Southern Economic Journal 2018
DOI: 10.1002/soej.12301

Open Borders for Business? Causes and Consequences of the Regulation of Foreign Entry

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While an extensive literature examines the regulation of entry by domestic firms, the causes and consequences of the regulation of entry by foreign firms have not been previously considered. First, we analyze the roles of culture, legal origin, democracy, and geographic openness as determinants of regulation of foreign entry. Strong evidence illustrates that more individualist cultures and geographically open countries regulate foreign entry less. Our findings also show that cultural values matter more in countries with common law traditions. In contrast, the association between democracy and the regulation of foreign entry is fragile. Next, we examine the consequences from foreign entry regulation. Evidence suggests a strong, negative, and economically significant association between the regulation of foreign entry and inward foreign direct investment (FDI). The regulation of domestic entry, however, is positively associated with FDI inflows. This result is robust to controlling for a variety of economic, cultural, and institutional variables.

JEL Classification: L51, Z10, D02, K2

1. Introduction

Following De Soto's (1989) path-breaking work detailing the regulatory impediments to new firm formation in Peru, an extensive literature has developed analyzing the causes and consequences of the regulation of entry (reviewed by Djankov 2009). To the best of our knowledge, however, there is no similar attempt to generate insights regarding the regulation of entry by foreign firms. Internationally comparable information on the regulation of foreign entry has only recently become available (World Bank 2012b).

In this article, we address this lacuna by providing an initial analysis of the causes and consequences of the regulation of foreign entry. We begin by analyzing the cultural, legal, political, and geographic determinants of foreign entry regulation. Next, we document a strong, negative, and economically significant association between the regulation of foreign entry and inward foreign direct investment (FDI). In contrast, the regulation of domestic entry is *positively* associated with FDI inflows.

As expected, measures of the regulation of domestic and foreign entry are highly correlated: 0.87 for number of days required for entry and 0.95 for number of regulatory procedures. Using number of entry procedures as a benchmark, among the 65 countries in our primary sample, 51 regulate foreign entry more than domestic entry.[1]

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Received January 2018; accepted June 2018.
Received January 2018; accepted June 2018.

[1] Canada, Hong Kong, Belarus, Cyprus, Indonesia, and Bosnia and Herzegovina have the same number of procedures for both domestic and foreign entry. New Zealand, Georgia, Armenia, Macedonia, Azerbaijan, Croatia, Moldova, Singapore, Burkina Faso, Italy, Bulgaria, Turkey, Romania, Mali, United Kingdom, Egypt, Zambia, Peru, Russia, Poland, Tanzania, Bangladesh, and India require one additional procedure for foreign entry. Malaysia, Slovakia, Vietnam, United States, Chile, Jordan, Germany, Czech

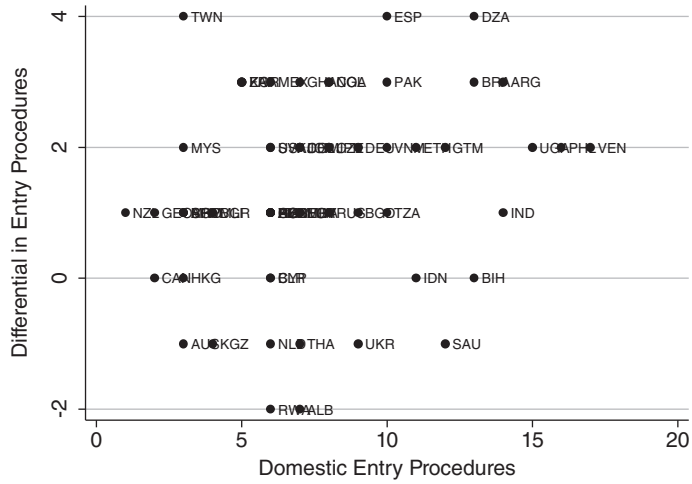

Figure 1. Domestic Entry and Foreign/Domestic Entry Differential.
Notes: Domestic entry procedures are measured in 2012 (World Bank 2014). Differential in entry procedures is 2012 foreign entry procedures minus 2012 domestic entry procedures. Foreign entry procedures is collected from world bank (2012b). Labels are world bank country codes.

Only eight countries regulate foreign entry less, including Rwanda, Albania, Kyrgyzstan, Australia, the Netherlands, Thailand, Ukraine, and Saudi Arabia. As illustrated in Figure 1, the differential of foreign and domestic entry procedures is not correlated with the regulation of domestic entry. Thus, the tendency to regulate foreign entry more than domestic entry is not simply a function of the general tendency to regulate. This suggests that there is sufficient variation in the regulation of domestic and foreign entry to distinguish empirically.

First, we examine the determinants of the regulation of foreign entry. Drawing on the domestic entry literature (Djankov et al. 2002; LaPorta et al. 2008; Davis and Williamson 2016), we test hypotheses regarding the roles of culture, politics, law, and geography as determinants of foreign entry regulation.

The *cultural theory of regulation* holds that culture is an important factor influencing a country's regulatory regime. In particular, culture influences individual preferences over social and economic policies. We focus specifically on individualism versus collectivism, a dimension of culture that reflects fundamental views of the self. Individualism promotes individual autonomy, while collectivism emphasizes the group or social unit over the individual (Gorodnichenko and Roland 2012). This distinction translates into a host of attitudes, beliefs, and behaviors, and it plausibly influences preferences over regulation.

Collectivist societies may choose greater government intervention and regulation if they are concerned with preserving social order, perceive the market as destructive, or expect market failures (Djankov et al. 2003; Aghion et al. 2010; Pinotti 2012). In such cultures, individuals may be more concerned with unbridled market exchanges than possible costs from intervention (Acemoglu and Verdier 2000). In contrast, as argued by Gorodnichenko and Roland (2017), individualist societies focus on personal achievement and promote innovation, entrepreneurship, and other market-oriented activities. This may include market exchanges across borders such as international trade or FDI.

Republic, Dominican Republic, Japan, Ethiopia, Guatemala, Uganda, Philippines, and Venezuela require two additional procedures for foreign entry. South Korea, France, Mexico, Colombia, South Africa, Ghana, Nigeria, Pakistan, Argentina, and Brazil require three additional foreign entry procedures. Taiwan, Spain, and Algeria require four additional procedures for foreign firms.

Similarly, new firm entry increases the "creative destructive" aspect of the market, which may lead collectivist societies to restrict new firm entry, foreign and domestic. Individualistic societies, however, place greater importance on innovation and entrepreneurship than social disruptions created from new firm entry. As a result, individualistic countries will tend to regulate business activity less, including activity related to establishing a foreign-owned subsidiary. We therefore expect individualism to negatively relate to the regulation of foreign entry.

In addition to shaping preferences, culture may also impact regulation via its influence on political institutions. Prior work supports the idea that informal institutions bear a causal relation to formal institutions (North 1990; Williamson 2000; Roland 2004; Siegel, Licht, and Schwartz 2011). Specifically, individualism is linked to the development of democratic political institutions (Licht, Goldschmidt, and Schwartz 2007; Klasing 2013). Formal political institutions, to a large degree, write the rules and regulations surrounding the entry of foreign firms. Thus, it is possible that individualism only influences political institutions, which in turn determines regulation.

This leads us to consider a *political theory of regulation.* Djankov et al. (2002) find that democracy decreases regulation of domestic business entry, a result that is broadly in line with public choice theory: Politicians and bureaucrats choose policies and regulations in keeping with their own private interest rather than with the public interest. In addition, Acemoglu (2008) provides a theoretical model showing that in an oligarchy, government capture may lead to high barriers to entry for new firms to protect incumbent elites. In contrast, entry barriers are lower under democracy. Given this literature, we expect that democracies will regulate foreign entry less than oligarchies. Because individualism is credibly linked to the development of democratic political institutions (Licht, Goldschmidt, and Schwartz 2007; Klasing 2013; Davis and Abdurazokzoda 2016), we test for this association with and without controls for national culture in order to disentangle the effects of culture and politics.

Legal institutions also affect the level of regulation, the *legal origins hypothesis.* A country's legal system is categorized by its legal origin—whether a nation was founded or colonized by a country with a common law or civil legal system. Collectively, the legal origins literature concludes that common law countries have fewer hierarchical regulations and more market-oriented processes of social control relative to civil law, including less business regulation (see LaPorta et al. 2008, for a survey). Thus, we hypothesize that common law countries will regulate foreign entry less intensively than civil law nations.[2]

Fourth, we consider the possibility that culture significantly interacts with formal institutions (North 1990; Greif 1993), an idea that Davis and Williamson (2016) call the *interdependent institutions hypothesis.* An important mechanism underlying the interdependence of formal and informal institutions is the nature of legal evolution. The adaptability channel holds that the common law system is more responsive to the local environment (Hayek 1960; Beck, Demirguc-Kunt, and Levine 2003), including local cultural values. If so, cultural values may have a greater impact on regulation in common law countries.

Finally, we test a *geographic theory of regulation*, which holds that countries with a greater degree of geographic openness will regulate foreign entry less. When a country's natural or geographic openness is high, the returns to pairing local resources with foreign resources and technology are greater, reducing pressure to restrict the entry of foreign firms. In contrast, countries that depend less on international trade or have lower returns from combining foreign and domestic

[2] For a discussion on how institutions affect a foreign firm's entry strategy into emerging markets, see Meyer et al. (2009).

resources are more likely to restrict foreign entry. General support for this idea comes from evidence that FDI is predicted by gravity model type variables, for example, geographic distance and economic size (Blonigen and Piger 2014).

Our key findings regarding the determinants of foreign entry regulation are as follows. First, we find strong support for the *cultural theory of regulation*: individualism has a strong, negative, and economically significant association with foreign entry regulation. This result is robust to the inclusion of a variety of control variables and to the use of instruments to address endogeneity concerns. Second, we fail to find empirical support for the *political theory of regulation.* While democracy is negatively related to the regulation of foreign entry, this association is not robust to the inclusion of individualism. Third, while the evidence does not support the legal origins theory of regulation, it does support the *interdependent institutions hypothesis*: individualism has a greater effect on the regulation of foreign entry in common law countries. Finally, we find strong and consistent support for the *geographic theory of regulation*: geographic openness significantly decreases the regulation of foreign entry.

Next, we investigate the consequences of regulating the entry of foreign firms. Specifically, we connect regulation of foreign entry to FDI inflows. We focus on FDI as an outcome variable given its close theoretical relation to the regulation of foreign entry: more regulation should increase the cost of foreign firm formation, thus reducing FDI. As expected, we find that the regulation of foreign entry is negatively associated with FDI. This relation is also economically meaningful. A one standard deviation increase in the regulation of foreign entry is associated with a decrease in FDI of nearly a standard deviation. We also find a significant *positive* relation between FDI and domestic entry regulation, possibly due to decreased domestic competition.

Our findings provide insight into how particular dimensions of regulation affect foreign investment, thus providing policymakers with more focused guidance for reform. They also suggest that a country that regulates foreign entry of firms more heavily will receive less FDI. If so, those countries may also incur unintended macroeconomic costs, given the links between FDI and a number of economically important outcomes, including economic growth (Balasubramanyam, Salisu, and Sapsford 1996; Alfaro et al. 2003; Hermes and Lensink 2003), technology and knowledge transfers (Barrell and Pain 1997; Javorcik 2004; Haskel, Pereira, and Slaughter 2007), capital formation (Borenszteina, De Gregoriob, and Leec 1998), and institutional development (Dutta and Roy 2009).

This article is the first attempt to analyze the causes and consequences of the regulation of foreign entry. We make three key contributions. The first, which extends findings in Davis and Williamson (2016), is evidence supporting the *cultural theory of regulation* and the *interdependent institutions hypothesis.* The second contribution consists of evidence in favor of the *geographic theory of regulation.* To the best of our knowledge, the link between geographic openness and regulation has not been previously established. The final contribution links the regulation of foreign entry to the level of inward FDI. Our results in this regard refine previous findings that a host country's regulatory environment matters for FDI, highlighting the importance of the *differential* in regulatory treatment of foreign versus domestic firms.

The article most similar to ours is Davis and Williamson (2016), which investigates the determinants of domestic entry regulation and overlaps with our current article in terms of focus and conceptual framework. Both articles find that individualism reduces entry regulation and common law significantly magnifies this effect. In addition, democracy does not significantly relate to entry regulation once culture is included. In contrast with Davis and Williamson (2016), we do not find support for the legal origins hypothesis. In addition, they do not consider the relation between geographic openness and regulation.

Our work also relates to the literature exploring the association between culture and regulation. Stulz and Williamson (2003) find a causal association between religious affiliation and financial regulation. Licht, Goldschmidt, and Schwartz (2005) and Cline and Williamson (2016) document that national culture affects shareholder protection regulation. Both Aghion et al. (2010) and Pinotti (2012) show a negative association between trust and regulation of domestic entry. We view this finding as largely consistent with our argument.

Finally, our work contributes to the literature on the determinants of FDI, which has been shown to depend on a host country's institutions (Globerman and Shapiro 2003), the protection of intellectual property rights (Coeurderoy and Murray 2008), and the degree of regulatory discrimination against foreign firms (Koyama and Golub 2006), inter alia. Busse and Groizard (2008) investigate several dimensions of regulation and find that domestic entry regulation significantly affects foreign investment flows. In addition, Jayasuriya (2011) and Morris and Aziz (2011) consider the relation between a composite measure of regulation, which includes information on the regulation of entry by domestic firms, and inward FDI. The empirical results are mixed. None of these articles, however, directly addresses the association between foreign investment and the regulation of entry by *foreign* firms or attempts to distinguish, as we do, between the regulation of foreign and domestic entry.

Within this literature, the most closely related article is Siegel, Licht, and Schwartz (2011), who document a negative association between cultural differences in egalitarianism and bilateral investment flows. They also present evidence that egalitarianism affects international investment indirectly, through a country's competition policies and institutional environment. While similar to our article in its conceptual framework, that article does not consider the regulation of foreign entry, which is the focus of our analytical attention.

2. The Determinants of Foreign Entry Regulation

Data

To measure the regulation of foreign entry, we collect recently available data from the World Bank's Investing across Borders. This project quantifies laws, regulations, and practices impacting how foreign companies invest. To measure cross-country regulation to start a foreign business, the procedural burden facing foreign companies to establish a foreign-owned subsidiary is measured. Specifically, the average number of days and the average number of procedures required to start a foreign subsidiary are counted. The World Bank collected data during 2011–2012 for 104 countries. Unfortunately, the data have not been updated; thus, panel analysis is not an option, and we are limited to the cross-section.[3] We aggregate time and procedures into an overall foreign regulation index by extracting the first principal component. Collectively, this index represents the legal obstacles to start a foreign-owned business.

We measure a country's level of individualism versus collectivism using an index developed by Beugelsdijk, Maseland, and van Hoorn (2015). Gorodnichenko and Roland (2011) find that Hofstede's (1980, 2001) measure of individualism is the most important cultural dimension for

[3] In 2009, The World Bank collected foreign entry regulation for 87 countries. The data were updated and expanded to include 104 countries as of 2011–2012. We utilize the most recent data available as this provides the largest set of countries and most accurate data at this time. We note that there are basically no changes in regulation for those countries sampled in both waves. Thus, we are unable to create a panel or analyze changes in foreign entry regulation.

economic outcomes. One criticism, however, is that this measure is based on data collected 45 years ago (Shenkar 2001). Beugelsdijk, Maseland, and van Hoorn (2015) address this issue by updating Hofstede's individualism with data from World Values Surveys (1981–2008). The four questions used to proxy Hofstede's individualism pertain to: (i) private versus government ownership of business, (ii) whether one of the main goals in life is to make parents proud, (iii) justifiability of abortion, and (iv) justifiability of homosexuality. The authors use factor analysis to compile an overall individualism index. Each of the four questions from WVS World Values Survey (WVS) (Inglehart 2008) relates to characteristics of individualism described by Hofstede, and the updated index correlates 0.78 with Hofstede's original individualism.

Comparison between the original and updated index suggests that individualism is increasing over time but only in absolute terms. Cultural differences across countries are relatively constant. Beugelsdijk, Maseland, and van Hoorn's (2015) updated measure (idv) is attractive since we can include up to 10 additional countries in the analysis. Using this updated and expanded measure, the intersection of foreign entry regulation and individualism provides a sample of 65 countries.

To measure political institutional quality, we rely on four measures of democracy: Accountability and Voice (voice), from the Worldwide Governance Indicators (Kaufmann, Kraay, and Mastruzzi 2012); polity2 (polity) from the Polity IV database (Jaggers and Marshall 2000); the Gastil Index of Democracy (gastil) from Freedom House (2014); and a dichotomous democracy variable (democ) developed by Przeworski et al. (2000) and updated in Cheibub, Gandhi, and Vreeland (2010). In each case, we average the measure in question from 1998 to 2008 under the assumption that foreign entry regulation responds to changes in political institutions with a lag. By relying on four different measures, we reduce the degree to which our results are driven by any one particular definition or data set. See Appendix A for further details.

To control for legal origin, a dummy variable for English legal heritage is included to capture the influence of the English common law tradition on regulatory choice. Common law countries tend to regulate markets less than civil law countries where governments have a higher proclivity to intervene in the economy, including creating higher levels of regulations (LaPorta et al. 1999, 2008).

As hypothesized in section 1, we believe that countries with a greater degree of geographic openness will have higher returns to combining domestic and foreign resources, leading these countries to regulate foreign entry more lightly. In addition, Olson (1982) argues that exposure to international trade increases the pressure to reform inefficient regulation. To avoid endogeneity, we utilize a measure of exogenous geographic openness, whether a country is landlocked, to proxy for international openness. In the foreign entry regulation determinants model, we do not control for trade volume as this measure depends in part on trade policy, which is likely to reflect the same policy-making processes that determine the regulation of foreign entry. For these reasons, we use a dummy variable equal to one if a country is landlocked.

Summary statistics are provided in Table 1. Our sample consists of 70 countries, with up to 65 countries included in our determinants of foreign entry model and up to 66 countries included in the FDI specifications, as detailed in Appendix B. Levels of development range from Ethiopia ($1234 per person) to Singapore ($75,777 per person) and a mean level of $20,829 per person. We have 22 common law countries in our sample, and countries range from extremely autocratic to highly democratic.

The foreign entry regulation index has a mean of −0.09, standard deviation of 1.33, and ranges from −3.37 to 3.08 with higher values representing greater regulation of foreign entry. Countries with low regulations on foreign entry include Australia, New Zealand, and Canada.

Table 1. Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Entry Regulations					
foreign_proc (log)	70	2.04	0.53	0.69	2.94
foreign_days (log)	70	2.90	1.01	0.69	5.78
foreign_reg	70	−0.09	1.33	−3.37	3.08
domestic_reg	70	−0.03	1.48	−5.20	2.92
Culture and Instruments					
idv	65	39.86	24.50	0.00	94.00
right_wing	61	5.72	0.74	4.50	9.07
state_ownership	65	5.35	0.83	3.29	7.00
native_priority	64	0.65	0.18	0.16	0.98
trust	67	23.30	11.47	4.80	50.50
pronoun_drop	60	0.74	0.44	0.00	1.00
rain	68	−0.18	0.44	−0.76	0.95
FDI and Controls					
FDI (log)	69	1.01	1.03	−1.86	3.97
trade	69	89.45	67.94	24.77	449.99
domestic_invest	69	24.31	6.24	12.80	39.15
gdp per capita (log)	69	9.47	1.02	7.12	11.24
growth	69	1.60	2.99	−6.80	10.17
resources	69	7.06	9.77	0.00	47.61
english	70	0.31	0.47	0.00	1.00
french	66	0.50	0.50	0.00	1.00
voice	70	0.09	0.88	−1.59	1.60
polity	68	4.96	5.70	−10.00	10.00
gastil	69	7.79	3.35	0.36	12.00
democ	68	0.66	0.45	0.00	1.00
landlocked	68	0.19	0.40	0.00	1.00
geo_open	52	15.38	13.09	2.56	68.18
disteq	67	31.06	16.06	0.23	55.68
transition	68	0.25	0.44	0.00	1.00
ethnic	70	0.39	0.24	0.00	0.93
partitioned	53	20.94	22.84	0.00	89.00
wheat_sugar	59	0.15	0.19	−0.22	0.53
battle_deaths	70	0.00	0.00	0.00	0.00

Notes: See Appendix A and the body of the article for variable description and sources.

At the other extreme, Venezuela, Algeria, and Brazil rank highest on the foreign entry regulation index. Individualism ranges from 0 to 94 with an approximate mean of 40 and a standard deviation of 25. Low individualism countries include Egypt, Jordan, and Indonesia, while high individualism countries include Czech Republic, Germany, and the Netherlands. We discuss the rest of our data throughout the article below and in Appendix A.

Main Results

Our baseline model considers three of the four hypotheses related to culture, law, and geographic openness. For the moment, we omit the political channel, since culture may influence regulation through its impact on political institutions. Our initial specification does not include a proxy for the political theory hypothesis, linking democracy to the regulation of entry (Djankov et al. 2002). Measures of democracy are likely to be endogenous to culture (Licht, Goldschmidt, and Schwartz 2007; Tabellini 2008; Davis and Abdurazokzoda 2016). If included, the results may underestimate the role of culture in foreign entry regulation. Thus, we consider the role of political institutions in the next subsection.

We initially include common law to proxy for legal institutions, individualism as our measure of national culture, and landlocked as a measure of geographic openness. Our dependent variable is a measure of foreign entry regulation. We test the benchmark specification using three measures of the regulation of foreign entry.

Results are reported in Table 2 and indicate initial support for the culture and openness hypotheses, as both individualism and landlocked are significant at the 5% level or better. As shown in columns 1 and 2, individualism is significant and negatively associated with number of foreign entry procedures and number of days to comply with foreign entry regulations. These associations are economically significant as a one standard deviation increase in individualism is associated with a 17% decrease in number of procedures and a 44% decrease in number of days. In column 3, the dependent variable is the combined foreign entry regulation index. A one standard deviation increase in individualism, the difference between Cyprus and Australia, decreases overall foreign entry regulation by 0.41 of a standard deviation, which is almost the difference between Ethiopia and Japan. Moving from the lowest to highest-ranking country on the individualism–collectivism spectrum decreases the foreign entry regulation index by 2.07, which equals 1.57 standard deviations.[4]

Landlocked is also significant and negatively related to the regulation of foreign entry, providing initial support for the openness hypothesis. A one standard deviation increase in landlocked decreases the number of procedures and days required for foreign entry by 15% and 23%, respectively, and reduces the index of foreign entry regulation by 0.35, which is a 0.26 standard deviation decrease. Perhaps surprisingly, the legal origins hypothesis receives no support. Common law is not significant, suggesting that legal origin is less important in determining foreign entry regulation than other dimensions of regulation.

For robustness, we drop landlocked and include a more refined measure of geographic trade openness, Frankel and Romer's (1999) exogenous trade measure. This measure is derived by estimating a gravity model of bilateral trade and then aggregating across a country's potential trade partners to obtain a measure of the geographic component of a country's overall trade. Results are reported in columns 4–6.

Individualism is negative and significant with similar size coefficients. Geographic openness is negative and significant at the 5% level, providing further support for the openness hypothesis. Lastly, the legal origins hypothesis receives at most modest support. Common law is significant (at the 10% level) in only one specification. Although our findings are robust, we lose 13 observations if this measure is included. Thus, for the remainder of the models, we include landlocked as an exogenous proxy for geographic openness. The remaining results are robust to either geographic openness measure.

Overall, these results suggest that trade openness and culture are significant, lending support to the argument that more open and individualistic countries regulate new foreign businesses less. The adjusted R^2 values indicate we are explaining 15–28% of the variation in foreign entry regulation. We continue to use the overall index as our primary measure since it captures all measures of foreign entry regulation.

The Political Theory of Regulation and the Direct Effect of Individualism

Next, we examine the role of political institutions in regulating foreign entry by incorporating measures of democracy into our baseline specification. We proxy political institutions with four

[4] Using the Hadi method, we do not detect any outliers in our sample. This finding is also supported by calculating Cook's distance for influential observations. Cook's D for all data points is <0.15.

Table 2. Determinants of Regulation of Foreign Entry

Dep. Var:	(1) foreign_proc	(2) foreign_days	(3) foreign_reg	(4) foreign_proc	(5) foreign_days	(6) foreign_reg
idv	−0.007**	−0.018***	−0.022**	−0.008**	−0.018***	−0.023**
	(−2.489)	(−3.593)	(−3.122)	(−2.581)	(−3.569)	(−3.136)
english	−0.233	−0.167	−0.421	−0.287*	−0.256	−0.553
	(−1.484)	(−0.623)	(−1.133)	(−1.921)	(−1.000)	(−1.573)
landlocked	−0.368**	−0.577**	−0.880**			
	(−2.018)	(−2.144)	(−2.178)			
geo_open				−0.009**	−0.025**	−0.029**
				(−2.268)	(−3.404)	(−2.949)
Constant	2.470***	3.761***	1.072**	2.658***	4.176***	1.603***
	(17.536)	(12.995)	(2.922)	(17.418)	(13.860)	(4.160)
Obs	65	65	65	52	52	52
Adj. R^2	0.15	0.18	0.17	0.20	0.28	0.26

Notes: Dependent variables as listed in column. See Appendix A and the body of the article for variable description and sources. OLS regressions with robust *t*-statistics in parentheses.
* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.

different measures of democracy: voice and accountability, polity2, Gastil index, and a dichotomous democracy variable. In these regressions, we continue to control for legal origin and landlocked. We first present regressions controlling for democracy but not for individualism to highlight the comparison with Djankov et al. (2002), who find that political institutions play an important role in determining the regulation of entry of domestic firms.

Results are shown in columns 1–4 of Table 3. Two of the four democracy measures, voice and gastil, are negative and significant at the 5% level. This suggests that democratic societies regulate foreign entry more lightly, providing moderate support for Djankov et al.'s (2002) findings.

Next, we consider specifications that include measures of both individualism and democracy. Because democracy is endogenous to individualism, these regressions provide information on the channels through which culture influences the regulation of foreign entry. If individualism is not significant, then individualism would appear to influence the regulation of foreign entry indirectly, through its influence on the development of political institutions. Alternatively, if the coefficient on individualism is significant, this indicates that individualism has a direct influence on regulation, independent of a country's level of democracy.

Results are shown in columns 5–8. In all four specifications, individualism is negative and significant at the 5% level. On average, a one standard deviation increase in individualism decreases foreign entry regulation by 0.40 of a standard deviation, which is similar to individualism's impact from the OLS specifications without controlling for democracy. In addition, with the inclusion of individualism, none of the political variables is significant.

Collectively, these results cast a significant doubt on the political theory of regulation and lend additional support to the cultural theory of regulation. In particular, we find that individualism has a direct effect on the regulation of foreign entry. We find no support for a significant effect of individualism through its influence on a country's political institutions. In addition, our results provide continued support for the openness hypothesis and little support for the legal hypothesis.

Robustness Checks

Our results indicate consistent support for the culture and openness theories of regulation. Here, we consider how robust these results are to a variety of controls, including measures of institutional quality, ethnic composition, political history, natural resources, trust, and political and economic ideology. As before, in each of these specifications, we continue to control for individualism, legal origin, and landlocked.

Our first set of controls relates to two dimensions of a country's political history, its history of communist rule and war. We first include a dummy variable for whether a country is a transition economy (transition). A country's history of communism may affect attitudes toward the role of government and, in particular, regulation (Alesina and Fuchs-Schundeln 2007). Another measure of political history is battle_deaths, the number of battle related deaths per capita from 1998 to 2008 (Melander, Pettersson, and Themnér 2016). The experience of war may increase hostility toward foreigners and, by extension, to the presence of foreign firms.

As shown in columns 1 and 2 in Table 4, neither political history control variable is significant. Individualism is negative and significant at the 5% level with a similar size coefficient. Landlocked is significant in one of two specifications.

Next, we include exogenous factors that proxy for institutional quality, wheat–sugar ratio, and distance from the equator. Distance from the equator (disteq) is linked to institutional quality

Table 3. Determinants of Regulation of Foreign Entry, Political Channel, and Direct Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
idv					−0.018**	−0.023**	−0.023**	−0.023**
					(−2.264)	(−3.031)	(−3.034)	(−3.127)
voice	−0.575**				−0.135			
	(−2.993)				(−0.662)			
polity		−0.047				0.019		
		(−1.618)				(0.623)		
gastil			−0.105**				0.023	
			(−2.086)				(0.453)	
democ				−0.373				0.236
				(−1.000)				(0.644)
english	−0.272	−0.213	−0.197	−0.247	−0.394	−0.272	−0.324	−0.292
	(−0.724)	(−0.502)	(−0.489)	(−0.555)	(−1.038)	(−0.726)	(−0.855)	(−0.766)
landlocked	−1.149**	−0.992**	−1.052**	−0.936**	−0.948**	−0.799*	−0.857**	−0.847**
	(−2.770)	(−2.701)	(−2.692)	(−2.654)	(−2.252)	(−1.955)	(−2.077)	(−2.062)
Constant	0.249	0.421	1.018**	0.451	0.941**	0.984**	0.942*	0.945**
	(1.261)	(1.562)	(2.164)	(1.272)	(2.429)	(2.600)	(1.968)	(2.203)
Obs	65	63	64	63	65	63	64	63
Adj. R^2	0.14	0.05	0.08	0.03	0.16	0.16	0.16	0.16

Notes: Dependent variable is foreign_reg. See Appendix A and the body of the article for variable description and sources. OLS regressions with robust *t*-statistics in parentheses.
* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.

through its effect on colonization and institutional transfer (Hall and Jones 1999; Williamson and Kerekes 2011). The wheat–sugar ratio is the natural log of land suitable for wheat cultivation divided by land suitable for sugar cultivation (wheat_sugar). This was first introduced by Easterly (2007) to provide an empirical test of Engermann and Sokoloff's (1997, 2002) hypothesis that a country's agricultural endowments influence its institutional development.

As seen in columns 3–4, neither control variable is significant. Individualism is significant at the 10% level in regression 3. Once we include disteq, however, individualism is no longer significant at conventional levels (significant at the 15% level). Landlocked is negative and significant in both regressions. Although the results are statistically weaker for individualism, the point estimate on individualism is similar to that in the baseline regression. Thus, we cannot reject the equality of the coefficient across specifications.

Next, we consider two variables related to a country's ethnic composition. It is possible that the ethnic structure of a society will influence policies and regulations, with more ethnically diverse societies favoring redistributional policies (Easterly and Levine 1997; Alesina, Baqir, and Easterly 1999; Alesina et al. 2003). In addition, the social salience hypothesis (Blalock 1967) suggests that ethnic fractionalization may increase collectivism by strengthening ethnic identities.

To address this concern, we control for the social composition by using two variables. First, we include a measure of ethnic fractionalization (*ethnicfrac*), which is the probability that two randomly selected individuals from a country's population will belong to the same ethnic group. Second, we include *partitioned*, a measure capturing the share of a country's population that belongs to an ethnic group that is partitioned by the country's borders. Countries with highly partitioned populations may have difficulty pursuing policies that favor public interest (Alesina, Easterly, and Matuszeski 2011). As seen in columns 5 and 6, neither variable is significant, and our results continue to support the culture and openness hypotheses.

Our next regression considers an extension of the openness hypothesis. Natural resource abundance provides an additional exogenous source of gains from foreign investment or trade. In particular, the presence of natural resources may increase the return to foreign entry, which has the potential to pair domestic natural resources with foreign capital and technology. However, resource rich countries do not need to rely on external trade or investment. The resource rents provide an additional source of revenue allowing governments to close off their country to outside business opportunities. This conjecture follows the resource curse literature, which argues that countries abundant in natural resources grow more slowly, have poor institutions, and worse economic outcomes (Sachs and Warner 1999; Mehlum, Moene, and Torvik 2006). The presence of natural resources may also increase the bargaining power of the domestic government relative to potential foreign entrants, leading to greater regulation.

Our measure of natural resource abundance is natural resource rents as a share of GDP in 2012 (World Bank 2017). Natural resource rents are positive and significant, indicating that a country's reliance on natural resources does significantly relate to barriers for foreign firms to start a business. Individualism and landlocked remain significant at the 5% level.

Next, we consider controls related to political and economic ideology, economic nationalism, and social trust. One concern is that individualism may simply proxy for conservative ideology and these ideological factors, rather than individualism itself, drive changes in the level of regulation.

To test whether this is indeed the case, we first include proxies for a country's political and economic ideology collected from WVS. Our measure of political ideology is the average of respondents' self-reported position on a left–right political scale, right_wing. Our measure of economic ideology is state_ownership, which reflects a preference for state ownership of business. We

Table 4. Determinants of Regulation of Foreign Entry, Additional Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
idv	−0.021**	−0.022**	−0.019*	−0.015^	−0.018**	−0.027**	−0.016**	−0.018*	−0.029***	−0.018**	−0.014^
	(−2.822)	(−3.101)	(−1.716)	(−1.573)	(−2.228)	(−2.995)	(−2.195)	(−1.732)	(−4.161)	(−2.748)	(−1.448)
english	−0.556	−0.421	−0.279	−0.515	−0.524	−0.353	−0.497	−0.379	−0.456	−0.357	−0.386
	(−1.496)	(−1.122)	(−0.756)	(−1.498)	(−1.398)	(−0.727)	(−1.377)	(−0.959)	(−1.218)	(−0.977)	(−1.076)
landlocked	−0.477	−0.880**	−0.915**	−0.709*	−0.995**	−1.005**	−0.907**	−0.678	−0.723*	−1.001**	−1.170**
	(−1.090)	(−2.159)	(−2.222)	(−1.903)	(−2.599)	(−2.418)	(−2.256)	(−1.659)	(−1.684)	(−2.442)	(−2.820)
transition	−0.658										
	(−1.638)										
battle_deaths		1.985									
		(0.001)									
wheat_sugar			−0.635								
			(−0.483)								
disteq				−0.019							
				(−1.446)							
ethnicfrac					0.922						
					(1.299)						
partitioned						0.000					
						(0.039)					
resources							0.030**				
							(2.144)				
right_wing								0.309*			
								(1.679)			
state_ownership								0.043			

(Continues)

Table 4. Continued

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
native_priority								(0.197)	−1.612* (−1.829)		
trust										−0.018 (−1.131)	
gdp per capita											−0.308 (−1.486)
Constant	1.227** (3.351)	1.071** (2.929)	1.123** (2.748)	1.395*** (3.719)	0.602 (1.077)	1.190** (2.284)	0.654 (1.534)	−1.050 (−0.475)	2.404** (3.429)	1.355** (2.792)	3.699** (2.091)
Obs	63	65	55	62	65	50	64	58	63	65	64
Adj. R^2	0.20	0.16	0.18	0.18	0.18	0.20	0.21	0.16	0.19	0.18	0.18

Notes: Dependent variable is foreign_reg. See Appendix A and the body of the article for variable description and sources. OLS regressions with robust *t*-statistics in parentheses.
* $p < 0.10$.
** $p < 0.05$.
*** $p < 0.01$.
ˆ $p < 0.15$.

proxy for economic nationalism with native_priority, the belief that when jobs are scarce priority should be given to nationals instead of immigrants. If a preference for native employment is associated with a preference for domestic ownership, this could lead to greater foreign entry regulation. Finally, we include a measure of generalized trust. Several articles argue that greater trust is associated with lower levels of regulation (Aghion et al. 2010; Pinotti 2012).

Our results are reported in columns 8–10. In regression 8, right_wing is positive and significant at the 10% level, individualism is negative and significant, and landlocked loses significance. This result suggests that right political leaning may increase the level of foreign entry regulation, possibly indicating an anti-foreign bias among this portion of the political spectrum (Caplan 2007). State ownership is not significantly related to foreign entry regulation. As reported in column 9, native_priority is negative and significant, as are individualism and openness. Trust does not significantly correlate with regulation, as shown in column 10. Individualism and landlocked retain sign and significance.

As one final robustness check, we include income per capita. Although there is not a direct theoretical link between the level of income and the regulation of foreign entry, economic development is associated with drastic shifts in the structure of society (Kuznets 1973). By controlling for GDP per capita, we simultaneously hold constant a large number of factors that correlate with income; thus, controlling for GDP per capita is likely to result in over-controlling.

Our results are shown in column 11. Income per capita is negative but insignificantly associated with foreign entry regulation. Landlocked remains negative and significant. However, individualism is not significant at conventional levels. We note that income per capita is clearly endogenous. In particular, since individualism has a large causal effect on economic development (Gorodnichenko and Roland 2011, 2017; Davis 2016), the estimated effect of individualism in this specification is subject to bias due to over-controlling. We address this concern in a later section when we instrument for individualism.

In addition, we examine whether individualism is robust to controlling for other dimensions of culture, including uncertainty avoidance and power distance (Hofstede 1980, 2001), as well as egalitarianism, mastery, autonomy, and embeddedness (Schwartz 1994). In each regression, individualism remains negative and significant. These findings are not tabulated to save space but are available upon request.[5]

Overall, our results are consistent with the culture and openness hypotheses showing a significant empirical association between individualism and geographic openness in the regulation of foreign entry. These findings are robust to controlling for additional dimensions of culture, the level of social trust, proxies for economic and political ideology, legal origin, geography, ethnicity, political history, and exogenous determinants of institutions. As before, our findings do not support the legal origins hypothesis, as English legal origin is insignificant in all specifications.

The Interdependent Institutions Hypothesis

With strong evidence supporting the link between culture and regulation of foreign business entry, we explore the mechanisms through which culture influences regulation by considering how it interacts with legal institutions. Our investigation focuses on the *interdependent institutions*

[5] We do not report these findings due to the large reduction in sample size, 38 countries in Hofstede specifications and 32 in Schwartz regressions.

hypothesis, introduced by Davis and Williamson (2016), which holds that culture may interact with formal institutions to determine social policy outcomes. In particular, culture influences preferences over social policy, while formal institutions may serve to aggregate and channel cultural preferences determining the degree to which they influence policy formation.

Here we restrict attention to the law-and-culture version of the interdependent institutions hypothesis.[6] The central role of legal precedent in the common law tradition makes it highly adaptive relative to civil law and, thus, better able to adapt to local economic and social conditions, as argued by Hayek (1960) and Rubin (1982). Pistor et al. (2003) provide evidence for the evolutionary nature of common law legal systems. In a cross-country comparative analysis of the development of corporate law, they conclude that "the capacity of legal systems to innovate is more important than the level of protection a legal system may afford to particular stakeholders at any point in time" (p. 678). A related study by Berkowitz, Pistor, and Richard (2003, p. 167) finds that the success of transplanted legal systems depends most on the ability of judges and lawyers to "increase the quality of the law in a way that is responsive to local demand." Similarly, Beck, Demirguc-Kunt, and Levine (2003) provide evidence that the flexibility of common law systems supports financial development. If common law's greater adaptability makes it more sensitive to local conditions, then national culture may have a greater influence on regulation in common law countries.

In Table 5, we incorporate interaction effects between individualism and legal origin. In column 1, we include the interaction term between individualism and common law to our baseline specification. This interaction term is negative and significant at the 1% level, suggesting that a one standard deviation increase in individualism in a common law country decreases foreign entry regulation by 1.20, which is almost a one standard deviation decrease.

Next, we check the robustness of this finding by including two additional control variables, resource rents, and GDP per capita. As reported in columns 2 and 3, the interaction term remains significant. The coefficient on individualism is no longer significant, suggesting that individualism's impact is working mainly through the legal system.

In columns 4 and 5, we drop the interaction term and split the sample into common law and civil law countries, respectively. Individualism is negative and significant at the 1% level in common law countries; however, it is negative and insignificant in civil law countries. Across these specifications, we are explaining up to 57% of the variation in foreign entry regulation.

Overall, the effect of culture on regulation appears to depend on a country's legal tradition, specifically the ability of common law to adapt to cultural preferences. Figure 2A, B illustrates the partial association between individualism and foreign entry regulation in these two subsamples. As is clear from the figures, these associations are not driven by outliers.[7]

Overall, our results provide consistent support for the law-and-culture interdependent institutions hypothesis. In doing so, these results also support the adaptability channel and a modified version of the legal origins hypothesis: legal origin does not matter *per se* for the regulation of foreign entry, but it determines the degree to which cultural values are reflected in the regulation of foreign entry. Thus, a country's legal tradition plays a key role in determining the degree to which policy preferences rooted in cultural values are reflected in social policy.

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[6] We also considered a political version of the interdependent institutions hypothesis based on the interaction of democracy and culture, but the results are not significant. These findings are available upon request.

[7] We also utilize the Hadi method to detect outliers. No outliers are detected in either subsample.

Table 5. Interaction Effects, Individualism and Legal Origin on Regulation of Foreign Entry

	(1)	(2)	(3)	(4)	(5)
	All	All	All	Common	Civil
idv	−0.005	−0.002	−0.00003	−0.052***	−0.006
	(−0.802)	(−0.227)	(−0.003)	(−6.252)	(−0.808)
english	1.435**	1.292**	1.404**		
	(2.743)	(2.587)	(2.599)		
english*idv	−0.049***	−0.047***	−0.047***		
	(−4.648)	(−4.424)	(−4.214)		
landlocked	−0.908**	−0.932**	−1.116**	0.453	−1.203***
	(−2.702)	(−2.771)	(−3.116)	(0.652)	(−3.735)
resources		0.025*			
		(1.859)			
gdp per capita			−0.217		
			(−1.078)		
Constant	0.397	0.081	2.273	1.638***	0.479
	(1.075)	(0.204)	(1.270)	(4.213)	(1.278)
Obs	65	64	64	21	44
Adj. R^2	0.34	0.37	0.34	0.57	0.18

Notes: Dependent variable is foreign_reg. See Appendix A and the body of the article for variable description and sources. OLS regressions with robust *t*-statistics in parentheses. In columns 4 and 5, the sample is restricted to common and civil law countries, respectively.
* $p < 0.1$
** $p < 0.05$.
*** $p < 0.01$.

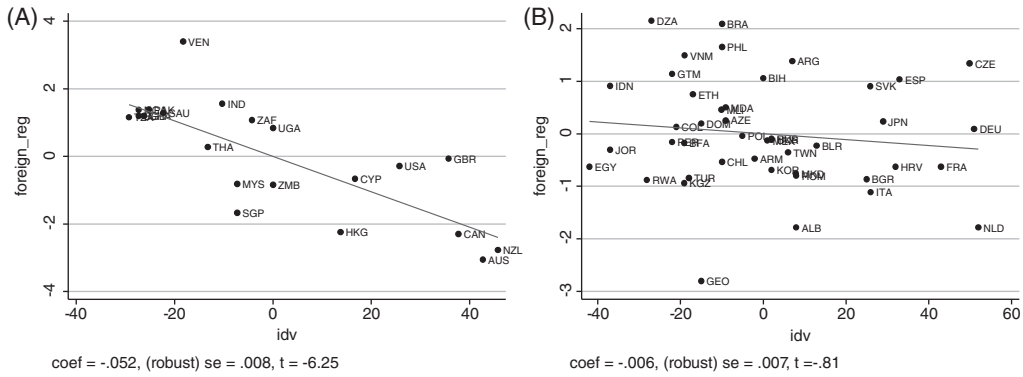

Figure 2. Individualism and Regulation of Foreign Entry by Legal Origin. A, Common Law Sample. B, Civil Law Sample.
Notes: Conditional correlation between foreign_reg and idv controlling for landlocked, split by legal origin, and based on regression specifications in Table 5, columns 4 and 5, respectively. Foreign_reg is the overall index of foreign entry regulations combining days and procedures, measured in 2012 (World Bank 2012b); idv is the measure of individualism from beugelsdijk, maseland, and van Hoorn (2015). Labels are world bank country codes.

IV Estimations

We turn next to the issues raised by the endogeneity of culture. One concern is that culture influences broad social phenomena including economic and political outcomes. In addition, reverse causality is of particular concern. For example, more foreign entry regulation may lead to a more closed society. In turn, this may increase the value of collectivist norms as a means of social cooperation. In addition, the association between individualism and regulation may be endogenous if some third factor influences both foreign entry and culture. Lastly, another source of bias may stem from

use of survey data to measure individualism. As a result, the estimates identified above cannot be interpreted as causal effects.

We address these concerns by estimating two-stage least squares regressions. In particular, we instrument for individualism using two instruments identified in the literature on the economics of culture, pronoun drop (Kashima and Kashima 1998; Davis and Abdurazokzoda 2016), and rainfall variation (Davis 2016). A variety of articles in the culture literature appeal to the persistence of culture to motivate a relation between historical variables and contemporary cultural norms and values, for example, Tabellini (2010), Nunn and Wantchekon (2011), Siegel, Licht, and Schwartz (2011), Voigtlaender and Voth (2012), and Alesina, Guiliano, and Nunn (2013).

Pronoun drop refers to the grammatical rules of pronominal expression, governing whether a speaker may drop a pronoun in subject position. In languages that permit pronoun drop, the identity of the subject is understood in the context of the rest of the sentence. However, if pronoun drop is not permitted, the subject stands apart from the context. Pronoun drop, therefore, is associated with less individualistic cultures. Kashima and Kashima (1998) present empirical evidence of this relation, leading to the use of pronoun drop as an instrument for individualism by Licht, Goldschmidt, and Schwartz (2007) and Tabellini (2008). We utilize a version of this variable developed by Davis and Abdurazokzoda (2016). The variable *pronoun_drop* equals the share of a country's population that speaks a language in which pronoun drop is permitted.

A second instrumental variable, *rain*, is a measure of rainfall variation from Davis (2016). Facing a higher degree of uncertainty with weather patterns, Davis argues that households adopt more collectivist attitudes as a means to facilitate informal risk sharing. Collectivist attitudes increase the disutility of reneging on a risk sharing arrangement, thus allowing individuals to credibly commit to greater transfers in the face of an adverse shock. His measure of rainfall variation has a robust, negative, and statistically significant effect on contemporary norms toward individual responsibility. The variable rain is the natural log of coefficient of intertemporal variation of monthly rainfall starting in 1900.

Both instruments, pronoun_drop and rain, are negative and significantly correlated with individualism (0.43 and 0.50) at the 1% level. This implies greater rainfall variation and the use of pronoun drop leads to lower levels of individualism. First stage results support the use of these instruments as shown in Table 6, Panel A.

In Table 6, Panel B, we present the second-stage regressions. We continue to control for the exogenous determinants of foreign regulation, English legal origin and landlocked, since neither of these variables can be caused by individualism or entry regulation. Findings reported in column 7 suggest that the exogenous component of individualism has a strong negative effect on the regulation of foreign entry. In column 8, we include log GDP per capita as an additional control variable. Unlike the OLS specification, individualism remains significant when including income; and income is not significant. Based on both specifications, the point estimate indicates that a one standard deviation increase in individualism leads to a reduction in foreign entry regulation between 0.62 and 0.70 standard deviations—an increase in the size of the impact indicated from the Ordinary Least Squares (OLS) estimations. The larger IV coefficient is consistent with the argument that the OLS estimate suffers from a sizeable attenuation bias.

Lastly, we instrument for both individualism and the interaction between individualism and common law. We create two additional instruments by interacting the English legal origin dummy with our two instruments, pronoun_drop and rain. As reported in column 9, IV estimation supports the earlier finding that the effect of individualism is magnified in common law countries. The marginal effects are similar to the OLS results. This result is robust to controlling for income, as shown in column 10.

Table 6. Determinants and Regulation of Foreign Entry, IV Regressions

	Panel A: First Stage Results						Panel B: Second Stage Results			
	(1) idv	(2) idv	(3) idv	(4) english*idv	(5) idv	(6) english*idv	(7) foreign_reg	(8) foreign_reg	(9) foreign_reg	(10) foreign_reg
idv							−0.034**	−0.038**	−0.015	−0.015
							(−3.166)	(−2.252)	(−1.153)	(−0.814)
english*idv									−0.039**	−0.039**
									(−2.168)	(−2.166)
english	−5.244	−6.863	7.880	54.491***	3.002	52.772***	−0.568	−0.610	0.981	0.971
	(−0.794)	(−1.147)	(0.447)	(7.152)	(0.226)	(5.217)	(−1.634)	(−1.610)	(1.195)	(1.149)
landlocked	7.892	22.095**	8.649	0.818	22.563**	5.504	−1.043	−0.863	−1.093**	−1.081*
	(0.745)	(3.054)	(0.768)	(0.152)	(2.886)	(1.475)	(−1.403)	(−1.026)	(−2.042)	(−1.690)
gdp per capita		15.716***			15.566***	5.387*		0.171		0.017
		(4.573)			(4.392)	(1.885)		(0.474)		(0.050)
pronoun_drop	−19.622*	−13.381*	−14.483	0.007	−9.686	1.801				
	(−1.989)	(−1.724)	(−1.009)	(0.001)	(−0.882)	(0.798)				
rain	−22.994***	−14.032**	−25.271***	−0.315	−15.947**	2.954				
	(−3.756)	(−2.198)	(−3.757)	(−0.071)	(−2.652)	(1.163)				
english*rain			14.648	−12.045	11.523	−13.186				
			(1.137)	(−1.165)	(0.604)	(−1.176)				
english* pronoun_drop			−12.178	−34.624***	−8.895	−33.621**				
			(−0.677)	(−4.557)	(−0.695)	(−3.339)				
Constant	52.315***	−101.670**	47.400**	−0.168	−103.828**	−52.479*	1.632**	0.164	0.850	0.699
	(4.999)	(−2.773)	(3.369)	(−0.033)	(−2.771)	(−1.856)	(3.143)	(0.057)	(1.419)	(0.266)
Obs	55	54	55	55	54	54	55	54	55	54
Adj. R^2	0.30	0.55	0.28	0.77	0.54	0.80	0.14	0.09	0.32	0.31
F-stat	15.32	13.46	8.17	4.21	11.92	16.92				
Hansen J p-value							0.88	0.89	0.61	0.60

Notes: Dependent variable is as listed in columns. See Appendix A and the body of the article for variable description and sources. Columns 7–8 are IV regressions with instruments pronoun_drop and rain. Columns 9–10 are IV regressions with standard instruments pronoun_drop, rain, and interactions between english*pronoun_drop and pronound_rain. Robust t-statistics in parentheses.

* $p < 0.1$.

** $p < 0.05$.

*** $p < 0.01$.

The final row in Table 6, Panel B reports the Hansen-J *p*-values. These results suggest that we cannot reject the exclusion restriction on the maintained hypothesis that at least a subset of the instruments is valid. In addition, our estimates do not appear to suffer from bias due to weak instruments.

Overall, the results suggest that individualism significantly reduces regulation for a foreign firm to start a business. Legal tradition alters the manner in which individualism determines foreign entry regulation. Specifically, we find that common law systems are sensitive to cultural preferences over the intensity of regulation while civil legal systems are not. Geographic openness plays a role in reducing regulation of foreign entry.

3. FDI and the Regulation of Foreign Entry

Data

To highlight the economic consequences from regulating the entry of foreign firms, we examine the association between FDI inflows and the rules adopted to regulate the entry of foreign firms. Foreign direct investment is measured as inflows as a percent of GDP, averaged from 2012 to 2015, in log form (World Bank 2017). FDI inflows range from −1.86 (Japan) to 3.97 (Cyprus) with a mean of 1.01 and standard deviation of 1.03.

In Figure 3 we plot the unconditional correlation between FDI inflows and foreign entry regulation. As shown, there is a strong negative relation between FDI and foreign entry regulation. As countries require more procedures and additional time to establish a foreign-owned subsidiary, FDI significantly declines.

To provide robustness to this correlation, we present OLS regressions for 66 countries with available data. In addition to the regulation of foreign entry, our baseline specification includes

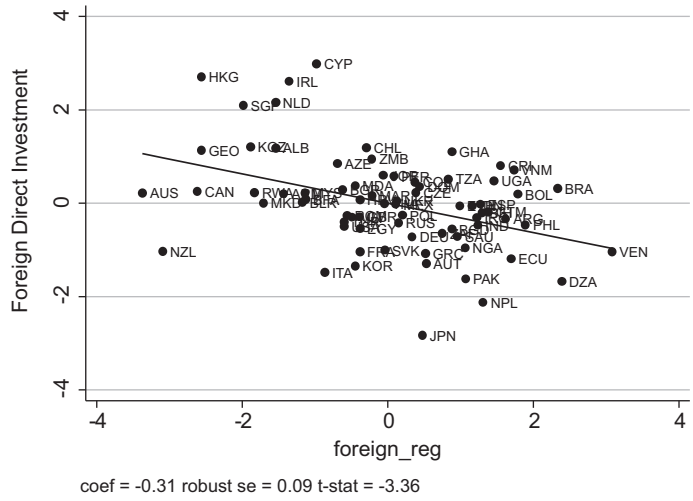

Figure 3. Foreign Direct Investment and Regulation of Foreign Entry.
Notes: Unconditional correlation between foreign direct investment (Inflows, Averaged from 2012 to 2015, in Log Form, World Bank 2017) and foreign_reg (Overall Index of Foreign Entry Regulations Combining Days and Procedures, Measured in 2012, World Bank 2012b). Based on OLS regression with robust standard errors. Labels are world bank country codes.

English legal origin, an important determinant of a country's legal environment. We also include landlocked and distance from the equator, which are approximate exogenous measures of institutional quality.[8] Trade volume as share of GDP is also included as countries more open to trade are also more likely to attract FDI. Additional controls, including economic factors, culture measures, and institutional variables, are drawn from the literature on FDI (Alfaro et al. 2003; Hermes and Lensink 2003; Blonigen and Piger 2014).

Consequences of Foreign Entry Regulation for FDI

Table 7 presents our findings. As seen in column 1, our baseline specification, there is a strong, negative, and statistically significant relation between regulation of foreign entry and FDI. Among the controls, distance from the equator and trade is significant. Overall, this regression explains roughly 28% of the observed variation in FDI.

One concern with our initial specification is that the regulation of foreign entry is highly correlated with the regulation of domestic entry. Failure to control for the regulation of domestic entry may bias our results. It is unclear how, if at all, domestic entry will affect FDI. It is plausible that foreign and domestic entry affects FDI in a similar fashion. We address this issue by including a measure of the regulation of domestic entry.

To isolate the independent effect of domestic entry regulation, column 2 drops foreign entry regulation but includes entry regulation of domestic firms. Domestic entry regulation is negative but insignificant. Next, we include both foreign and domestic entry regulation simultaneously. As seen in column 3, the inclusion of domestic entry regulation strengthens our results: the coefficient on the regulation of foreign entry nearly triples in size and is now significant at the 1% level. The relation between regulation of foreign entry and FDI is also economically significant: a one standard deviation increase in the index of foreign entry regulation, the difference between Canada and Guatemala, is associated with a 90% decline in inward FDI, almost a one standard deviation decrease.

The regulation of domestic entry is now significant, but unlike the regulation of foreign entry and domestic entry's coefficient in column 2, it is *positively* related to FDI. The regulation of domestic entry appears to increase a country's attractiveness as a location for foreign firms, perhaps because this regulation tends to limit potential competition from domestic firms. This finding highlights our argument that foreign entry regulation does not simply proxy for domestic entry regulation. It is also consistent with the idea that FDI responds to differential regulation of foreign and domestic firms. Our finding also suggests that the negative association between the regulation of domestic entry and FDI in Busse and Groizard (2008) may be spurious, reflecting the correlation between the regulation of domestic and foreign entry.

Columns 3–9 include additional control variables, such as culture, institutional quality, and economic factors. First, we include our other exogenous measure of institutional quality, wheat–sugar ratio. Both entry regulations retain their respective sign and significance, and wheat–sugar is negative and significant. This suggests that as institutional quality worsens FDI is decreased, as expected.

In column 4, we include French legal origin as civil law countries have a propensity to regulate more intensely. This provides a general proxy for domestic regulation. French legal origin is positive and significant, suggesting that countries adopting a French legal heritage receive less FDI.

[8] Prior studies negatively link poor formal institutional quality to the amount of foreign multinational activity (Globerman and Shapiro 2003; Flores and Aguilera 2007; Slangen and Beugelsdijk 2012).

Table 7. Foreign Direct Investment and Regulation of Foreign Entry

Dep. Var: Foreign Direct Investment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
foreign_reg	−0.243**		−0.678***	−0.464**	−0.632***	−0.664***	−0.685***	−0.669***	−0.611**	−0.408**
	(−2.859)		(−3.956)	(−2.960)	(−3.886)	(−3.640)	(−3.944)	(−3.886)	(−3.412)	(−2.627)
domestic_reg		−0.069	0.456**	0.285**	0.450**	0.452**	0.474**	0.451**	0.355**	0.338**
		(−0.841)	(3.073)	(2.081)	(3.160)	(2.751)	(2.988)	(2.982)	(2.198)	(2.359)
english	−0.024	0.057	0.126	0.012	0.805*	−0.023	0.108	0.099	0.129	0.276
	(−0.090)	(0.195)	(0.464)	(0.055)	(1.882)	(−0.086)	(0.397)	(0.354)	(0.462)	(0.631)
landlocked	−0.116	−0.029	−0.205	−0.115	−0.142	−0.099	−0.179	−0.290	−0.448*	0.099
	(−0.454)	(−0.110)	(−0.893)	(−0.486)	(−0.679)	(−0.436)	(−0.769)	(−1.238)	(−1.740)	(0.383)
disteq	−0.014**	−0.010	−0.011	−0.002	−0.003	−0.013*	−0.012*	−0.006	−0.006	0.006
	(−2.100)	(−1.268)	(−1.518)	(−0.223)	(−0.428)	(−1.862)	(−1.781)	(−0.764)	(−0.657)	(0.473)
trade	0.008**	0.009**	0.008***	0.012***	0.010***	0.007***	0.008***	0.009***	0.010***	0.013***
	(2.969)	(3.391)	(3.696)	(3.578)	(4.156)	(4.031)	(3.642)	(3.873)	(4.013)	(3.778)
wheat_sugar				−1.443*						−0.091
				(−1.950)						(−0.096)
french					0.792**					0.756*
					(2.489)					(1.955)
idv						−0.001				−0.003
						(−0.116)				(−0.470)
voice							0.067			0.468**
							(0.478)			(2.641)
ethnicfrac								0.565		1.038**
								(0.967)		(2.034)

domestic_invest									−0.009	−0.022
									(−0.529)	(−1.209)
gdp per capita									−0.229	−0.076
									(−1.508)	(−0.461)
growth									−0.028	0.110*
									(−0.650)	(1.996)
resources									0.010	0.026
									(0.858)	(1.616)
Constant	0.777**	0.500	0.568	0.268	−0.393	0.791**	0.596	0.188	2.695*	−0.296
	(2.207)	(1.258)	(1.523)	(0.702)	(−0.662)	(2.311)	(1.597)	(0.347)	(1.926)	(−0.165)
Obs	66	66	66	59	66	61	66	66	66	55
Adj. R^2	0.28	0.20	0.36	0.36	0.42	0.33	0.35	0.36	0.34	0.42

Notes: Dependent variable is foreign direct investment (inflows, averaged from 2012 to 2015, in log form, World Bank 2017); foreign_reg is the overall index of foreign entry regulations, measured in 2012; domestic_reg is an index of the first principal component of domestic entry procedures and days, as of 2012 (World Bank 2014). See Appendix A and the body of the article for variable description and sources. OLS regressions with robust *t*-statistics in parentheses.

* $p < 0.1$.

** $p < 0.05$.

*** $p < 0.01$.

Foreign entry regulation remains negative and significant, and domestic entry regulation is positive and significant.

It is conceivable that our correlation between FDI and regulation of foreign entry is spurious due to not controlling for the influence of culture. Based on the findings of section 2, it is possible that foreign entry regulation is simply proxying for cultural differences; thus, we include individualism directly into the FDI specification. As shown in column 5, both regulation of foreign and domestic entry remains significant. Individualism is negative but not significant. This indicates that culture indirectly influences FDI via its impact on regulation of entry.

Next, we control for possible influence from political institutions and ethnic composition. Column 6 includes voice, a measure of political institutions. Ethnic fractionalization is included in regression 7. Neither control variable is significant. Foreign entry and domestic entry regulation remain significant.

Lastly, we include economic factors that are likely to influence FDI. This includes domestic investment, measured as gross capital formation as a percentage of GDP, GDP per capita, the growth rate, and natural resource rents. All variables are measured in 2012 and collected from World Bank (2017). None of the additional economic control variables is significant.

For one final robustness check, we include all additional control variables in column 9. Both foreign and domestic entry regulation remains significant. We note that the coefficients on these variables are highly stable across the specifications.[9] In all specifications, trade volume is highly significant, as expected.

This empirical exercise illustrates that foreign entry regulation is significantly associated with FDI inflows. A country that regulates the entry of a foreign business more heavily will reduce the amount of FDI received. The regulation of domestic entry also appears to play a key role in the level of FDI a country receives, with greater FDI in countries that regulate domestic entry more intensively. These findings highlight the importance in understanding the differential effects of foreign versus domestic entry regulation.

4. Conclusion

This is the first article to examine empirically the causes and consequences of the regulation of foreign entry. Our investigation of the determinants of foreign entry regulation is guided by the literature on the regulation of entry, which emphasizes the roles of legal origin, democracy, and culture. In addition, we consider a role for geographic openness, arguing that countries with greater exogenous levels of openness will have a larger return from pairing domestic and foreign resources. Thus, countries that are more naturally open will tend to regulate foreign entry more lightly. We also consider the interdependent institutions hypothesis, introduced by Davis and Williamson (2016), which holds that certain legal institutions tend to magnify the role of cultural values in policy formation.

Our results indicate strong support for the geographic openness and cultural hypotheses. More open and individualistic countries regulate foreign entry less. We find initial support for the political hypothesis that democracies regulate entry more lightly, but this finding is fragile, and does not survive controlling for culture. In addition, we find support for a modified version of the legal origins theory of regulation. While common law countries do not, on average, regulate foreign entry more

[9] Based on the findings from Siegel, Licht, and Schwartz (2013), we include a measure of culture, egalitarianism. Both domestic and foreign entry remains significant; egalitarianism is insignificant. We do not tabulate these findings due to the reduction in sample size to 34 observations. Results are available upon request.

lightly, they are more sensitive to cultural values, serving to magnify the role of individualism in the regulation of foreign entry. Both the role of culture and the interaction of culture and law are robust to the use of instruments to address issues related to the endogeneity of culture.

We also provide evidence that the regulation of foreign entry has a negative and economically significant association with FDI inflows. Controlling for the regulation of domestic entry, a one-standard deviation increase in the regulation of foreign entry is associated with a 90% decrease in inward FDI. Our results also establish the importance of analyzing the regulation of foreign entry separately from the regulation of domestic entry, as they have opposing effects on inward FDI.

Overall, our results imply that in order to capture the gains from FDI, policymakers should adopt fewer procedures and require less days for a foreign company to start a business. However, our results also suggest a limited role for policymakers. Natural openness is determined by exogenous geographic factors. To the degree that natural openness associates with actual trade volume, policymakers in more open countries may be more inclined to regulate both trade and foreign businesses less. Given the robustness of culture, our findings also imply that policymakers may be constrained in achieving quick solutions as culture tends to be slow-moving and difficult to change. In addition, our results cast doubt on potential gains from legal institutional transfer as formal rules may function differently in diverse cultures.

Appendix A: Data Description

Dep. Variable	Description	Source
Foreign_days (log)	Average number of days required to start a foreign subsidiary as of 2012. Log form	World Bank (2012b)
Foreign_proc (log)	Average number of procedures required to start a foreign subsidiary as of 2012. Log form	World Bank (2012b)
foreign_reg	Foreign entry regulation index is the first principal component of foreign entry procedures and days, as of 2012	World Bank (2012b)
domestic_reg	Domestic entry regulation index is the first principal component of domestic entry procedures and days, as of 2012	World Bank (2014)
FDI	Foreign direct investment inflows (% of GDP), in log form. Averaged from 2012 to 2015	World Bank (2017)
Culture Variable		
idv	Update to Hofstede's individualism based on World Values Surveys from 1981 to 2008 using individual responses for respondents born after 1958. The four questions from WVS: (i) private versus government ownership of business, (ii) one of the main goals in life is to make parents proud, (iii) justifiability of abortion, and (iv) justifiability of homosexuality	Beugelsdijk, Maseland, and van Hoorn (2015)
Democracy Measures		
voice	Captures perceptions to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Averaged from 1998 to 2008	World Bank (2012a)
polity2	Polity2 captures the level of democracy versus autocracy and ranges from −10 to 10 with 10 representing strong democracy. Averaged from 1998 to 2008	Polity IV, Jaggers and Marshall (2000)
gastil	Freedom House's ranking for political and civil liberties. Scaled between 1 and 7, averaged from 1998 to 2008, and reordered so that higher values indicate greater democracy	Freedom House (2014)
democ	Dichotomous democracy ranking from Przeworski et al. (2000). Updated in Cheibub, Gandhi, and Vreeland (2010). Average from 1998 to 2008	Cheibub, Gandhi, and Vreeland (2010)

Control Variables		
english	Dummy variable coded 0 or 1:1 indicates a country has English legal traditions	LaPorta et al. (2008)
french	Dummy variable coded 0 or 1:1 indicates a country has French legal traditions	LaPorta et al. (2008)
landlocked	Dummy variable coded 0 or 1:1 indicates a country is landlocked	CIA World Factbook (2014)
geo_open	Gravity based constructed measure of trade openness based on geographic characteristics	Frankel and Romer (1999)
disteq	Measured as the absolute value of the latitude of the country, scaled to values between 0 and 1 (0 is the equator)	CIA World Factbook (2014)
resources	Total natural resources rents (% of GDP), 2012	WDI (2015)
transition	Dummy variable equals 1 if a country is a transition country	CIA World Factbook (2014)
ethnicfrac	Measures the probability that two randomly selected individuals from a country's population will belong to the same ethnic group. Ranges from 0 to 1	Alesina et al. (2003)
partitioned	Share of a country's population belonging to an ethnic group that is partitioned by the country's borders	Alesina, Easterly, and Matuszeski (2011)
wheat_sugar	Natural log of land suitable for wheat cultivation divided by land suitable for sugar cultivation	Easterly (2007)
right_wing	Mean score from 1 to 10 to the question: In political matters, people talk of "the left" and "the right." How would you place your views on this scale, left (1) to right (10). Average of first five waves	WVS, 1981–2008
state_ownership	Mean score from 1–10 to the question: Private ownership of business should be increase (1) or government ownership of business should be increased (10). Average of the first five waves	WVS, 1981–2008
native_priority	Percentage of "yes" respondents to the WVS question: When jobs are scarce should priority be given to nationals instead of immigrants?	WVS, 1981–2008
trust	Percentage of respondents answering "yes" most people can be trusted. Average of first five waves	WVS, 1981–2008
battle_deaths	Total battle related deaths per capita, averaged from 1998 to 2008	Melander, Pettersson, and Themnér (2016); UCDP Battle-Related Deaths Dataset, version 5.0–2016
gdp per capita	Log of GDP per capita (PPP), in log form, 2012	World Bank (2017)
domestic_invest	Gross capital formation as a percentage of GDP, 2012	World Bank (2017)
trade	Total trade equal to imports plus exports as a share of GDP, 2012	World Bank (2017)
Instruments		
pronoun_drop	Equals the share of a country's population that speaks a language in which pronoun drop is permitted. Update to Kashima and Kashima (1998)	Davis and Abdurazokzoda (2016)
rain	The natural log of the coefficient of variation of monthly precipitation, 1900–2009	Davis (2016)

Appendix B: List of Countries ($N = 70$)

Albania	Czech Republic	Korea, South	Saudi Arabia
Algeria	Dominican Republic	Kyrgystan	Singapore
Argentina	Egypt	Macedonia	Slovakia
Armenia	Ethiopia	Malaysia	South Africa
Australia	France	Mali	Spain
Austria	Georgia	Mexico	***Taiwan, China***
Azerbaijan	Germany	Moldova	Tanzania

Bangladesh	Ghana	**Morocco**	Thailand
Belarus	**Greece**	Netherlands	Turkey
Bosnia–Herzegovina	***Guatemala***	New Zealand	Uganda
Brazil	***Hong Kong***	Nigeria	Ukraine
Bulgaria	India	Pakistan	United Kingdom
Burkina Faso	Indonesia	Peru	United States
Canada	**Iraq**	Philippines	Venezuela
Chile	**Ireland**	Poland	Vietnam
Colombia	Italy	Romania	Zambia
Croatia	Japan	Russia	
Cyprus	Jordan	***Rwanda***	

Notes: Bolded countries are only included in the FDI analysis; Bolded and italicized countries are only included in the determinants of foreign entry models.

References

Acemoglu, Daron. 2008. Oligarchic and democratic societies. *Journal of the European Economic Association* 6:1–44.

Acemoglu, Daron, and Thierry Verdier. 2000. The choice between market failures and corruption. *American Economic Review* 90:194–211.

Aghion, Philippe, Yann Algan, Pierre Cahuc, and Andrei Shleifer. 2010. Regulation and distrust. *The Quarterly Journal of Economics* 125:1015–49.

Alesina, Alberto, and N. Fuchs-Schundeln. 2007. Good-bye Lenin (or not?): The effect of communism on people's preferences. *American Economic Review* 97:1507–28.

Alesina, Alberto, Reza Baqir, and William Easterly. 1999. Public goods and ethnic divisions. *The Quarterly Journal of Economics* 114:1243–84.

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. Fractionalization. *Journal of Economic Growth* 8:155–94.

Alesina, Alberto, William Easterly, and Janina Matuszeski. 2011. Artificial states. *Journal of the European Economic Association* 9:246–77.

Alesina, Alberto F., Paola Guiliano, and Nathan Nunn. 2013. On the origin of gender roles: Women and the plough. *The Quarterly Journal of Economics* 128:469–530.

Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek. 2003. FDI spillovers, financial markets and economic development. IMF Working Papers No. WP/03/186.

Balasubramanyam, V. N., M. Salisu, and David Sapsford. 1996. Foreign direct investment and growth in EP and IS countries. *The Economic Journal* 106:92–105.

Barrell, Ray, and Nigel Pain. 1997. Foreign direct investment, technological change and economic growth within Europe. *The Economic Journal* 107:1770–86.

Beck, Thorsten, Asli Demirguc-Kunt, and Ross Levine. 2003. Law and finance: Why does legal origin matter. *Journal of Comparative Economics* 3:653–75.

Berkowitz, Daniel, Katharina Pistor, and Jean-Francois Richard. 2003. Economic development, legality, and the transplant effect. *European Economic Review* 47:165–95.

Beugelsdijk, Sjored, Robbert Maseland, and André van Hoorn. 2015. Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal* 5:223–40.

Blalock, Hubert. *Toward a theory of minority-group*. New Jersey: John Wiley & Sons Inc., 1967.

Blonigen, Bruce, and Jeremy Piger. 2014. Determinants of foreign direct investment. *Canadian Journal of Economics* 47: 775–812.

Borenszteina, Eduardo, Jose De Gregoriob, and Jong-Wha Leec. 1998. How does foreign direct investment affect economic growth. *Journal of International Economics* 45:115–35.

Busse, Matthias, and José Luis Groizard. 2008. Foreign direct investment, regulations and growth. *World Economy* 31:861–86.

Caplan, Bryan, 2007. *The myth of the rational voter*. Princeton University Press, Princeton, New Jersey.

Cheibub, Jose, Jennifer Gandhi, and James Vreeland. 2010. Democracy and dictatorship revisited. *Public Choice* 143:67–101.

CIA World Factbook 2014. Washington, DC: Central Intelligence Agency, 2014.

Cline, Brandon N., and Claudia R. Williamson. 2016. Trust and the regulation of corporate self-dealing. *Journal of Corporate Finance* 41:572–90.

Coeurderoy, Regis, and Gordon Murray. 2008. Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies* 39:670–87.

Davis, Lewis. 2016. Individual responsibility and economic development: Evidence from rainfall data. *Kyklos* 69:426–70.

Davis, Lewis, and Farangis Abdurazokzoda. 2016. Language, culture and institutions: Evidence from a new linguistic dataset. *Journal of Comparative Economics* 44:541–61.

Davis, Lewis, and Claudia Williamson. 2016. Culture and the regulation of entry. *Journal of Comparative Economics* 44: 1055–83.

De Soto, Hernando. *The other path: The invisible revolution in the third world*. London: I.B. Taurus, 1989.

Djankov, Simeon. 2009. The regulation of entry: A survey. *The World Bank Research Observer* 24:183–203.

Djankov, Simeon, Rafael LaPorta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. The regulation of entry. *Quarterly Journal of Economics* 117:1–35.

Djankov, Simeon, Edward Glaeser, Rafael LaPorta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2003. The new comparative economics. *Journal of Comparative Economics* 31:595–619.

Dutta, Nabamita, and Sanjukta Roy. 2009. The impact of foreign direct investment on press freedom. *Kyklos* 62:239–57.

Easterly, William. 2007. Inequality does cause underdevelopment: Insights from a new instrument. *Journal of Development Economics* 84:755–76.

Easterly, William, and Ross Levine. 1997. Africa's growth tragedy: Policies and ethnic divisions. *Quarterly Journal of Economics* 112:1203–50.

Engermann, Stanley, and Kenneth Sokoloff. 1997. Factor endowments, institutions, and differential paths of growth among new world economies: A view from economic historians of the United States. In *How Latin America fell behind*, edited by S. Haber. Stanford, CA: Stanford University Press.

Engermann, Stanley and Kenneth Sokoloff. 2002. Factor endowments, inequality, and paths of development among new world economics. NBER Working Paper No. 9259.

Flores, Ricardo, and Ruth Aguilera. 2007. Globalization and location choice: An analysis of US multinational firms in 1980 and 2000. *Journal of International Business Studies* 38:1187–210.

Frankel, Jeffrey A., and David H. Romer. 1999. Does trade cause growth? *American Economic Review* 89:379–99.

Globerman, Steven, and Daniel Shapiro. 2003. Governance infrastructure and US foreign direct investment. *Journal of International Business Studies* 34:19–39.

Gorodnichenko, Yuriy, and Gerard Roland. 2011. Which dimensions of culture matter for long-run growth? *American Economic Review Papers and Proceedings* 101:492–8.

Gorodnichenko, Yuriy, and Gerard Roland. 2012. Understanding the individualism-collectivism cleavage and its effects: Lessons from cultural psychology. In *Institutions and comparative economic development*, edited by M. Aoki, T. Kuran and G. Roland. UK: Palgrave McMillan.

Gorodnichenko, Yuriy, and Gerard Roland. 2017. Culture, institutions and the wealth of nations. *The Review of Economics and Statistics* 99:402–16.

Greif, Avner. 1993. Contract enforceability and economic institutions in early trade: The Maghribi traders' coalition. *American Economic Review* 83:525–48.

Hall, Robert E., and Charles I. Jones. 1999. Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics* 114:83–116.

Haskel, Jonathan, Sonia C. Pereira, and Matthew J. Slaughter. 2007. Does inward foreign direct investment boost the productivity of domestic firms? *Review of Economics and Statistics* 89:482–96.

Hayek, Friedrich. *The constitution of liberty.* Chicago: University of Chicago Press, 1960.

Hermes, Niels, and Robert Lensink. 2003. Foreign direct investment, financial development and economic growth. *Journal of Development Studies* 40:142–63.

Hofstede, Geert H. *Culture's consequences: International differences in work-related values*. Thousand Oaks, CA: Sage, 1980.

Hofstede, Geert H. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. 2nd edition. Thousand Oaks, CA: Sage, 2001.

House, Freedom. Freedom in the World 2014, online edition. 2014.

Inglehart, Ronald. 2008. World Values Survey Group, World Values Survey Association (EVSF-WVSA), 2008. European and World Values Surveys Four-Wave Integrated Data File:1981–2008.

Jaggers, Keith, and Monty G. Marshall. *Polity IV project*. College Park, Maryland: Center for International Development and Conflict Management, University of Maryland, 2000.

Javorcik, Beata Smarzynska. 2004. Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages. *American Economic Review* 94:605–27.

Jayasuriya, Dinuk. 2011. Improvements in the World Bank's ease of doing business rankings: Do they translate into Greater Foreign Investment Flows? World Bank Policy Research Paper No. 5787.

Kashima, Emiko S., and Yoshihisa Kashima. 1998. Culture and language: The case of cultural dimensions and personal pronoun use. *Journal of Cross-Cultural Psychology* 29:461–87.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. *Worldwide governance indicators*. Washington, DC: World Bank, 2012.

Klasing, Mariko. 2013. Cultural dimensions, collective values and their importance for institutions. *Journal of Comparative Economics* 41:447–67.

Koyama, Takeshi and Stephen S. Golub. 2006. OECD's FDI Regulatory restrictiveness index: Revision and extension to more economies. OECD Working Papers on International Investment. Working Paper No. 2006/04, OECD Publishing.

Kuznets, Simon. 1973. Modern economic growth. *American Economic Review* 63:247–58.

LaPorta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1999. The quality of government. *Journal of Law Economics and Organization* 15:222–79.

LaPorta, Rafael, Florencio Lopez-de-Silanes, Cristian Pop-Eleches, and Andrei Shleifer. 2008. The economic consequences of legal origins. *Journal of Economic Literature* 46:285–332.

Licht, Amir N., Chana Goldschmidt, and Shalom Schwartz. 2005. Culture, law, and corporate governance. *International Review of Law and Economics* 25:229–55.

Licht, Amir N., Chana Goldschmidt, and Shalom Schwartz. 2007. Culture rules: The foundations of the rule of law and other norms of governance. *Journal of Comparative Economics* 35:659–88.

Mehlum, Halvor, Karl Moene, and Ragner Torvik. 2006. Institutions and the resource curse. *The Economic Journal* 116:1–20.

Melander, Erik, Therése Pettersson, and Lotta Themnér. 2016. Organized violence, 1989–2015. *Journal of Peace Research* 53:727–42.

Meyer, Klaus E., Saul Estrin, Sumon K. Bhaumik, and Mike Peng. 2009. Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30:61–80.

Morris, Rosetta, and Abdul Aziz. 2011. Ease of doing business and FDI inflow to Sub-Saharan Africa and Asian countries. *Cross Cultural Management* 18:400–11.

North, Douglass C. *Institutions, institutional change and economic performance*. New York, NY: Cambridge University Press, 1990.

Nunn, Nathan, and Leonard Wantchekon. 2011. The slave trade and the origins of mistrust in Africa. *American Economic Review* 101:3221–52.

Olson, Mancur. *The rise and decline of nations: Economic growth, stagflation, and social rigidities*. New Haven, CT: Yale University Press, 1982.

Pinotti, Paolo. 2012. Trust, regulation, and market failures. *Review of Economics and Statistics* 94:650–8.

Pistor, Katharina, Yoram Keinan, Jan Kleinheisterkam, and Mark West. 2003. Innovation in corporate law. *Journal of Comparative Economics* 31:676–94.

Przeworski, Adam, Mike Alvarez, Jose A. Cheibub, and Fernando Limongi. *Democracy and development: Political institutions and material well-being in the world*. New York, NY: Cambridge University Press, 2000, 1950–90.

Roland, Gérard. 2004. Understanding institutional change: Fast-moving and slow-moving institutions. *Studies of Comparative International Development* 38:109–32.

Rubin, Paul. 1982. Common law and statute law. *Journal of Legal Studies* 11:205–33.

Sachs, Jeffrey D., and Andrew M. Warner. 1999. The big rush, natural resource booms and growth. *Journal of Development Economics* 59:43–76.

Schwartz, Shalom H., 1994. Beyond individualism/collectivism: new cultural dimensions of values. In: Uichol, Kim, Triandis, Harry C., Kagitcibasi, Cigdem, Choi, Sang-Chin, Yoon, Gene (Eds.), Individualism and Collectivism: Theory, Method, and Applications Sage, Thousand Oaks, CA.

Shenkar, Oded. 2001. Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies* 32:519–35.

Siegel, Jordan I., Amir N. Licht, and Shalom H. Schwartz. 2011. Egalitarianism and International Investment. *Journal of Financial Economics* 102:621–42.

Siegel, Jordan I., Amir N. Licht, and Shalom H. Schwartz. 2013. Egalitarianism, cultural distance, and FDI: A new approach. *Organization Science* 24:1174–94.

Slangen, Arjen H. L., and Sjoerd Beugelsdijk. 2012. The impact of institutional hazards on foreign multinational activity: A contingency perspective. *Journal of International Business Studies* 4:980–95.

Stulz, Rene´ and Rohan Williamson. 2003. Culture, openness, and finance, *Journal of Financial Economics* 70:313–49.

Tabellini, Guido. 2008. Institutions and culture. *Journal of the European Economic Association Papers and Proceedings* 6:2–3.

Tabellini, Guido. 2010. Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association* 8:677–716.

Voigtlaender, Nico, and Hans-Joachim Voth. 2012. Persecution perpetuated: The medieval origins of anti-semitic violence in Nazi Germany. *The Quarterly Journal of Economics* 127:1339–92.

Williamson, Oliver E. 2000. The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature* 38:595–613.

Williamson, Claudia R., and Carrie B. Kerekes. 2011. Securing private property: Formal versus informal institutions. *Journal of Law and Economics* 5:537–72.

World Bank. *Worldwide Governance Indicators*. Washington, DC: World Bank, 2012a.

World Bank. *Investing across borders*. Washington, DC: World Bank, 2012b.

World Bank. *Doing business*. Washington, DC: World Bank, 2014.

World Bank. *World development indicators*. Washington, DC: World Bank, 2017.

World Factbook. *Central Intelligence Agency.* Washington, DC: 2014.