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Boards of a Feather: Homophily in Foreign Director Appointments Around the World

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Boards of a Feather: Homophily in Foreign Director Appointments Around the World

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Abstract: We examine whether similarities in legal, sociological, and cultural characteristics between countries (country-pair homophily) affect foreign director appointments. Our results from estimating a gravity model, which includes economic and geographic country characteristics, indicate that country-pair homophily is associated with foreign director appointments to corporate boards. Country-pair homophily plays a more significant role in the foreign director market than in other cross-border exchange, such as trade, migration, and foreign investment, consistent with homophily being more important in bilateral voluntary human exchange. We use the international IFRS adoption and the gender-quota adoption in Norway as regulatory interventions to assess the role of country-pair homophily in new foreign director appointments. We find that both events led firms to appoint directors from countries that were, prior to the regulation, less institutionally, socially and culturally similar, attesting to the importance of homophily in foreign director appointments. Overall, we identify an impediment to the effectiveness of foreign director appointments driving global governance practice convergence.

Keywords: corporate governance; foreign directors; gravity model; homophily; culture; IFRS; Gender quota

JEL Classification: F16, F66, G30, G34, J60

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1. Introduction

The increasing globalization of business due to the growth in international exchange (of people, goods, and capital) is viewed as leading to the convergence of governance practices around the world through foreign director appointments (Hansmann and Kraakmann 2001; Khanna, Kogan, and Palepu 2006; Bouwman 2011; Iliev and Roth 2018). Correspondingly, several standard-setting bodies and multinational institutions, including the OECD and the World Bank, have issued global principles of good governance that advocate for board internationalization as a critical mechanism to achieve governance convergence (e.g., Davies and Hopt 2013; OECD 2017).[1] Despite the importance given to board directors in governance convergence , evidence on the drivers of foreign director appointments is sparse.

Boards provide oversight on their firms' strategic decisions, disclosure and financial reporting, the design of executive compensation plans, and the identification and appointment of directors. Directors' effectiveness in performing these functions determines the way in which firms are governed and perform (Hermalin and Weisbach 2003; Adams, Hermalin, and Weisbach 2010). A firm's board is structured as an endogenous response to its governance needs and its owners' preferences (Adams, Hermalin and Weisbach 2010). Prior work shows that firms' selection and design of governance policies, including board structure, are influenced by the institutional, economic, and social features of their domicile country (e.g., Lel and Miller 2019; Levit and Malenko 2016; Durnev and Kim 2005; Doidge, Karolyi, and Stulz 2007; Black 2001). Further, similarities between countries affect the cross-country transfer of knowledge, labor, and governance practices (Bloomfield, Brüggerman, Christensen, and Leuz 2017; Aggarwal, Erel, Ferreira, and Matos 2011; Guiso, Sapienza, and Zingales 2009; Khanna, Kogan, and Palepu 2006).

[1] For example, the German Corporate Governance Code encourages the appointment of foreign members to supervisory boards.

Consequently, we propose that foreign director appointments should not only be affected by country-level characteristics but also by the institutional, economic, and social conditions in-common between the domicile country of the firm and its directors (i.e., country-pair homophily).

Existing studies on cross-country appointments of directors suggest that foreign directors are a potential mechanism for propagating corporate governance practices across countries (Iliev and Roth 2018; Giannetti, Liao, and Yu, 2015; Masulis, Wang, and Xie 2012; Bouwman 2011). While these studies are informative about firm-level governance choices, they largely ignore the role of shared characteristics between the director's and the firm's countries in examining firm-level consequences of foreign director appointments.[2] As a result, these studies overlook the role of factors in-common between countries in affecting foreign director appointments. In contrast, we posit that shared characteristics between directors' and firms' countries affect both the supply of and the demand for foreign directors.

Our examination of the shared country characteristics between firms' and directors' home countries focuses on the role of homophily. Homophily is the tendency of individuals to associate, interact, and bond with others who possess similar characteristics and backgrounds and is viewed as one of the organizing bases of networks and inter-personal relationships (McPherson, Smith-Lovin, and Cook 2001). Homophily shapes group formation and social connections in a wide array of settings, such as school, work, and marriage (e.g., Rivera 2012, McPherson, Smith-Lovin, and Cook 2001, DiMaggio and Powell 1983).[3]

[2] Further, firm-level studies that estimate the marginal effect of director characteristics on individual firms, capture the marginal effect on firms' governance practices rather than the effect on country-level governance features. Micro estimates would equal aggregate estimates only if the micro estimates are proportional to the aggregate estimate. In the case of governance and the distribution of firms within a country the proportionate assumption rarely holds (i.e. the marginal firm does not always equal the average firm).

[3] In the case of the marriage market, positive assortative mating along observable inheritable traits (e.g., intelligence, race, and height) as discussed by Becker (1973) can be viewed as the micro foundation of homophily in which choosing a partner with similar characteristics increases the certainty about the quality of one's offspring.

Despite evidence that people tend to associate with individuals possessing similar traits, the implications for corporate governance decisions are unclear. Since inter-personal relations and networking are key elements of board dynamics, we expect that shared country-level characteristics, i.e. country-pair homophily, between firms and directors affects foreign director appointments. On the one hand, common or shared characteristics between individuals potentially enhance group performance by increasing communication effectiveness through the sharing of tacit knowledge, leading to more timely and productive decisions (e.g., Gompers and Xuan 2010; Cohen, Frazzini, and Malloy 2008; McPherson, Smith-Lovin, and Cook 2001; Ingram and Roberts 2000).[4] For boards, efficiency is likely increased when directors share a cultural and social environment, speak the same language and are more familiar with the governance and reporting practices of their firm's country. Alternatively, homophily negatively affects group performance by inducing social conformity and groupthink that leads to inefficient decision making (e.g., Ishii and Xuan 2014; Janis 1982; Asch 1951). Individuals in homophilic relationships often have an enhanced desire for unanimity and ignore, or insufficiently consider, the disadvantages of a favored decision or the advice of outside group experts.[5]

To measure country-pair homophily we utilize shared characteristics between countries that are known to affect cross-border economic exchange (Bloomfield, Brüggerman, Christensen, and Leuz 2017; Karolyi, Sedunov, and Taboada 2018; Karolyi and Taboada, 2015). Specifically, we measure homophily as a vector of attributes that include *Cultural proximity, Common religion*, and *Common language* (Inglehart and Welzel 2005; Hofstede 2001). We also include as measures

[4] Moreover, homophilic selection based on ability-related characteristics can lead to the formation of high-ability groups that have superior performance.

[5] Homophily also plays an important role in the diffusion of ideas and practices. A substantial literature shows that homophily has implications for the propensity of individuals to be affected by others' behavior and leads to convergence of ideas (e.g., see the survey by Jackson and Yariv 2011). Homophilous individuals tend to adopt new behaviors and products earlier and at higher rates, promoting diffusion. However, a certain degree of heterophily is desirable to introduce new ideas.

Colonial link, Common legal origin, and financial *Reporting proximity.* These cultural, social, and legal ties are important because they collectively influence cross-country exchange and tend to persist over time (e.g., Head and Mayer 2013).[6] Our motivation to proxy for the similarity in firms' and individuals' characteristics at the country-pair level is threefold. First, by its very nature, the notion of a "foreign" director is a country-level construct, i.e., a director is classified as "foreign" if the director's domicile country is different from that of the firm. Second, modeling homophily using individual director characteristics in a cross-country setting is an empirical challenge given the broad cross-sectional variation within countries.[7] In contrast, a domicile country serves as a parsimonious proxy of country-level characteristics that are shared by individuals and firms in each country. Third, prior studies show that aggregate commonalities between countries are a significant lever of economic exchange, over and above individual country characteristics.[8] Consequently, our goal is to identify the effect of country-pair similarities on foreign director appointments to improve our understanding of board internationalization.

We begin our empirical examination by analyzing the relative importance of firm-specific and country-pair determinants in affecting new foreign director appointments. Prior studies that examine corporate governance effectiveness around the world show that country characteristics

[6] The similarity in financial reporting practices is relevant for foreign director appointments because financial information can enhance governance and directors' effectiveness in performing their duties (Armstrong, Guay and Weber 2010).

[7] Proxies of homophily at the individual level (individual director traits and characteristics) cannot capture the aggregate between-country shared characteristics. Director characteristics such as age, education, and experience do affect firm-level decisions of director appointments, but they are not unique to foreign director appointments. What is unique in the cross-country setting is that commonalities between firm and director countries affect these appointments. Further, studying individual level similarity would be a theoretical and empirical challenge. To which board members is a foreign director be compared with? Which combination of intrinsic and acquired individual characteristics (gender, age, background, language, network, etc.) should be considered, and how should they be weighted? Essentially, what should be the baseline model of random assortment from which to obtain deviations?

[8] For example, a large stream of research in accounting and finance documents that cultural and social proximity between countries promotes trade, foreign investment, household equity ownership, and cross-border M&A (Christensen, Maffett and Vollon 2019; Ahern, Daminelli and Fracassi 2015; Aggarwal, Kearney and Lucey 2012; and Guiso, Sapienza, and Zingales 2009).

play a first-order role and are more important than firm-level characteristics in explaining governance (Lel and Miller 2019; Levit and Malenko 2016; Doidge, Karolyi, and Stulz 2007). Consistent with these studies, we find that country-level characteristics explain substantially greater variation in the likelihood of appointing new foreign directors than firm-level characteristics. This motivates us to further examine the determinants of foreign director appointments from a cross-country perspective and allows us to model country-pair characteristics that capture *similarities* across various economic, legal, and social conditions (country-pair homophily).

To examine the role of country-pair homophily in foreign director appointments we estimate a gravity model using a sample of 169,472 directors appointed to 26,940 corporate boards in 38 countries from 2000 to 2013.[9] To disentangle the country-specific demand/supply of directors from country-pair similarities, we regress bilateral director appointments on fixed effects corresponding to both director and firm domicile countries. We include all country-pair observations in our dataset to account for both potential and actual director appointments to firms around the world. Our empirical analysis indicates that the baseline gravity model explains more than 84% of the variation in director appointments across country-pairs. We find that firms located in economically significant countries appoint a higher number of foreign directors originating from other economically significant countries, while geographic distance decreases and a shared border increases the likelihood of cross-country director appointments. More importantly, including the country-pair homophily variables increases the explained variation in foreign director appointments by 8.7%. Country-pair homophily is economically important. The magnitude of the

[9] The gravity model has been widely used to explain cross-country trade and investment (Karolyi, Sedunov and Taboada 2018; Anderson 2011; Guiso, Sapienza, and Zingales 2006, 2009; Berkowitz, Moenius, and Pistor 2006; Anderson and Marcouiller 2002; Anderson 1979). The traditional gravity model interprets the country-pair distances as frictions to doing business across borders (e.g., Lewer and Van den Berg 2008; Anderson 2010).

coefficient on the country-pair homophily vector is 1.6 times larger than the sum of the coefficients on the GDPs of the firm's and director's countries. Our results imply that country-pair homophily is a significant determinant of cross-country director appointments and its explanatory power is incremental to other economic and geographic country characteristics.

We further investigate variation in the inherent strength of country-pair homophily in the director labor market. First, we examine the importance of country-pair homophily over time in our panel. Improvements in transportation and communication technologies and an increase in business globalization could have altered foreign director appointments around the world. Perhaps, over time, foreign director mobility is less constrained by geographic, cultural, social, institutional and reporting distance. While we find that during our sample period both the number of foreign directors and international trade increased significantly, we observe only a small (and largely insignificant) decrease in the effect of country-pair homophily on foreign director appointments. Second, we compare country-pair homophily's effect on the international director market with that on other bilateral markets. While trade and FDI represent arms-length exchange and migration is often driven by unilateral decisions, international director appointments are based on bilateral voluntary human relations where country-pair homophily should be most impactful. From estimating a gravity model, we find that country-pair homophily is more important in explaining foreign director appointments than other cross-border exchanges. Third, we compare the effect of country-pair homophily on foreign director appointments in poor governance countries with its effect among superior governance countries. To the extent that firms in poor governance countries have a greater incentive to attract directors from superior governance countries to facilitate improvements in governance, we expect country-pair homophily to be less of an impediment to foreign director appointments in poor governance countries (Miletkov, Poulsen, and Wintoki 2016;

Levit and Malenko 2016). However, we find that even in poor governance countries country-pair homophily negatively affects foreign director appointments. This finding suggests that homophily is a relevant friction to director movement from high to low governance countries, which limits foreign director appointments leading to the convergence in international governance practices.

Our final empirical tests examining homophily's effect on foreign director appointments exploit two policy changes that affect firms' director preferences. Specifically, we use a generalized difference-in-differences design to examine changes in foreign directors appointed around the staggered adoption of IFRS and the gender quota rule adoption in Norway. Following Karolyi, Sedunov, and Taboada (2018) we construct a variable, the number of foreign directors appointed to boards in a country that is *not explained* by country-pair homophily (*Dissimilar Foreign Directors*), by aggregating the residuals of a gravity model that includes country-pair fixed effects.[10] We expect an increase in *Dissimilar Foreign Directors* appointed to boards in countries switching to IFRS since adopting a common reporting language potentially increases country-pair homophily in reporting standards. We find that foreign director appointments increase in countries that adopted IFRS. Further, the number of *Dissimilar Foreign Directors* increases in adopting countries, consistent with increasing country-pair commonality facilitating foreign director appointments.

The gender-quota rule potentially leads constrained Norwegian firms to appoint female directors originating from outside Norway, since the supply of domestic female directors is likely inelastic in the short run. Consequently, we expect an increase in *Dissimilar Foreign Female Directors* appointed to non-compliant firms in Norway following the rule. We find that both foreign director appointments and *Dissimilar Foreign Female Directors* increase in non-compliant

[10] These fixed effects account for all shared time-invariant institutional, social and cultural characteristics between country-pairs. Thus, if director appointments do not change due to homophily the measure should equal zero.

Norwegian firms after the gender-quota rule. Collectively, our results imply that the IFRS and gender-quota adoption led firms to appoint directors from countries that were, prior to regulation, less institutionally, socially and culturally similar, attesting to the importance of country-pair homophily in affecting foreign director appointments.

Our results inform several areas of inquiry. First, we extend the corporate board governance literature by showing that homophily affects corporate board composition. Second, our study adds to a growing literature on the role of the international director market in global governance policies. Prior firm-level studies on directors focus on demand-side explanations, thereby ignoring directors' preferences that potentially affect the supply of corporate directors. We supplement this literature by identifying country-pair factors that influence both the demand for and the supply of directors between countries. Our work shows that, in addition to director-level characteristics (e.g. reputation), similarities between countries affect foreign director appointments and thus potentially influence the global governance practice propagation. Our analysis of foreign director appointments suggest a strategic complementarity in director appointments: directors are appointed to boards in countries with institutional and cultural features similar to those in their domicile country.[11] Our findings imply that country-pair homophily limits the effect of trade and financial globalization in shaping globalization of governance quality (Doidge, Karolyi, and Stulz 2007).

The remainder of the paper is organized as follows: the next section presents our data and variable construction used in our empirical analysis. Section 3 examines the determinants of foreign director appointments and the role of country homophily. Section 4 describes our

[11] Theoretical work by Levit and Malinko (2016) posits that directors' reputational concerns can amplify the effectiveness of corporate governance in a country, which suggests that reputation potentially explains why cross-country characteristics are important in corporate governance (see Doidge, Karolyi, and Stulz 2007).

examination of the relation between homophily and foreign director appointments around two regulatory interventions. We conclude in Section 5.

2 Sample and Data

We use the BoardEx database to collect detailed historical information on the characteristics of directors and senior executive officers of public companies for 38 countries over the period 2000 to 2013.[12] We use several BoardEx data files ("Director Characteristics", "Director Employment", "Director Network" and "Director Other Activities") to compile our sample by tracking each director's employment history using the start and end dates of their board appointments along with other relevant information.[13] Our sample consists of 169,472 directors appointed to 26,940 corporate boards in 38 countries.

We rely on information available in BoardEx to define director domicile throughout the sample period. We caveat that BoardEx does not provide information on a director's primary employer's country.[14] To overcome this limitation, we use each director's country of citizenship (44 percent of sample cases), and, if unavailable, use their country of first appointment reported in BoardEx (56 percent of sample cases). Our inferences do not change if we use either nationality or the country of the first appointment to classify director domicile, as shown in Appendix 2, Table 1. We drop observations with incomplete information about director domicile (country of origin *i*)

[12] For example, Sergio Marchionne was the CEO of Fiat Daymler Crysler in 2013 and independent director of Philip Morris. In our sample Marchionne represents, at the company level, a connection between Fiat Daymler Crysler and Philip Morris, whereas at the country-level, he represents a connection between Italy and USA. We note that our inferences do not change if we exclude senior executive officers from our analyses (please see Appendix 2).

[13] BoardEx provides data in different modules that can be linked through companies and individuals' identifiers. For example, "Director Characteristics" module provides information about demographics (age, gender, and nationality) and education (degree obtained and name of the school attended), whereas the "Director Network" module contains data about directors' professional (interlocks) and educational (same school) connections to other directors and senior managers.

[14] For instance, Masulis, Wang, and Xi (2012) rely on a specific field in RiskMetrics to identify information about the country of a director's primary employer. This field is not available in BoardEx.

and company domicile (country of destination *j*). We compile our sample by each firm's domicile country (destination), director's domicile country (origin), and year to form all possible combinations of country pairs and for each country-pair we calculate the number of directors domiciled in country *i* appointed to companies domiciled in country *j*. The final sample comprises 19,684 observations, representing all possible combinations of pairs among 38 countries over the period of 2000 to 2013.[15]

We supplement the BoardEx data with country-level data from several sources. Data for the gross domestic product (GDP) is obtained from the World Bank's World Development Indicators. Geographic distance and contiguous territory are obtained from Rose (2004) and the CIA Worldfact Book. Country-pair homophily variables are measured based on data from Inglehart and Welzel (2005) for cultural proximity; World Economic Forum for reporting proximity; Rose (2004) and the CIA Worldfact Book for colonial link, common religion, and common language; and La Porta, Lopez-de-Silanes, and Shleifer (2006) for common legal origin. The United Nations' Comtrade Database provides trade data. Migration data are obtained from OECD (2014) and foreign direct investment (FDI) data are from UNCTAD (2014). Firm-level data are from Thompson Reuters Worldscope.

In Table 1, Column 1, we show that the percentage of foreign directors increased from 10.61 percent in 2000 to 19.47 percent in 2013, which provides support for the general perception of board internationalization and increasing foreign directors on boards (e.g. Giannetti, Liao, and Yu 2015; Masulis, Wang, and Xi 2012).[16] Table 1 also shows that on average 63 percent of foreign

[15] Our inferences do not change if we restrict the analysis to 2013 to account for the fact that BoardEx has poorer data coverage in the earlier sample years. This analysis is shown in Appendix 2, Table 2, Column 2.

[16] Globalization of corporate boards and discussions about the trend toward more internationally diverse boards have been commented often in the media (e.g., Joann S. Lublin, Globalizing the boardroom, The Wall Street Journal, October 31, 2005)

directors originate from countries with same legal origin as that of their firms, 27 percent originate from a contiguous country, and 38 percent are from a country that is geographically proximate. These preliminary results suggest that despite the increase in foreign directors over time, country-pair similarities and geographic constraints are important factors affecting foreign director appointments.

---------- Insert Table 1 about here ----------

In Figure 1, we show the distribution of foreign directors by country. We observe large differences among countries. In 2013, Luxembourg has the largest percentage of foreign directors (78 percent), followed by Korea (68 percent), and Ireland (57 percent), while Japan has the smallest percentage of foreign directors (six percent), preceded by the U.S. (nine percent), and India (11 percent).

---------- Insert Figure 1 about here ----------

Table 2 reports the mean values of the number of foreign directors and other country-level variables that we use in our empirical analyses. The U.S. stands out as the country with the largest number of foreign directors (3,607), average GDP, trade, and number of listed firms. Other countries with relatively high foreign directorships are Canada (2,389), the U.K. (1,887), and Hong Kong (1,466), which are all countries with developed capital markets. Interestingly, India, Japan, and Spain, where the number of listed firms is high, have relatively few foreign directors, suggesting that development of capital markets is not the only driver of cross-country director appointments. The countries with the fewest foreign directors are Philippines (32), Thailand (48), and Turkey (50).

---------- Insert Table 2 about here ----------

Table 3 tabulates average director appointments between all country pairs during the period 2000 to 2013. The numbers below the diagonal present the average number of directors that are domiciled in country *i* (column) and appointed to companies domiciled in country *j* (row), and the numbers above the diagonal present the average number of directors that are domiciled in country *j* (row) and appointed to companies located in country *i* (column). The U.S. is the largest source with 7,054 directors (among them 2,246 appointed in Canada, 724 in the U.K. and 517 in Ireland), followed by the U.K. with 5,240 directors (among them 2,075 appointed in the U.S., 746 in Canada, and 444 in Australia), and Canada with 1,129 (638 directors appointed in the U.S., 106 in the U.K., and 93 in Australia). This descriptive evidence suggests that proximity of countries' legal structures, language and cultural values is associated with country-pair director appointments. Among the continental European countries, Germany has the most directors on boards in other countries with 962 directors (162 in the U.S. and 134 in Switzerland), followed by France with 824 directors (129 in the U.S., 100 in the UK, and 67 in Belgium). Of the Asian countries China has the largest number of directors appointed to boards in other countries with 1,907 directors (1,464 in Hong Kong and 107 in Singapore) and Hong Kong is second with 513 (283 in China and 92 in Singapore).

---------- Insert Table 3 about here ----------

3. Determinants of foreign director appointments

3.1. Firm characteristics versus country-level factors

Prior studies that examine corporate governance effectiveness around the world show that country characteristics play a first-order role and are more important than firm-level characteristics in explaining governance (Lel and Miller 2019; Levit and Malenko 2016; Doidge, Karolyi, and Stulz

2007). Consequently, we begin our analysis by comparing the relative importance of country-level and firm-level characteristics in explaining foreign director appointments. We estimate the following logistic regression:

$$\begin{aligned} FD\ appointment_{z,i,j,t} = {} & \gamma_0 + \gamma_1 Foreign\ Sales_{z,t} + \gamma_2 Log(assets)_{z,t} + \gamma_3 Sales\ Growth_{z,t} + \gamma_4 Leverage_{z,t} + \gamma_5 \\ & Board\ Size_{z,t} + \gamma_6 Busyness_{z,t} + \gamma_7 GDP\ destination_{j,t} + \gamma_8 GDP\ origin_{i,t} + \gamma_9 \\ & GeographicDistance_{i,j} + \gamma_{10} Contiguous_{i,j} + \gamma_{11} CulturalProximity_{i,j} + \\ & \gamma_{12} ReportingProximity_{i,j} + \gamma_{13} Colony_{i,j} + \gamma_{14} Common\ Legal\ Origin_{i,j} + \gamma_{15} Common \\ & Religion_{i,j} + \gamma_{16} Common\ Language_{i,j} + \varepsilon_{z,t} \end{aligned} \quad (1)$$

Where *FD appointment* is an indicator variable equal to one if director *x* from country *i* is appointed to firm *z* in country *j* in year *t*, and zero otherwise.[17] We identify newly appointed directors by identifying directors in each firm-year that are not listed as directors in the prior year's record for the same firm.[18] For each firm *z* with domicile in country *j* that appoints a new foreign director in year *t* (11,555 firm-year observations), we include all possible countries *i* (37 countries). Our sample contains 427,535 observations. Following prior studies, we account for idiosyncratic firm factors that potentially influence the appointments of foreign directors (Miletkov, Poulsen, and Wintoki 2016; Masulis, Wang, and Xi 2012). Specifically, we include the percentage of foreign sales to total sales, company size (measured as natural logarithm of total assets), growth in net sales relative to the previous year, leverage (measured as total debt divided by total assets), the number of directors on board, and the percentage of busy directors on board (i.e., directors who hold more than 3 board appointments). In each specification we include year fixed effects and cluster standard errors by firm.[19]

Table 4 displays our results. In Column (1), we include firm characteristics and industry fixed effects. We find that the model has modest explanatory power; the Pseudo R-squared is lower

[17] We provide a detailed description on how we classify a director as being foreign in section 2.
[18] We acknowledge that this approach is subject to limitations, given that BoardEx data may not always be complete.
[19] Our inferences do not change if we cluster standard errors by country of destination.

than one percent. Our coefficient estimates on the firm-level covariates are largely in line with prior literature (e.g., Miletkov, Poulsen, and Wintoki 2016; Masulis, Wang, and Xi 2012). In Column (2), we include firm fixed effects to account for unobservable firm characteristics. We find that the explanatory power is still modest, being lower than one percent.[20]

We further include country-level covariates that have been used by prior literature to explain international corporate governance and business (e.g., Karolyi, Sedunov, and Taboada 2018; Doidge, Karolyi, and Stulz 2007). We include the GDP of both directors' and firms' country, geographic distance between the two countries and an indicator variable equaling one if they share a common border. Finally, we include a vector of covariates that capture country-pair homophily. Specifically, we include cultural proximity, reporting proximity, and indicator variables for common colonial legacy, common legal origin, common religion, and common language. The detailed definition of country-level variables is provided in Appendix 1.

In Column (3), we tabulate the results after including the country-pair factors. We find a positive coefficient on all the factors, exception for *Geographic Distance,* and find that the Pseudo R-squared increases to 0.278. This result suggests that similarities between country of origin (director) and country of destination (firm) are positively associated with the appointment of foreign directors. In Column (4) we add firm characteristics to the country-level model and find that the Pseudo R-squared increases to 0.327. Finally, when we add fixed effects for country of origin *i* (Column 5) the Pseudo R-squared increases to 0.366.

---------- Insert Table 4 about here ----------

We compare the relative predictive ability of the models tested in Table 4 by examining the area under the receiver operating characteristic curve (AUC) for each of the models (reported

[20] We caution readers when interpreting results from this analysis, for the possibility of unobservable determinants.

at the bottom of Table 4).[21] Figure 2 displays the AUC plots for the models. Panel A shows that the model with country characteristics (Column 3) is closer to the upper left region of the graph, suggesting that this model better explains foreign director appointments than the models with firm characteristics (Columns 1 and 2). Further, Panel B shows that the model with fixed effects for country of origin (Column 5) has larger AUC than the model without these fixed effects (Column 4).

---------- Insert Figure 2 about here ----------

While board structure is selected by the firm, our results support the view that country-level characteristics play a strong role in affecting this governance choice. This initial finding motivates us to study the determinants of foreign director appointments from a shared country characteristic perspective and we create country-pair characteristics that capture *similarities* across various institutional, cultural, and social conditions (country-pair homophily). To test the effect of country-pair homophily on foreign director appointments we use a gravity model, a well-established model in the international economics literature.

3.2. Gravity model

The traditional gravity model (Anderson 1979) expresses trade flow between countries as a function of its chief facilitators and impediments. The model predicts that a mass of goods supplied by origin country *i* is attracted to a mass of demand for these goods at destination country *j*. The attraction force is reduced by frictions such as geographic distance and is increased by social

[21] The AUC is the most popular metric when comparing models predicting discrete outcomes (e.g., Kim and Skinner 2012). The receiver operating characteristic curve (ROC) is a plot of the true positive rate (i.e., sensitivity) versus the false positive rate (i.e., specificity) for different cut-off thresholds. A model with perfect discrimination has a ROC plot that passes though the upper left corner. The closer the ROC plot is to the upper left corner, the higher the overall accuracy of the model; suggesting a relation between the overall rates of correct classification and the area under the ROC.

and institutional similarities (country-pair homophily). Empirically we estimate the following model:

$$\begin{aligned} \textit{Foreign Directors}_{i,j,t} = {} & \gamma_0 + \gamma_1\, \textit{GDP destination}_{j,t} + \gamma_2\, \textit{GDP origin}_{i,t} + \gamma_3\, \textit{GeographicDistance}_{i,j} \\ & + \gamma_4 \textit{Contiguous}_{i,j} + \gamma_5 \textit{CulturalSimilarity}_{i,j} + \gamma_6 \textit{ReportingStandardSimilarity}_{i,j} \\ & + \gamma_7\, \textit{Colony}_{i,j} + \gamma_8\, \textit{Common Legal Origin}_{i,j} + \gamma_9\, \textit{Common Religion}_{i,j} + \gamma_{10} \\ & \textit{Common Language}_{i,j} + \varepsilon_{i,j,t} \end{aligned} \quad (2)$$

Where *Foreign Directors* is the number of directors domiciled in the origin country *i* who have board appointments at firms in the destination country *j* in year *t*. Given that our dependent variable has a large proportion of zeros, as many country-pairs do not have director appointments, we supplement our OLS gravity model with the Poisson pseudo-maximum likelihood (PPML) estimator as proposed by Santos Silva and Tenreyro (2006) and tested in several studies that estimate gravity equations (e.g., Karolyi and Taboada 2015). This estimator has been shown to perform well compared to other approaches when a sample consists of a large proportion of zeros (Santos Silva and Tenreyro 2011).

Our construct of interest is country-pair homophily. We measure country-pair homophily by a vector of covariates that are commonly used in the trade literature to explain cross-country trade flow (Karolyi, Sedunov, and Taboada 2018; Karolyi and Taboada, 2015). Specifically, we include *Cultural proximity* to capture the extent to which the shared norms and sociocultural values of individuals in one country vary from those of the individuals in another (Inglehart and Welzel 2005; Hofstede 2001). *Cultural proximity* is measured as in Tadesse and White (2010) as follows:

$$\textit{Cultural proximity}_{i,j} = [-\sqrt{(TSR_j - TSR_i)^2 + (SSE_j - SSE_i)^2}],$$

where *TSR* and *SSE* are the mean values of cultural dimensions *Traditional* versus *Secular-Rational authority* (TSR) and *Survival versus Self-Expression values* (SSE), which are obtained from Inglehart and Welzel (2005). Subscript *i* indicates country of origin, and subscript *j* indicates country of destination.

We also include indicator variables for countries that have a colonial link (*Colony*), with the same legal origin (*Common legal origin*), share a main religion (*Common religion*), and speak the same language (*Common language*). These cultural, social and legal ties persist over long periods of time and greatly influence economic exchange between countries.[22] We include *Reporting proximity* to capture similarity in financial reporting practices between countries, given the importance of financial reporting in improving governance and in facilitating directors' effectiveness in performing their duties (Armstrong, Guay and Weber 2010). *Reporting proximity is* calculated as follows:

$$\textit{Reporting proximity}_{i,j} = [-\sqrt{(ReportingIndex_j - ReportingIndex_i)^2}],$$

where Reporting Index is the mean value of the index measuring a country's auditing and reporting quality for the period 1995-2012, obtained from the Global Competitiveness Report (World Economic Forum 2013).

We use GDP as the mass variable because countries' economic size has been shown to increase bilateral trade (Bergstrand and Egger 2011). $GDP\ destination_{j,t}$ and $GDP\ origin_{i,t}$ represent the two mass variables for destination country *j* and origin country *i*. In alternative specifications, we use the log of the *Number of listed firms* in the two countries which proxies for the size of capital markets; we also substitute *GDP per capita* and *Human capital* for GDP.[23] We include *Geographic distance* in the model because: (i) cultural differences and information barriers manifest themselves more strongly over distance; and (ii) despite technological and policy improvements their influence remains in international exchange (Head and Mayer 2013). We calculate *Geographic distance* as the logarithm of the distance between the two countries' capitals,

[22] For example, Head and Mayer (2013) document that the impact of these social commonalities on trade are as strong as of a free trade agreement.

[23] We use the human capital index per country developed by the World Economic Forum (2013). Results with these alternative proxies for country masses are shown in Appendix 2, Table 2, Columns 3 and 4.

which is expected to reduce trade relations between two countries. We also include an indicator variable for *Contiguous* countries which takes the value of one if country *j* and country *i* border each other and zero otherwise (CIA Worldfact Book; Rose 2004).[24]

Following prior literature, we also include country fixed effects for the origin country (*DD*) and the destination country (*CD*) to account for unilateral country characteristics (Anderson 2010; Subramanian and Wei 2007; Baldwin and Taglioni 2006; Feenstra 2004; Rose and Van Wincoop 2001). The country-of-origin fixed effects capture systematic differences in foreign directors from a particular country, whereas the country-of-destination fixed effects capture the demand for directors from the destination country, which derives from the level of economic activity, capital market, and the quality of institutions and their enforcement. Finally, we include year fixed effects and we adjust standard errors for group correlation at the country-pair level.[25] Detailed variable definitions and computations are provided in Appendix 1. Table 5, Panel A reports descriptive statistics for the sample, while Panel B shows correlations among the gravity variables.

---------- Insert Table 5 about here ----------

Table 6 presents the estimation results for the gravity model. Our first analysis estimates the baseline gravity model including the two mass variables (*GDP destination* and *GDP origin*), *Geographic distance, Contiguous* and fixed effects for both country of origin and country of destination. Results presented in Column (1) show that our baseline model explains a significant portion of the global variation in foreign corporate director appointments, with an R-squared of 0.847. Consistent with extant gravity model estimates, we find a positive association with the two

[24] As a sensitivity analysis, we have included in the gravity model controls for economic factors other than GDP that potentially facilitate director appointments between two country-pairs (*Bilateral Trade* and *Cross-Listings*). Results are shown in Appendix 2, Table 2, Column 1. In Panel A, we use a PPML estimator, and in Panel B we report results using an OLS model. Our results are not sensitive to the estimation technique.
[25] Our inferences do not change if we cluster standard errors by country of destination.

measures of *GDP*, a negative association with *Geographic distance,* and a positive association with *Contiguous.* These results confirm that economic significance and geographic distance remain important determinants of cross-country director appointments.

In Column (2), we augment the baseline model by adding a vector of covariates that represent homophily at the country-pair level. We find a significant increase in the explanatory power of the model of about 10 percent. We also find positive and statistically significant coefficients on *Cultural proximity, Reporting proximity, Colony,* and *Common language*, and their effects are economically meaningful. A one standard deviation increase in *Cultural proximity* is associated with an increase of 16.7 foreign directors, i.e. 5.5 percent of the standard deviation of *Foreign Directors*. A one standard deviation increase in *Reporting proximity* is associated with an increase of 13.7 foreign directors, i.e. 1.7 percent of the standard deviation of *Foreign Directors*. A one standard deviation increase in *Colony* is associated with an increase of 14 foreign directors, i.e. 2.1 percent of the standard deviation of *Foreign Directors*. A one standard deviation increase of *Common language* is associated with an increase of 16 foreign directors, i.e. 4.6 percent of the standard deviation of *Foreign Directors*.[26] To further examine the relevance of homophily, we plot the sum of the coefficients of GDP Origin and GDP Destination and the sum of the coefficients of the homophily vector in Figure 3. The magnitude of the coefficient sum for the homophily vector is significantly larger (1.6 times) than the coefficient sum for the GDP variables, which suggests that country-pair homophily plays a substantial role in explaining variation in foreign director appointments.

---------- Insert Figure 3 about here ----------

[26] The coefficients in PPML should be interpreted as if the dependent variable is in logs (Karolyi and Taboada 2015). For instance, given the coefficient on *Cultural Proximity* (0.37), a one-σ increase (0.83 units) is associated with 1.36 times ($e^{0.37 \times 0.83}$) increase in the mean *Foreign Directors* from 12.30 to 16.70, or an increase of 5.51 per cent of its σ (79.68).

To verify that our results are not unduly affected by the inclusion of large countries, we exclude the US and the UK as both destination origin country. We find (in Column (3) of Table 6) that including the US and UK does not affect our results. In Columns (4) and (5) we re-tabulate results from Columns (2) and (3) using an OLS model. The results suggest that our inferences are not sensitive to alternative empirical methods. As a final test, we re-estimate Equation (2) excluding company executives from *Foreign Directors*. Our inferences do not change (see Appendix 2, Table 3).

---------- Insert Table 6 about here ----------

3.3. Country-pair homophily over time

The past two decades have seen: (i) the emergence and diffusion of transportation and communication technologies, and (ii) global governance institutionalization, intensified by the growth of multinational organizations (Zhou 2011). These two significant changes potentially have increased director appointments across countries by decreasing barriers to travel and employment, potentially leading to a lower role for country-pair homophily to affect these appointments. Consequently, we examine the effect of country-pair homophily on foreign director appointments over our sample period.

We estimate Equation (2) by year and compute the coefficient of the country-pair homophily vector as the linear combination of *Cultural proximity*, *Reporting proximity*, *Colony*, *Common legal origin*, *Common religion*, and *Common language*. In Figure 4, Panel A, we graph the coefficients by year. We observe that the coefficient decreased from 2.24 in 2000 to 1.98 in 2013. In Panel B, we compare changes in country-pair homophily with changes in aggregate level of *Foreign Directors* and *International Trade*. We find that relative to 2000, *Foreign Directors* have increased by 180 percent while *International Trade* has increased by 144 percent with

country-pair homophily decreasing by 11.6 percent during the same period. This difference is marginally significant at the 0.10 level. Collectively, these results suggest that barriers to both director mobility and international trade have decreased over time. Nevertheless, we find that the association between country-pair homophily foreign director appointments remains significant.

---------- Insert Figure 4 about here ----------

3.4. Country-pair homophily and other bilateral markets

We further explore whether the frictions created by country-pair homophily are unique to the director labor market or ubiquitous in other bilateral markets. Specifically, we study how the association between homophily and foreign director appointments differs from its association with cross-border product markets, migration, and foreign direct investments (FDI). While trade and FDI represent arms-length transactions of commodities and migration is often driven by unilateral decisions, international director movements are based on bilateral voluntary human relations and networks where the similarity between countries potentially matters most. Accordingly, we expect country-pair homophily to have a stronger effect in the international director market than in other bilateral markets.

We use Equation (2) to estimate a gravity model for international trade, migration, and foreign direct investment, and we tabulate results in Appendix 2, Table 5. In Figure 5, we plot the coefficients on the country-pair homophily vector for foreign directors, international trade, migration, and foreign direct investment. We find that the joint coefficient is 2.12 for foreign directors, 0.15 for international trade, 1.40 for migration flows, and 0.65 for FDI. These results suggest that country-pair homophily is more salient in the director labor market than in other bilateral exchange.

---------- Insert Figure 5 about here ----------

3.5. Country-pair homophily and country-level governance quality

We compare the importance of country homophily in poor governance countries with that in strong governance countries. Since firms in poor governance countries derive larger benefits from directors with superior governance experience, we expect country-pair homophily to be less important in affecting director appointments in these countries (Miletkov, Poulsen, and Wintoki 2016; Levit and Malenko 2016).

We use the country governance quality measure developed by Karolyi (2015, 2016). Karolyi (2015) constructs six time-varying country-level governance factors (market capacity, operational inefficiency, foreign accessibility, corporate opacity, legal protection, and political stability).[27] Consistent with Karolyi (2016), we run a principal component analysis of these six measures and obtain a common factor that we label *Governance Quality*. We classify *Low Governance Quality* countries as those in the first quartile of the distribution of *Governance quality*. We estimate the following model:

$$\begin{aligned} \textit{Foreign Directors}_{i,j,t} = {} & \gamma_0 + \gamma_1\, \textit{GDP destination}_{j,t} + \gamma_2\, \textit{GDP origin}_{i,t} + \gamma_3\, \textit{Geographic Distance}_{i,j} \\ & + \gamma_4\, \textit{Contiguous}_{i,j} + \gamma_3\, Z_{i,j} + \gamma_4\, \textit{Low Governance Quality}_t + \gamma_5\, \textit{Low}_t\, x\ \textit{GDP destination}_{j,t} + \gamma_6\, \textit{Low}_t\, x\ \textit{GDP origin}_{i,t} \\ & + \gamma_7\, \textit{Low}_t\, x\ \textit{Geographic Distance}_{i,j} + \gamma_8\, \textit{Low}_t\, x\ \textit{Contigous}_{i,j} + \gamma_9\, \textit{Low}_t\, x\ Z_{i,j} + \varepsilon_{i,j,t} \end{aligned} \quad (3)$$

Low Governance Quality is a dichotomous variable equaling one if the country (either destination or origin) is within the first quartile of the *Governance Quality* distribution. $Z_{i,j}$ is the vector of covariates capturing country-pair homophily. All other variables are defined in Equation (2), and definitions are provided in Appendix 1.

Table 7 displays our results. In Column 1, we tabulate results when the low governance quality country is the destination country. We find a negative and significant coefficient on the

[27] We thank Andrew Karolyi for sharing his data.

interaction variables *Low_Cultural proximity* and *Low_Common legal origin,* while we find a positive and significant coefficient on *Low_Common language.* In Column 2, we display results when the low governance quality country is the origin country. We find a negative and significant coefficient on *Low_Reporting proximity* but a positive and significant coefficient on *Low_Common language.*[28] When we calculate the linear combination of the coefficients' on the country-pair homophily vector with the interaction terms, we find a positive and statistically significant coefficient in both Column (1) and Column (2). Collectively, our results suggest two important implications. Cultural, legal, and social differences among individuals across countries remain a significant friction to foreign director appointments between high and low governance countries despite the potential benefits of obtaining a director from a dissimilar country. Further, the effectiveness of foreign director appointments as a mechanism to propagate superior governance practices is potentially hindered by country-pair dissimilarities.

---------- Insert Table 7 about here ----------

3.6. Estimating gravity model with pair fixed effects

In the Table 6 analysis, we use two sets of country fixed effects (i.e. origin and destination) to account for bilateral resistance to trade and other transaction costs and to allow the estimation of the coefficients on time invariant characteristics. Following prior work, we adopt a two-step fixed effects model (Bussiere and Schnatz 2007; Cheng and Wall 2005).29 Specifically, we first estimate the following model:

$$Foreign\ Directors_{i,j,t} = \alpha_{ij} + \gamma_t + \gamma_1\ GDP\ destination_{j,t} + \gamma_2\ GDP\ origin_{i,t} + \varepsilon_{i,j,t} \quad (4)$$

[28] As a sensitivity analysis, we re-estimate Equation (3) using an OLS model and show results in Appendix 2, Table 4. We find consistent results which suggest that our findings are not sensitive to using alternative estimation techniques.

[29] Egger and Pfaffermayr (2004), however, show that country-pair fixed effects are preferable than origin and destination country fixed effects to obtain efficient estimators. Relatedly, Micco, Stein, and Ordoñez (2003) suggest that the inclusion of country-pair fixed effects potentially mitigate endogeneity problems.

The term α_{ij} represents the country-pair individual effects covering all unobservable factors affecting the dependent variable, and the term γ_t is the time-specific effects accounting for any variables affecting the dependent variable that vary over time. These terms are constant across country-pairs (e.g. global changes in transportation and communication costs). We then purge the fixed effects from the effects of the time-invariant variables and estimate the following model:

$$\begin{aligned} \alpha\_hat_{i,j} = {} & \beta_0 + \beta_1\, GeographicDistance_{i,j} + \beta_2\, Contiguous_{i,j} + \beta_3\, Homophily_{i,j} \\ & + \beta_4\, Colony_{i,j} + \beta_5\, Common\ Legal\ Origin_{i,j} + \beta_6\, Common\ Religion_{i,j} \\ & + \beta_7\, Common\ Language_{i,j} + \mu_{i,j} \end{aligned} \quad (5)$$

Where α_hat is the estimated country-pair effect from Equation (4). All variables are defined as in Equation (2), and all definitions are provided in Appendix 1. The level of analysis is the country-pair. Table 8, Column 1, presents the first stage results, while Column 2 tabulates the second stage results. Consistent with our prior results, we find that *Geographic distance* is negatively associated with the estimated country-pair effects, whereas *Reporting proximity, Contiguous, Colony, Common religion,* and *Common language* are positively related with the estimated country-pair effects.

---------- Insert Table 8 about here ----------

4. Two policy interventions

In this section, we consider two policy interventions to further examine the relation between foreign directors' appointments and country-pair homophily. Specifically, we study the worldwide IFRS adoption and the Norwegian gender quota rule adoption.

4.1 Staggered adoption of IFRS worldwide

The adoption of common accounting standards (IFRS) increased financial reporting proximity between adopting countries, thereby increasing one dimension of country-pair

homophily. IFRS represents a common financial language that is believed to improve financial reporting comparability (De George, Li, and Shivakumar 2016; Cox 2014; Jayaraman and Verdi 2013; Barth, Landsman, Lang, and Williams 2012; Daske, Hail, Leuz, and Verdi 2008). Moreover, common financial reporting rules enhance the transferability of directors' financial skills across countries. Bloomfield, Brüggerman, Christensen, and Leuz (2017) show that the adoption of IFRS reduces economic mobility barriers, facilitating the cross-border accounting professional migration. This evidence suggests that increase in financial reporting proximity through IFRS adoption provides firms the opportunity to hire skilled directors from countries that they previously eschewed. As a result, we would observe an increase in the appointments of foreign directors originating from countries that are, on other dimensions, less similar to the IFRS adoptee country.

Following Christensen, Hail, and Leuz (2013) we restrict our analysis to the 2001-2009 period to obtain a similar group of adopter and non-adopter countries, and employ a generalized difference-in-differences design to estimate the following regression at the country-year level:

$$\%ForeignDirectors_{i,t} = \gamma_0 + \gamma_1 IFRS\_POST_{i,t} + \Sigma\gamma_i Fixed\ Effects_i + \varepsilon_{i,t} \quad (6)$$

Where *%ForeignDirectors* represents the percentage of foreign directors in country *i* in year *t*. The variable *IFRS_POST* equals one beginning in the calendar year following the first fiscal-year end after IFRS became mandatory in country *i* (Christensen, Hail, and Leuz 2013). For example, for European countries that adopted IFRS after fiscal-year end 2005, *IFRS_POST* equals one from 2006 onwards. *Fixed Effects* represents country, year and separate country-year fixed effects for the corresponding groups. Table 9, Panel A Column (1) reports our estimated results. We find a positive and statistically significant coefficient for *IFRS_POST*, which suggests that after IFRS adoption the number of foreign directors increased. This result is consistent with evidence from Bloomfield, Brüggerman, Christensen, and Leuz (2017) that find an increase in cross-country accounting professional appointments after IFRS. In Table 9, Panel B, we plot time

trends of the percentage of foreign directors before and after IFRS adoption. We plot the coefficients of year indicators for IFRS adopters for three years before (*t-3, t-2, t*-1) and after (*t+1, t+2, t+3*) the first fiscal-year end after adoption became mandatory (*t*). The results indicate an upward trend in the percentage of foreign directors around the adoption of IFRS.

We further examine whether the upward trend in foreign directors is associated with country-pair homophily. We follow Karolyi, Sedunov, and Taboada (2018) and create a measure of *Dissimilar Foreign Directors*. To create this measure, we first estimate a gravity model of the number of foreign directors with country-pair fixed effects using Equation (4). We then obtain the residuals from this model for each country-pair (Column 1). Arguably, country-pair fixed effects explain the variation due to time-invariant covariates in the homophily vector. Hence, the residuals from the gravity model represent the effect unexplained by country-pair homophily (i.e., *dissimilar foreign directors*). We then estimate weights (Column 2) using the lagged origin country total number of directors as a proportion of the global number of corporate directors and calculate the weighted average residuals (Column 3) by multiplying residuals (Column 1) by the weights (Column 2). Finally, we sum the weighted average residuals at the destination country level to obtain the number of dissimilar foreign directors (for example, in Germany, the dissimilar foreign directors in the year 2006 is 3.801). We show an illustrative example of our methodology in Appendix 3. We use *Dissimilar Foreign Directors* as the dependent variable to estimate Equation (6), and tabulate our results in Table 9, Column (2). We find a positive and significant coefficient on *IFRS_POST*, indicating that the number of dissimilar foreign directors increased after IFRS adoption. An increase in *Dissimilar Foreign Directors* is consistent with similarity in accounting rules leading firms to appoint directors originating from previously dissimilar countries, thereby deemphasizing homophily in director selection. In Panel C, we plot time trends of dissimilar

foreign directors before and after IFRS adoption and find an upward trend. As an additional analysis, in Column (3) and Column (4), we exclude the U.S. and the UK and replicate results from Column (1) and (2). Our inferences are unchanged.

---------- Insert Table 9 about here ----------

4.2 Adoption of gender quota rule in Norway

To further examine the relation between foreign directors and country-pair homophily, we exploit the gender quota rule adoption in Norway. Prior studies have exploited the Norwegian case as a natural experiment to examine firm-level consequences of the quota introduction, such as firm value (Eckbo, Nygaard, and Thorburn 2019; Ahern and Dittmar 2012), firm performance (Matsa and Miller 2013), board efficiency (Bøhren and Staubo 2014), and gender disparity in earnings (Bertrand, Black, Jensen, and Lleras-Muney 2017). We extend this research by examining the consequences of the gender quota on the country-pair homophily's effect in the corporate director market.

Our use of the Norwegian regulatory intervention assumes that supply of *local* directors is inelastic in the short-run since it plausibly gives Norwegian firms a smaller pool of qualified candidates to pick from. The short-run supply of qualified female directors in Norway potentially led Norwegian companies to appoint female directors originating from other, perhaps, dissimilar, countries. Consequently, we examine whether firms appoint more foreign female directors to comply with the rule and whether they appoint more female directors from dissimilar countries.

The Norwegian parliament passed the rule in December 2003, and compliance became compulsory in January 2006, with a two-year transition period. We adapt the Ahern and Dittmar (2012) research design and restrict the sample to the 2001-2009 period. As a counterfactual we

follow Abadie, Diamond, and Hainmueller (2014) and construct a "synthetic" Norway with weights chosen so that the resulting synthetic Norway best reproduces the values of the predictors for GDP and female foreign director percentage during the three-year period before the gender quota introduction. The synthetic Norway is a weighted average of Sweden (49.2 percent), Italy (38.8 percent), and Hong Kong (12 percent). The synthetic Norway is very similar to Norway in GDP (26.38 versus 27.12) and female foreign director percentage in 2001 (0.0038 versus 0.0043), 2002 (0.0061 versus 0.0057), and 2003 (0.0102 versus 0.0102). Table 10, Panel A, shows the foreign female director percentage for Norway and its synthetic counterpart. The synthetic Norway almost exactly reproduces the female director percentage in the pre-quota period (2001, 2002, and 2003). In the post-quota period, we observe a steep increase in female foreign director percentage in Norway up to 2008, while the female foreign director percentage in synthetic Norway remains flat.

We follow the same procedure used in the IFRS analysis to calculate *Dissimilar Female Foreign Directors.* However, in this case we estimate a gravity model of the number of female foreign directors with country-pair fixed effects using Equation (4). We use all female directors in our analysis (executive and independent).[30] We then extract the residuals from this model and aggregate them on a weighted average basis for a given destination country across all origin countries using the lagged origin country total number of directors as a proportion of the number of corporate directors. Table 10, Panel B, shows the trend in *Dissimilar Female Foreign Directors* of Norway and its synthetic counterpart. We observe that in the pre-quota period the two lines overlap. Post-quota, Norwegian *Dissimilar Female Foreign Directors* decrease after the gender

[30] Our inferences do not change if we exclude executive female foreign directors from our definition of *Female Foreign Directors,* as shown in Appendix 2, Table 7.

quota adoption and then increase steadily until 2008, while the synthetic Norway remains unchanged.

To test this difference empirically, we estimate the following model at the country-level:

$$\%FemaleForeignDirectors_{i,t} = \gamma_0 + \gamma_1 NORWAY\_2004_{i,t} + \gamma_2 NORWAY\_2005_{i,t} + \gamma_1 NORWAY\_2006_{i,t} + \gamma_1 NORWAY\_2007_{i,t} + NORWAY\_2008_{i,t} + NORWAY\_2008_{i,t} + \Sigma\gamma_i \, Fixed\ Effects_i + \varepsilon_{i,t} \quad (7)$$

Where *Female Foreign Directors* is the number of foreign female directors divided by total directors in country *i* in year *t.* We create year indicators for Norway during the post-quota period, and add *Fixed Effects* that represent country and year for the corresponding groups. The other 37 countries in our sample represent the control group. Table 10, Panel C, Column (1) tabulates our results. We find a negative and significant coefficient on *NORWAY_2004,* while we find a positive and significant coefficient on *NORWAY_2006, NORWAY_2007, NORWAY_2008,* and *NORWAY_2009.* These results suggest that the number of female foreign directors appointed to Norwegian firm boards decreased immediately after the passage of the gender quota, and then increased steadily through the end of the sample period.

We substitute *Dissimilar Female Foreign Directors* as the dependent variable in Equation (7) and tabulate results in Table 11, Panel C, Column (2). Consistent with the graph in Panel B, we find that in Norway the number of *Dissimilar Female Foreign Directors* decreased in 2004 and 2005, and then increased steadily through 2009. This evidence suggests that constrained firms, i.e. firms who hired closer to the mandatory quota date, appointed female directors originating from previously dissimilar countries. As a sensitivity analysis, in Column (3) and Column (4), we exclude countries that passed similar quota rules during the 2001-2009 period (Finland, Spain, and Switzerland) and replicate the results reported in Column (1) and (2). Our inferences remain unchanged.

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5. Conclusion

In this study we examine how common or shared country characteristics, i.e., country-pair homophily, affect foreign director appointments around the world. Our work is motivated by a large body of research documenting that country-level features play a first-order role in the effectiveness and propagation of corporate governance practices. But while country-level institutional, economic, and social features are expected to influence foreign director appointments, the commonality of features between a firm's and the director's domicile country are likely to further impact the internationalization of boards.

Our examination of the shared country characteristics between firms' and directors' home countries focuses on the role of homophily. Homophily is the tendency of individuals to associate, interact, and bond with others who possess similar characteristics and is viewed as one of the bases of networks and inter-personal relationships. In the international director labor market, country-pair homophily represents sociocultural, economic and legal similarities between the director's and the firm's country. For a large sample of director-firm appointments across 38 countries we find that country-pair homophily increases the likelihood of foreign director appointments, beyond individual country characteristics. Our evidence suggests that country-pair similarities that are deeply rooted in societies have a significant effect in the international director market and that this effect is more pronounced than in other bilateral markets such as trade, foreign direct investment, and migration.

We use the international adoption of IFRS and adoption of gender quota in Norway as external interventions to examine the relation between country-pair homophily and changes in

foreign directors. We find an increase in appointments of foreign directors originating from countries that are, on other dimensions, less similar to the adopting countries.

Our results that country-pair homophily affects the composition and internationalization of corporate boards sheds light on the plausibility of foreign director appointments serving as a primary mechanism for global corporate governance convergence. For example, despite the view that firms located in low quality governance countries can improve governance by appointing directors from superior governance countries, we find that foreign directors in low governance countries continue to originate from other low governance-quality countries, and that country-pair homophily explains that effect. Consequently, country-pair homophily limits the effect of trade and financial globalization in global convergence of governance quality.

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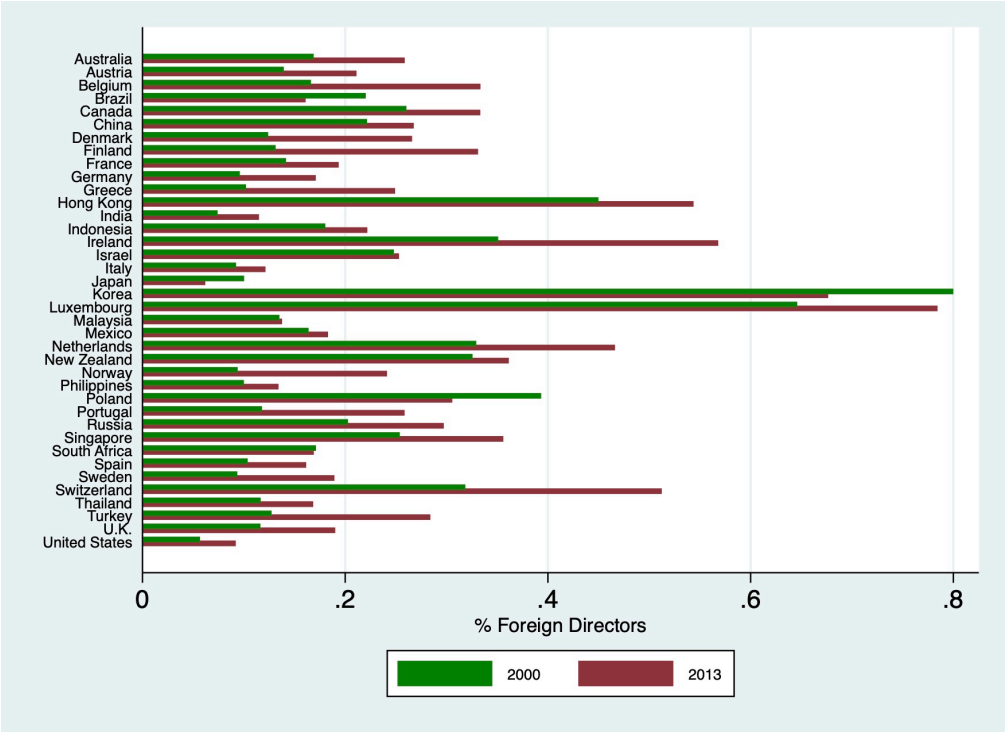
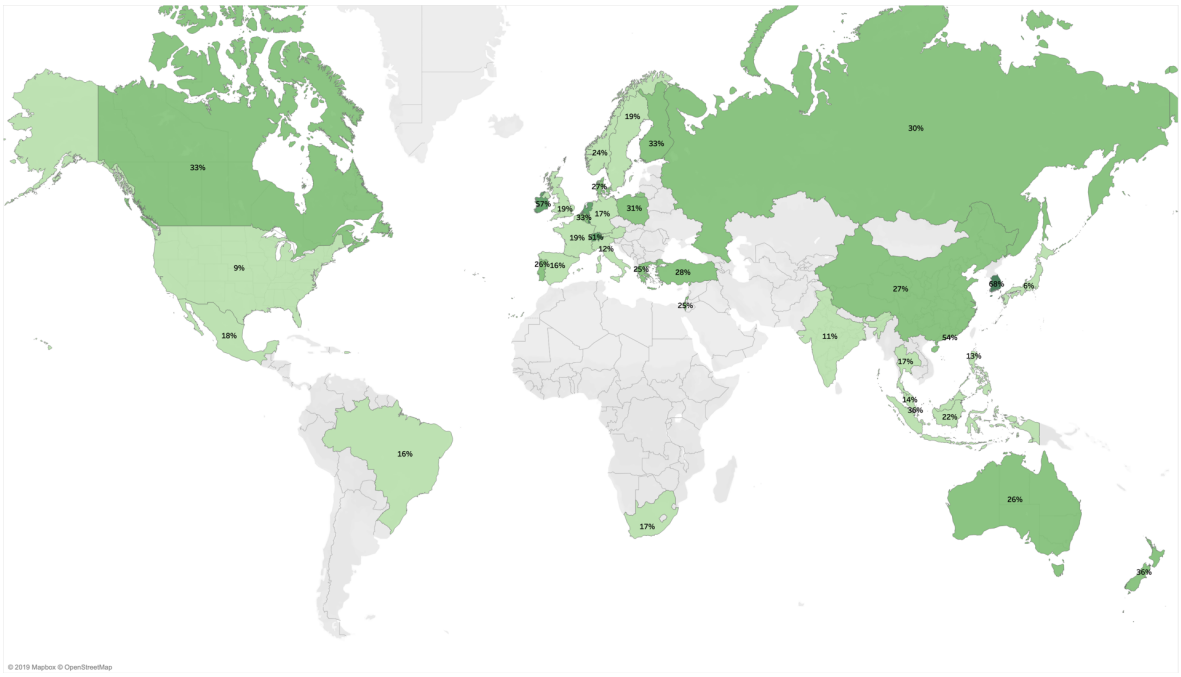
Figure 1 – Foreign directors around the world
Panel A: Foreign Directors by Country

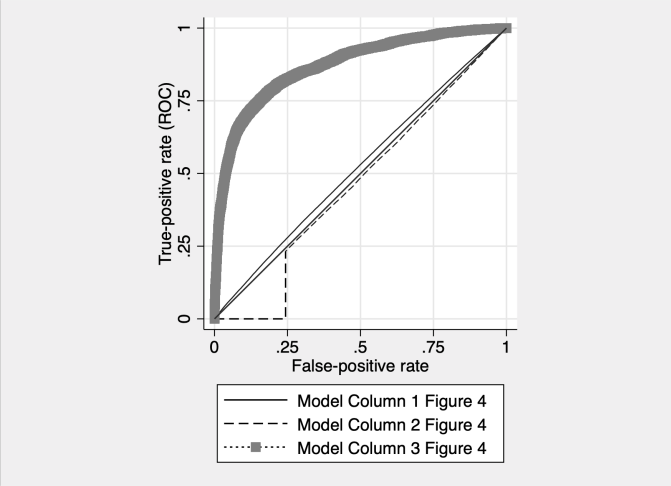


Panel B: World map of foreign directors

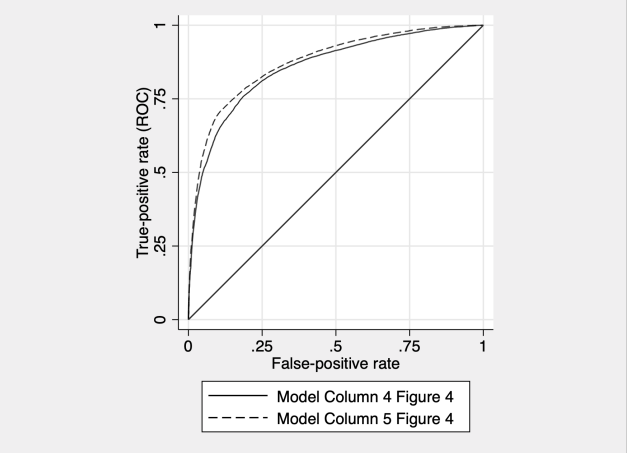


This Figure shows the percentage of foreign directors by country. Panel A reports the distribution for 2000 and 2013. Panel B shows a world map of foreign directors in 2013. Values are expressed as percentages of the total number of directors in a country-year.

Figure 2 – Foreign director new appointments. ROC curves.
Panel A: ROC Curve of Models with Firm and Country characteristics

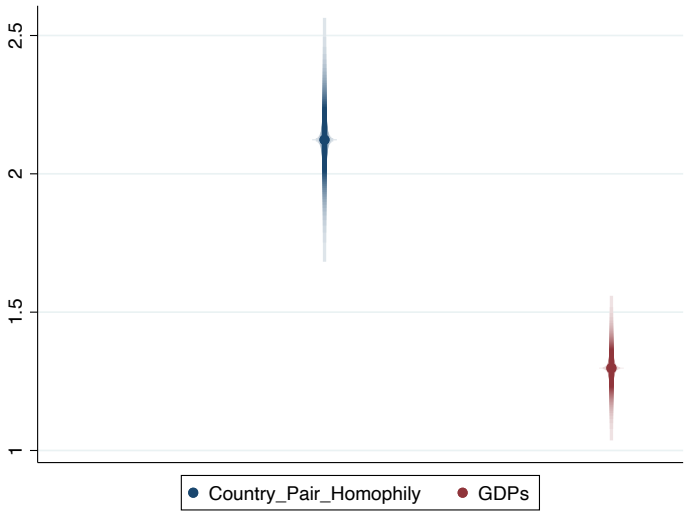


Panel B: ROC Curve of Models with and without Country Fixed Effects



This Figure shows the ROC curves for equations in Table 4. Panel A shows Model (1) with firm characteristics and industry fixed effects, Model (2) with firm characteristics and firm fixed effects, and Model (3) with country-pair characteristics. Panel B shows Model (4) with firm characteristics, firm fixed effects, and country-pair characteristics, and Model (5) which adds country of origin fixed effects. The receiver operating characteristic curve (ROC) is a plot of the true positive rate (i.e., sensitivity) versus the false positive rate (i.e., specificity) for different cut-off thresholds. Each point on the ROC plot represents a sensitivity and specificity pair corresponding to a particular decision threshold. In this analysis, a model with perfect predictive power will produce curves near the upper left corner, while a random guess will be on the diagonal line. The AUC is the area under the depicted curves.

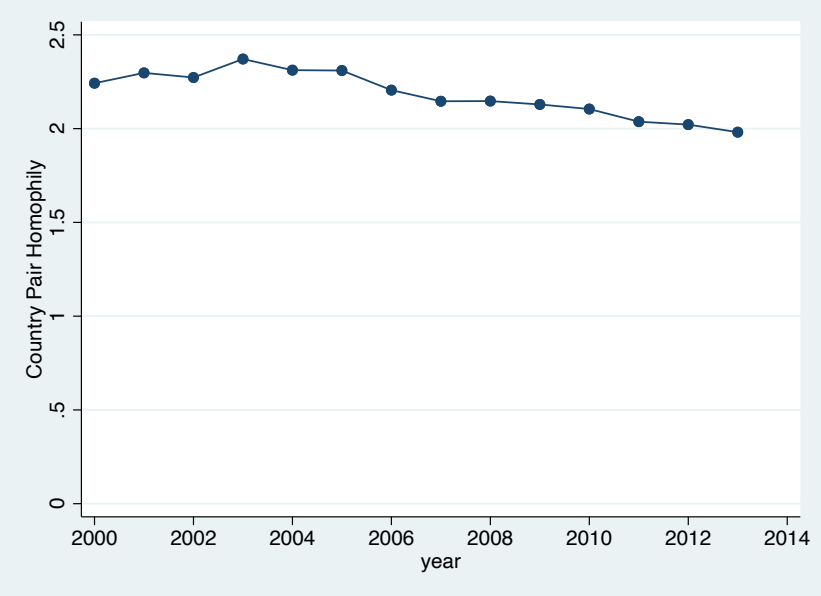
Figure 3 – Country-pair homophily and GDP



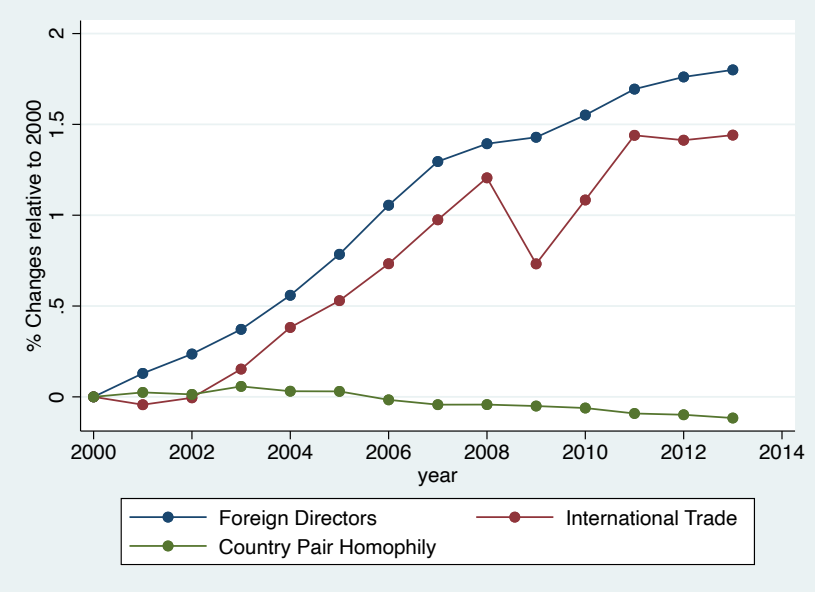
This Figure shows the sum of the coefficients of GDP Origin and GDP Destination (GDPs) and the Country-pair homophily vector (sum of the coefficients of Cultural proximity, Reporting proximity, Colony, Common legal origin, Common religion, and Common language). Coefficients are estimated with the model in Table 6, Column 2.

Figure 4 – Country-pair homophily over time

Panel A: Plot of Country-pair Homophily by Year

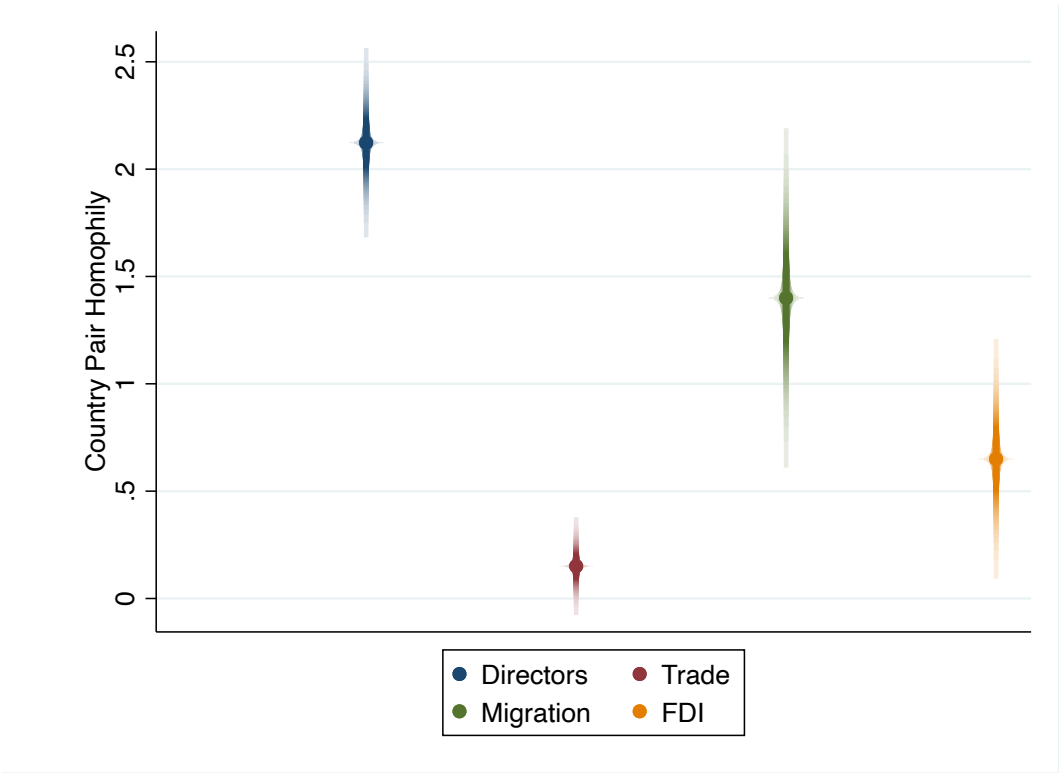


Panel B: Comparing Changes in Country-pair Homophily with Changes in Foreign Directors and International Trade.



This Figure examines time trends of country-pair homophily. We run a gravity model for each year in our sample period and estimated *Country-Pair Homophily* as the linear combination of the coefficients of *Cultural proximity*, *Reporting proximity*, *Colony*, *Common legal origin*, *Common religion*, and *Common language*. In Panel A, we plot *Country-pair Homophily* by year (levels). In Panel B, we compare changes (relative to year 2000) in *Country-pair Homophily* with changes in *Foreign Directors* and changes in *International Trade*. Both *Foreign Directors* and *International Trade* are aggregated at the year level.

Figure 5 – Country-pair homophily in bilateral markets



This Figure plots coefficients of country-pair homophily estimated with Equation (2) for: (a) Foreign Directors, (b) International Trade, (c) Migration Flows, and (d) Foreign Direct Investments (FDI). Country-pair homophily is a vector of the following covariates: *Cultural proximity*, *Reporting proximity*, *Colony*, *Common legal origin*, *Common religion*, and *Common language*. Results of Equation (2) for International Trade, Migration Flows, and FDI are shown in Appendix 2, Table 5. Variable definitions are provided in Appendix 1.

Table 1: Foreign director characteristics

Year	% of foreign directors	Total number of directors	% of foreign directors from countries with same legal origin	% of foreign directors from countries that share a border	% of foreign directors from countries within Q1 of geographic distance	% of foreign directors from countries within Q4 of geographic distance
	(1)	(2)	(3)	(4)	(5)	(6)
2000	10.61%	81,307	64%	26%	39%	13%
2001	11.04%	88,309	64%	26%	39%	14%
2002	11.44%	93,248	64%	27%	39%	14%
2003	11.93%	99,199	65%	26%	38%	15%
2004	12.56%	107,121	65%	26%	38%	16%
2005	13.45%	114,472	65%	26%	37%	17%
2006	14.65%	121,084	64%	26%	37%	17%
2007	15.74%	125,818	63%	26%	37%	17%
2008	16.55%	124,775	63%	27%	38%	17%
2009	17.18%	121,968	62%	27%	38%	18%
2010	17.93%	122,795	61%	28%	38%	19%
2011	18.71%	124,251	60%	28%	38%	20%
2012	19.22%	123,987	60%	28%	38%	19%
2013	19.47%	124,133	60%	27%	38%	19%

This Table reports some summary descriptive statistics of corporate directors in our sample. Column (1) shows the percentage of foreign directors. Column (2) shows the total number of corporate directors. Column (3) shows the percentage of foreign directors that come from countries that have the same legal origin. Column (4) shows the percentage of foreign directors that come from countries that share a common border. Column (5) shows the percentage of foreign directors that come from countries that follow within the first quartile of the geographic distance. Column (6) shows the percentage of foreign directors that come from countries that follow within the last quartile of geographic distance.

Table 2 – Country characteristics

Country	Country Code	Foreign Directors	Legal origin	GDP (bil $US)	Trade (bil$US)	Listed firms
Australia	AUS	982	Common	869	253	1,647
Austria	AUT	113	German	325	207	93
Belgium	BEL	210	French	399	639	177
Brazil	BRA	112	French	1,332	185	400
Canada	CAN	2,389	Common	1,287	658	3,265
China	CHN	520	German	4,018	1,535	1,548
Denmark	DNK	87	Scandinavian	267	140	200
Finland	FIN	110	Scandinavian	207	111	135
France	FRA	548	French	2,220	823	860
Germany	DEU	502	German	2,917	1,669	705
Greece	GRC	104	French	240	58	308
Hong Kong	HKG	1,466	Common	205	632	1,090
India	IND	394	Common	1,126	232	5,231
Indonesia	IDN	68	French	460	177	361
Ireland	IRL	411	Common	193	163	59
Israel	ISR	208	Common	180	82	609
Italy	ITA	160	French	1,803	631	285
Japan	JPN	153	German	4,803	961	3,205
Korea	KOR	52	German	922	507	1,610
Luxembourg	LUX	226	French	42	29	39
Malaysia	MYS	100	Common	186	253	923
Mexico	MEX	93	French	941	474	147
Netherlands	NLD	431	French	666	669	177
New Zealand	NZL	77	Common	117	44	137
Norway	NOR	141	Scandinavian	344	166	189
Philippines	PHL	32	French	148	82	241
Poland	POL	108	German	361	199	360
Portugal	PRT	69	French	195	91	63
Russia	RUS	122	French	1,101	316	271
Singapore	SGP	564	Common	173	419	478
South Africa	ZAF	257	Common	257	89	437
Spain	ESP	150	French	1,156	406	2,822
Sweden	SWE	244	Scandinavian	401	234	298
Switzerland	CHE	501	German	448	275	256
Thailand	THA	48	Common	232	224	470
Turkey	TUR	50	French	537	162	318
U.K.	GBR	1,887	Common	2,214	853	2,302
United States	USA	3,607	Common	13,557	2,394	5,407

This Table reports legal origin, and mean values of number of foreign directors, GDP, total trade, and number of listed firms for the period 2000-2013.

Table 3 – Foreign directors by country of origin (column) and their firm's domicile country (row)

	AUS	AUT	BEL	BRA	CAN	CHE	CHN	DEU	DNK	ESP	FIN	FRA	GBR	GRC	HKG	IDN	IND	IRL	ISR	ITA	JPN	KOR	LUX	MEX	MYS	NLD	NOR	NZL	PHL	POL	PRT	RUS	SGP	SWE	THA	TUR	USA	ZAF
AUS		7	3	7	93	32	65	24	1	1	3	16	444	0	39	6	21	11	1	1	6	0	2	0	21	6	1	56	10	4	0	2	49	4	1	0	517	92
AUT	2		2	0	1	6	0	81	0	1	1	2	11	0	0	0	2	1	0	7	0	0	0	1	0	3	2	0	0	1	0	1	0	1	0	0	22	1
BEL	1	1		8	6	4	1	17	4	8	0	67	50	10	1	0	2	2	0	3	1	0	5	0	0	42	5	1	0	2	1	0	0	3	0	0	49	1
BRA	2	2	3		8	4	2	3	0	16	0	24	17	1	0	0	0	0	0	11	2	0	1	7	0	2	2	0	1	0	24	1	0	0	0	0	66	0
CAN	174	4	5	13		31	49	28	4	2	2	42	746	0	13	2	10	17	6	7	13	1	4	13	2	6	10	17	1	2	4	16	4	20	0	2	###	84
CHE	7	15	12	8	18		6	134	7	5	5	49	97	5	1	0	2	6	2	22	0	0	2	4	1	12	4	2	0	0	0	3	3	16	0	0	192	10
CHN	17	0	1	1	27	3		3	0	6	0	3	99	1	283	0	3	1	2	3	26	0	0	0	14	5	0	2	2	0	0	0	61	2	9	0	396	3
DEU	7	81	13	1	10	54	33		14	19	6	43	87	0	14	0	3	2	1	34	4	0	6	2	0	46	7	2	0	5	3	3	5	18	1	3	187	6
DNK	1	0	3	0	2	1	0	5		1	2	11	32	0	0	0	0	1	0	1	0	0	0	0	0	5	20	0	0	0	0	0	0	50	0	0	24	0
ESP	0	2	3	4	0	2	2	11	1		0	23	29	0	1	0	2	1	0	25	2	0	2	10	1	4	0	0	0	0	27	0	0	3	0	0	55	2
FIN	1	1	1	1	1	7	0	17	1	0		8	28	0	0	0	0	4	3	1	2	0	2	0	0	5	4	0	1	0	0	2	0	64	0	0	33	0
FRA	4	7	55	8	27	34	5	56	4	52	0		116	3	0	0	9	5	2	49	13	1	11	5	0	29	7	0	1	1	2	3	2	5	0	0	218	6
GBR	173	6	23	9	106	37	43	93	14	26	4	100		16	9	10	33	128	18	55	8	3	4	0	28	74	13	29	7	6	8	32	29	44	0	2	724	121
GRC	3	0	3	0	4	3	1	7	1	0	0	2	40		0	0	1	1	0	6	1	1	1	0	1	4	3	0	0	1	2	3	0	0	0	0	69	0
HKG	49	3	4	0	83	3	1464	24	4	3	0	20	247	1		2	10	5	2	0	43	0	0	0	29	6	2	4	10	1	2	1	129	4	20	0	291	5
IDN	19	0	1	1	4	0	1	4	0	0	0	0	20	0	7		7	0	0	0	11	0	0	0	11	4	0	1	4	0	0	0	13	1	7	0	30	1
IND	9	0	2	1	7	12	2	39	7	1	2	27	118	0	2	1		18	0	5	26	0	0	0	4	9	2	1	6	0	0	0	9	7	1	2	291	2
IRL	10	1	3	1	18	7	0	5	0	1	0	4	150	0	1	0	0		2	2	1	1	0	0	0	7	2	0	0	1	0	4	1	4	0	0	223	2
ISR	0	0	2	0	5	3	1	6	0	0	0	0	32	0	0	0	4	0		1	1	0	0	0	0	1	1	0	0	1	0	2	2	0	0	1	184	5
ITA	1	2	8	0	5	21	1	19	1	7	0	43	27	2	0	0	0	0	1		0	1	0	0	0	5	0	0	0	0	1	1	1	1	0	1	65	1
JPN	6	1	3	1	2	4	9	6	0	1	0	8	38	0	5	4	2	0	0	0		0	0	0	3	4	0	0	2	0	0	1	4	0	5	0	146	1
KOR	0	0	0	0	0	1	4	5	1	1	0	7	9	0	6	1	3	0	1	0	8		0	0	0	1	1	0	1	0	0	0	3	0	0	0	62	0
LUX	1	0	17	0	6	6	0	29	2	2	3	44	58	1	1	0	5	6	2	18	0	0		6	0	6	9	0	0	0	15	9	1	7	0	0	61	5
MEX	2	0	0	7	0	0	0	1	1	18	0	4	13	0	0	0	0	1	0	0	1	0	4		0	5	0	0	0	0	0	0	0	0	0	0	78	1
MYS	11	1	0	0	1	1	6	4	5	2	0	6	29	0	3	3	1	2	0	2	4	1	0	0		4	6	1	4	0	0	0	71	2	4	1	4	0
NLD	4	3	28	1	10	12	3	63	1	5	2	35	79	1	0	0	12	5	8	6	1	0	2	5	0		8	0	1	1	0	14	2	8	0	0	158	4
NOR	3	0	0	2	1	1	0	10	21	0	8	8	50	0	2	0	0	4	1	1	0	0	0	0	0	2		0	0	2	0	0	1	49	1	0	50	1
NZL	54	0	0	0	2	0	3	8	0	0	0	0	31	0	1	0	0	2	0	0	0	0	0	0	1	1	0		0	0	0	0	4	0	0	0	26	0
PHL	1	0	0	0	3	1	6	0	0	0	0	0	9	0	1	0	0	0	0	0	4	0	0	0	0	0	0	0		0	0	0	6	0	0	0	26	0
POL	3	0	3	0	0	3	0	16	1	4	1	31	23	0	1	0	1	4	4	8	0	0	0	0	0	6	2	0	0		12	0	0	1	0	0	41	0
PRT	1	0	4	21	0	0	6	7	1	22	0	15	12	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	2		2	0	1	0	0	15	0
RUS	3	5	2	0	2	6	2	19	3	2	2	25	58	0	0	0	0	4	0	7	0	0	1	0	0	5	2	0	0	0	0		0	13	0	0	75	5
SGP	81	1	1	1	16	7	107	14	2	1	0	2	142	0	92	33	28	2	2	4	12	0	1	0	130	8	12	4	11	0	0	1		2	19	0	205	0
SWE	3	4	3	0	7	9	2	23	27	1	35	6	39	0	0	0	2	2	0	4	1	0	1	1	0	7	53	0	0	1	2	3	1		1	0	73	1
THA	0	0	3	0	0	1	18	1	0	0	0	4	10	0	4	3	9	0	0	0	4	0	0	0	1	1	6	0	0	0	0	0	11	1		0	20	0
TUR	0	3	1	1	3	0	1	7	1	3	0	8	11	10	0	0	0	3	0	10	1	0	0	0	0	6	2	0	0	2	0	7	0	3	0		31	1
USA	108	12	27	44	638	75	60	162	28	16	2	129	2075	4	26	2	87	70	72	62	62	7	3	56	3	103	23	9	5	5	5	14	23	55	6	3		42
ZAF	31	1	1	1	13	10	4	11	1	4	0	8	164	1	0	0	5	0	1	5	0	0	2	0	0	9	0	5	1	0	3	2	3	0	0	0	101	

This Table shows below (above) the diagonal the average number of directors moving from country of origin in *i* column (row) to country of destination in *j* row (column).

Table 4 – The firm-level and country-level determinants of foreign director appointments

Dependent variable: Pr(Foreign Director=1)	(1)	(2)	(3)	(4)	(5)
Foreign sales	0.05***	-0.09**		-0.11**	-0.11**
	[3.88]	[-2.36]		[-2.41]	[-2.42]
Log (assets)	0.00*	-0.04***		-0.04**	-0.04**
	[1.65]	[-2.75]		[-2.34]	[-2.31]
Sales growth	0.01**	0.000		0.000	0.010
	[2.26]	[0.74]		[0.65]	[0.68]
Leverage	-0.13***	0.020		0.030	0.030
	[-6.74]	[0.44]		[0.45]	[0.47]
Board size	0.01***	0.03***		0.04***	0.04***
	[8.52]	[10.93]		[10.26]	[10.61]
Busyness	0.05**	0.12**		0.15**	0.16**
	[2.14]	[2.26]		[2.33]	[2.35]
GDP destination			0.01**	-0.17***	-0.18***
			[2.29]	[-2.76]	[-2.80]
GDP origin			1.04***	1.04***	0.55***
			[86.35]	[87.14]	[7.83]
Geographic distance			-0.46***	-0.59***	-0.56***
			[-29.25]	[-30.14]	[-23.75]
Contiguous			0.25***	0.030	0.47***
			[4.96]	[0.60]	[8.57]
Country-pair Homophily:					
Cultural proximity			0.21***	0.29***	0.33***
			[10.17]	[13.07]	[13.45]
Reporting proximity			0.29***	0.42***	0.12***
			[8.68]	[13.32]	[2.87]
Colony			1.03***	1.21***	0.83***
			[27.26]	[32.85]	[13.91]
Common legal origin			0.38***	0.14***	0.18***
			[10.53]	[3.78]	[4.12]
Common religion			0.25***	0.19***	0.12***
			[9.61]	[6.17]	[3.75]
Common language			0.70***	0.91***	0.50***
			[22.11]	[19.80]	[8.35]
Observations	427,535	427,535	427,535	427,535	427,535
Country Origin FE	NO	NO	NO	NO	YES
Country Destination FE	NO	NO	NO	NO	NO
Year FE	YES	YES	YES	YES	YES
Firm FE	NO	YES	YES	YES	YES
Industry FE	YES	NO	NO	NO	NO
Pseudo Rsq	0.001	0.000	0.278	0.327	0.366
AUC	0.522	0.461	0.871	0.858	0.875

This Table shows the results of logistic regressions to examine the determinants of appointing foreign directors for the period 2000-2013. The level of analysis is the firm-year. For each firm *z* appointing a new foreign director in year *t* (11,555 firm-year observations), we include all the possible countries *i* (37 countries), resulting in 427,535 observations. We code the dependent variable *FD* to one if director *x* comes from country *i,* and zero otherwise. In Column (1), we include firm characteristics and industry fixed effects. In Column (2), we add firm fixed effects to the model in Column (1). In Column (3), we include country-pair characteristics. In Column (4), we include both firm characteristics, firm fixed effects and country-pair characteristics. In Column (5), we add to the model in Column (4) country of origin fixed effects. The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the firm-level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively. Variable definitions are provided in Appendix 1.

Table 5 – Univariate statistics

Panel A: Summary Statistics (19,684 observations)

Variables	mean	median	p25	p75	sd
Foreign Directors	12.30	1.00	0.00	4.00	79.68
GDP	26.97	26.75	26.10	27.84	1.24
Geographic distance	8.50	8.96	7.75	9.20	1.01
Contiguous	0.05	0.00	0.00	0.00	0.21
Cultural proximity	-1.66	-1.63	-2.26	-1.01	0.83
Reporting proximity	-0.75	-0.65	-1.14	-0.27	0.55
Colony	0.03	0.00	0.00	0.00	0.17
Common legal origin	0.28	0.00	0.00	1.00	0.45
Common religion	0.24	0.00	0.00	0.00	0.43
Common language	0.17	0.00	0.00	0.00	0.38

Panel B: Correlations (observations 19,684)

	Variables	1	2	3	4	5	6	7	8	9	10	11
1	Foreign Directors	1										
2	GDP destination	0.1300*	1									
3	GDP origin	0.1975*	0.0518*	1								
4	Geographic distance	-0.0654*	0.0353*	0.0353*	1							
5	Contiguous	0.1620*	0.0600*	0.0600*	-0.4205*	1						
6	Cultural proximity	0.0863*	-0.0837*	-0.0837*	-0.2917*	0.1655*	1					
7	Reporting proximity	0.0582*	-0.0424*	-0.0424*	-0.0754*	0.0581*	0.3429*	1				
8	Colony	0.2277*	0.0498*	0.0498*	-0.0569*	0.1586*	0.0459*	0.0860*	1			
9	Common legal origin	0.1187*	-0.0131	-0.0131	-0.0492*	0.1320*	0.1367*	0.1393*	0.2450*	1		
10	Common religion	0.0475*	0.0150*	0.0150*	-0.2071*	0.1084*	0.1819*	0.1432*	0.0751*	0.1553*	1	
11	Common language	0.1934*	-0.0322*	-0.0322*	0.0630*	0.1114*	0.0412*	0.1616*	0.2506*	0.3349*	0.0712*	1

This Table reports univariate statistics of the variables we use in our main models. Panel A reports summary statistics. Panel B reports Pearson correlations of variables for years 2000-2013. The symbol * indicates statistical significance at the 5% level. Variable definitions are provided in Appendix 1.

Table 6: Gravity model for foreign director appointments

Dependent variable:	Foreign Directors			Log(Foreign Directors)	
Sample:	ALL COUNTRIES		NO US&UK	ALL	NO US&UK
Estimator:	PPML	PPML	PPML	OLS	OLS
	(1)	(2)	(3)	(4)	(5)
GDP origin	0.94***	0.93***	0.68***	0.24***	0.20***
	[11.93]	[12.89]	[5.26]	[5.32]	[4.47]
GDP destination	0.39***	0.37***	0.58***	-0.01	0.08*
	[3.89]	[3.33]	[10.65]	[-0.36]	[1.80]
Geographic distance	-0.34***	-0.49***	-0.87***	-0.43***	-0.43***
	[-4.19]	[-8.08]	[-18.62]	[-14.54]	[-14.27]
Contiguous	1.28***	0.27*	0.41***	0.50***	0.55***
	[5.33]	[1.72]	[3.70]	[3.97]	[3.98]
Country-pair Homophily:					
Cultural proximity		0.37***	0.40***	0.07**	0.07**
		[4.88]	[7.52]	[2.29]	[2.17]
Reporting proximity		0.19*	-0.14*	0.11***	0.10***
		[1.78]	[-1.66]	[3.05]	[2.60]
Colony		0.76***	0.29	0.56***	0.2
		[4.69]	[1.52]	[3.64]	[0.86]
Common legal origin		0.02	0.40***	0.23***	0.20***
		[0.15]	[5.10]	[5.11]	[4.59]
Common religion		0.1	-0.04	0.11***	0.10**
		[1.24]	[-0.42]	[2.72]	[2.31]
Common language		0.69***	0.73***	0.30***	0.35***
		[4.29]	[6.21]	[4.13]	[4.57]
Observations	19,684	19,684	17,640	19,684	17,640
R-squared	0.847	0.934	0.963	0.757	0.623
Country Destination FE	YES	YES	YES	YES	YES
Country Origin FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

This Table examines the economic, geographic, social, legal, reporting and cultural determinants of appointing foreign directors for the period 2000-2013. The level of analysis is the country pair-year. For each country *j* (38 countries) we include all the possible countries *i* (37 countries) over the sample period (14 year), resulting in 19,684 observations. Column (1) shows a gravity model controlling for *GDP,* geographic distance and whether two countries share a common border. In column (2), we include our country-pair homophily vector that captures cultural, reporting, social legal, and institutional similarities between country *i* and country *j* (cultural proximity, reporting proximity, existence of a colonial link between two countries, common legal origin, religion, and language). In column (3), we exclude the U.S. and the U.K. as both country of destination and country of origin. In columns (1) through (3) results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. In columns (4) and (5) we use an OLS estimator to reproduce results of columns (2) and (3), where the dependent variable is the natural logarithm of *Foreign Directors*. The *t*-statistics are reported in parentheses. In all models, standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table 7: Foreign director appointments and country-level governance quality

Dependent variable: Foreign Directors	Low Governance Quality in Destination Country	Low Governance Quality in Origin Country
	(1)	(2)
GDP destination	0.77***	0.94***
	[8.82]	[14.63]
GDP origin	0.37***	0.110
	[3.10]	[1.02]
Low_GDP destination	0.24***	0.17**
	[3.39]	[2.27]
Low_GDP origin	0.23***	0.32***
	[3.52]	[3.58]
Geographic distance	-0.44***	-0.51***
	[-7.21]	[-7.20]
Contiguous	0.39***	0.260
	[2.58]	[1.46]
Low Governance quality	-0.71**	-1.43***
	[-2.05]	[-3.97]
Low_Geographic distance	-0.50***	-0.54***
	[-3.83]	[-4.21]
Low_Contiguous	-0.560	-0.150
	[-1.52]	[-0.41]
Country-pair Homophily:		
Cultural proximity	0.46***	0.19*
	[6.09]	[1.72]
Reporting proximity	0.33**	0.59***
	[2.52]	[4.68]
Colony	0.72***	0.77***
	[4.64]	[5.04]
Common legal origin	0.130	0.32**
	[1.13]	[2.29]
Common religion	0.120	0.13*
	[1.59]	[1.82]
Common language	0.51***	0.35**
	[3.37]	[2.31]
Low_Cultural proximity	-0.51***	0.030
	[-3.83]	[0.20]
Low_Reporting proximity	-0.250	-1.43***
	[-0.81]	[-4.59]
Low_Colony	-0.070	-0.260
	[-0.28]	[-0.81]
Low_Common legal origin	-0.72***	-0.220
	[-2.65]	[-0.79]
Low_Common religion	0.140	-0.530
	[0.47]	[-1.49]
Low_Common language	1.31***	1.80***
	[3.82]	[5.13]
Observations	19,684	19,684
R-squared	0.94	0.96
Country Destination FE	YES	YES
Country Origin FE	YES	YES
Year FE	YES	YES

This Table examines differences in the determinants of appointing foreign directors between countries with low and high institutional quality. The level of analysis is the country pair-year. All results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). We use measures from Karolyi (2015) to identify countries of low governance quality as those in the first quartile of the distribution. Column (1) shows results when the low governance quality is the country of destination. Column (2) shows results when the low governance quality is the country of origin. The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table 8: Gravity model with pair fixed effects

Dependent variable	Foreign	Pair Fixed Effects
	(1)	(2)
GDP origin	0.24***	
	[5.13]	
GDP destination	-0.01	
	[-0.34]	
Geographic distance		-0.31***
		[-9.25]
Contiguous		0.65***
		[3.15]
Country-pair Homophily:		
Cultural proximity		0.00
		[-0.00]
Reporting proximity		0.29***
		[5.33]
Colony		1.31***
		[4.86]
Common legal origin		0.08
		[1.26]
Common religion		0.17**
		[2.30]
Common language		0.81***
		[8.32]
Observations	19,684	1,406
R-squared	0.935	0.293
Pair FE	YES	NO
Year FE	YES	YES

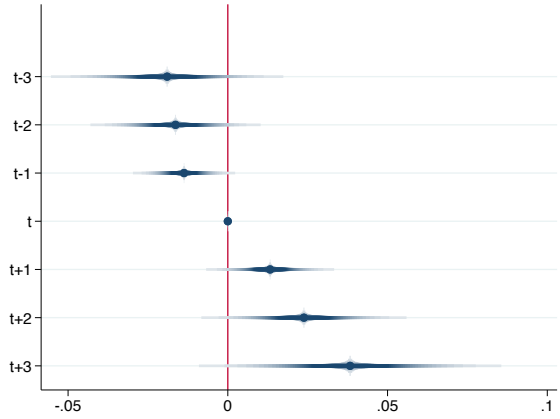
This Table shows results of applying a gravity model with country-pair fixed effects. In column (1), we use a baseline gravity model to estimate country-pair fixed effects. In column (2), we use as dependent variable the estimated country-pair fixed effect coefficients from Column (1), and we regress them on geographic, cultural, reporting, social legal, and institutional country-pair time invariant characteristics. The *t*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table 9: IFRS adoption and foreign directors

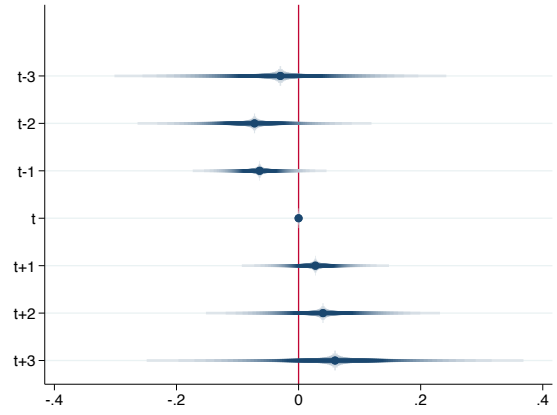
Panel A – Difference-in-Differences Research Design

Variables	% FD	DISSIMILAR FD	% FD	DISSIMILAR FD
	(1)	(2)	(3)	(4)
IFRS	0.01**	0.08*	0.01**	0.08*
	[2.03]	[1.92]	[2.00]	[1.94]
Observations	204	204	204	204
R-squared	0.975	0.97	0.979	0.98
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Country-Year FE	YES	YES	YES	YES

Panel B: Foreign Directors Trends



Panel C: Dissimilar Foreign Directors Trends

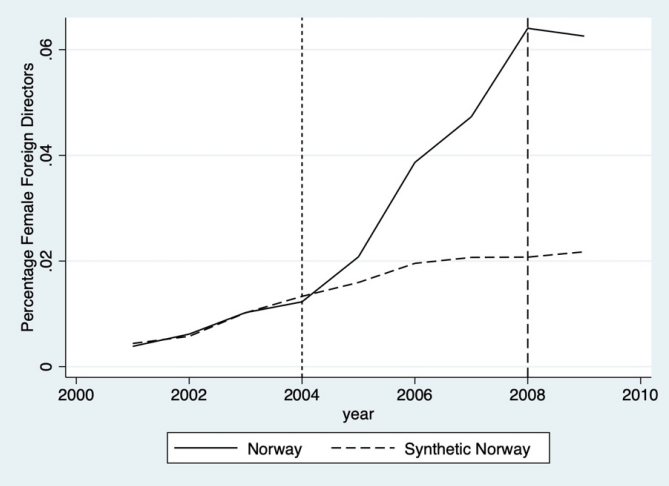


This Table examines a shock to the supply of foreign directors around the staggered adoption of IFRS worldwide. We adapt the research design of Christensen et al. (2013) to our setting. First, we restrict the analysis to the period 2001-2009 to obtain a similar group of adopters and non-adopters. Second, we create a variable IFRS which takes on the value of '1' beginning in the calendar year following the first fiscal-year end after IFRS became mandatory in a given country. For example, for all European countries that adopted IFRS after 2005 fiscal-year end IFRS takes the value of '1' from year 2006 onwards. Panel A presents results from OLS regressions that test for differences in percentage of foreign directors (Column 1) and dissimilar foreign directors (Column 2) between adopters and non-adopters. To obtain dissimilar foreign directors, we (1) estimate a gravity model of number of foreign directors with country-pair fixed effects (as shown in Table 9, Column 1); (2) extract the residuals from this model and aggregate them on a

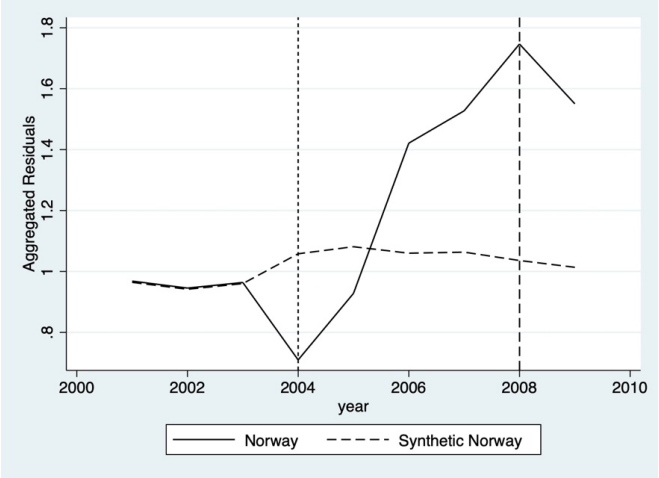
weighted average basis for a given destination country across all origin countries using the lagged origin country total number of directors as a proportion of the global number of corporate directors as weights (see Appendix for an example). In Column (3) and (4), we exclude U.S. and U.K and replicate analyses in Column (1) and (2). In Panel B and C, we plot time trends of the percentage of foreign directors and dissimilar foreign directors. To do that, we create year dummies for IFRS adopters for three years before (*t-3, t-2, t*-1) and after (*t+1, t+2, t+3*) the first fiscal-year end after IFRS became mandatory (*t*); and we plot the coefficients of these year dummies. The *t*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1

Table 10: Gender quota rule in Norway

Panel A - Female Foreign Directors Trends: Norway versus Synthetic Norway



Panel B – Dissimilar Female Foreign Directors Trends: Norway versus Synthetic Norway



Panel C - Difference-in-Differences Analysis

Variables	% FEMALE FD (1)	DISSIMILAR FEMALE FD (2)	% FEMALE FD (3)	DISSIMILAR FEMALE FD (4)
NORWAY_2004	-0.00**	-0.32***	-0.00**	-0.32***
	[-2.61]	[-8.95]	[-2.50]	[-8.39]
NORWAY_2005	0.00	-0.14***	0.00	-0.15**
	[0.90]	[-2.90]	[1.04]	[-2.72]
NORWAY_2006	0.01***	0.35***	0.02***	0.34***
	[9.10]	[5.53]	[8.95]	[4.98]
NORWAY_2007	0.02***	0.44***	0.02***	0.44***
	[10.48]	[5.68]	[10.16]	[5.23]
NORWAY_2008	0.03***	0.67***	0.03***	0.67***
	[16.98]	[7.20]	[15.73]	[6.79]
NORWAY_2009	0.03***	0.48***	0.03***	0.49***
	[12.25]	[4.33]	[11.58]	[4.10]
Observations	342	342	315	315
R-squared	0.848	0.943	0.866	0.945
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

This Table examines a shock to the supply of female directors in the aftermath of the adoption of a gender quota rule in Norway. We adapt the research design of Ahern and Dittmar (2012) to our setting. We restrict the sample to the 2001-2009 period. Norwegian parliament passed the rule in December 2003, and the law became compulsory in January 2006, with a two-year transition period. In Panel A and B, we compare Norway with a synthetic control group (Hong Kong, Italy, and Sweden). Panel A plots percentage of female foreign directors. Panel B plots scores of dissimilar female foreign directors. To obtain dissimilar female foreign directors, we (1) estimate a gravity model of number of female foreign directors; (2) extract the residuals from this model and aggregate them on a weighted average basis for a given destination country across all origin countries using the lagged origin country total number of directors as a proportion of the global number of corporate directors as weights (see Appendix for an example). Panel C presents results from OLS regressions that test for differences in female foreign directors (Column 1) and dissimilar female foreign directors (Column 2) between Norway and the rest of the countries in our sample. In column (3) and Column (4), we exclude those countries that passed similar quota rules during the 2001-2009 period (Finland, Spain, and Switzerland) and replicate results from Column (1) and (2). The *t*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1

Appendix 1 – Variable definition

Variable	*Description*	*Data source*
Foreign Directors	Number of directors domiciled in country *i* who have board appointments in country *j* at period *t.*	BoardEx
GDP	Natural log of GDP in $billions of country *i* (or country *j*).	World Bank Development Indicators (World Bank 2014)
Geographic distance	Log of the artic distance in kilometers between the capitals of country *i* and country *j*.	Rose (2004) and CIA Worldfact Book
Contiguous	Dummy variable set to one if country *i* and country *j* share a border, and zero otherwise.	Rose (2004) and CIA Worldfact Book
Cultural proximity	Index representing sociocultural proximity in societal values and beliefs between country *i* and country *j* calculated as: $[-\sqrt{(TSR_j - TSR_i)^2 + (SSE_j - SSE_i)^2}]$ where *TSR* and *SSE* are the mean values of Traditional versus Secular-Rational authority (TSR) and Survival versus Self-Expression values (SSE).	Hofstede (2001) Inglehart and Welzel (2005)
Reporting proximity	Index representing financial reporting and auditing proximity calculated as follows: $[-\sqrt{(ReportingIndex_j - ReportingIndex_i)^2}]$, where Reporting Index is the mean value of the index measuring a country's auditing and reporting quality for the period 1995-2012.	Global Competitiveness Report (World Economic Forum 2013)
Colony	Dummy variable set to one if country *i* country *j* have ever had a colonial link, and zero otherwise.	Rose (2004)
Common legal origin	Dummy variable set to one if country *i* and country *j* adopt the same legal system, and zero otherwise.	La Porta et al. (2006)
Common religion	Dummy variable set to one if country *i* and country *j* share a common religion, and zero otherwise	CIA Worldfact Book
Common language	Dummy variable set to one if country *i* and country *j* share a common language, and zero otherwise	CIA Worldfact Book
Bilateral trade	Log of one plus the sum of imports and exports between country *i* and country *j*.	United Nations Comtrade Database
Cross-listings	Log of the number of firms in country *i* listed in an exchange of country *j*.	BoardEx
Low governance quality	Indicator variable equal to one if country *i* (or country *j*) is in the first quartile of the distribution of institutional quality.	Karolyi (2015)
FD appointment	Indicator variable equal to one if director *x* from country *i* is appointed to firm *z* in country *j*, and zero otherwise.	BoardEx
Foreign sales	Foreign sales as percentage of total sales for firm *z* in year *t.*	Worldscope
Log (assets)	Logarithm of total assets for firm *z* in year *t.*	Worldscope
Sales growth	Growth in net sales relative to the previous year for firm *z* in year *t.*	Worldscope
Leverage	Long term debt plus short term debt divided by total assets for firm *z* in year *t.*	Worldscope

Board size	Number of directors on board for firm *z* in year *t.*	BoardEx
Busyness	Number of directors who hold 3 or more other directorships divided by the total number of directors on firm z' s board in year t.	BoardEx
FDI	Log of one plus the amount of foreign direct investment flow between country *i* and country *j.*	United Nations Conference on Trade and Development – UNCTAD (2014)
Migration	Log of one plus the amount of migration flow between country *i* and country *j.*	OECD International Migration Database (2014)
Human capital	Index representing the level of human capital of the country *i.*	World Economic Forum (2013)
GDP per capita	GDP per capita of country *j.*	World Bank Development Indicators
Listed firms	Log of the number of firms listed in the stock market of country *i* (or country *j*)	World Bank Development Indicators
% FD	Percentage of directors domiciled in country different from *j* who have board appointments in country *j* at period *t.*	BoardEx
Dissimilar FD	Residual bilateral flows are aggregated at the destination-country-year level using the lagged origin country director market size as a proportion of world corporate directors as weights.	BoardEx
% Female FD	Percentage of directors domiciled in country different from *j* who have board appointments in country *j* at period *t.*	BoardEx

In this table, subscript *i* indicates country of origin, and subscript *j* indicates country of destination.

Appendix 2 – Other specifications for director domicile

Table A2.1: Country of domicile

Panel A: Steps to Identify Director Domicile

Step	Nr. directors	Percentage
Nationality	74,649	44%
Country of first appointment	94,823	56%
Total	**169,472**	

Panel B: Gravity Model Using Different Proxies for Director Country of Domicile

Dependent variable:	ALL	ALL	ALL
Foreign Directors	(1)	(2)	(3)
GDP origin	0.93***	1.01***	0.76***
	[12.89]	[14.20]	[8.89]
GDP destination	0.37***	0.56***	0.54***
	[3.33]	[3.97]	[4.43]
Geographic distance	-0.49***	-0.44***	-0.39***
	[-8.08]	[-7.41]	[-5.66]
Contiguous	0.27*	0.18	0.59***
	[1.72]	[1.26]	[3.70]
Country-pair Homophily:			
Cultural proximity	0.37***	0.39***	0.36***
	[4.88]	[4.83]	[3.12]
Reporting proximity	0.19*	0.23**	0.31**
	[1.78]	[2.03]	[2.07]
Colony	0.76***	1.01***	0.50***
	[4.69]	[7.16]	[2.72]
Common legal origin	0.02	0.01	0.35***
	[0.15]	[0.12]	[2.77]
Common religion	0.10	0.13*	0.14*
	[1.24]	[1.85]	[1.77]
Common language	0.69***	0.51***	0.32
	[4.29]	[3.44]	[1.55]
Observations	19,684	19,684	19,684
R-squared	0.934	0.96	0.92
Country Destination FE	YES	YES	YES
Country Origin FE	YES	YES	YES
Year FE	YES	YES	YES

In this Table we show results using alternative definitions of foreign director. Panel A shows the steps we followed to identify director domicile. Panel B shows results of gravity model using different proxies for director domicile. In Column (1), director domicile is operationalized with director nationality. In Column (2), director domicile is operationalized with the country where the director obtained her first appointment. In Column (3), director domicile is operationalized with director nationality if it coincides with the country where the director obtained the first appointment. All results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table A2.2: Alternative specifications for the gravity model
Panel A: Gravity Model Estimated with PPML Estimator

Dependent Variable: Foreign Directors	ALL (1)	2013 (2)	ALL (3)	2013 (4)
GDP destination	0.56***	0.63***		
	[7.02]	[9.09]		
GDP origin	0.02	0.97***		
	[0.19]	[9.64]		
Listed firms' destination			0.56***	
			[8.38]	
Listed firms' origin			0.22***	
			[2.71]	
GDP per capita destination				0.25***
				[2.95]
Human capital origin				1.40***
				[4.20]
Geographic distance	-0.01	-0.51***	-0.50***	-0.61***
	[-0.09]	[-8.44]	[-8.13]	[-9.60]
Contiguous	-0.14	0.17	0.27*	0.18
	[-1.07]	[1.06]	[1.73]	[1.05]
Bilateral trade	0.64***			
	[9.28]			
Cross-listings origin	0.07			
	[1.34]			
Country-pair Homophily:				
Cultural proximity	0.35***	0.34***	0.36***	0.34***
	[5.01]	[4.70]	[4.91]	[4.62]
Reporting proximity	0.15	0.08	0.20*	0.05
	[1.53]	[0.71]	[1.82]	[0.50]
Colony	0.64***	0.78***	0.76***	0.43**
	[4.30]	[4.66]	[4.72]	[2.15]
Common legal origin	-0.13	-0.04	0.02	-0.07
	[-1.36]	[-0.34]	[0.14]	[-0.56]
Common religion	0.16**	0.05	0.1	-0.06
	[2.35]	[0.59]	[1.28]	[-0.71]
Common language	0.67***	0.77***	0.68***	0.75***
	[5.20]	[4.82]	[4.29]	[4.18]
Observations	19,684	1,406	19,684	1,184
R-squared	0.943	0.934	0.929	0.952
Country Destination FE	YES	YES	YES	YES
Country Origin FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

(continued)

Table A2.2 (continued)
Panel B: Gravity Model Estimated with OLS

Dependent Variable:	ALL	2013	ALL	2013
Log(Foreign Directors)	(1)	(2)	(3)	(4)
GDP destination	0.19***	0.49***		
	[3.95]	[7.55]		
GDP origin	-0.06	0.62***		
	[-1.28]	[10.98]		
Listed firms' destination			0.14***	
			[4.68]	
Listed firms' origin			0.02	
			[0.55]	
GDP per capita destination				0.26***
				[4.37]
Human capital origin				0.89***
				[5.36]
Geographic distance	-0.34***	-0.53***	-0.43***	-0.58***
	[-8.24]	[-16.04]	[-14.54]	[-16.53]
Contiguous	0.44***	0.36**	0.50***	0.32*
	[3.79]	[2.57]	[3.97]	[1.89]
Bilateral trade	0.06***			
	[2.64]			
Cross-listings origin	0.52***			
	[8.87]			
Country-pair Homophily:				
Cultural proximity	0.05*	0.00	0.07**	0.02
	[1.92]	[0.10]	[2.29]	[0.50]
Reporting proximity	0.09***	0.10**	0.11***	0.08
	[2.68]	[2.15]	[3.05]	[1.60]
Colony	0.49***	0.57***	0.56***	0.40*
	[3.40]	[3.42]	[3.64]	[1.85]
Common legal origin	0.21***	0.23***	0.23***	0.22***
	[4.97]	[3.99]	[5.11]	[3.50]
Common religion	0.12***	0.16***	0.11***	0.16***
	[3.20]	[3.14]	[2.72]	[2.84]
Common language	0.26***	0.30***	0.30***	0.32***
	[3.83]	[3.37]	[4.13]	[3.21]
Constant	0.12	-23.14***	4.87***	4.97***
	[0.07]	[-10.03]	[10.99]	[8.50]
Observations	19684	1406	19684	1184
R-squared	0.774	0.771	0.757	0.751
Country Destination FE	YES	YES	YES	YES
Country Origin FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

This Table shows results applying different estimation methods. In panel A all results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). In column (1), we include other economic determinants than GDP (bilateral trade and the number of firms from the origin country listed on an exchange in the destination country). In column (2), we restrict the sample to the year 2013. In column (3), we substitute GDP for another size measure for both countries (number of listed firms). In column (4), we substitute the GDP of the origin country with the level of human capital and the GDP of the receiver with the GDP per capita in a restricted sample for year 2013. In Panel B we replicate results from Panel A with OLS regressions where the dependent variable is the natural logarithm of *Foreign Directors*. The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table A2.3: Gravity model for foreign independent director appointments

Dependent variable:	Foreign Directors			Log(Foreign Directors)	
Sample:	ALL COUNTRIES		NO US&UK	ALL	NO US&UK
Estimator:	PPML	PPML	PPML	OLS	OLS
	(1)	(2)	(3)	(4)	(5)
GDP origin	0.91***	0.91***	0.64***	0.21***	0.18***
	[11.61]	[12.23]	[4.94]	[4.79]	[4.11]
GDP destination	0.34***	0.33***	0.56***	-0.06	0.05
	[3.55]	[3.07]	[9.34]	[-1.40]	[1.15]
Geographic distance	-0.35***	-0.49***	-0.84***	-0.38***	-0.37***
	[-4.53]	[-8.11]	[-17.50]	[-13.66]	[-13.36]
Contiguous	1.22***	0.29*	0.38***	0.51***	0.56***
	[5.49]	[1.91]	[3.29]	[4.16]	[4.15]
Country-pair Homophily:					
Cultural proximity		0.34***	0.39***	0.07**	0.07**
		[4.27]	[7.41]	[2.46]	[2.30]
Reporting proximity		0.23**	-0.13	0.11***	0.09***
		[2.06]	[-1.55]	[3.17]	[2.66]
Colony		0.69***	0.31	0.54***	0.18
		[4.37]	[1.53]	[3.69]	[0.86]
Common legal origin		0.08	0.42***	0.21***	0.18***
		[0.72]	[5.16]	[5.01]	[4.41]
Common religion		0.09	-0.01	0.11***	0.10***
		[1.24]	[-0.10]	[2.88]	[2.61]
Common language		0.64***	0.74***	0.31***	0.36***
		[3.94]	[5.99]	[4.41]	[4.97]
Observations	19,684	19,684	17,640	19,684	17,640
R-squared	0.862	0.935	0.944	0.742	0.607
Country Destination FE	YES	YES	YES	YES	YES
Country Origin FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

In this Table we exclude executive directors from our definition of *Foreign Directors* and replicate Table 6 with independent directors only. Column (1) shows a gravity model controlling for *GDP,* geographic distance and whether two countries share a common border. In column (2), we include our measures of country-pair homophily (cultural proximity, reporting proximity, existence of a colonial link between two countries, common legal origin, religion, and language). In column (3), we exclude the U.S. and the U.K. as both country of destination and country of origin from Column (2). In columns (2) through (3) results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). The *z*-statistics are reported in parentheses. In columns (5) and (6) we use an OLS estimator to reproduce results of columns (2) and (3), where the dependent variable is the logarithm of Independent Foreign Directors. The *t*-statistics are reported in parentheses. In all models, standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table A2.4: Foreign director appointments and country-level governance quality using OLS regressions

	Low Institutional Quality Destination Country	Low Institutional Quality Origin Country
Dependent variable: Foreign Directors	(1)	(2)
GDP destination	0.26***	0.27***
	[5.16]	[6.04]
GDP origin	0.020	0.050
	[0.55]	[1.07]
Low_GDP destination	0.050	-0.14***
	[1.29]	[-4.90]
Low_GDP origin	-0.14***	-0.010
	[-4.81]	[-0.16]
Geographic distance	-0.42***	-0.43***
	[-13.29]	[-13.14]
Contiguous	0.63***	0.61***
	[4.63]	[4.78]
Low governance quality	0.080	0.010
	[0.94]	[0.07]
Low_Geographic distance	-0.020	0.020
	[-0.51]	[0.36]
Low_Contiguous	-0.66**	-0.490
	[-2.08]	[-1.34]
Country-pair Homophily:		
Cultural proximity	0.09**	0.06*
	[2.42]	[1.81]
Reporting proximity	-0.070	0.000
	[-1.34]	[-0.02]
Colony	0.13***	0.17***
	[2.94]	[3.88]
Common legal origin	0.090	-0.060
	[1.14]	[-0.63]
Common religion	0.49***	0.63***
	[3.01]	[3.93]
Common language	0.290	-0.390
	[1.00]	[-1.13]
Low_Cultural proximity	0.31***	0.28***
	[5.67]	[5.17]
Low_Reporting proximity	-0.32***	-0.20***
	[-4.13]	[-2.77]
Low_Colony	0.040	0.060
	[0.89]	[1.40]
Low_Common legal origin	0.28***	0.17**
	[3.34]	[2.11]
Low_Common religion	0.31***	0.29***
	[4.02]	[3.80]
Low_Common language	-0.200	-0.050
	[-1.41]	[-0.31]
Observations	19,684	19,684
R-squared	0.77	0.76
Country Destination FE	YES	YES
Country Origin FE	YES	YES
Year FE	YES	YES

This Table replicates Table 7 and show results estimated with OLS regressions. We use measures from Karolyi (2015) to identify countries of low governance quality as those in the first quartile of the distribution. Column (1) shows results when the low governance quality is the country of destination. Column (2) shows results when the low governance quality is the country of origin. The *t*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table A2.5: Country-pair homophily in bilateral markets

Dependent variable	TRADE	MIGRATION	FDI
	(1)	(2)	(3)
GDP origin	0.74***	0.95***	0.89***
	[16.11]	[4.58]	[5.08]
GDP destination	0.53***	0.06	1.04***
	[15.29]	[0.55]	[4.15]
Geographic distance	-0.79***	-0.76***	-0.37***
	[-30.02]	[-8.27]	[-5.86]
Contiguous	0.55***	0.55**	0.28**
	[7.45]	[2.13]	[2.14]
Country-pair Homophily:			
Cultural proximity	-0.15***	-0.14	0.46***
	[-3.69]	[-1.32]	[5.41]
Reporting proximity	0.01	0.31**	-0.21*
	[0.03]	[1.97]	[-1.77]
Colony	0.19**	0.76***	-0.06
	[2.30]	[3.68]	[-0.38]
Common legal origin	0.08*	0.10	-0.02
	[1.73]	[0.88]	[-0.15]
Common religion	-0.05	0.03	0.16**
	[-1.07]	[0.25]	[2.05]
Common language	0.08	0.34*	0.31**
	[0.99]	[1.74]	[1.96]
Observations	19,684	10,463	11,495
R-squared	0.918	0.774	0.483
Country Destination FE	YES	YES	YES
Country Origin FE	YES	YES	YES
Year FE	YES	YES	YES

In this Table, we estimate a gravity model (Equation 2) for bilateral international trade (Column 1), migration flows (Column 2), and foreign direct investments (*FDI*) (Column 3). All results are estimated from regressions using Poisson pseudo maximum likelihood (PPML) (Santos Silva and Tenreyro 2006). All the specifications include year fixed effects. The *z*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1.

Table A2.6: Independent Female Directors in Norway

VARIABLES	% FEMALE FD	DISSIMILAR FEMALE FD	% FEMALE FD	DISSIMILAR FEMALE FD
	(1)	(2)	(3)	(4)
NORWAY_2004	0.00***	-0.08**	0.00***	-0.09***
	[6.27]	[-2.66]	[6.00]	[-2.98]
NORWAY_2005	0.01***	0.12***	0.01***	0.10**
	[10.37]	[3.11]	[12.43]	[2.64]
NORWAY_2006	0.03***	0.64***	0.03***	0.62***
	[19.97]	[12.40]	[22.19]	[11.68]
NORWAY_2007	0.04***	0.75***	0.04***	0.74***
	[23.50]	[14.01]	[28.98]	[13.00]
NORWAY_2008	0.05***	0.98***	0.05***	0.97***
	[37.57]	[20.14]	[42.01]	[18.42]
NORWAY_2009	0.05***	0.77***	0.05***	0.76***
	[30.91]	[15.63]	[38.75]	[14.25]
Observations	342	342	315	315
R-squared	0.846	0.944	0.865	0.945
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

In this Table we exclude executive female foreign directors from our definition of *Female Foreign Directors* and replicate Table 10, Panel C with female independent directors only. Column (1) shows results of percentage of *Female Foreign Directors*. Column (2) shows results for *Dissimilar Female Foreign Directors.* In column (3) and Column (4), we exclude those countries that passed similar quota rules during the 2001-2009 period (Finland, Spain, and Switzerland) and replicate results from Column (1) and (2). The *t*-statistics are reported in parentheses. Standard errors are adjusted for group correlation at the country-pair level. The symbol *, **, and *** next to the coefficients indicate statistical significance at the 10%, 5%, and 1% levels, respectively, based on two tailed tests. Variable definitions are provided in Appendix 1

Appendix 3 – Dissimilar foreign directors (example)

First, we estimate a gravity model of number of foreign directors with country-pair fixed effects as reported in Table 9, Column 1. Second, we estimate residuals from this model for each country-pair (Column 1). Third, we estimate weights (Column 2) using the lagged origin country total number of directors as a proportion of the global number of corporate directors. Fourth, we calculate the weighted average residuals (Column 3) by multiplying residuals (Column 1) times weights (Column 2). Finally, we sum the weighted average residuals at the country of destination level to obtain the number of dissimilar foreign directors for Germany in year 2006 (3.801).

DESTINATION COUNTRY	ORIGIN COUNTRY	YEAR	RESIDUALS (1)	WEIGHTS (2)	WEIGHTED RESIDUALS (3) = (1) x (2)
DEU	AUS	2006	-0.024	0.035	-0.024
DEU	AUT	2006	2.603	0.005	2.603
DEU	BEL	2006	1.145	0.008	1.145
DEU	BRA	2006	-1.405	0.004	-1.405
DEU	CAN	2006	0.208	0.062	0.208
DEU	CHE	2006	2.244	0.010	2.244
DEU	CHN	2006	0.401	0.009	0.401
DEU	DNK	2006	0.521	0.004	0.521
DEU	ESP	2006	0.677	0.010	0.677
DEU	FIN	2006	0.362	0.003	0.362
DEU	FRA	2006	2.478	0.030	2.478
DEU	GBR	2006	2.668	0.130	2.668
DEU	GRC	2006	-1.426	0.004	-1.426
DEU	HKG	2006	-0.737	0.021	-0.737
DEU	IDN	2006	-1.421	0.002	-1.421
DEU	IND	2006	-0.714	0.026	-0.714
DEU	IRL	2006	0.181	0.008	0.181
DEU	ISR	2006	0.175	0.008	0.175
DEU	ITA	2006	2.292	0.014	2.292
DEU	JPN	2006	-0.691	0.012	-0.691
DEU	KOR	2006	-1.406	0.000	-1.406
DEU	LUX	2006	-0.355	0.002	-0.355
DEU	MEX	2006	-1.406	0.003	-1.406
DEU	MYS	2006	-0.334	0.006	-0.334
DEU	NLD	2006	1.956	0.010	1.956
DEU	NOR	2006	-1.422	0.008	-1.422
DEU	NZL	2006	-0.746	0.002	-0.746
DEU	PHL	2006	-1.437	0.002	-1.437
DEU	POL	2006	-0.036	0.002	-0.036
DEU	PRT	2006	-0.331	0.002	-0.331
DEU	RUS	2006	-1.406	0.003	-1.406
DEU	SGP	2006	-0.741	0.013	-0.741
DEU	SWE	2006	1.471	0.016	1.471
DEU	THA	2006	-1.429	0.002	-1.429
DEU	TUR	2006	-0.317	0.001	-0.317
DEU	USA	2006	3.531	0.478	3.531
DEU	ZAF	2006	-0.327	0.011	-0.327