

Foreign Directors

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Abstract

In this paper we empirically examine the determinants of foreign director appointments across countries and the resulting consequences. We posit that the demand for directors by foreign corporations is greater for individuals domiciled in countries with greater economic development. Moreover, we also predict that individuals' preferences for board appointments increase in the economic development of company's domicile country given the higher return for human capital. Consistent with our hypotheses, we find that corporate boards in economically significant countries have more foreign directors from other economically significant countries, and that geographic proximity, similarities in culture and legal institutions also favor the exchange of directors. We find that individuals' education, work experience, and demographics are incremental in explaining a significant variation in the likelihood of obtaining a foreign appointment. When we examine the consequences of foreign appointments, we find that foreign directors are as likely to turnover when their firm performs poorly as domestic counterparts and that there is no difference in firm performance and market reactions to a foreign director replacing a domestic or vice versa.

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1. Introduction

The curtailment of restrictions in the cross-border flows of trade and capital over the past few decades, combined with the development of new technology, has increased the interconnectedness of labor markets around the globe.¹ This interconnectedness has significantly impacted the corporate sector, increasing the supply as well as the demand for foreign directors in multinational businesses under the view that international knowledge and expertise is a key factor for corporate success.² For example, the proportion of boards that contain at least one foreign director increased from 33.6 percent in 1993 to 75 percent in 2005 (Staples, 2008). In our sample, foreign directors make up around five percent of the global market of corporate directors, however, there exists a large variation across countries (as shown in Figure 1). While the previous literature on corporate governance largely focuses on national markets for corporate directors, in this paper we examine corporate director appointments across countries to study the global exchange of governance talent. Specifically, this paper describes our empirical examination of the determinants, both country-level factors and individual characteristics, of foreign director appointments across countries as well as the consequences of foreign directors appointed on company boards.

¹ Political and economic reforms in many developing countries have effectively involved their labor forces in the global economy. In 1960, the stock of people residing in countries other than their birthplace was about 75 million. By 2010, this number was estimated to have grown close to 214 million (United Nations, 2010).

² Coverage of the globalization of corporate boards in the business press includes discussions of the trend toward more internationally diverse boards, their desirability and/or inevitability (Lublin 2005). When asked about the attributes of their corporate directors, firms typically respond that individuals are selected to serve on their boards based on their experience, training, and expertise, and that a globally diverse board is essential for business success (Staples 2008).

Prior literature has extensively examined corporate directorships, with a focus on the role played by directors in effecting firm governance.³ This work has primarily studied the effect of individual director characteristics and the impact of discrete events in national labor markets on the director selection process and firm performance (Yermack 2004).⁴ The increased reliance by firms on foreign directors has led scholars to examine the firm-level consequences of appointing directors from countries other than where the firm is located (Giannetti, Liao and Yu. 2014, Masulis, Wang, and Xie 2012). Since these studies, in the words of Adams, et. al. (2010), are “joint statements about both the director-selection process and the effect of board composition on board actions and firm performance”, we examine both the determinants and consequences of foreigners serving on corporate boards. Our empirical examination is motivated by two competing observations. On one hand, foreign directors are less effective on corporate boards because of their physical remoteness, and cultural and linguistic differences. While on the other hand, foreign directors are potentially valuable to their firms because of expertise that is unavailable locally for companies that operate or seek to expand globally.

Consistent with the latter argument, recent studies suggest that directors’ international experience is a valuable firm asset. Giannetti et al. (2014) argue that directors possessing foreign experience improve firm performance because their superior knowledge of global management practices and that weaker connections with local governments make them more effective at monitoring management. Relatedly, Masulis et al. (2012) posit that foreign directors provide valuable international expertise in advising firms about the possibility of expanding into new

³ See Adams, Hermalin, and Weisbach (2010) for a comprehensive survey of the literature on corporate directorships.

⁴ Past research has been motivated by the idea that the ability of corporate directors to effectively monitor management on behalf of shareholders is central to effective corporate governance and crucial for the development of a well-functioning financial market (Jensen 1993).

markets where they possess specific information about the regulatory environment, cultural and social norms, industry structure, and local consumer preferences. Yet, this demand side focus largely ignores the director selection process that leads to international appointments. It is not clear ex-ante that foreign directors and firms are homogeneous in terms of their costs and benefits from these international appointments. Instead it is plausible that the costs and benefits of international expertise vary across directors from different countries, and across firms located in different countries. For example, the benefit of having a foreign director may differ between a country with high quality governance institutions and strong investor protection and a country with lower quality governance institutions and weaker investor protection. Consequently, we begin our analysis by examining director appointments across countries based on both the individual director's domicile country and the appointing firm's headquarter country.

We posit that demand for directors by foreign corporations is greater for individuals domiciled in countries with greater economic development for two reasons. Larger economies possess larger product, capital and labor markets and directors from these countries potentially provide their firms valuable access to these markets. Further, individuals from economically developed countries are perceived as possessing greater human capital in terms of skills, expertise and knowledge. We also propose that individuals' preference for board appointments increases in the economic development of a firm's country of location, since the returns to their human capital are higher. Hall and Jones (1999) show that individuals prefer environments that favor capital accumulation and skill acquisition, which allows them to retain greater returns from their labor.⁵ Consequently, we predict that an individual's domicile country's economic development increases the likelihood that he/she is appointed to a foreign corporate board (the

⁵ This search for returns to talent is consistent with the existing literature on migration where positive selection is observed among individuals immigrating from developing countries (Hanson 2012).

demand effect), and a country's economic development increases the likelihood that a foreign director serves on a firm's corporate board located in that country (the supply effect). Further, we propose that both an individual's desire for a board appointment and a corporation's need for foreign expertise are negatively affected by geographic, social and cultural distance between the director's domicile country and the corporation's home country. Hence, we conjecture that the likelihood that an individual is appointed to a corporate board in a foreign country is negatively related to the geographic, social and cultural distance between her domicile country and a firm's headquarter country.

Our examination of the effect of country-level factors on cross-country foreign corporate director appointments is similar in spirit to previous studies that explain trade flows between countries using the gravity model (Anderson and Marcouiller 2002; De Groot et al. 2004; Berkowitz et al. 2006; Guiso et al. 2009). The gravity model, first introduced in international economics by Tinbergen (1962), predicts that bilateral trade (goods flow) between countries increases in the product of their economic size (typically GDP) and decreases in the geographic distance between the two. Frictions such as cultural and institutional distance between countries reduce this flow (Anderson 1979; Anderson 2010).⁶ Accordingly, we adapt the gravity model to test our hypotheses regarding foreign director appointments between country pairs by using measures of country-level economic, cultural, and geographic factors. Consistent with our hypotheses, we expect that the number of directors operating in a country but domiciled in another country (foreign directors) increase in the product of the two countries economic development and decrease in the geographic and cultural distance between two countries.

⁶ The gravity model has been extensively used to explain international trade, foreign investment and immigration (e.g. Beine, Docquier and Ozden 2011; Grogger and Hanson 2011; Subramanian and Wei 2007; Aggarwal et al. 2012; Kleinert and Toubal 2010; Guiso et al. 2009; Lewer and Van den Berg 2008)

Directors from economically significant countries have greater directorship opportunity in other countries, a greater preference for directorships in other economically significant countries but the preference of both a director and the corporation is attenuated by geographic and cultural distance between the countries of the director and corporation's domicile (van Veen et al. 2014).

We use BoardEx to compile a cross-country database covering 172,799 directors appointed to 26,940 corporate boards in 38 countries between the years of 2000-2013. We examine this variation and model cross-country aggregate foreign director appointments by adapting the gravity model in our setting. Our empirical model explains a significant fraction of aggregate cross-country corporate director appointments. Specifically, we find that corporate boards in economically significant countries appoint a greater number of foreign directors from other economically significant countries, than from less significant countries. Countries that share a common border and are geographically closer also tend to exchange more directors suggesting that frictions affecting international trade similarly affect the global market for directors. Finally, we find that similarity of legal institutions and cultural values (being the colonizer country, having common legal origin and religion) increase cross-country corporate director appointments. Furthermore, we utilize an exogenous shock to the demand for corporate directors due to the imposition of a gender quota in Norway, to examine the effects of the quota on foreign female foreign directors joining Norwegian firms' boards. We find that, as the quota becomes binding, firms increasingly rely on foreign female directors to meet the demand. Consistent with our cross-sectional determinants model, these directors come from countries that are geographically more proximate, that have more developed economies as well as countries with similar cultural and legal features.

Since the country of domicile is only one individual characteristic that affects the likelihood of a foreign directorship, we further examine how other individual characteristics affect the likelihood of a foreign director appointment. We begin by comparing foreign and domestic directors across several economic, geographic and cultural dimensions. We then estimate the likelihood of obtaining a foreign board appointment on individual directors' demographics, education, work experience, and their domicile countries' institutional characteristics. We find that the likelihood of a *foreign director* appointment is lower for female directors and for professionally licensed directors (accountants, chartered financial analysts and lawyers), and higher for directors with an MBA and for those graduating from a highly ranked university. Consistent with higher reputation enhancing labor market prospects, we find that directors receiving honors and awards for their professional and personal achievements are more likely to hold a foreign directorship. Further, the likelihood of a director holding a foreign board seat increases in experience as measured by the number of home country board appointments held by the director. Finally, directors domiciled in countries with stronger institutions (better rule of law and anti-director rights) have a higher probability of possessing a foreign board seat.

We extend these cross-sectional results by exploring how reputational shocks affect the likelihood of obtaining (or losing) a foreign appointment. Specifically, we exploit the 2007-2009 financial crisis as a negative reputational shock to directors serving on the boards of financial services firms located in the U.S. and the U.K. We find that while U.S./U.K. directors are unconditionally less likely to obtain a foreign appointment, that likelihood further decreases during and post crisis. Additionally, they are less likely to lose their domestic appointments post crisis. These results further support our hypothesis regarding the variation in the joint selection of foreign directorships by firms and individuals.

Our prior evidence suggests that foreign directors appointed on boards of firms located in developed economies likely possess greater human capital than those on boards of firms in less developed economies. To further explore this observation, we examine foreign director turnover due to poor firm performance and the effect of foreign director appointments on firm performance. If foreign directors in developed economies have greater human capital quality, we predict that they are less likely to turnover in light of poor firm performance than foreign directors in less developed economies. Our empirical evidence shows that foreign directors are as likely to turnover when their firm performs poorly as their domestic director counterparts in countries with higher institutional quality. However, in countries with lower institutional quality turnover is insensitive to firm performance for both foreign and domestic directors.

In line with prior work by Masulis et al. (2012), we examine the effect of foreign director appointments on firm performance across countries. Our empirical design uses director replacements by linking each director appointment with a corresponding director turnover. Specifically, we match each outgoing director with an incoming director and code four possible combinations based on whether a domestic director or a foreign director is replaced by either a domestic or a foreign director. We find that, on average, there is no difference in firm performance, measured by changes in Tobin's Q, revenue or ROA, across all four combinations. Finally, we examine the impact of foreign director turnover announcements on firm abnormal stock returns. We find no difference in abnormal returns around announcements of director turnover between domestic and foreign directors. However, when we include other firm characteristics that purportedly affect firm returns, we find a slight significant increase in firm announcement returns when a foreign director replaces a domestic director. Overall, our results

are consistent with two-sided matching between firms and directors based on individual, firm and country characteristics that affect demand and supply of director talent.

This paper makes several contributions to the literature on boards of directors and firm governance. First, it extends the literature on the market for corporate directors by employing an international dataset to identify the determinants of international corporate director appointments. Specifically, we examine the main determinants of aggregate corporate director appointments across countries and find that countries' economic significance and lower transaction costs between countries are the major determinants of foreign director appointments. We further show that individual characteristics related to reputation and visibility positively affect the likelihood of foreign corporate board appointments. Collectively, our results are consistent with prior research that suggests that a director's reputation and experience are important characteristics used by firms in selecting new board members (Giannetti et al. 2015).

Our study of foreign directors adds to the growing literature on the determinants and effects of board composition in general (see, for example Raheja, 2005; Adams and Ferreira, 2007). While previous literature on directors tends to focus on whether or not the director was an insider or an outsider to the corporation, more recent studies have examined the role of personal director characteristics such as gender, political affiliation, age, education, profession, and ethnic background (see, for example, Farrell and Hersch, 2005; Adams and Ferreira, 2009; Aggarwal, Erel, Stulz, and Williamson, 2010; Anderson, Reeb, Upadhyay, and Zhao, 2011; Ahern and Dittmar, 2012). Our study extends this stream of literature by studying the role of director nationality and the global labor market. We also differ from other studies (Giannetti et al. 2015; Masulis et al. 2012) that examine the effect of foreign experience on firm performance using firms from a single country, by employing an international sample to exploit variations in

institutional quality across countries. Finally, we also depart from studies that examine performance differences between companies that employ foreign directors with companies that do not. Specifically, we exploit cross-sectional differences between companies hiring foreign directors to examine the effect on firm performance of transitioning from outgoing to incoming director conditional on their country of domicile.

The rest of the paper is organized as follows. In the next section, we examine the determinants of foreign director appointments across countries. In Section 3, we explore the consequences of foreign director appointments across countries. In Section 4 we conclude.

2. Determinants of foreign director appointments across countries

2.1.1 Global determinants

We apply the gravity equation to model the global determinants of foreign corporate director appointments. This model predicts that a mass of goods, or other factors supplied by origin country i , is attracted to a mass of demand for these goods at destination country j , but the attraction force is reduced by distance and other frictions between the two countries. We estimate the following model:

$$\begin{aligned}
 & \textit{ForeignDirectors}_{i,j,t} \\
 & = \gamma_0 + \gamma_1 \textit{GDP director domicile}_{i,t} + \gamma_2 \textit{GDP company domicile}_{j,t} \\
 & + \gamma_3 \textit{GeographicDistance}_{i,j} + \sum \gamma_4 Z_{i,j} + \sum \gamma_5 E_{i,j,t} \quad 1) \\
 & + \sum \gamma_4 DD + \sum \gamma_5 CD + \varepsilon_{i,j,t}
 \end{aligned}$$

The dependent variable $ForeignDirectors_{i,j,t}$ is the natural log of one plus the number of directors domiciled in the origin country i (*Director's Domicile*) who have board appointments in the destination country j (*Company's Domicile*) at period t . Following Masulis et al. (2012), we define a director's domicile as the country where the director has the primary employment and not the country of citizenship. For directors with directorships in multiple countries we define the domicile as the country where the director has the majority of board appointments. Specifically, we code a director's domicile country throughout the sample period as the director's domicile in the first year that the director appears in our sample.⁷

$GDP\ director\ domicile_{i,t}$ and $GDP\ company\ domicile_{j,t}$ represent the two mass variables for country i and country j . Following previous applications of the gravity model, we use GDP as the mass variable because countries' economic size has been shown to increase bilateral trade (Bergstrand and Egger 2011). In alternative specifications of the model we also use the log of the *number of listed firms* in the two countries which proxies for the size of capital markets. $GeographicDistance_{i,j}$ is the logarithm of the distance between capitals in a country pair, and is expected to reduce the force of attraction between two countries.

Other geographic, cultural and historical proximities between countries are likely to reduce transactions and relocation costs since individuals and firms prefer to trade with other businesses and individuals who are similar to them (van Veen et al. 2014; Aggarwal et al. 2012; Kleinert and Toubal 2010; Guiso et al. 2009; Subramanian and Wei 2007). We include a vector $Z_{i,j}$ to capture these commonalities. In particular, we use *linguistic proximity* (as measured by

⁷ Less than four percent of the directors in our sample have an even number of board appointments in more than one country. To avoid this issue, we use, alternatively, nationality or the country of director's first appointment when nationality is not available in BoardEx.

Toubal 2012), and dummy variables for *common border*, *colonizer*, *common legal origin* and *common culture*.⁸

Further, we add a vector $E_{i,j}$ to control for other economic factors than GDP that can stimulate director appointments between two countries. We include $Trade_{i,j,t}$ to control for total economic trade between country i and country j in year t and is calculated as the log of one plus the sum of total imports and total exports between the two countries. Another possible factor that affects the appointment of a foreign director in the destination country is the presence of foreign operations in the destination country, i.e. a company opens branches in foreign markets and relocates some of its directors to that country. Consequently, we include $Cross-Listings_{i,j,t}$ measured as the number of firms with headquarter in country i that are also listed in a stock market of country j .

Following prior literature (Rose and Van Wincoop 2001; Subramanian and Wei 2007; Feenstra 2004; Baldwin and Taglioni 2006; Anderson 2010), we also include country fixed effects for the director domicile (DD) and the company domicile (CD) to control for bilateral resistance to trade and other transaction costs. Finally, we add year fixed effects and we adjust standard errors for group correlation at the country-pair level.

2.1.2 Sample

We use BoardEx as our main data source for corporate director information. From BoardEx, we obtain detailed historical information on the characteristics of directors of public

⁸ These measures have been extensively used in the literature and serve as proxies for our constructs of geographic, cultural and historical proximity.

companies for 38 countries for the period of 2000 to 2013.⁹ We use several BoardEx data files (“Director Characteristics”, “Director Employment”, “Director Network” and “Director Other Activities”) to create our sample by tracking each director’s employment history using the start and end dates of their board appointments along with other relevant information.¹⁰ We construct an initial sample of 172,799 directors appointed to 26,940 corporate boards in 38 countries, where each observation represents a director-company-year appointment. We drop observations with incomplete information about directors’ demographics, work experience, education and company’s domicile country.¹¹ We reduce the sample to the director-company’s domicile country level, where each observation identifies a unique connection between a director and a country. Given that the unit of analysis in the model of the global determinants of foreign corporate director appointments is the country pair, we form all possible combinations of country pairs and calculate the number of directors in each country in the pair. The final sample comprises 19,684 observations, representing all possible combinations of pairs among 38 countries over the period of 2000-2013.

We complement BoardEx with country-level data from several other sources. Data for the Gross Domestic Product (GDP) and the number of listed firms in a country is obtained from

⁹ The focus of our analysis is the global market of foreign directors, thus we include both executive and non-executive directors in our sample. Given that some board members can also be CEOs and CFOs in other companies, we included CEOs and CFOs to avoid losing information about existing connections among companies, and consequently, among countries. For example, Sergio Marchionne is the CEO of Fiat Daymler Chrysler but he is also independent director at Philip Morris. In our sample Marchionne represents, at company level, a connection between Fiat Daymler Chrysler and Philip Morris, whereas at country level, he represents a connection between Italy and USA.

¹⁰ 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.

¹¹ “Director Network” module suffers one important limitation because it contains also directors and companies’ that are not fully covered by BoardEx. That means that for these companies and directors BoardEx assigns an identifier but does not collect any information.

the World Bank, World Development Indicators. The United Nations's Comtrade Database provides the trade flow data. Measures of geographic distance, common border, colonizer, and common religion are constructed based on data from Rose (2004) and the CIA Worldfact Book. We code common legal origin using La Porta et al.'s (2006) classification of legal systems. Cross-listing information is obtained from BoardEx.

2.1.3 Empirical results

Figure 1 shows the breakthrough of the percentage of foreign directors with respect to the total number of directors by country over the period 2000-2013. On average, foreign directors represent five percent of all corporate directors worldwide. However, there are remarkable differences among countries. For instance, Luxemburg shows the highest percentage of foreign directors in the sample, with more than 30% in 2000, and 23% in 2013. Switzerland has the second highest percentage of foreign directors, with 16% in 2000 and 21% in the 2013. Ireland has the third highest proportion with 17% in 2000 and 20% in 2013. The USA show the lowest proportion of foreign directors with less than two percent, followed by Japan with a decreasing trend over time, from four percent in 2000 to one percent in 2013. The other economic significant economies show a stable proportion of foreign directors over time: Canada (ten percent in 2000 and seven percent in 2013), China nine percent, Germany four percent, France seven percent, and UK five percent.

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

Table 1 reports the mean values of country level variables.

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

Table 2 shows the matrix of director appointments between all sample countries. The numbers below the diagonal present the average number of foreign directors that move from their domicile country (column) to the companies domiciled in another country (row) during the period 2000-2013. A zero in the matrix indicates that there no director appointments between the countries in the pair. The US is the largest source of foreign directors with 1,078 (among them 288 in Canada, 201 in the UK and 89 in Ireland), followed by the UK with 523 directors (among them 132 in the US, 50 in Australia, and 45 in Canada), and Canada with 342 (218 directors in the US, 38 in the UK, and 30 in Australia). Among the continental European countries, France is the largest supplier of foreign directors with 201 directors (29 in the US, 24 in Belgium and Switzerland), followed by Germany with 192 directors (28 in the US and Switzerland, and 20 in France). Of the Asian countries, Hong Kong is the largest source with 212 directors (97 in China and 33 in Singapore) and Singapore is the second largest source with 132 (32 in Hong Kong and 22 in Malaysia). This descriptive evidence suggests there are relevant flows of directors across countries that are geographic and culturally closer.

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

Table 3 presents Pearson correlations of the variables in the model of the global determinants of foreign corporate director appointments. Coherently with the intuition of the gravity model, *Foreign Directors* is positively correlated with *GDP* of both director's domicile country and company's domicile country, and negatively correlated with *Geographic Distance*. Among the other patterns, the correlations with *Cross-Listings* of 0.53 and *Trades* of 0.52 are notable, thus suggesting that the economic factors play an important role in explaining the global

market for corporate directors. Further, all the geographic, cultural and historical commonalities between pair of countries are positively correlated with *Foreign Directors*.

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

We next conduct a multivariate empirical analysis by estimating a gravity model using OLS regressions to examine the global determinants of foreign corporate director appointments. Specifically, we regress *Foreign Directors* on economic, cultural, and geographic factors that represent commonalities and proximity between pairs of countries. Table 4 presents the results. Our first analysis estimates the baseline gravity model including only the two mass variables (*GDP director domicile* and *GDP company domicile*), geographic distance, and fixed effects of directors' domicile country and companies' domicile country. Results presented in Column (1) of Panel A of Table 4 show that our baseline gravity model explains a significant portion of the global determinants of foreign corporate director appointments, with the R-squared being 0.575. Coherently with the gravity model, we find a positive association between *Foreign Directors* and the two measures of GDP and a negative association between *Foreign Directors* and *Geographic Distance*. These results confirm our predictions, i.e., the demand for directors by foreign corporations is greater for individuals domiciled in countries with greater economic development and is lower when individuals are domicile in farther countries.

We increment the baseline model by adding variables capturing cultural and institutional similarities between the countries (column 2, Panel A of Table 4). We find a positive association between *Foreign Directors* and *Common Border*, suggesting that sharing a common border reduces the relocation costs. Further, we find a positive association with *Common Legal Origin*, and *Common Culture*, indicating that similar legal institutions, as well as common religious values (proxy for common culture) increase the demand for individuals domiciled in similar

countries. Further, we also find a positive association with *Foreign Directors* when the director's domicile country was a former colonizer of the company's domicile country, suggesting that colonial relations between countries still play an important role in explaining the demand of international corporate director. Surprisingly, we do not find any significant association between *Foreign Directors* and *Linguistic Proximity*, suggesting that language does not represent a barrier in the in the global market of corporate directors. With respect to the baseline model, the R-squared significantly increases by 0.046 to 0.621.

In Column (3) of Panel A, Table 4, we further increment our baseline model by adding controls for economic factors that might increase the demand for foreign directors. We find strong evidence that *Trade* and *Cross-listings* from the director's domicile country to the company's domicile country increase the demand for foreign directors. The R-squared of our full gravity model is 0.668.

We run several sensitivity analyses. In column (1), Panel B of Table 4, we substitute GDP with an alternative proxy for country size, i.e., the number of listed firms in capital markets of both director's domicile and company's domicile country. We find similar results to our main analysis, confirming that our results are not sensitive to the use of *GDP* as a proxy for country size. In column (2), Panel B of Table 4, we estimate an alternative specification of the gravity model on a subsample for year 2013 by substituting *GDP* of the director's domicile and the company's domicile country respectively with a measure of *Human Capital* and *GDP per capita*.¹² We find a positive association between *Foreign Directors* and *Human Capital* of the director's domicile country, as well as a positive association between *Foreign Directors* and

¹² We use the human capital index per country developed by the World Economic Forum for the year 2013 available at <http://reports.weforum.org/human-capital-index-2013>.

GDP per capita of the company's domicile country. These results confirm that demand for directors by foreign corporations is greater for individuals domiciled in countries with higher human capital endowments and that corporate directors seek appointments on boards in countries with greater economic development.

In order to reduce the potential issue of no foreign directors appointments in a given year between two given countries, we first run our full model eliminating all the observations where *Foreign Directors* is zero. The results presented in Column (3), Panel B of Table 4, are consistent with our main results. Further, we follow Anderson and Marcouillier (2002) and we estimate a Tobit regression by left-censoring *Foreign Directors* to zero. The results presented in Column (4), Panel B of Table 4, are also consistent with our main results. Finally, in Column (5), Panel B of Table 5, we estimate an alternative specification of the gravity model on a subsample for year 2013 by substituting *GDP* with a measure that captures the level of institutional quality of both director's domicile and company's domicile country. We find a positive association between *Foreign Directors* and *Institutional Quality* (measured as the principal component of 24 variables capturing institutional, governance and regulatory characteristics of the country) of both director's domicile and company's domicile country.¹³ The results suggest that demand for directors by foreign corporations is greater for individuals domiciled in countries with higher institutional quality and that corporate directors seek appointments on boards in countries with higher institutional quality.

¹³ The variables are: judicial efficiency, judicial independence, law and order, low repudiation of contracts, low risk of expropriation, political quality, property rights, rule of law, control of corruption, anti-director rights, book tax independence, class action lawsuit, creditor rights, enforcement of accounting standards, enforcement of audit standards, ex ante private control of self-dealing, ex post private control of self-dealing, public control of self-dealing, public enforcement securities regulation, regulatory quality, disclosure requirements, securities regulation liability standards, strength of securities regulation. We extract the principal component of all these variables to capture the interconnectedness of institutional features in a country (Isidro, Nanda and Wysocki, 2016)

In untabulated analysis, we estimate our full model using a reduced sample with observations only from 2013. We do that to account for the fact that BoardEx has poorer data coverage in the earlier sample years, which potentially influences our baseline results. Results are similar to our main analysis. Finally, in untabulated analysis, we augment the baseline model by controlling for the presence of multinational companies with headquarters in the destination country that have foreign operations in the origin country and we obtain results qualitatively similar to our main results.¹⁴

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

2.1.4 Norway adoption of gender quota rule

To assess whether economic, geographic and cultural similarities drive the flows of foreign directors, we use the imposition of a gender quota in Norway as an exogenous shock to the demand for corporate directors. Norway issued the “Rules for gender representation” quota as voluntarily in 2003, which became compulsory in 2006. Prior research (Matsa and Miller 2013; Bohren and Staubo 2014; Bertrand, Black, Jensen, and Lleras-Muney 2014, Garcia Lara, Penalva Zausti, and Scapin 2014) has used this natural experiment to examine firms’ consequences of the quota introduction. We extend this stream of literature by examining the consequences of the gender quota rule on the demand of foreign female directors in Norway. We restrict our sample to all the country pairs where the company’s domicile country is Norway during the period 2006-2013. For each director’s domicile country, we estimate the likelihood of obtaining a new female director appointment to a Norwegian company as follows:

¹⁴ By means of data from ORBIS, we are able to estimate the number of branches that companies from the destination country have in the origin country for 2013.

$$\begin{aligned}
& \Pr(\text{New Appointment}_{i,t} = 1) \\
& = \gamma_0 + \gamma_1 \text{GDP director domicile}_{i,t} + \gamma_2 \text{GeographicDistance}_i \\
& + \gamma_3 \text{Common Culture}_i + \gamma_4 \text{Common Legal Origin}_i
\end{aligned}
\tag{2)$$

The dependent variable, *New Appointment*, is a dichotomous variable equal to 1 if a female director from country *i* obtains a new appointment on a Norwegian board in year *t*. *GPD Director Domicile* country, *Geographic Distance*, *Common Culture*, and *Common Legal Origin* represent, respectively, the level of economic development of the country where the director has domicile, and cultural, as well as legal, similarities with Norway. Similar to Equation 1, the level of analysis is the country pair. Table 5, Panel A, shows the distribution of female directors appointed to Norwegian boards after the rule became compulsory. The majority of the female directors come from Sweden and the UK. Table 5, Panel B, reports the mean differences between countries that supply female directors to Norway and those that do not. On average, these countries supplying female directors to Norway have bigger economies, are closer to Norway, and share similar culture and legal origin. Table 5, Panel C, shows the results of a conditional logit. Consistent with our cross-sectional determinants model, we find that female directors from countries that are geographically more proximate to Norway, that have more developed economies as well as countries with similar cultural and legal features are more likely to obtain a new appointment on a Norwegian board. These results suggest that, as the gender quota rule becomes more binding, Norwegian companies increasingly rely on foreign female directors to meet the demand.

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

2.2.1 Director characteristics and the probability of being a foreign director

The country of domicile represents only one individual characteristic that affects the likelihood of obtaining a foreign directorship. In this section we examine how other individual characteristics, including directors' demographics, education, work experience, and their domicile's institutional characteristics affect the likelihood of a foreign director appointment. We estimate the following model:

$$\Pr (Foreign_x = 1) = \gamma_0 + \sum \gamma_1 D_x + \sum \gamma_2 C_x \quad 3)$$

The dependent variable *Foreign* equals one if director *x* is a foreign director, and 0 if domestic. *D* is a set of director specific characteristics, and *C* is a set of country characteristics representing the institutional environment of the director's domicile country. The vector *D* includes demographic, education, and work experience characteristics. Multinational companies potentially prefer directors with specific knowledge in a determined field such as accountants, CPAs, CFAs or lawyers. *Professional* captures whether a director is a licensed professional, and is equal to one if director *x* is a certified accountant (or CPA), or a chartered financial analyst (CFA), or a lawyer, and zero otherwise. *Reputation* represents the visibility that some directors achieve by receiving honors (e.g., the British knight, the French *legion de honneur*, the Italian *cavaliere* etc.) or awards for their outstanding performance as directors (i.e., best director, best CEO, best entrepreneur, etc.) or as individuals (person of the year, richest person, wealthiest, etc.), and that can ultimately affect the likelihood of obtaining an international directorship. *Reputation* is equal to one if in year *t* director *x* receives an award or honor, and zero otherwise. *Female* attempts to capture the effect that gender has on obtaining an international board appointment, and is equal to one if director *x* is a female, and zero man. *MBA* proxies for the level of education necessary to obtain an international appointment, and is equal to one if

director x holds an MBA, and zero otherwise. We also explore whether affiliation with a top academic institution increases the likelihood of an international career. We include an indicator variable, *Top School*, equal to one if director x graduated from one of the top one hundred universities listed in the 2013 QS World University Rankings, and zero otherwise. We also add *Foreign Education* to capture whether a director received a degree in a country different from her domicile, because directors with education received abroad may have a higher propensity to obtain a foreign appointment than directors without such experience. Further, we add the average number of board appointments (*Appointments*) as a proxy for reputation, because directors with multiple domestic board appointments may have greater opportunities to obtain an international appointment than directors with a single appointment. We control for the average board size (*Board Size*) and whether director x has a single appointment (*Single Appointment*). We also explore whether directors with expertise in one industry are more likely to obtain international board appointments by adding *Specialist*, a variable that takes the value of one if director x has the majority of her appointments in one industry, and zero otherwise.¹⁵ We control for directors' age (*Age*) and for directors' years of work experience (*Experience*) that represent different dimensions of experience.¹⁶ Finally, we also include institutional characteristics of directors' domicile country that can explain variations in the likelihood of obtaining an international board appointment. Directors coming from countries with stronger institutions can offer their governance expertise to corporations domiciled in countries with weaker institutions. Specifically, we include the ratio of market capitalization to GDP as a proxy of economic

¹⁵ BoardEx provides industry classification for each company in the database. We convert this classification into Fama and French 30 industries. In order to do that, first, we match BoardEx industries with SIC codes of those US companies we could find in Compustat. Second, we associated each BoardEx industry with the SIC code with the highest frequency of companies. Last, we used the latter SIC code to link BoardEx industry to the Fama and French classification.

¹⁶ We used BoardEx data to track each director's employment history and we use the first year in BoardEx to start counting the years of experience.

development, the rule of law (Kaufmann et al. 2015), and anti-directors rights (Djankov 2008).¹⁷ Finally, we add controls to capture firm characteristics of the directors' appointments. Specifically, we add firm size, the market to book ratio, leverage, ROA, and the percentage of foreign sales.¹⁸ These firm characteristics represent the business environment where directors built their expertise and contacts that facilitates obtaining a foreign appointment. We also include year dummies in our analysis to control for cohorts of directors.

2.2.2 Sample

Starting from the initial sample of 172,799 directors, for each director we examine the distribution of board appointments across countries during the period 2000-2013. We identify two groups of directors: (i) directors who only have board appointments in their domicile country during the period 2000-2013 (domestic director), (ii) directors who have both domestic and international board appointments, i.e. in some years they only have domestic board appointments and in others they also have board appointments besides their domicile country. Among these directors, we keep the year before they obtain their first foreign board appointment, and we match them with the group of domestic directors.¹⁹ We then merge BoardEx with Worldscope to obtain all the financial data.²⁰ Our final sample consists of a cross-section of 64,213 directors.

2.2.3 Empirical results

¹⁷ In sensitivity analysis we substitute these institutional characteristics with domicile country fixed effects and we obtain similar results.

¹⁸ All the controls for firm characteristics are calculated as averages of all the board appointments each director has in the year she appears in our sample.

¹⁹ For the domestic directors we use the first year available in the sample, so that for each director we have only one observation.

²⁰ We merge financial data from Worldscope with BoardEx by means of ISIN number and company names. We winsorize all the financial variables we use in the model at the top and bottom 1%. For each director in the sample, we calculate the average value for the financial variables in the model of those firms where the director is appointed.

We begin our examination of the individual characteristics that affect the likelihood of obtaining a foreign director appointment by comparing foreign and domestic directors across the economic, geographic, and cultural dimensions described in the previous paragraph. Table 6 Panel A provides tests of differences in means between the domestic and foreign directors groups. On average, foreign directors are older, have longer working experience, have less professional expertise, and have higher reputation than domestic directors. Further, foreign directors show higher level of education, higher affiliation with top institutions, and higher foreign education than domestic directors. Foreign directors work on bigger corporate boards, have more board appointments, and show higher levels of industry expertise than domestic directors. In Panel B and Panel C we partition (at the median) the sample on the level of institutional quality of the director's domicile country using the institutional quality factor described in section 2.1.3. Results in Panel B and C are similar to those in Panel A, suggesting that the level of institutional quality does not affect differences existing between foreign and domestic directors.

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

In Table 7 we present the estimation results of the Equation 3. Column (1) of Table 7 shows the estimated coefficients and corresponding t-statistics and column (2) presents the average marginal effects. The probability of holding a foreign appointment for directors practicing a licensed profession is one percentage points lower than for directors not practicing a licensed profession, implying that these directors are perhaps too specialized in their home country's regulatory environment and lack the global knowledge desired by foreign corporations. For directors with higher reputation the probability of obtaining a foreign appointment is 2.4 percentage points higher. For female directors and directors holding and MBA, the likelihood of

becoming a foreign director is not different from male directors. Graduating from a Top School increases that probability of obtaining a foreign directorship by 0.01 percentage points, and having foreign education increases the probability by 0.06 percentage points. Further, directors with a single board appointment have a 7.9 percentage point lower probability to obtain a foreign appointment. On average, older directors and more experienced directors are more likely to obtain a foreign directorship. Finally, directors domiciled in countries with stronger institutions (better rule of law and anti-directors rights) have a higher probability of obtaining an international appointment. Among the financial controls, directors working for companies with higher reputation represented by size are more likely to obtain a foreign board seat. In Column 3 of Table 7, we control for correlated omitted variables at the director's domicile country level by including domicile country fixed effects. Results are similar to those in Column 1, with the exception of *Female* and *MBA* that are now significant. Female directors have a 0.6 percentage point lower probability to obtain a foreign appointment than male directors, and directors with an MBA have a 0.8 percentage point higher probability to obtain a foreign appointment. Overall, these results suggest that higher reputation and higher human capital enhance labor market prospects. Further, the likelihood of obtaining a foreign directorship increases with the level of experience as measured by the number of domestic board appointments. Finally, directors domiciled in countries with stronger institutions are more likely to obtain a foreign board seat.

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

2.2.4 Reputational consequences of the financial crisis in the financial industry.

In order to extend our cross-sectional results, we explore how reputational shocks affect the likelihood of obtaining or losing a foreign board appointment. Specifically, we use the recent financial crisis as a negative reputational shock to directors serving on board of financial institutions located in the U.S. and the U.K. Following Ho, Huang, Lin, and Yen (2016), we define the 2007-2009 as the financial crisis years and we estimate the following model:

$$\begin{aligned}
 \Pr(\text{New Appointment}_{x,t} = 1) & \\
 &= \gamma_0 + \gamma_1 US_UK_{x,t} + \gamma_2 Crisis_t + \gamma_3 Post - Crisis_t + \gamma_4 US_UK \times Crisis_{x,t} \\
 &+ \gamma_4 US_UK \times Post - Crisis_{x,t}
 \end{aligned}
 \tag{4}$$

The dependent variable, *New Appointment*, is a dichotomous variable equal to 1 if director x obtains a new appointment in the financial industry in year t , and 0 otherwise. *US_UK* is a dichotomous variable equal to 1 if director x has her domicile in either in the U.S. or in the U.K., and 0 otherwise. *Crisis* is equal to one if year t is either 2007, 2008, or 2009, and 0 otherwise. *Post-Crisis* is equal to one if year t is after 2009, and 0 otherwise. *US_UK x Crisis* and *US_UK x Post-Crisis* are interaction terms. We use a balanced sample of companies operating in the financial industry from 2004 to 2012. Each observation is at the company-director unit of analysis. In Table 8, Panel A, Column 1, we show the results of the likelihood of obtaining a new foreign appointment. We find that directors with their domicile in either the U.S. or the U.K. are unconditionally less likely to obtain a foreign appointment. The probability of obtaining a foreign appointment decreases by 0.027 percentage points. We also find that during and after the crisis directors are less likely to obtain a new foreign appointment. Moreover, we find that U.S. and U.K. directors have a 0.017 percentage point lower probability to obtain a foreign appointment during the financial crisis than directors from the rest of the world. This probability further decreases by 0.012 percentage point after the crisis. In Column 3, we show

the results of the likelihood of obtaining a new domestic appointment. Results are similar to those of Column 1. In Table 8, Panel B, Column 1, we substitute the likelihood of obtaining a new foreign appointment with the likelihood of losing a foreign appointment. Results show that U.S. and U.K. directors are unconditionally less likely to lose their foreign appointments. Further, we show that during and after the crisis directors in the financial industry are more likely to lose their international appointments, but that there are no differences between U.S. and U.K. directors and the rest of the world. Finally, in Column 3, we show the results of losing a domestic appointment and we find similar results to Column 1, with the exception that U.S. and U.K. directors are less likely to lose a domestic appointment after the financial crisis.

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

3. Consequences of foreign director appointments across countries

After examining the determinants of foreign director appointments across countries, we move our analysis to the consequences. Specifically, we examine the determinants of director turnover and the effect on foreign director appointments on firm performance.

3.1 Determinants of director turnover

Hiring a foreign director can be costlier than hiring a domestic director. The firm may need to divert resources from productive activities to the search for a suitable foreign candidate. The search costs involve international travelling and communication, payment to recruitment firms, etc. The firm also faces additional information costs because it cannot rely in local information networks to evaluate the skills and fit of the candidate. Given the costs of hiring a

foreign director firms may be reluctant to let go of foreign directors. In that case turnover would be lower for foreign directors than for domestic directors. However, prior evidence for US boards indicates that foreign directors are less effective members than their US counterparts (Masulis et al. 2012), which can result in higher turnover. To examine the likelihood of foreign directors turnover we estimate the following model:

$$\begin{aligned}
 \Pr(\textit{Turnover}_{x,y,t} = 1) & \\
 &= \gamma_0 + \gamma_1 \textit{Foreign}_{x,y,t} + \gamma_2 \textit{ROA}_{x,y,t} + \gamma_3 \textit{Foreign_ROA}_{x,y,t} + \gamma_4 \textit{MBA}_{x,t} \\
 &+ \gamma_5 \textit{Female}_{x,t} + \gamma_6 \textit{Top School}_{x,t} + \gamma_7 \textit{Professional}_{x,t} + \gamma_8 \textit{Experience}_{x,t}
 \end{aligned}
 \tag{5)$$

The dependent variable, *Turnover*, is a dichotomous variable equal to one if director *x* leaves company *y* in year *t*, and zero otherwise. *Foreign* is a dichotomous variable equal to one if director *x* is a foreign director for company *y* in year *t*. *Foreign_ROA* is an interaction term between *Foreign* and *ROA*. We add several controls for *director x* characteristics, including *MBA*, *Female*, *Top School*, *Professional*, and *Experience* are all defined as in Equation 3. We restrict our sample to companies employing foreign directors where each observation is at the company-director unit of analysis.²¹ Table 9, Panel A, Column 1, shows results of director turnover conditional on performance. We find that director turnovers are more likely to turnover when the company is performing poorly, however we do not find any difference between foreign and domestic directors with respect to the likelihood of turnover. In Column 3, we interact all the control variables with performance. Results are similar to those of Column 1.

Our results about the determinants of foreign director appointments across countries suggest that foreign directors appointed on board of companies with domicile in more developed

²¹ In this analysis we include only independent directors.

countries likely possess greater human capital than those on boards of firms in less developed countries. We further examine this intuition; we partition the sample at the median on the level of institutional quality of the company's domicile country. Table 9, Panel B, Column 1, presents results for the director turnover model in countries with low institutional quality. Results show that the likelihood of director turnover is insensitive to firm performance for both domestic and foreign directors. In Column 3, we present results for the director turnover model in countries with high institutional quality. Our results show that foreign directors are as likely to turnover when their firm performs poorly as domestic directors.

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

3.2 Consequences of foreign director appointments on firm performance

In line with Masulis et al. (2012) who state that foreign directors provide valuable international expertise in advising firms about the possibility of expanding into new markets where they possess specific information about the regulatory environment, cultural and social norms, industry structure, and local consumer preferences, we examine the consequences of appointing foreign directors. Differently from Masulis et al. (2012), we use an international sample in order to exploit variations in institutional quality across countries, and we examine only firms hiring foreign directors in order to exploit cross-sectional differences within this homogenous group. We adopt an innovative research design that examines director replacements by linking each director appointment with a corresponding director turnover. In order to do that we use a specific module of BoardEx (*Global Announcements*) which provides the dates of the company announcements with respect to director turnovers and new appointments. Specifically,

we match each outgoing director with an incoming director and code four possible combinations based on whether a domestic director or a foreign director is replaced by either a domestic or a foreign director. We estimate the following model:

$$\begin{aligned}
 & Firm\ Performance_{y,t+1} \\
 & = \gamma_0 + \gamma_1 D_F_{z,y,t} + \gamma_2 F_D_{z,y,t} + \gamma_3 F_F_{z,y,t} + \gamma_4 Firm\ Performance_{y,t} \\
 & + \gamma_5 Size_{y,t} + \gamma_6 Log(days)_{z,t} + \varepsilon_{z,y,t}
 \end{aligned}
 \tag{5}$$

The dependent variable, *Firm Performance*, is, alternatively, *Tobin's Q*, *Revenues*, and *ROA*, measured for firm *y* at time *t+1*. *D_F* is a dichotomous variable equal to one if a domestic director is replaced by a foreign director (where *z* represents the transition), and zero otherwise. *F_D* is a dichotomous variable equal to one if a foreign director is replaced by a domestic director, and zero otherwise. *F_F* is a dichotomous variable equal to one if a foreign director is replaced by a foreign director, and zero otherwise. We also add a control for the number of days between the announcement of the turnover and the announcement of the new appointment. The unit of analysis, *z*, is the transition from the outgoing to the incoming director per company *y*. In Table 10, Panel A, we provide the number of domestic directors who are replaced by domestic (6,175) and foreign (795), as well as the number of foreign directors who are replaced by domestic (552) and foreign (291). In Table 10, Panel B, we provide results of the multivariate analysis. We find that, on average, there is no difference in firm performance (measured with Tobin Q, Revenues, and ROA) across all four combinations of replacements.

----- Insert Table 10 about here -----

3.3 Consequences of foreign director appointments on firm announcements returns

We examine the market reaction to the appointment of foreign directors. If foreign directors improve the effectiveness of the board and firm value, then investors will react positively. On the contrary, if foreign directors increase frictions among board member reducing the effectiveness of the board we expect a negative market reaction. Similarly to Masulis et al. (2012), we compute the cumulative abnormal returns (CAR) in the three day window (from -1 to +1) surrounding the announcement date (time 0). Abnormal returns are obtained from a market model that uses value-weighted returns for the period -210 days to -11 days. Because market liquidity and efficiency varies significantly across the world, and because of data constraints we focus on US firms for this test. The univariate results in Panels A, B and C of table 11 suggests a negative market response to appointments and turnovers of foreign directors. However, the effects are not statistically meaningful. We then refine the appointments and turnovers by identifying the domicile of the director leaving the board and the director entering the board. A domestic director may be replaced by a foreign director (D_F), or by another domestic director (D_D). Similarly, a foreign director may be replaced by a domestic director (F_D) or by a foreign director (F_F). The multivariate results reported in Table 11 Panel D indicate that the market reacts only to the announcement of a foreign director substituting a domestic director.

----- Insert Table 11 about here -----

4. Conclusion

In this paper, we examine the global market for corporate directors identifying both country-level factors and individual characteristics' determinants of foreign director appointments and the consequences of foreign appointments. While previous research has largely

focused on the demand side for international expertise, we examine the interaction of demand and supply factors for corporate directors that lead to foreign appointments and ultimately generate foreign expertise. Specifically, we predict that an individual's domicile country's economic development increases the likelihood that she is appointed to a foreign corporate board (the demand effect), and a country's economic development increases the likelihood that a foreign director serves on a firm's corporate board located in that country (the supply effect)

We begin by studying the effects of country-level factors on cross-country foreign director appointments, adapting a gravity model approach with economic, cultural, and geographic factors. This approach leads us to find that corporate boards in economically significant countries appoint a greater number of foreign directors from other economically significant countries. Further, countries that share a common border and are geographically closer also tend to exchange more directors. Finally, similarities in legal institutions and cultural values also increase cross-country corporate director appointments. Furthermore, we utilize an exogenous shock to the demand for corporate directors due to the imposition of a gender quota in Norway, to examine the role of foreign directors when there are increases in the demand for directors.

Since country of domicile is only one individual director characteristic that affects the likelihood of obtaining a foreign directorship, we go on to examine how other individual characteristics affect the likelihood of a foreign appointment. We find that the likelihood of a *foreign director* appointment is lower for female directors and for professionally licensed directors, and higher for directors with an MBA and for those graduating from a highly ranked university. We also find that directors with higher reputation are more likely to hold a foreign appointment. Further, directors with a single board appointment have a lower likelihood of

obtain an international appointment while older and more experienced directors are more likely to obtain an international appointment. Finally, we use the 2007-2009 financial crisis as a negative reputational shock to directors serving on boards of financial company to examine the changes in foreign appointment likelihood given reputational shocks.

We end our study by examining the consequences of foreign director appointments. We find that foreign directors are as likely as domestic directors to turnover when their firm performs poorly. Further, when we examine director replacements and company performance, we find that there is no difference when a domestic director is replaced by a foreign director or vice versa.

Our study of foreign director appointments adds to the growing literature on the determinants and effects of board composition in general. Specifically, we extend the stream of literature that examines the role of personal director characteristics such as gender, political affiliation, age, education, profession, and ethnic background. We also differ from other recent studies that examine the effect of foreign experience on firm performance using firms from a single country, by exploiting variation in institutional quality across countries using an international sample. Finally, we exploit cross-sectional differences between companies hiring foreign directors to examine the effects of transitioning from outgoing to incoming director conditional on their country of domicile on firm performance, shedding light on this substantive class of corporate directors.

Appendix 1 – Variable definition

<i>Variable</i>	<i>Description</i>	<i>Data source</i>	<i>Tables</i>
Age	Age of director <i>i</i>	BoardEx	6, 7
Anti director rights	Anti director rights of the domicile country of director <i>i</i>	Djankov (2008)	7
Appointment Loss	Dummy variable equal to one if director <i>i</i> loses a board appointment in year <i>t</i>	BoardEx	8
Appointments	Number of directorships that director <i>i</i> has in year <i>t</i>	BoardEx	6, 7
Board size	Average board size of the companies where director <i>i</i> is appointed in year <i>t</i>	BoardEx	6, 7
CAR	Cumulative abnormal returns (CAR) around the date of directors' new appointments and turnovers. CAR is the 3 day cumulative abnormal returns around the announcement date 0 (window: -1,+1). Abnormal returns are estimated using the value-weighted market returns in the period -210 to -11 days prior to the announcement	CRSP	11
Colonizer	Dummy variable set to one if the origin country has ever colonized the destination country, and zero otherwise	Rose (2004)	3, 4
Common border	Dummy variable set to one if the country pair share borders, and zero otherwise	Rose (2004) and CIA Worldfact Book	3, 4
Common culture	Dummy variable set to one if the country pair shares a common religion, and zero otherwise	CIA Worldfact Book	3, 4, 5
Common legal origin	Dummy variable set to one if the country pair is from the same legal system, and zero otherwise	La Porta et al. (2006)	3, 4, 5
Crisis	Dummy variable equal to one if year is equal to either 2007, or 2008, or 2009	BoardEx	8
Cross-listings	Log of the number of firms in the origin country listed in an exchange in the destination country	BoardEx	3, 4
D_F	Dummy variable equal to one if in year <i>t</i> a domestic director (D) is substituted by a foreign director (F)	BoardEx	10
Experience	Years of working experience in year <i>t</i> since the first information available in BoardEx	BoardEx	6, 7
F_D	Dummy variable equal to one if in year <i>t</i> a foreign director (F) is substituted by a domestic director (D)	BoardEx	10
F_F	Dummy variable equal to one if in year <i>t</i> a foreign director (F) is substituted by a foreign director (F)	BoardEx	10
Female	Dummy variable equal to one if director <i>i</i> is a female and zero if male	BoardEx	6, 7
Foreign	Dummy variable equal to one if director <i>i</i> in year <i>t+1</i> obtains the first foreign appointment and zero when director <i>i</i> has only domestic appointments (domestic director)	BoardEx	6, 7, 9
Foreign Directors	Log of one plus the number of directors from the origin country employed as a director in destination country	BoardEx	3, 4
Foreign Education	Dummy variable equal to one if director <i>i</i> has received a degree in a country different from the domicile and zero otherwise	BoardEx	6, 7
Foreign_ROA	Interaction term of Foreign and ROA		9
GDP	Natural log of GDP in \$billion	World Bank	3, 4, 7

		Development Indicators	
GDP per capita	GDP per capita	World Bank Development Indicators	3, 4
Geographic distance	Log of the distance in kilometers between the capitals of a country pair	Rose (2004) and CIA Worldfact Book	3, 4, 5
Human capital	Index representing the level of human capital of the origin country	World Economic Forum (2013)	4
Industry Specialist	Dummy variable equal to one if director i in year t has the majority of her/his directorships in one industry and zero otherwise. Industry are classified using Fama and French 30 industry classification	BoardEx	6, 7
Institutional Factor	In the spirit of Isidro, Nanda, and Wysocki (2016), the level of institutional quality is obtained by means of a factor that summarizes different measures of institutional quality at the country level.	Different data sources	4
Leverage	For each director i in year t the average ratio of total liabilities to total assets of those firms where the director is appointed	Worldscope	7
Linguistic proximity	Index representing lexical similarity between two countries	Toubal (2012)	3, 4
Listed firms	Log of the number of firms listed in the stock market	World Bank Development Indicators	3, 4
Log total assets	For each director i in year t the logarithm of average total assets in \$US of those firms where the director is appointed	Worldscope	7
Log(days)	Natural logarithm of the number of days between the date when director i leaves company x and the date when director y is appointed to company x as a substitute of director i	BoardEx	10
Market cap to GDP	Market capitalization of the domicile country of director i in year t	World Bank Development Indicators	7
Market to Book	For each director i in year t average ratio of market value of equity to book value of equity of those firms where the director is appointed	Worldscope	7
MBA	Dummy variable equal to one if director i has an MBA and zero otherwise	BoardEx	6, 7
New Appointment	Dummy variable equal to one if director i obtains a new board appointment in year t	BoardEx	5, 8
New Director_H	Dummy variable equal to 1 if the incoming director y has the domicile in a country with higher institutional quality than the country of company x	Various sources. See: Isidro, Nanda, and Wysocki (2016)	10
New Director_L	Dummy variable equal to 1 if the incoming director y has the domicile in a country with lower institutional quality than the country of company x .	BoardEx	10
Non-USA	Dummy variable equal to 1 if the headquarter of the company is not in the USA, 0 otherwise	BoardEx	11
Percentage of foreign	For each director i in year t the average ratio of	Worldscope	7

sales	foreign sales divided by net sales of those firms where the director is appointed		
Post-Crisis	Dummy variable equal to one if year is after 2009	BoardEx	8
Professional	Dummy variable equal to one if director <i>i</i> is certified accountant, CPA, CFA or lawyer and zero otherwise	BoardEx	6, 7
Reputation	Dummy variable equal to one if director <i>i</i> is awarded with a special award or honor in year <i>t</i> , and zero otherwise.	BoardEx	6, 7
Revenues	Total Revenues divided by total assets.	Worldscope	10
ROA	For each director <i>i</i> in year <i>t</i> the average ratio of net income to total assets of those firms where the director is appointed	Worldscope	7, 9, 10
Rule of law	Rule of law of the domicile country of director <i>i</i>	Worldwide Governance Indicators. Kaufaman et al. (2015)	7
Single appointment	Dummy variable equal to one if director <i>i</i> has only one directorship and zero otherwise	BoardEx	6, 7
Tobin	Market capitalization divided by total assets	Worldscope	10
Top School	Dummy variable equal to one if director <i>i</i> is an alumnus of one of the top 100 universities in the 2013 QS World University Rankings and zero otherwise	BoardEx	6, 7
Trade	Log of one plus the sum of imports and exports between the country pair	UN Comtrade Database	3, 4
Turnover	Dummy variable equal to 1 if director <i>i</i> leaves the company in year <i>t+1</i> and 0 otherwise	BoardEx	9
US_UK	Dummy variable equal to one if director <i>i</i> has the domicile in the USA or in the UK	BoardEx	8

Reference:

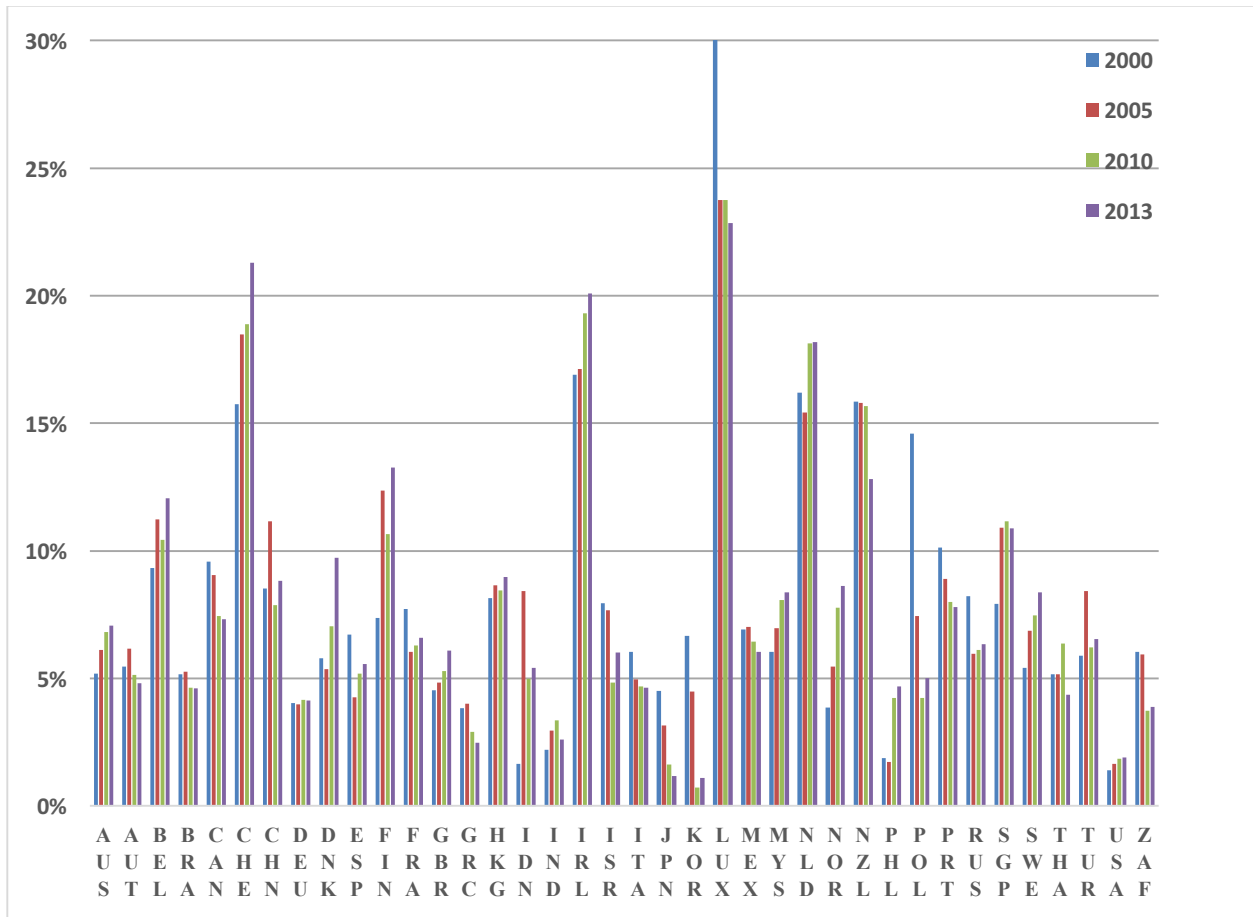
- Adams, R. B., and Ferreira, D. 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics* 94(2): 291–309.
- Adams, R. B., B. E. Hermalin, and M. S. Weisbach. 2010. The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. *Journal of Economic Literature* 48 (1): 58–107.
- Aggarwal, R., Erel, I., Stulz, R. and Williamson, R. 2010. Differences In Governance Practices Between U.S. And Foreign Firms: Measurement, Causes, And Consequences. *NBER Working Paper n. 13288*.
- Aggarwal, R., C. Kearney, and B. Lucey. 2012. Gravity and culture in foreign portfolio investment. *Journal of Banking and Finance* 36 (2): 525–538.
- Ahern, K.R., and Dittmar, A.K. 2012. The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation. *The Quarterly Journal of Economics*, 127(1): 137-197.
- Anderson, J. 2010. *The Gravity Model*. Cambridge, MA: National Bureau of Economic Research.
- Anderson, J. E. 1979. A Theoretical Foundation for the Gravity Equation. *The American Economic Review* 69 (1): 106–116.
- Anderson, J. E. 2011. The Gravity Model. *Annual Review of Economics* 3 (1): 133–160.
- Anderson, J. E., and D. Marcouiller. 2002. Insecurity and the Pattern of Trade: An Empirical Investigation. *The Review of Economics and Statistics* 84 (2): 342–352.
- Anderson, R.C., Reeb, D.M., Upadhyay, A., and Zhao, W. 2011. The Economic of Director Heterogeneity. *Financial Management*, 40(1): 5-38
- Baldwin, R., and D. Taglioni. 2006. Gravity for Dummies and Dummies for Gravity Equations: 1–31.
- Beine, M., F. Docquier, and Ç. Özden. 2011. Diasporas. *Journal of Development Economics* 95: 30–41.

- Bergstrand, J.H. and Egger, P. 2011. Gravity Equations and Economic Frictions in the World Economy, in Daniel Bernhofen, Rod Falvey, David Greenaway, and Udo Kreickemeier, Eds., Palgrave Handbook of International Trade, Palgrave Macmillan Publishing.
- Bertrand, M., Black, S. E., Jense, S., and Lleras –Muney, A. 2014. Breaking the Glass Ceiling? The Effect of Board Quotas on Female Labor Market Outcomes in Norway, NBER Working Papers, 1–54.
- Berkowitz, D., J. Moenius, and K. Pistor. 2006. Trade, Law, and Product Complexity. *The Review of Economics and Statistics* 88 (2): 363–373.
- Bøhren, Ø., and Staubo, S. (2014). Does mandatory gender balance work? Changing organizational form to avoid board upheaval. *Journal of Corporate Finance*, 28(C): 152–168.
- De Groot, H. L. F., G. J. Linders, P. Rietveld, and U. Subramanian. 2004. The Institutional Determinants of Bilateral Trade Patterns. *Kyklos* 57 (1): 103–123.
- Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2008. The law and economics of self-dealing. *Journal of Financial Economics* 88 (3): 430–465.
- Fama, E. F. 1980. Agency Problems and the Theory of the Firm. *Journal of Political Economy* 88 (2): 288–307.
- Farrell, K.A., and Hersch, P.L. 2005. Additions to Corporate Boards: The Effect of Gender. *Journal of Corporate Finance*, 11: 85-106.
- Feenstra, R. 2004. *Advanced International Trade*. MIT Press.
- Garcia Lara, J.M., Penalva Zuasti, J., and Scapin, M.P. 2015. Accounting quality effects of imposing gender quotas on boards of directors, Universidad Carlos III de Madrid Working Paper.
- Giannetti, M., G. Liao, and X. Yu. 2015. The Brain Gain of Corporate Boards: Evidence from China. *The Journal of Finance* 70 (4): 1629–1682.
- Grogger, J., and G. H. Hanson. 2011. Income maximization and the selection and sorting of international migrants. *Journal of Development Economics* 95 (1): 42–57.
- Guiso, L., P. Sapienza, and L. Zingales. 2009. Cultural Biases in Economic Exchange? *The*

- quarterly journal of economics* 124 (3): 1095–1131.
- Hall, R. E., and C. I. Jones. 1999. Why Do Some Countries Produce So Much More Output Per Worker Than Others? *The quarterly journal of economics* 114 (1): 83–116.
- Hanson, G. H. 2012. Immigration and Economic Growth. *Cato Journal* 32 (1): 25–34.
- Ho, P.-H., Huang, C.-W., Lin, C.-Y., and Yen, J.-F. (2016). CEO overconfidence and financial crisis: Evidence from bank lending and leverage. *Journal of Financial Economics*, 120(1): 194–209.
- Isidro, H., Nanda, DJ., Wysocki, P. 2016. Financial Reportin Differences Around the World: What Matters? University of Miami working paper.
- Jensen, M. C. 1993. The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Finance* XLVIII (3): 831–880.
- Kaufmann, D., A. Kraay, and M. Mastruzzi. 2015. *The Worldwide Governance Indicators (WGI): 1996-2014*. World Bank.
- Kleinert, J., and J. Toubal. 2010. Gravity for FDI. *Review of International Economics* 18 (1): 1–13.
- Knyazeva, A., D. Knyazeva, and R. W. Masulis. 2013. The Supply of Corporate Directors and Board Independence. *Review of Financial Studies* 26 (6): 1561–1605.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 2006. What Works in Securities Laws? *The Journal of Finance* 61 (1): 1–32.
- Lel, U., and D. Miller. 2015a. The Market for Director Reputation around the World: Evidence from International Shocks to Reputation.
- Lel, U., and D. P. Miller. 2015b. Does Takeover Activity Cause Managerial Discipline? Evidence from International M&A Laws. *Review of Financial Studies* 28 (6): 1588–1622.
- Lewer, J. J., and H. Van den Berg. 2008. A gravity model of immigration. *Economics Letters* 99 (1): 164–167.
- Lublin, J. S. 2005. Globalizing the Boardroom. *The Wall Street Journal*, October 31.
- Masulis, R. W., C. Wang, and F. Xie. 2012. Globalizing the boardroom—The effects of foreign

- directors on corporate governance and firm performance. *Journal of Accounting and Economics* 53 (3): 527–554.
- Matsa, D. A., and Miller, A. R. (2013). A Female Style in Corporate Leadership? Evidence from Quotas. *American Economic Journal: Applied Economics*, 5(3): 136–169.
- Miletkov, M. K., A. B. Poulsen, and M. B. Wintoki. 2013. A Multinational Study of Foreign Directors on Non-U.S. Corporate Boards. *SSRN Electronic Journal*.
- Raheja, C.G. 2005. Determinants of Board Size and Composition: A Theory of Corporate Boards. *Journal of Financial and Quantitative Analysis*, 40(2): 283-306.
- Rose, A. K. 2004. Do we really know that the WTO increases trade? *The American Economic Review* 94 (1): 98–114.
- Rose, A. K., and E. Van Wincoop. 2001. National money as a barrier to international trade: The real case for currency union. *American economic review* 91 (2): 386–390.
- Staples, C. L. 2008. Cross-Border Acquisitions and Board Globalization in the World's Largest TNCS, 1995-2005. *The Sociological Quarterly* 49 (1): 31–51.
- Subramanian, A., and S.-J. Wei. 2007. The WTO promotes trade, strongly but unevenly. *Journal of International Economics* 72 (1): 151–175.
- Tinbergen, J. J. 1962. *Shaping the World Economy; Suggestions for an International Economic Policy*. Twentieth Century Fund, New York.
- Toubal, J. 2012. Native language, spoken language, translation and trade. *CEPII Working Paper Series*: 1–79.
- van Veen, K., P. R. Sahib, and E. Aangeenbrug. 2014. Where do international board members come from? Country-level antecedents of international board member selection in European boards. *International Business Review* 23 (2): 407–417.
- Yermack, D. 2004. Remuneration, Retention, and Reputation Incentives for outside Directors. *The Journal of Finance* 59 (5): 2281–2308.

Figure 1 – Breakdown of the Percentage of Foreign Directors by country-year



This figure shows the percentage of foreign directors with respect to the total number of directors by country over the period 2000-2013. Values are expressed as percentages of the total number of directors working in a country-year.

Table 1 – Country characteristics

Country	Code	Legal Origin	GDP (bil \$US)	Trade (bil \$US)	Listed firms	FD	Cross-listings*	Direct. rights	Rule of Law	Institutional. Quality
Australia	AUS	Common	869	253	1,647	205	42	4.00	1.75	3.23
Austria	AUT	German	325	207	93	28	6	2.50	1.85	1.81
Belgium	BEL	French	399	639	177	79	6	3.00	1.31	1.79
Brazil	BRA	French	1,332	185	400	26	13	5.00	-0.29	-4.36
Canada	CAN	Common	1,287	658	3,265	435	50	4.00	1.73	3.67
China	CHN	German	4,018	1,535	1,548	150	248	1.00	-0.42	-2.67
Denmark	DNK	Scandinavian	267	140	200	27	6	4.00	1.90	3.69
Finland	FIN	Scandinavian	207	111	135	36	8	3.50	1.94	2.93
France	FRA	French	2,220	823	860	183	42	3.50	1.41	1.65
Germany	GER	German	2,917	1,669	705	135	32	3.50	1.65	2.57
Greece	GRC	French	240	58	308	16	6	2.00	0.75	-3.15
Hong Kong	HKG	Common	205	632	1,090	186	55	5.00	1.37	2.43
India	IND	Common	1,126	232	5,231	67	42	5.00	0.09	-3.49
Indonesia	IDN	French	460	177	361	16	0	4.00	-0.70	-6.68
Ireland	IRL	Common	193	163	59	147	33	5.00	1.63	2.11
Israel	ISR	Common	180	82	609	45	19	4.00	0.93	0.57
Italy	ITA	French	1,803	631	285	60	20	2.00	0.55	-1.08
Japan	JPN	German	4,803	961	3,205	41	33	4.50	1.29	1.50
Korea	KOR	German	922	507	1,610	3	7	4.50	0.90	-1.90
Luxembourg	LUX	French	42	29	39	74	18	2.00	1.79	1.12
Malaysia	MYS	Common	186	253	923	42	7	5.00	0.50	-1.13
Mexico	MEX	French	941	474	147	26	14	3.00	-0.52	-4.85
Netherlands	NLD	French	666	669	177	155	32	2.50	1.75	2.38
New Zealand	NZL	Common	117	44	137	27	2	4.00	1.85	3.62
Norway	NOR	Scandinavian	344	166	189	49	8	3.50	1.91	3.25
Philippines	PHL	French	148	82	241	7	3	4.00	-0.43	-6.78
Poland	POL	German	361	199	360	17	8	2.00	0.57	-1.58
Portugal	PRT	French	195	91	63	25	4	2.50	1.12	-0.69
Russia	RUS	French	1,101	316	271	26	15	4.00	-0.89	-4.41
Singapore	SGP	Common	173	419	478	128	14	5.00	1.58	2.34
South Africa	SOU	Common	257	89	437	64	18	5.00	0.09	-1.69
Spain	SPA	French	1,156	406	2,822	52	15	5.00	1.19	-0.11
Sweden	SWE	Scandinavian	401	234	298	93	22	3.50	1.87	2.80
Switzerland	SWI	German	448	275	256	185	27	3.00	1.85	3.51
Thailand	THA	Common	232	224	470	14	0	4.00	0.09	-3.86
Turkey	TUR	French	537	162	318	12	7	3.00	0.04	-5.05
UK	UK	Common	2,214	853	2,302	509	145	5.00	1.67	3.57
United States	USA	Common	13,557	2,394	5,407	648	144	3.00	1.55	2.95

This table reports mean values of GDP, total trade, number of listed firms, number of foreign directors, and number of firms cross-listed in other countries, for the period 2000-2013. We also report institutional characteristics, such as legal origin, director rights, rule of law, and a factor representing the level of institutional quality. * The number of cross-listings from the origin country to the destination country is provide byBoardEx for 2013 only.

Table 3 – Correlation table of the global determinants of foreign corporate director appointments

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Foreign Directors	1												
2 GDP company country	0.2334*	1											
3 GDP director domicile Listed firms in firm's	0.3158*	0.0518*	1										
4 domicile country Listed firms in director's	0.1875*	0.6491*	-0.0125	1									
5 domicile country	0.2548*	-0.0125	0.6491*	-0.0266*	1								
6 Trade	0.5193*	0.5401*	0.5282*	0.3571*	0.3427*	1							
7 Cross-listings	0.5343*	0.3564*	0.1195*	0.2712*	0.1140*	0.3164*	1						
8 Geographic distance	-0.2912*	0.0353*	0.0353*	0.1704*	0.1704*	-0.3746*	-0.0402*	1					
9 Common border	0.3114*	0.0600*	0.0600*	-0.0281*	-0.0281*	0.2955*	0.1082*	-0.4205*	1				
10 Colonizer	0.1839*	0.1191*	-0.0113	0.0978*	0.0285*	0.0951*	0.1102*	-0.0223*	0.0943*	1			
11 Common legal origin	0.2242*	-0.0131	-0.0131	0.0089	0.0089	0.0840*	0.0738*	-0.0492*	0.1320*	0.1501*	1		
12 Common culture	0.1597*	0.0150*	0.0150*	-0.1137*	-0.1137*	0.0829*	0.0482*	-0.2071*	0.1084*	0.0447*	0.1553*	1	
13 Linguistic proximity	0.1556*	0.0211*	0.0211*	-0.1884*	-0.1884*	0.0889*	0.0700*	-0.3433*	0.0970*	-0.0712*	-0.0791*	0.3107*	1

Observations = 19,684

This table reports Pearson correlations of variables for years 200-2013. The symbol * indicates statistical significance at the 5% level. Variable definitions are provided in Appendix 1.

Table 4 – The global determinants of foreign corporate director appointments
Panel A: Economic, geographic and cultural determinants of foreign corporate directors

Dependent Variable	Foreign Directors	Foreign Directors	Foreign Directors
	(1)	(2)	(3)
GDP director domicile	0.1164*** [3.41]	0.1164*** [3.41]	0.0907** [2.48]
GDP company domicile	0.1070*** [3.21]	0.1070*** [3.21]	0.0778** [2.15]
Geographic distance	-0.4143*** [-16.41]	-0.3059*** [-12.50]	-0.2325*** [-6.88]
Common border		0.6195*** [5.46]	0.5242*** [5.31]
Colonizer		0.3774** [1.99]	0.3033* [1.90]
Common legal origin		0.2945*** [8.28]	0.2612*** [8.08]
Common culture		0.0912** [2.28]	0.0955*** [2.75]
Linguistic proximity		-0.006 [-0.24]	0.003 [0.15]
Trade			0.0379** [2.00]
Cross-listings			0.6055*** [11.11]
Constant	-0.702 [-0.55]	-1.927 [-1.52]	-2.2191* [-1.76]
Observations	19,684	19,684	19,684
R-squared	0.575	0.621	0.668
Change in R-squared		0.046	0.047
P-value		0.000	0.000

This table shows results of the economic, geographic and culture determinants of foreign directors for the period 2000-2013. The level of analysis is the pair of countries – year. All the specifications include fixed effects for the receiver and the origin country, as well as year fixed effects. Column (1) shows the basic gravity model, controlling for GDP as a measure of size and geographic distance. In column (2) we add geographic (common border) and institutional determinants (the destination country is the colonizer of the origin country, common legal origin and religion, and linguistic proximity). In column (3) we also include other economic determinants than GDP (total trade among the two countries in the pair and the number of firms from the origin country listed on an exchange in the destination country).

(continued on next page)

Table 4 (continued)*Panel B: Different estimation methods for the determinants of foreign corporate directors*

	OLS (1)	OLS 2013 (2)	OLS (3)	Tobit (4)	OLS 2013 (5)
Listed firms director domicile	0.0769*** [3.21]				
Human Capital director domicile		0.5011*** [4.03]			
GDP director domicile			0.1893** [2.37]	0.5145*** [5.88]	
Institutional Factor director domicile					0.0761*** [6.00]
Listed firms company domicile	0.0490** [1.97]				
GDP per capita company domicile		0.1706*** [3.57]			
GDP company domicile			0.2223*** [3.00]	0.2780*** [3.02]	
Institutional quality company domicile					0.0991*** [6.15]
Geographic distance	-0.2263*** [-6.89]	-0.3288*** [-7.36]	-0.1866*** [-4.24]	-0.3773*** [-6.87]	-0.3124*** [-7.09]
Common border	0.5228*** [5.30]	0.4174*** [3.62]	0.3227*** [3.70]	0.2333** [2.03]	0.3970*** [3.44]
Colonizer origin	0.3019* [1.90]	0.289 [1.42]	0.3663** [2.56]	0.4526** [2.42]	0.272 [1.38]
Common legal origin	0.2598*** [8.04]	0.2454*** [5.76]	0.3036*** [6.20]	0.4700*** [7.55]	0.2510*** [5.97]
Common religion	0.0955*** [2.75]	0.1322*** [3.03]	0.072 [1.39]	0.2312*** [3.61]	0.1216*** [2.82]
Linguistic proximity	0.003 [0.15]	-0.005 [-0.19]	-0.027 [-1.00]	0.012 [0.33]	0.003 [0.10]
Trade	0.0439** [2.45]	0.0513* [1.72]	0.1561*** [4.39]	0.3270*** [7.00]	0.0523* [1.80]
Cross-listings director domicile	0.6057*** [11.11]	0.6578*** [10.51]	0.4263*** [9.08]	0.3966*** [6.22]	0.6380*** [10.15]
Constant	1.1930* [1.80]	-3.4084*** [-2.58]	-11.1215*** [-4.23]	-24.0784*** [-7.30]	2.7568*** [2.75]
Observations	19,684	1,369	6,676	19,684	1,406
R-squared	0.668	0.678	0.686		0.672
Pseudo R-squared				0.384	

Panel B shows results applying different estimation methods. All the specifications include fixed effects for both the receiver and the origin country, as well as year fixed effects for column (1), (3) and (4). In column (1) we substitute GDP for another size measure for both countries (number of listed firms). In column (2) 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 reduced sample. In column (3) we omit all observations with the dependent variable equal to zero, in column (2) we run a Tobit regression by left-censoring the dependent variable. In column (5) we restrict the sample to the year 2013 and we substitute GDP with a factor capturing the level of institutional quality of both the sender and the receiver country. The *t*-statistics are reported in parenthesis. 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 5: Norway adoption of the Gender Quota Rule (2006-2013)*Panel A: Foreign female directors by their domicile*

Director domicile	Number
SWE	36
GBR	17
DNK	6
FRA	4
FIN	2
USA	2
BRA	1
CAN	1
IRL	1
ZAF	1

Panel B: Descriptive statistics of foreign female foreign directors' domicile countries

Variables	Domicile countries	Other countries	Difference in means	t-statistic
GDP (billions)	2.97	1.07	1.90	4.80***
Geographic distance (km)	2,512.49	6,036.05	-3,523.56	- 5.50***
Common culture	0.63	0.11	0.52	9.85***
Common legal origin	0.34	0.00	0.34	10.21***

Panel C: Likelihood of foreign female director appointments in Norway

Dependent Variable	New Appointment (1)
GDP director domicile	0.7193** [2.42]
Geographic distance	-0.9755*** [-3.02]
Common culture	1.5914** [2.32]
Common legal origin	1.6431* [1.69]
Observations	296
Pseudo R-squared	0.47

This table examines the characteristics of the domicile of foreign female directors in Norway after the adoption of the board gender quota. Panel A shows the number of new female directors' appointments by their domicile country appointed in Norway during the 2006-2013 period. Panel B shows the differences in means between domicile countries and countries without any directors appointed in Norway. Panel C shows the results of a conditional logit, which implements the gravity model. The level of analysis is the country year level. In Column 1, the dependent variable is equal to 1 if country y supplies at least a new female director to Norway in year t . In all the specifications we include year fixed effects. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. Variable definitions are provided in Appendix 1.

Table 6*Panel A: Differences in means between domestic and foreign directors*

	Domestic	Foreign	Difference	(t-statistic)	
Professional	0.228	0.177	0.051	7.992	***
Reputation	0.008	0.023	-0.014	-9.781	***
Gender	0.107	0.087	0.020	4.291	***
MBA	0.240	0.279	-0.039	-5.945	***
Top School	0.351	0.478	-0.126	-17.254	***
Foreign Education	0.263	0.492	-0.229	-33.617	***
Industry specialist	0.020	0.147	-0.126	-49.755	***
Boards	1.116342	1.827	-0.711	-78.139	***
One directorship	0.912	0.556	0.356	76.598	***
Board size	4.978	5.236	-0.258	-4.771	***
Age	3.920	3.996	-0.076	-26.383	***
Experience	1.390	2.321	-0.931	-50.566	***
Observations	59,600	4,613			

Panel B: Differences in means between domestic and foreign directors in low institutional quality country

	Domestic	Foreign	Difference	(t-statistic)	
Professional	0.177	0.168	0.008	0.577	
Reputation	0.006	0.023	-0.016	-5.167	***
Gender	0.099	0.076	0.023	2.089	**
MBA	0.186	0.267	-0.081	-5.511	**
Top School	0.211	0.354	-0.143	-9.265	***
Foreign Education	0.386	0.609	-0.223	-12.212	***
Industry specialist	0.017	0.105	-0.087	-15.895	***
Boards	1.141	1.688	-0.547	-25.566	***
One directorship	0.898	0.622	0.276	23.287	***
Board size	5.519	5.902	-0.383	-2.351	**
Age	3.924	3.972	-0.048	-6.349	***
Experience	1.099	2.185	-1.087	-25.436	***
Observations	12,231	754			

(continued)

Table 6 (continued)

Panel C: Differences in means between domestic and foreign directors in high institutional quality country

	Domestic	Foreign	Difference	(t-statistic)	
Professional	0.242	0.179	0.063	8.792	***
Reputation	0.009	0.023	-0.014	-8.366	***
Gender	0.109	0.089	0.020	3.867	***
MBA	0.254	0.282	-0.027	-3.734	***
Top School	0.388	0.502	-0.114	-13.967	***
Foreign Education	0.232	0.469	-0.237	-33.113	***
Industry specialist	0.021	0.155	-0.134	-46.816	***
Boards	1.110	1.854	-0.744	-73.990	***
One directorship	0.915	0.543	0.372	73.966	***
Board size	4.838	5.106	-0.268	-4.857	***
Age	3.919	4.000	-0.081	-26.450	***
Experience	1.466	2.348	-0.882	-43.543	***
Observations	47,369	3,859			

This table reports the main features of the global market of corporate directors. Panel A reports differences in means between domestic and foreign directors along various dimensions over the 2000-2013 period. Foreign directors are defined as those who have board directorships in a country different from their domicile. In Panel B and Panel C we partition (at the median) the sample on the level of institutional quality of the director's domicile country. Panel B show differences in means between domestic and foreign directors who have their domicile in low institution quality countries. Panel C show differences in means between domestic and foreign directors who have their domicile in high institution quality countries. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. Variable definitions are provided in Appendix 1.

Table 7 – Individual and country-level determinants of foreign corporate director appointments

Dependent Variable	foreign (1)	margins (2)	foreign (3)	margin
Professional	-0.0946*** [-4.19]	-0.010	-0.0657*** [-2.81]	-0.007
Reputation	0.2257*** [3.01]	0.024	0.2547*** [3.32]	0.026
Female	-0.041 [-1.34]	-0.004	-0.0606* [-1.91]	-0.006
MBA	0.017 [0.80]	0.002	0.0747*** [3.54]	0.008
Top School	0.0911*** [5.02]	0.010	0.1468*** [7.79]	0.015
Foreign Education	0.5602*** [27.96]	0.059	0.4510*** [21.36]	0.046
Specialist	0.2131*** [4.99]	0.022	0.2266*** [5.20]	0.023
Appointments	0.1384*** [2.73]	0.014	0.1371*** [2.75]	0.014
Single appointment	-0.7537*** [-10.41]	-0.079	-0.7483*** [-10.56]	-0.076
Board size	-0.0069*** [-2.60]	-0.001	-0.0081*** [-2.95]	-0.001
Age	0.4441*** [8.81]	0.046	0.5816*** [10.91]	0.059
Experience	0.3329*** [46.49]	0.035	0.3562*** [47.11]	0.036
Market cap to GDP	0.000 [0.98]	0.000		
Rule of law	0.1924*** [11.05]	0.020		
Anti director rights	0.0504*** [4.10]	0.005		
Log total assets	0.0918*** [23.24]	0.010	0.0853*** [20.77]	0.009
Market to book	0.000 [-0.87]	0.000	0.000 [-0.23]	0.000
Leverage	-0.062 [-1.07]	-0.006	-0.003 [-0.42]	0.000
ROA	0.000 [-0.79]	0.000	0.000 [0.37]	0.000
Percentage foreign sales	0.053 [1.47]	0.006	0.041 [1.52]	0.004
Observations	64,213		64,213	
Pseudo R-squared	0.25		0.27	

This table presents the determinants of a director becoming a *foreign director* from the supply side. Column (1) shows results of a logistic regression. Column (2) shows the average marginal effect of variables in column (1). Column (3) shows results with country fixed effects. Column (4) shows the average marginal effect of variables in column (3). ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. All t-statistics (in brackets) and p-values are calculated using robust standard errors. Variable definitions are provided in Appendix 1.

Table 8: Reputational consequences of the financial crisis in the financial industry
Panel A: Likelihood of obtaining a new appointment during and after the financial crisis.

Dependent Variable	Foreign	margin	Domestic	margin
New Appointment	(1)	(2)	(3)	(4)
US_UK	-0.3060*** [-8.27]	-0.027	-0.3296*** [-9.05]	-0.030
Crisis	-0.0633* [-1.69]	-0.005	-0.0901** [-2.44]	-0.008
Post-Crisis	-0.1756*** [-4.72]	-0.015	-0.1823*** [-4.97]	-0.017
US_UK x Crisis	-0.1963*** [-3.72]	-0.017	-0.1596*** [-3.08]	-0.015
US_UK x Post Crisis	-0.1427*** [-2.71]	-0.012	-0.1293** [-2.50]	-0.012
Observations	98,367		98,367	
Pseudo R-squared	0.01		0.01	

Panel B: Likelihood of losing an appointment during and after the financial crisis.

Dependent Variable	Foreign	margin	Domestic	margin
Appointment Loss	(1)	(2)	(3)	(4)
US_UK	-1.2570*** [-3.48]	-0.003	-0.6866*** [-4.85]	-0.006
Crisis	0.4654* [1.92]	0.001	0.150 [1.21]	0.001
Post-Crisis	0.6627*** [2.92]	0.001	0.2408** [2.02]	0.002
US_UK x Crisis	-0.058 [-0.13]	0.000	-0.269 [-1.39]	-0.002
US_UK x Post Crisis	-0.335 [-0.75]	-0.001	-0.3493* [-1.86]	-0.003
Observations	98,367		98,367	
Pseudo R-squared	0.01		0.01	

This table examines the likelihood of obtaining and losing a board appointment for directors holding a directorship in the financial industry during and after the financial crisis. In all the specifications we use a balanced sample of companies from 2004 to 2012 in the financial industry. Panel A reports results of a logit model examining the likelihood of obtaining a new appointment in the financial industry. Column 1 shows results for obtaining a new foreign appointment in year t . Column (2) shows the average marginal effect of variables in column (1). Column 3 shows results for obtaining a new domestic appointment in year t . Column (4) shows the average marginal effect of variables in column (3). Panel B reports results of a logit model examining the likelihood of losing an appointment in the financial industry. Column 1 shows the results for losing a foreign appointment in year t . Column (2) shows the average marginal effect of the variables in column (1). Column 3 shows results for losing a domestic appointment in year t . Column (4) shows the average marginal effect of variables in column (3). ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. All z-statistics (in brackets) and p-values are calculated using clustered standard errors by director. Variable definitions are provided in Appendix 1.

Table 9: Determinants of director turnover
Panel A: Cross-sectional analysis at engagement level.

Dependent Variable	TURNOVER (1)	margins (2)	TURNOVER (3)	margins (4)
Foreign	-0.027 [-0.98]	-0.001	-0.028 [-0.99]	-0.001
ROA	-0.6424*** [-10.17]	-0.032	-0.8811*** [-5.00]	-0.043
Foreign_ROA	0.141 [1.19]	0.007	0.107 [0.89]	0.005
MBA	-0.1092*** [-3.84]	-0.005	-0.1107*** [-3.87]	-0.005
Female	-0.1025*** [-2.64]	-0.005	-0.1018*** [-2.63]	-0.005
Top School	0.0405* [1.67]	0.002	0.0443* [1.82]	0.002
Professional	-0.1967*** [-5.72]	-0.010	-0.2015*** [-5.77]	-0.010
Experience	0.2361*** [14.47]	0.012	0.2395*** [14.46]	0.012
ROA_MBA			-0.048 [-0.39]	-0.002
ROA_Female			-0.155 [-0.79]	-0.008
ROA_Top School			0.141 [1.33]	0.007
ROA_Professional			-0.114 [-0.85]	-0.006
ROA_Experience			0.087 [1.38]	0.004
Observations	146,837		146,837	
Pseudo R-squared	0.04		0.04	

Table 9 (continued)

Panel B: Partitioning the sample on the level of institutional quality of the country of the firm domicile

Dependent Variable	LOW	margins	HIGH	margins
TURNOVER	(1)	(2)	(3)	(4)
Foreign	0.2497*** [3.03]	0.009	-0.0623** [-2.11]	-0.003
ROA	-0.768 [-0.84]	-0.026	-0.9056*** [-5.12]	-0.047
Foreign_ROA	-0.004 [-0.01]	0.000	0.099 [0.81]	0.005
MBA	-0.052 [-0.57]	-0.002	-0.1227*** [-4.08]	-0.006
Female	-0.014 [-0.11]	0.000	-0.1166*** [-2.87]	-0.006
Top School	0.076 [0.99]	0.003	0.034 [1.33]	0.002
Professional	-0.120 [-1.16]	-0.004	-0.2109*** [-5.68]	-0.011
Experience	0.1347*** [3.24]	0.005	0.2548*** [13.95]	0.013
ROA_MBA	0.177 [0.35]	0.006	-0.074 [-0.58]	-0.004
ROA_Female	0.409 [0.46]	0.014	-0.201 [-1.00]	-0.011
ROA_Top School	0.234 [0.49]	0.008	0.111 [1.02]	0.006
ROA_Professional	-0.173 [-0.29]	-0.006	-0.106 [-0.77]	-0.006
ROA_Experience	-0.155 [-0.46]	-0.005	0.1097* [1.73]	0.006
Observations	24,776		122,018	
Pseudo R-squared	0.06		0.04	

This table presents the determinants of independent directors' turnover by means of a sample of companies employing foreign directors. In Panel A, Column (1) shows results of a probit regression. Column (2) shows the average marginal effect of variables in column (1). In Panel B we partition (at the median) the sample on the level of institutional quality of the company's domicile country. Column (1) shows results of the subsample of directors' appointments to companies with domicile in countries with low institutional quality. Column (2) shows the average marginal effect of variables in column (1). Column (3) shows results of the subsample of companies with domicile in countries with high institutional quality. Column (4) shows the average marginal effect of variables in column (3). All specifications include, but do not tabulate, country, year and industry fixed effects. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. All t-statistics (in brackets) and p-values are calculated using clustered standard errors at the appointment level (director-firm). Variable definitions are provided in Appendix 1.

Table 10: Firm level consequences of director appointments*Panel A: Director replacements*

Directors		IN		
		Domestic	Foreign	NONE
OUT	Domestic	6,175	795	10,453
	Foreign	552	291	1,812
	NONE	10,604	1,319	N/A

Panel B: Multivariate analyses.

Dependent Variable	TOBIN (t+1)	TOBIN (t+1)	REV (t+1)	REV (t+1)	ROA (t+1)	ROA (t+1)
	(1)	(2)	(3)	(4)	(5)	(6)
D_F	0.006 [0.26]	-0.150 [-1.60]	-0.010 [-1.10]	-0.002 [-0.08]	-0.007 [-1.21]	0.009 [0.40]
F_D	-0.020 [-0.56]		0.010 [0.76]		0.000 [0.01]	
F_F	0.1040** [1.97]	0.012 [0.16]	-0.0177* [-1.93]	-0.019 [-1.22]	0.008 [0.98]	0.016 [1.46]
Tobin	0.7191*** [35.59]	0.7193*** [35.62]				
Revenues			0.9059*** [69.86]	0.9059*** [70.00]		
ROA					0.6072*** [21.87]	0.6070*** [21.87]
Size	-0.0323*** [-5.33]	-0.0322*** [-5.31]	0.001 [0.51]	0.001 [0.54]	0.0141*** [8.42]	0.0141*** [8.43]
Log(days)	0.001 [0.16]	0.001 [0.14]	-0.0026* [-1.85]	-0.0026* [-1.86]	0.000 [-0.37]	0.000 [-0.36]
New Director_L		0.1572* [1.78]		-0.012 [-0.45]		-0.006 [-0.37]
New Director_H		0.155 [1.58]		-0.003 [-0.17]		-0.023 [-1.13]
F_D*New Director_H		-0.1984* [-1.79]		0.004 [0.16]		0.019 [0.82]
F_D*New Director_L		-0.151 [-1.45]		0.033 [1.07]		0.011 [0.47]
F_F*New Director_L						-0.005 [-0.20]
F_F*New Director_H		0.007 [0.06]				
F_F*New Director_L				0.020 [0.78]		
Intercept	0.6348*** [4.46]	0.6336*** [4.51]	0.2508*** [3.01]	0.2511*** [2.99]	-0.0976** [-2.25]	-0.0968** [-2.25]
Observations	7,691	7,691	7,750	7,750	7,958	7,958
R-squared	0.67	0.67	0.91	0.91	0.49	0.49

This table presents the consequences at director appointment level of turnover of *independent directors* in year t . Panel A shows a 3X3 matrix of directors' changes. Specifically, it reports the number of new directors joining a board of directors (IN) matched with directors leaving the same board of directors (OUT), partitioned into domestic (D) and foreign (FD) directors. Column (None) and row (None) report the number of directors that joined a board of directors that were not matched with directors leaving the same board of directors, partitioned into domestic and foreign. Panel B reports the multivariate analysis. The dependent variables are measured in year $t+1$, whereas the control variables are measured in year t . All specifications include, but do not tabulate, industry, country and year fixed effects. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. All t-statistics (in brackets) and p-values are calculated using clustered standard errors at firm level. Variable definitions are provided in Appendix 1.

Table 11: Announcement returns of director appointments and turnovers*Panel A: Announcement effect of domestic and foreign directors - all announcements*

	Mean		Test diff	Median		Test diff
			(p-value)			(p-value)
	<u>Domestic</u>	<u>Foreign</u>		<u>Domestic</u>	<u>Foreign</u>	
CAR (-1,+1), All directors	0.22%*	-0.04%	0.456	-0.11%**	-0.22%	0.426
CAR (-1,+1), Independent directors	0.27%*	-0.15%	0.306	-0.1%**	-0.2%	0.335

Panel B: Announcement effect of domestic and foreign directors new appointments

	Mean		Test diff	Median		Test diff
			(p-value)			(p-value)
	<u>Domestic</u>	<u>Foreign</u>		<u>Domestic</u>	<u>Foreign</u>	
CAR (-1,+1), Independent directors	0.2%*	0.07%	0.664	-0.12%**	-0.15%	0.972

Panel C: Announcement effect of domestic and foreign directors turnover

	Mean		Test diff	Median		Test diff
			(p-value)			(p-value)
	<u>Domestic</u>	<u>Foreign</u>		<u>Domestic</u>	<u>Foreign</u>	
CAR (-1,+1), Independent directors	0.36%*	-0.54%	0.325	-0.06%**	-0.25%	0.180

Panel D: Multivariate analyses.

Dependent Variable	CAR
	(1)
D_F	0.0093**
	[2.04]
F_D	0.000
	[-0.03]
F_F	0.020
	[0.87]
Log(days)	-0.0025***
	[-2.73]
Size	-0.0022**
	[-2.14]
Non-USA	-0.004
	[-0.51]
Intercept	0.021
	[1.15]
Observations	1,652
R-squared	0.03

This table examines cumulative abnormal returns (CAR) around the date of directors' new appointments and turnovers. Panel A shows the univariate results for all the announcements (both new appointments and turnovers) of all directors (including executives) and only independent. Panel B shows the univariate results for new appointments of independent directors. Panel C shows the univariate results for turnovers of independent directors. Panel D shows results of regressing CAR on a subsample of directors leaving a board of directors matched with directors joining the same board. All specifications include, but do not tabulate, industry and year fixed effects. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively. All t-statistics (in brackets) and p-values are calculated using clustered standard errors at firm level. Variable definitions are provided in Appendix 1.