross loans in the domestic currency (*Loan*) of bank *i* in country *c* in year *t*. We are aware that most cross-country empirical studies on bank lending (Cull and Peria, 2013; Allen et al., 2017) convert lending to USD. However, we focus on emerging host countries, which may be characterized by high exchange rate fluctuations. Thus, we follow Bonin and Louie (2017) and use real growth in total gross loans in domestic currency as our dependent variable.

In our regressions, in line with the available relevant literature (de Haas and van Lelyveld, 2014; Bonin and Louie, 2017; Allen et al., 2017; Meriläinen, 2016, Chen et al., 2016), we control for bank characteristics, that is, liquid assets to total assets (*Liquidity*), loans to deposits (*LtD*), return on assets (*ROA*), equity to assets (*Equity*), and total bank assets to the GDP of a given country (*Size*), and lag those variables by one period. Furthermore, in line with the literature (Allen et al., 2017), we introduce GDP growth (*GDP growth*) and inflation rate (*CPI*) as country-level control variables. We assume that bank loans are positively linked to GDP but negatively associated with high inflation.

To verify our hypotheses, we apply the WGI, which are composite indicators of the governance quality in a country; they are constructed by averaging the data of sub-indicators previously assigned to one of the six main dimensions. Methodology issues and the list of data sources for dimensions can be found on the WB[4] website and are presented in detail in a dedicated paper (Kaufmann et al., 2010c). In general, the WGI bring together information from four types of over 30 sources: (a) surveys of households and firms, (b) commercial business information providers, (c) non-government organizations, and (d) the public sector. We fully adopt the WGI framework in this research. Thus, we assess governance quality using the following dimensions:

- *voice and accountability* (VAE), which we consider as a proxy for citizen participation

- *political stability and absence of violence* (PVE), which we consider as a proxy for political stability and lack of social unrest.

- *government effectiveness* (GEE), which we consider as a proxy for the quality of public services, including lack of political pressure on civil services

- *regulatory quality* (RQE), which we consider as a proxy for a regulatory framework that fosters private sector development

- *rule of law* (RLE), which we consider as a proxy for contract enforcement, property rights protection, judicial fairness, and effectiveness

- *control of corruption* (CCE), which we consider as a proxy for control over widely understood corruption, including both minor abuse and big corruption crimes

All indicators in their basic form range from -2.5 to 2.5, and an increase in the value of the indicator means an improvement in governance quality. Contrary to Thomas (2009) and Knack and Langbein (2010), we think that the WGI are well-projected, well-classified, and that they represent separate institutional features with a distinct essence. However, they are highly correlated with each other, especially GEE, RQE, and RLE; thus, all are introduced separately into our estimations. In addition, we find that only some are related to the lending measure we investigate. Furthermore, we introduce governance distances between home and host countries for each year and proxy them using the absolute value of the difference between the WGI scores. In Table 1, we present the list of variables used in the study, as well as descriptive statistics, while Appendix A1 presents the detailed definitions.

[Table 1]

We employ the following specification to verify our theses on bank lending and governance quality interlinkages:

$$Loan_{i,t,c} = \beta_1 + Bank_{i,t-1,c}\beta_2 + M_{c,t}\beta_3 + GFC\beta_4 + X_{c,t}\beta_5 + [GFC \times X_{c,t}]\beta_6 + \alpha_t + \varepsilon_{i,t}$$

(1)

where $Loan_{i,t,c}$ represents the real credit growth of bank i in year t in country c; $Bank_{i,t-1,c}$ is a vector of bank-level control variables for bank i in year t-1 (one period lagged); $M_{c,t}$ represents macro-level control variables for country c in year t; GFC represents the binary variable denoting the crisis in the years 2008 and 2009; $X_{c,t}$ represents control variables for institutional quality in country c in year t or institutional quality distance between the host and home market of foreign bank i acting in country c in year t (measured by the absolute value of the difference between the WGI scores for the home and host country), while $[GFC \times X_{c,t}]$ are interactions of institutional quality or institutional quality distance and a binary variable denoting the GFC. All regressions include a constant year fixed effect (α_t) and an error term ($\varepsilon_{i,t}$). In choosing the empirical method, we follow Claessens and van Horen (2014), Beck et al. (2011), Chen et al. (2016), and Bonin and Louie (2017) and estimate Equation (1) using pooled ordinary least squares. The bank-level explanatory variables are lagged by one period to mitigate the potential problem of reverse causality (Dushnitsky et al., 2016).

4   Results and discussion

In Table 2, we present the baseline results, that is, the regression results of the change in foreign banks' lending on a set of control variables (both bank and macro-level) and six governance quality proxies. The sample is foreign-owned subsidiaries with owners from high-income economies running a business in emerging markets. The results for bank-level control variables are as expected; that is, lagged values of *liquidity* and *equity* are positively linked to bank lending growth. The coefficients of macroeconomic control variables are also consistent with our expectations, that is, positive for GDP growth, negative for CPI, and significant in both cases. As the coefficients for bank and macroeconomic control variables do not change the signs and remain stable across the specifications, we will not refer to them further in this paper.

Regarding the governance quality dimensions, we show that the coefficients of VAE, RQE, and CCE are positive and significant at least at the 5% level, while the coefficients of PVE, GEE, and RLE are positive but insignificant. Thus, we can state that foreign banks from developed countries pay attention to the perceived high-quality regulatory environment that

supports private business and control over corruption as well as citizen participation, which includes free media, freedom of association, and expression. The latter, however, may be a good sign of potential financial demand sophistication. On the other hand, rule of law, judicial system fairness, political stability, and strong public services are not associated with foreign banks' decisions to develop business. In our opinion, these results suggest that foreign banks focus more on micro-level governance quality, such as controlled corruption and business regulation friendliness, rather than general institutions of principal importance, such as the rule of law. Thus, even if those principals deteriorate, there is still a chance that an emerging economy will attract foreign banks to run businesses if a supportive micro-environment is ensured. Although this interpretation seems reasonable, we will not go further, as the current scope of the study does not allow for it. Nevertheless, we indeed confirm H1, which states that *institution/governance quality in emerging host countries contributed positively to lending by foreign banks from high-income economies*, but only in reference to three WGIs, namely VAE, RQE, and CCE. This mostly shows that foreign banks perceived those three as the most vital.

[Table 2]

In Table 3, we present the regression results with the same bank-level and macro variables, but we pay attention to governance quality distance as a driver for foreign bank lending. However, developed economies are characterized by higher governance scores, we use the absolute value of the difference between the WGI for the home and host country in a given year to ensure that we capture proximity in governance quality and not governance quality itself. We assume that the higher the distance, the more difficult the lending business becomes. Indeed, we see that the coefficients of five out of six distance indicators are negative and highly significant, at least at the 1% level. Only the coefficient of PVE distance is insignificant, demonstrating that international banks do not perceive political stability when shaping lending strategies. However, we confirm our H2 quite convincingly in reference to the remaining five dimensions: VAE distance, GEE distance, RQE distance, RLE distance, and CCE distance. Interestingly, RLE distance and GEE distance shape foreign banks' lending, even though RLE and GEE do not (see Table 2). Thus, we see that foreign banks develop lending in emerging economies that are perceived to be close in terms of governance quality.

These results have several interesting implications. If the institutional/governance quality in an emerging economy deteriorates, it does not necessarily mean that foreign banks are less interested in operating in that country. Among the six estimations presented in Table 2, only three contain positive and statistically significant coefficients of governance quality

proxies, namely VAE, RQE, and CCE. At the same time, explanatory variables denoting governance quality distance are important in five out of the six estimates in Table 3. Thus, it may turn out that following deterioration in governance quality in emerging economies, *ceteris paribus*, foreign banks from developed countries with high-quality institutions withdraw their lending (due to the unacceptable level of governance quality distance), but they are replaced by banks from developed countries with lower quality governance and institutions.

In addition, we need to be aware that developed economies are indeed diversified in terms of the WGI. We calculate the standard deviation for WGI observations in our main sample, equivalent to descriptive statistics from Table 1, but computed for WGI values for home countries in each case, and they are all above 0.4. Furthermore, standard deviations of observations for VAE, PVE, and RQE are larger for emerging host countries, while standard deviations for GEE, RLE, and CCE are larger in the case of developed home markets. Thus, foreign banks that run businesses in emerging economies originate in home countries with a very diversified institutional background.

Hence, due to the weakening of, for example, the rule of law in the emerging economy, the aggregate of financing received from foreign banks may not decline. This funding will, however, be provided by foreign banks from other developed countries and may be associated with greater misallocation and lending corruption risks, as it comes from foreign banks from home markets with lower governance quality. Overall, in the short term, the effect for emerging countries may be hidden; however, in the long term, the change in the set of foreign banks active in the market as a result of institutional quality deterioration in host country, will not be beneficial for the emerging economy. Finally, we confirm H2 and assert that our results reveal some additional risks for emerging economies that have not been recognized thus far.

[Table 3]

In Tables 4A and 4B, we present the regression results of our model, while taking into account the GFC experience as a binary variable and its interaction with emerging host country governance quality and home–host country governance quality distance. We present the most interesting results, that is, for GEE, GEE distance, RQE, and RQE distance in Table 4A, and RLE, RLE distance, CCE, and CCE distance in Table 4B. We once again confirm a significant and positive link between our dependent variable and the levels of RQE and CCE. More importantly, we provide empirical evidence that high governance quality in terms of corruption control (CCE) indeed increased emerging market resilience to the GFC. The coefficients of

CCE, as well as its interaction with GFC, that is, CCE × GFC, are positive and statistically significant in Estimation (3) in Table 4B.

Furthermore, we confirm the significance of governance quality distances as factors that shaped emerging economies' resilience during the GFC. In Table 4A, the coefficients of GEE distance and RQE distance are negative and significant. Moreover, the coefficients of interaction GEE distance x GFC and RQE distance x GFC are negative and significant, respectively, in Columns (2) and (4) of Table 4A. Thus, we see that, in line with our expectations, a high governance quality distance hampers foreign banks' lending in emerging host countries in normal times and worsens the situation during crisis. Similarly, in Table 4B, the coefficient of RLE distance and its interaction with GFC in Column (2), as well as the coefficient of CCE distance and its interaction with GFC in Column (4), are negative and significant.

Finally, we confirm H3. Better institutions in the host country, particularly featuring high corruption control, stopped foreign banks from withdrawing their lending during the GFC, while large institutional quality distance between host and home countries significantly accelerated foreign banks' lending outflow. The GFC hit the developed economies — the foreign banks' home markets. de Haas and van Lelyveld (2014) showed that the risk of withdrawal of financing from peripheral markets increased. However, we indicate that emerging markets characterized by a lower governance quality distance from developed home markets were indeed more resilient. This is particularly evident in the case of GEE distance, RQE distance, RLE distance, and CCE distance. Thus, we provide evidence that the level of corruption control itself increased the resilience of a particular emerging market during the GFC, but when we apply the distance approach, the list of vital governance quality dimensions is longer and contains, in addition to corruption control, rule of law standards, regulatory quality, and effectiveness.

Lastly, we conduct robustness checks that are interesting but are of secondary importance. When we perform estimations involving host emerging markets and foreign banks from all over the world, regardless of the home country's income level, we see very similar results to those presented above. However, they are driven by mechanisms revealed in our sample because no significant relations between variables appear when we analyze host emerging markets and foreign banks that are only from other emerging markets. Furthermore, when we investigate the behaviors of foreign banks from developed home markets acting in other developed host markets, we also do not see the abovementioned mechanisms. Foreign

banks sometimes seek to increase lending in other high-income countries with lower institutional quality, which is justified as they look for higher returns in slightly riskier developed markets; however, characterized by overall good institutions. This once again confirms our empirical strategy, focusing on a well-defined and restricted sample of banks. We formulate our theses in reference to the lending behaviors of foreign banks from high-income countries running businesses in emerging economies, as we assume that their actions may be driven by similar mechanisms. They may share some characteristics, business goals, as well as fears and expectations. Thus, the mechanisms that drive their lending behavior may be robustly identified in panel research.

[Table 4A and 4B]

5   Conclusions

We are deeply convinced that institutions matter in the financial system and in the banking market. In our research, we draw significantly upon the achievements of New Institutional Economics and the WGI framework, but we ask ourselves questions related to the determinants and stability of bank financing in emerging economies in the context of governance quality.

We define our research sample specifically. We focus on the behavior of foreign banks from developed countries in emerging host markets. Hence, we also examine the importance of governance quality during the GFC, which was characterized by a strong impact on developed countries, that is, the home markets of the foreign banks we examine. We conduct our research using a relatively large sample of banks, and we utilize bank-level observations for the period 1996–2018. We propose a sophisticated approach and look at quality governance through the prism of home–host country distance. Ultimately, we indicate that governance dimensions such as *voice and accountability*, *regulatory quality*, and *corruption control* foster lending by foreign banks standalone. We see them as having a more micro character, and thus, they probably affect banks' business more directly in emerging economies, in comparison to others. While introducing the home–host country distance approach, *government effectiveness* and *rule of law* are also important. Moreover, we provide interpretations and forecast the consequences of governance quality deterioration in emerging markets. We think that the set of foreign banks that provide lending may change in a less favorable direction; however, the lending volumes may not change in the short term. Last but not least, fundamental importance should be attributed to corruption control, which strengthens lending, both standalone and within the

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distance-based approach, and additionally improved emerging banking sectors' resilience during the GFC.

In future research, we anticipate the need to extend the analysis and add experiences related to the COVID-19 crisis. At present, the pandemic is ongoing, and it is probably too early to judge. It should be noted, however, that this is another post-GFC global crisis that could have affected the behavior of international banks in emerging host markets. In addition, health protection today has become one of the most important country comparative advantages in reference to financial market attractiveness. Thus, it would be interesting to investigate emerging market resilience in the context of extended governance quality dimensions, including healthcare organization effectiveness in particular. We leave this, however, to future research.

References

Allen, F., Jackowicz, K., Kowalewski, O., Kozłowski, Ł. (2017). Bank lending, crises, and changing ownership structure in Central and Eastern European countries. *Journal of Corporate Finance* 42: 494 – 515.

Bae K.-H., Goyal V. K. (2009). Creditor Rights, Enforcement, and Bank Loans. *Journal of Finance* 64 (2): 823-860.

Beck, T., Demirgüç-Kunt, A., Martínez Pería, M. S. (2011). Bank Financing for SMEs: Evidence Across Countries and Bank Ownership Types. *Journal of Financial Services Research* 39: 35–54.

Beck, T., and Levine, R. (2004). Legal institutions and financial development. In C. Menard, and M. M. Shirley (Eds.). Handbook of new institutional economics. Berlin Heidelberg: Springer.

Bonin, J.P., Louie, D. (2017). Did foreign banks stay committed to emerging Europe during recent financial crises? *Journal of Comparative Economics* 45: 793–808.

Brandao-Marques, L., Gelos, G., Melgar N. (2018). Country transparency and the global transmission of financial shocks. *Journal of Banking and Finance* 96: 56–72.

Chen Y.-S., Chen, Y., Lin C.-Y., Sharma Z. (2016). Is there a bright side to government banks? Evidence from the global financial crisis. *Journal of Financial Stability* 26: 128 – 143.

Chen, W. Hamori, S., Kinkyo, T. (2019). Complexity of financial stress spillovers: Asymmetry and interaction effects of institutional quality and foreign bank ownership. *North American Journal of Economics and Finance* 48: 567–581.

Claessens, S., van Horen N. (2014). Foreign Banks: Trends and Impact, *Journal of Money, Credit and Banking*, Supplement to Vol. 46 (1).

Clarke, G.R.G., Cull, R., Martínez Pería, M.S. (2006). Foreign bank participation and access to credit across firms in developing countries. *Journal of Comparative Economics* 34: 774–795.

Cull, R. and Martínez Pería, M.S. (2013). Bank ownership and lending patterns during the 2008–2009 financial crisis: Evidence from Latin America and Eastern Europe. *Journal of Banking & Finance* 37: 4861–4878.

Cull, R., Martinez Peria, M. S., Verrier, J. E. (2018). Bank Ownership - Trends and Implications. *World Bank Policy Research Working Paper* No. 8297. Available at SSRN: https://ssrn.com/abstract=3098574.

De Haas, R. and Van Lelyveld, I. (2006). Foreign banks and credit stability in Central and Eastern Europe. A panel data analysis. *Journal of Banking & Finance* 30 (7): 1927–1952.

De Haas, R. and Van Lelyveld, I. (2010). Internal capital markets and lending by multinational bank subsidiaries. *Journal of Financial Intermediation* 19(1): 1–25.

De Haas, R., and van Lelyveld, I. (2014). Multinational Banks and the Global Financial Crisis: Weathering the Perfect Storm? *Journal of Money, Credit and Banking*, Supplement to Vol. 46 (1): 333 – 364.

Dheera-aumpon, S. (2019). Collectivism and connected lending. *Research in International Business and Finance* 48: 258–270.

Dushnitsky, G., Guerini, M., Piva, E. Rossi-Lamastra, C. (2016). Crowdfunding in Europe: Determinants of Platform Creation. *California Management Review* 58: 44-71.

Hu, S. and Gong, D. (2019). Economic policy uncertainty, prudential regulation and bank lending. *Finance Research Letters* 29: 373-378.

Kaufmann D., Kraay, A., Mastruzzi, M. (2010a). Response to 'What Do the Worldwide Governance Indicators Measure? *European Journal of Development Research* 22:55-58.

Kaufmann D., Kraay, A., Mastruzzi, M. (2010b). Response to: 'The Worldwide Governance Indicators: Six, One, or None'. World Bank.

Kaufmann D., Kraay, A., Mastruzzi, M. (2010c). The Worldwide Governance Indicators: Methodology and Analytical Issues. *World Bank Policy Research Working Paper* No. 5430. Available at SSRN: https://ssrn.com/abstract=1682130

Kaufmann, D., Kraay, A. and Zoido-Lobatón, P. (1999a). Aggregating Governance Indicators. Washington, D.C.: World Bank.

Kaufmann, D., Kraay A. and Zoido-Lobatón P. (1999b). Governance Matters. Washington, D.C.: World Bank.

Knack, S. and Langbein L. (2010). The Worldwide Governance Indicators: Six, One, or None?. *Journal of Development Studies* 46(2): 350-370.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. (2008). The Economic Consequences of Legal Origins. *Journal of Economic Literature* 46 (2): 285-332.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R. (1999). The quality of government. *Journal of Law, Economics, and Organization* 15: 222–279.

Lensink, R., Meesters, A., Naaborg, I. (2008). Bank efficiency and foreign ownership: Do good institutions matter? *Journal of Banking & Finance* 32: 834–844.

Meriläinen, J. (2016). Lending growth during the financial crisis and the sovereign debt crisis: The role of bank ownership type. *Journal of International Financial Markets, Institutions and Money* 41: 168 - 182.

Müller, O., Uhde A. (2013). The impact of external governance quality on the economic and social success of microfinance institutions. *International Journal of Monetary Economics and Finance* 6 (2-3): 116-149.

North, D. (2005). Institutions and the Performance of Economies Over Time. In: C. Ménard and M. M. Shirley (eds.) *Handbook of New Institutional Economics* 21–30. Springer.

North, D. (1991). Institutions, Institutional Change and Economic Performance, New York: Cambridge University Press.

Saha, M. and Debasis Dutta, K. (2021). Does governance quality enhance the efficacy of macroprudential policy? *Economics Letters* 204. 109886

Sapienza, P. (2004), The effects of government ownership on bank lending. *Journal of Financial Economics* 72 (2): 357–384.

Stulz, R.M., Williamson, R. (2003). Culture, openness, and finance. *Journal of Financial Economics* 70: 313–349.

Thomas, M. A. (2009). What Do the Worldwide Governance Indicators Measure? *European Journal of Development Research* 22: 31–54 Available at SSRN: https://ssrn.com/abstract=1007527.

Thomas, M. A. (2006). What Do the Worldwide Governance Indicators Measure? The John Hopkins University.

Williamson, O.E. (2000). The New Institutional Economics: Taking Stock, Looking Ahead, *Journal of Economic Literature* 38: 595-613.

Table 1 Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Liquidity	0.2708	0.1587	0.0195	0.5793
LtD	0.6924	0.3359	0.2238	1.3370
ROA	0.0142	0.0146	-0.0120	0.0327
Equity	0.1485	0.0726	0.0409	0.3077
Size	0.0068	0.0088	0.0000	0.0237
GDP growth	0.0342	0.0331	-0.1704	0.1503
CPI	0.0794	0.3406	-0.0375	10.5837
GFC	0.0878	0.2830	0.0000	1.0000
VAE	-0.1228	0.5652	-1.6608	1.1516
PVE	-0.5356	0.6228	-2.6770	1.1040
GEE	-0.2024	0.4082	-1.3695	1.1151
RQE	-0.0976	0.4493	-1.9968	1.1273
RLE	-0.4308	0.3817	-2.2411	0.9501
CCE	-0.4475	0.3865	-1.4439	0.9337
VAE distance	1.2252	0.6145	0.0006	3.2450
PVE distance	1.1891	0.6926	0.0001	4.0452
GEE distance	1.6000	0.5916	0.0193	3.4257
RQE distance	1.4206	0.5995	0.0051	3.4938
RLE distance	1.8026	0.5803	0.0015	3.8591
CCE distance	1.7868	0.7026	0.0001	3.5864

Table 2 Lending in emerging markets by foreign-owned bank's subsidiaries from high income countries and host country governance quality

This table presents the regression results of change in lending by bank i in year t in country c on a set of variables denoting the macro and banking sectors as the control variables and proxies for governance quality in the host country. The bank control variables are lagged by one period. All specifications include year fixed effects but are not reported for brevity. Robust standard errors are presented in parentheses, and ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Liquidity	0.123***	0.108***	0.110***	0.116***	0.112***	0.116***
	(0.0284)	(0.0276)	(0.0276)	(0.0277)	(0.0278)	(0.0279)
LtD	-0.00463	-0.00427	-0.00498	-0.00427	-0.00397	0.000322
	(0.0141)	(0.0141)	(0.0141)	(0.0140)	(0.0142)	(0.0142)
ROA	0.389	0.389	0.386	0.450	0.369	0.396
	(0.285)	(0.287)	(0.288)	(0.285)	(0.287)	(0.286)
Equity	0.180***	0.171***	0.177***	0.182***	0.177***	0.184***
	(0.0626)	(0.0631)	(0.0626)	(0.0625)	(0.0627)	(0.0627)
Size	0.0349	0.0148	0.128	-0.124	0.0452	0.00249
	(0.436)	(0.440)	(0.434)	(0.442)	(0.445)	(0.439)
GDP growth	1.227***	1.166***	1.164***	1.158***	1.172***	1.154***
	(0.136)	(0.135)	(0.136)	(0.135)	(0.135)	(0.136)
CPI	-0.109**	-0.121***	-0.119***	-0.0877**	-0.118**	-0.110**
	(0.0442)	(0.0445)	(0.0453)	(0.0432)	(0.0468)	(0.0439)
VAE	0.0198***					
	(0.00711)					
PVE		0.00923				
		(0.00590)				
GEE			0.0124			
			(0.00970)			
RQE				0.0339***		
				(0.00881)		
RLE					0.0108	
					(0.0108)	
CCE						0.0256**
						(0.0105)
Constant	-0.0114	0.0265	0.0124	-0.0566	0.0195	-0.0184
	(0.0350)	(0.0317)	(0.0390)	(0.0394)	(0.0394)	(0.0386)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,247	3,247	3,247	3,247	3,247	3,247
R^2	0.181	0.180	0.180	0.183	0.179	0.181
Adj. R^2	0.174	0.173	0.173	0.176	0.173	0.174

Table 3 Lending in emerging markets by foreign-owned banks' subsidiaries from high-income countries and governance quality distance between home and host countries

This table presents the regression results of change in lending by bank i in year t in country c on a set of variables denoting macro and banking sector as the control variables and the governance quality distance between home and host countries. The bank control variables are lagged by one period. All specifications include year fixed effects and country controls but are not reported for brevity. Robust standard errors are presented in parentheses, and ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Liquidity	0.123***	0.109***	0.112***	0.117***	0.116***	0.116***
	(0.0283)	(0.0276)	(0.0276)	(0.0276)	(0.0277)	(0.0276)
LtD	-0.0037	-0.00476	-0.00435	-0.00407	-0.00303	-0.000835
	(0.0141)	(0.0141)	(0.0141)	(0.0140)	(0.0141)	(0.0141)
ROA	0.368	0.360	0.456	0.513*	0.457	0.463
	(0.286)	(0.285)	(0.289)	(0.287)	(0.289)	(0.288)
Equity	0.180***	0.175***	0.157**	0.154**	0.153**	0.150**
	(0.0627)	(0.0629)	(0.0634)	(0.0631)	(0.0637)	(0.0635)
Size	0.0630	0.0464	-0.0627	-0.324	-0.216	-0.236
	(0.440)	(0.439)	(0.437)	(0.447)	(0.449)	(0.444)
VAE distance	-0.0177***					
	(0.00614)					
PVE distance		-0.00547				
		(0.0054)				
GEE distance			-0.0195***			
			(0.00627)			
RQE distance				-0.0303***		
				(0.00630)		
RLE distance					-0.0203***	
					(0.00659)	
CCE distance						-0.0202***
						(0.00531)
Constant	0.0597*	0.0523*	0.0756**	0.0739**	0.0805**	0.0810***
	(0.0306)	(0.0311)	(0.0313)	(0.0302)	(0.0319)	(0.0314)
Country controls	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,233	3,247	3,247	3,247	3,247	3,247
R^2	0.181	0.179	0.181	0.185	0.181	0.183
Adj. R^2	0.175	0.173	0.175	0.178	0.175	0.176

Table 4A Lending in emerging markets by foreign-owned banks' subsidiaries from high-income countries. Governance quality (GEE and RQE) and resilience to the GFC.

This table presents the regression results of change in lending by bank i in year t in country c on a set of variables denoting the macro and banking sectors as the control variables and the governance quality as well as the quality distance between home and host countries, including interactions with the binary variable denoting the GFC. The bank control variables are lagged by one period. All specifications include year fixed effects and country controls but are not reported for brevity. Robust standard errors are presented in parentheses, and ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Liquidity	0.111***	0.114***	0.116***	0.117***
	(0.0277)	(0.0276)	(0.0277)	(0.0276)
LtD	-0.00400	-0.00276	-0.00376	-0.00268
	(0.0141)	(0.0141)	(0.0140)	(0.0140)
ROA	0.376	0.429	0.443	0.495*
	(0.288)	(0.289)	(0.285)	(0.287)
Equity	0.177***	0.155**	0.184***	0.152**
	(0.0626)	(0.0633)	(0.0624)	(0.0630)
Size	0.135	-0.0815	-0.118	-0.325
	(0.435)	(0.437)	(0.442)	(0.447)
GFC	-0.147*	-0.00637	-0.132	0.00381
	(0.0859)	(0.0443)	(0.0837)	(0.0451)
GEE	0.00943			
	(0.0102)			
GEE x GFC	0.0340			
	(0.0354)			
GEE distance		-0.0149**		
		(0.00658)		
GEE distance x GFC		-0.0399**		
		(0.0200)		
RQE			0.0315***	
			(0.00919)	
RQE x GFC			0.0305	
			(0.0318)	
RQE distance				-0.0268***
				(0.00649)
RQE distance x GFC				-0.0459*
				(0.0240)
Constant	0.0189	0.0677**	-0.0503	0.0698**
	(0.0397)	(0.0315)	(0.0401)	(0.0302)
Country controls	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Observations	3,247	3,247	3,247	3,247
R^2	0.180	0.182	0.183	0.186
Adj. R^2	0.173	0.176	0.176	0.179

Table 4B. Lending in emerging markets by foreign-owned banks' subsidiaries from high-income countries. Governance quality (RLE and CCE) and resilience to GFC.

This table presents the regression results of change in lending by bank i in year t in country c on a set of variables denoting the macro and banking sectors as the control variables and the governance quality as well as the quality distance between home and host countries, including interactions with the binary variable denoting the GFC. The bank control variables are lagged by one period. All specifications include year fixed effects and country controls but are not reported for brevity. Robust standard errors are presented in parentheses, and ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Liquidity	0.113***	0.117***	0.117***	0.116***
	(0.0278)	(0.0277)	(0.0279)	(0.0276)
LtD	-0.000789	-0.00117	0.00218	0.000126
	(0.0142)	(0.0141)	(0.0142)	(0.0142)
ROA	0.351	0.429	0.396	0.450
	(0.287)	(0.289)	(0.286)	(0.288)
Equity	0.176***	0.149**	0.184***	0.147**
	(0.0626)	(0.0636)	(0.0627)	(0.0635)
Size	0.0418	-0.228	0.0343	-0.247
	(0.445)	(0.449)	(0.440)	(0.444)
GFC	-0.294***	0.0296	-0.243***	-0.0215
	(0.0815)	(0.0494)	(0.0885)	(0.0424)
RLE	0.00165			
	(0.0113)			
RLE x GFC	0.108***			
	(0.0370)			
RLE distance		-0.0148**		
		(0.00686)		
RLE distance x GFC		-0.0554**		
		(0.0216)		
CCE			0.0188*	
			(0.0109)	
CCE x GFC			0.0828**	
			(0.0398)	
CCE distance				-0.0169***
				(0.00556)
CCE distance x GFC				-0.0296*
				(0.0169)
Constant	0.0376	0.0704**	-0.00524	0.0748**
	(0.0400)	(0.0321)	(0.0390)	(0.0316)
Country controls	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Observations	3,247	3,247	3,247	3,247
R^2	0.182	0.183	0.182	0.184
Adj. R^2	0.175	0.176	0.175	0.177

Table A1 Variables and definitions

Variable	Description
Bank level variables	
Loans	Real growth rate of gross loans in domestic currency.
Liquidity	Liquid assets over total assets.
LtD	Ratio of total loans to total deposits.
ROA	Ratio of gross profit to total assets.
Equity	Ratio of equity capital to total assets.
Size	Ratio of bank's total assets to countries GDP.
Country level variables	
GDP growth	Real rate of growth of GDP.
CPI	Consumer price inflation.
GFC	Binary variable denoting Global Financial Crisis, it takes the value of 1 for the 2008 and 2009 and 0 otherwise.
VAE	*Voice and Accountability* (composite indicator by World Bank) captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media; estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).
PVE	*Political Stability and Absence of Violence/Terrorism* (composite indicator by World Bank) measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism; estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).
GEE	*Government Effectiveness* (composite indicator by World Bank) reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies; estimate of governance (ranges

from approximately -2.5 (weak) to 2.5 (strong) governance performance).

RQE   *Regulatory Quality* (composite indicator by World Bank) reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development; estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).

RLE   *Rule of Law* (composite indicator by World Bank) reflects 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; estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).

CCE   *Control of Corruption* (composite indicator by World Bank) reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests; estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance).

VAE distance   Distance in VAE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.

PVE distance   Distance in PVE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.

GEE distance   Distance in GEE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.

RQE distance	Distance in RQE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.
RLE distance	Distance in RLE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.
CCE distance	Distance in CCE between home and host country in a given year that is measured by absolute value of the difference between scores for both countries.

Table A2 List of emerging host countries included in the study

ALBANIA	LEBANON
ALGERIA	MACEDONIA (FYROM)
ANGOLA	MALAYSIA
ARMENIA	MAURITIUS
BANGLADESH	MEXICO
BELARUS	MONTENEGRO
BOLIVIA	MOROCCO
BOSNIA AND HERZEGOVINA	NEPAL
BOTSWANA	NIGERIA
BRAZIL	PAKISTAN
BULGARIA	PANAMA
BURKINA FASO	PARAGUAY
CAMBODIA	PERU
CHINA	PHILIPPINES
COLOMBIA	REPUBLIC OF MOLDOVA
COSTA RICA	RUSSIAN FEDERATION
COTE D'IVOIRE	SENEGAL
DOMINICAN REPUBLIC	SERBIA
ECUADOR	SOUTH AFRICA
EGYPT	SRI LANKA
GEORGIA	THAILAND
GUATEMALA	TUNISIA
HONDURAS	TURKEY
INDIA	UGANDA
INDONESIA	UKRAINE
JORDAN	UNITED REPUBLIC OF TANZANIA
KAZAKHSTAN	VENEZUELA
KENYA	VIETNAM
KYRGYZSTAN	ZAMBIA

Table A3 List of high income home countries included in the study

UNITED ARAB EMIRATES	ICELAND
AUSTRALIA	ISRAEL
AUSTRIA	ITALY
BELGIUM	JAPAN
BAHRAIN	REPUBLIC OF KOREA
BAHAMAS	KUWAIT
BERMUDA	LIECHTENSTEIN
CANADA	LUXEMBOURG
SWITZERLAND	MALTA
CHILE	NETHERLANDS
CAYMAN ISLANDS	NORWAY
CYPRUS	OMAN
CZECHIA	POLAND
GERMANY	PORTUGAL
DENMARK	QATAR
SPAIN	SAUDI ARABIA
FINLAND	SINGAPORE
FRANCE	SLOVAKIA
UNITED KINGDOM	SLOVENIA
GREECE	SWEDEN
HONG KONG	URUGUAY
HUNGARY	UNITED STATES
IRELAND	