Firm-Level Lobbying and the Liberalization of High-Skilled Visa Regulations[*]

Steven Liao[†]

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Abstract

Studies consistently find public opposition towards increasing immigration levels in the U.S., yet legal migrant inflows have still increased steadily. Why is immigration liberalization possible despite public opposition? I introduce a theory that explains the influence of Multinational Corporations (MNCs) on temporary migration policymaking. I argue that MNCs lobby bureaucracies to relax the *implementation* of immigration policies, thus overcoming legislations that are constrained by public attitudes. To test the argument, I analyze an original firm-level data set of around 256,000 approved visas for high-skilled intra-company transfers to the U.S. This visa data is merged with firm-level financial and lobbying information and country-specific visa regulations. I show that industries reliant on firm-specific human capital are the top petitioners for intra-company transfers. Furthermore, MNCs lobby effectively, despite the presence of collective action problems, by strategically targeting the State Department and Congress. The results explain the frequent disjuncture between hostile publics and receptive governments on immigration.

1 Introduction

Survey studies consistently find public opposition towards increasing levels of immigration in the U.S. (Muste 2013), which matches broader patterns found across Western democracies (Freeman and Tendler 2012:1).[1] Yet, legal migrant flows to the U.S. have still increased steadily over time (U.S. Department of Homeland Security 2015; U.S. Department of State 2015b). Why is immigration liberalization possible despite public opposition to one of the most politically charged phenomena in globalization?

Building on political economy models of policy formation, I introduce a theory that explains the influence of Multinational Corporations (MNCs) on temporary migration policymaking through their choice of lobbying venue. I argue that MNCs lobby bureaucracies to relax the *implementation* of immigration policies to overcome legislations that are constrained by public attitudes. In contrast, when policy implementation is relaxed, MNCs turn to lobby the legislature to relax broad parameters of immigration legislation. The success of such lobbying strategies explains why immigration liberalization occurs despite constant public opposition. I derive observable implications about the type of MNCs that lobby, how they lobby, and the effect of their lobbying on immigration policymaking.

To test observable implications, I analyze an original data set that combines firm-level data on around 256,000 approved visa petitions for high-skilled intra-company transfers (L-1) to the U.S., firms' financial and lobbying information, and country-specific visa regulations MNCs face from 2000 to 2013.[2] The data reveals which firms engage in intra-company transfers to the US, and links their lobbying activity to immigration policy outputs. Previous studies primarily use monadic (focusing on either the receiving or the sending country) data sets coded based on immigration legislation.[3] In contrast, my data consists of dyadic visa regulations as implemented by bureaucracies. This allows me to distinguish between migrant type and their origin country in a way that previous studies cannot.

My analysis reveals three key findings. First, MNCs strategically allocate their lobbying

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[1] See polling data from International Social Survey Program (ISSP) and European Social Survey (ESS).

[2] The intra-company transfer visa enables a U.S. employer to transfer an executive/manager (L-1A) or professional employee with specialized knowledge relating to the organization's interests (L-1B) from one of its affiliated foreign offices to one of its offices in the United States. It also enables a foreign company which does not yet have an affiliated U.S. office to send above employees to the United States with the purpose of establishing one (U.S. Citizenship and Immigration Services 2015).

[3] See Bjerre et al. (2015) for a review of thirteen immigration policy indices. See Goodman (2015) for methodological concerns about conceptualizing and measuring citizenship and integration policy. See also the ongoing projects of the Immigration Policies in Comparison (IMPIC) Index, the International Migration Law and Policy Analysis (IMPALA) database, and Peters (2015)'s new data set on low skilled immigration policy since late 18th century. To the best of my understanding, Neumayer (2006) and Neumayer (2010)'s cross-sectional data set on visa waivers is the only other existing dyadic migration policy data set.

resources between the legislature and bureaucracies depending on how immigration policy is implemented. Most MNCs lobby both Congress and the State Department on immigration. However, MNCs facing more relaxed implementation of visa regulations are more likely to focus on lobbying Congress to influence immigration legislation. This reveals a way through which MNCs liberalize economic policies incrementally despite domestic opposition or debate.

Second, collective action problems hinder bureaucratic lobbying efforts. Generally, few MNCs lobby on immigration in any institutional venue and only larger ones do. However, MNCs are even less likely to lobby the State Department on the implementation of intra-company transfer visas when many MNCs source transferees from the same country. This offers an explanation for why U.S. visa regulations remain restricted for certain developed origin-countries.

Third, MNCs successfully relax the implementation of country-specific visa regulations once they overcome collective action problems. In particular, more intensive lobbying towards the State Department is associated with more relaxed visa regulations on intra-company transfers. The results hold even when accounting for U.S. bilateral strategic interests and country-specific biases of natives. Overall, the results provide new evidence showing interest group politics at work in bureaucracies.

This study makes several contributions to the literature on immigration policy formation and international political economy in general. First, the study challenges the common focus on individual and public attitudes in the immigration literature. It demonstrates the importance of *firms* and their preferences in immigration policymaking. Furthermore, it offers an explanation for why a large literature has documented a frequent disjuncture between hostile publics and receptive governments on immigration (Freeman and Tendler 2012). Second, by focusing on high-skilled temporary migration, the study reveals insights about behind-the-scenes "interest group politics" in immigration where policies have concentrated costs and benefits.[4] This contrasts and complements extant research in low-skilled immigration that focuses on "majoritarian politics" where costs and benefits are widely distributed.[5] Third, the results complement a large literature that examines domestic lobbying on economic policies in trade and finance.[6] The study's focus on bureaucratic lobbying further distinguishes itself from studies focusing on on legislative lobbying. Finally, the results raise normative

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[4]See Malhotra, Margalit, and Mo (2013) for an example of new empirical research focusing on "interest group politics" in the immigration literature.

[5]For typology of "interest group politics" and "majoritarian politics", see Lowi (1972) and Wilson (1974).

[6]For the literature in trade see Gawande and Bandyopadhyay (2000), Ludema, Mayda, and Mishra (2010), Bombardini and Trebbi (2012), and Kim (2013). For the literature in finance see Gehlbach (2006), Richter, Samphantharak, and Timmons (2009), Mian, Sufi, and Trebbi (2010), Igan, Mishra, and Tressel (2011), Yu and Yu (2012), Blau, Brough, and Thomas (2013), and Hill et al. (2013).

concerns about the trade-off between legislative control and economic efficiency in representative democracies.

The outline of this paper is as follows. Section 2 contrasts public opposition towards increasing levels of immigration with increased legal migrant inflows in the U.S. Section 3 introduces a theory that explains the influence of MNCs on immigration policymaking though their choice of lobbying venue. Section 4 situates the theory in the context of U.S. high-skilled immigration policy. Section 5 presents an original data set and empirical evidence on the lobbying behavior and effectiveness of MNCs. Section 6 concludes the paper.

2 Hostile Publics and Receptive Governments

Figure 1 illustrates patterns of public attitudes toward immigration and legal migrant flows to the U.S. for the period 1998 to 2012. The left panel plots survey response from American National Election Study (ANES), General Social Survey (GSS), and Gallup. It shows that more than 80% of survey respondents prefer the number of legal migrant inflows to remain the same or decreased. Furthermore, these attitudes are relatively stable over time.[7]

The right panel shows that legal migrant inflows have increased steadily in this period despite consistent public opposition. Total admissions for high-skilled temporary migrants (H-1B and L-1) and low-skilled temporary migrants (H-2B) continue to grow according to data from U.S. Department of Homeland Security (2015). While the global financial crisis in 2007 to 2008 led to decreases in admissions, admissions have recovered and even exceeded pre-crisis levels in recent years. Figure A.3 in the appendix shows similar trends in migrant inflows using data on visa issuance from U.S. Department of State (2015b).

Why is immigration liberalization possible despite public opposition? In the following section, I illustrate the importance of human capital to MNCs, distinguish between multiple dimensions of immigration policy, and develop a theory about the influence of MNCs on immigration policymaking through their choice of lobbying venue.

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[7]Even when the literature finds that high-skilled immigrants are favored over low-skilled (Hainmueller and Hiscox 2010; Hainmueller and Hopkins 2014; Hainmueller and Hopkins 2015), Hainmueller and Hiscox (2010:67-68) show that a majority (around 65%) were unsupportive of increasing *high-skilled* immigration in 2007.
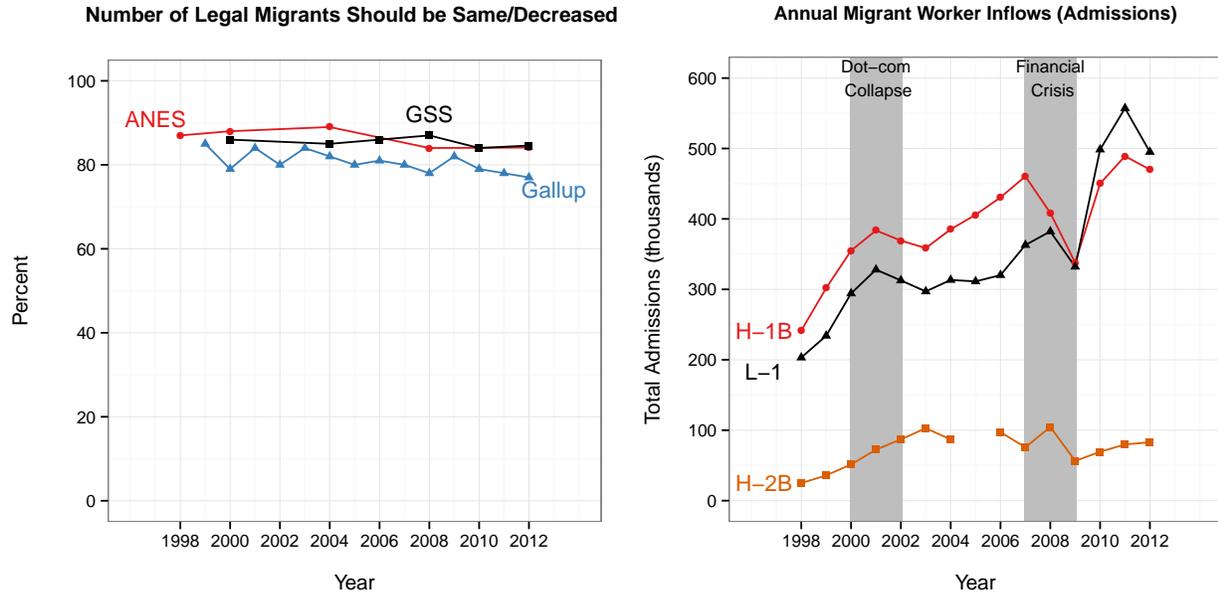
Fig 1. Public Attitudes Toward Immigration and Migrant Inflows, 1998 - 2012. The left panel shows consistent public opposition towards increasing number of legal migrants. The right panel shows that legal migrant inflows have increased steadily during the same period as measured by total admissions. Temporary declines in migrant inflows around 2001 and 2008 correspond to the dot-com collapse and global financial crisis, respectively. Migrants may enter the U.S. multiple times with valid visas. Therefore, total admissions usually exceed numbers of visa issued even for categories with visa caps such as H-1B and H-2B. *Source*: Muste (2013), ANES, GSS, Gallup, U.S. Department of Homeland Security (2015).

3 MNCs and Immigration Policy Liberalization

3.1 Human Capital and MNCs

A large literature demonstrates the importance of human capital to productivity and growth.[8] There are two main types of human capital important to MNCs. First, MNCs rely on *generic* human capital that can be acquired externally. This type of capital includes specialized knowledge and skill sets important in the production process, but is not proprietary and is transferable across firms. For example, it includes proficiency in different programming languages or statistics, but does not include knowledge about firm-specific propriety software or patents.

Second, MNCs rely on *firm-specific* human capital that can only be developed internally. Firms want to prevent spillovers of proprietary knowledge and protect ownership advantages when production processes take place across country borders (Dunning 1981; Markusen

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[8]See Romer (1993), Grossman and Helpman (1990), Grossman and Helpman (1993), Black and Lynch (1996), Peri (2012), and Hausmann (2013).

1995; Helpman 2006). To achieve these goals, MNCs internalize their global production processes through Foreign Direct Investment (FDI), the establishment of subsidiaries in foreign countries. The same goals drive MNCs to move their *own* employees in order to transfer (extract) technical, managerial, or production related human capital. Furthermore, some firm-specific human capital such as managerial and organizational practices can be intangible, difficult to codify, or best learned through face-to-face demonstration and training (Markusen and Trofimenko 2009; Hausmann 2013). Therefore, intra-company transfers are crucial for MNCs' acquisition of firm-specific human capital. Following four decades of FDI liberalization (Pandya 2014) and growth (Lipsey 2003), global demand in firm-specific human capital has also increased. Intra-company transfers have increased by 15% in Organisation for Economic Co-operation and Development (OECD) countries between 2007 and 2012, increasing from 110,000 to 126,000 (OECD 2014:26).[9]

The flow of people across borders, however, is the most regulated phenomenon in globalization, surpassing cross-border flows of goods or capital (Freeman 2006; Pritchett 2006). This presents a significant barrier to MNCs on their acquisition of human capital. In the following, I discuss different dimensions of immigration policy and how MNCs leverage these dimensions to influence immigration policymaking.

3.2 Multidimensional Immigration Policy and the Lobbying of MNCs

According to Bjerre et al. (2015), immigration policy is defined as "government's statements of what it intends to do or not do (including laws, regulations, decisions or orders) in regards to the selection, admission, settlement and deportation of foreign citizens residing in the country." This defintion distinguishes between different *target groups* of immigration policy and helps identify important domestic actors who have the most at stake. For example, the U.S. categorizes migrants by their purpose: labor, family reunification, or refugees. It further categorizes labor migrants by skill-level (high vs. low), duration of stay (temporary vs. permanent), and types of human capital (firm-specific vs. generic). In particular, the L-1 Intra-Company Transfer visa is issued to high-skilled temporary migrants who hold firm-specific human capital. This definition also helps distinguish the roles of different gov-

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[9]The U.S. continues to be the largest destination in the world for such transferees, with admissions for transferees (L-1) exceeding H-1B visas since 2009 (U.S. Department of Homeland Security 2015). The significance of firm-specific human capital and intra-company transfers extend to other developed countries. For example, plans in the United Kingdom to significantly reduce intra-company transfers (the Tier 2 Visa) have faced strong opposition from MNCs in service and technology industries (The Economist 2015). Examples of other countries issuing intra-company transfer visas include Austria, Canada, Switzerland, Germany, Japan, and South Korea.

ernment actors at various stages of the policy-making process, and highlights the strategic advantages that each actor enjoys. In particular, public attitudes may be more influential in legislative settings where the median voter's preferences are pivotal (Downs 1957; Grossman and Helpman 1994), while firms or interest groups may have an advantage in influencing the implementation of legislation by bureaucracies (Yackee and Yackee 2006; Yackee 2006; Binderkrantz, Christiansen, and Pedersen 2014) given smaller collective action problems (Olson 1965).

Based on these distinctions, I extend existing political economy explanations of immigration policy formation. I build on a literature that focuses on interest groups and immigration policy outputs in the legislature (Freeman 1995; Amegashie 2004; Facchini and Mayda 2009; Facchini, Mayda, and Mishra 2011; Freeman and Tendler 2012; Peters 2014).[10] However, I extend this literature by incorporating immigration policy outputs implemented by *bureaucracies* and focusing on the preferences of MNCs, global firms with subsidiaries across borders.[11]

I argue that MNCs seek to relax both immigration legislation and policy implementation due to their need for human capital. First, when the legislature delegates details of visa regulations to bureaucracies and the latter implements strict regulations, MNCs *directly* lobby bureaucracies at the implementation stage. Such bureaucratic lobbying takes the form of informational lobbying—using firms' private information to persuade bureaucracies on particular policies of interest.[12] Alternatively, MNCs may lobby bureaucracies *indirectly* through the legislature. For example, MNCs can lobby committee chairs in the U.S. Congress to pressure the State Department and shape how visa regulations are implemented.[13] Such indirect lobbying leverages both campaign and informational lobbying. Overall, returns from immigration policy liberalization at the implementation stage are smaller but are more feasible in

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[10]This approach follows a long tradition in the political economy of trade on how the lobbying of domestic interest groups affects economic policy outcomes (Hillman 1982; Mayer 1984; Magee, Brock, and Young 1989; Grossman and Helpman 1994). Similar to the literature on public attitudes, this literature relies on the consequences of migrant inflows to identify relevant domestic actors and their preferences. However, while the literature on public attitudes focuses on the attitudes of median voters, this literature focuses instead on the preferences of domestic business interests and other organized interest groups. For example, Facchini, Mayda, and Mishra (2011) find that the U.S. Congress gives larger quotas for temporary work visas to industries lobbying more intensively on immigration. Focusing on low-skilled immigration policy formation in the U.S. Congress, Peters (2014) shows that more mobile firms with less trade protection are less likely to lobby on immigration. Their exit, in turn, allows legislators to restrict low-skilled immigration.

[11]See Bennedsen and Feldmann (2006) and McKay (2011) for research on bureaucratic lobbying.

[12]See for example, Austen-Smith and Wright (1994), Potters and Winden (1992), and Ludema, Mayda, and Mishra (2010).

[13]See Arnold (1987) and McCubbins, Noll, and Weingast (1987) for more on indirect lobbying through the legislature. See De Figueiredo and Richter (2014:167) for more details on target selection in the lobbying literature. See Lipton (2015) for an example of legislative pressure put on regulatory agencies regarding Comcast's plan to acquire Time Warner Cable.

the short run. For example, Ellermann (2005) shows that the degree of political insulation of bureaucratic agencies explains the gap between immigration laws on deportation and implementation. Yackee and Yackee (2006) find that business interests enjoy disproportionate influence over U.S. bureaucratic policymaking. In the context of this study, changes in the implementation of visa regulations on intra-company transfers by bureaucracies can satisfy MNCs' short run need for firm-specific human capital.

Second, when bureaucracies already implement relaxed visa regulations, MNCs focus on lobbying the legislature for broader immigration reforms. These reforms include relaxing visa quotas, educational requirements, labor market tests, or other eligibility requirements in immigration legislation. However, immigration policy liberalization in the legislature can be more difficult, even though it provides higher returns for MNCs in the long run.[14] Such difficulties arise from general public opposition towards increasing levels of immigration in Western democracies. They also arise from the common bundling of legal labor migration and other politically contentious issues such as illegal immigration in legislative reforms.[15]

To maximize the returns of lobbying, I expect firms to strategically allocate their lobbying resources between the legislature and bureaucracies. Large firms like MNCs are more capable of bearing the costs of collective lobbying in the legislature, but also have incentives to relax policy implementation in order to satisfy short run need for firm-specific human capital.[16] Therefore, I expect MNCs to lobby on both the implementation of immigration policy and immigration reforms in the legislature. This strategy allows MNCs to hedge risks in lobbying across multiple venues. However, when visa regulations are already relaxed at the implementation stage, I expect MNCs to concentrate their resources and lobby the legislature on more challenging immigration reforms.

While bureaucratic lobbying is more specific and involves more private goods, I expect collective action problems to hinder lobbying efforts for MNCs in immigration. In particular, MNCs have strong incentives to conserve resources and free ride on the lobbying of efforts of others when many MNCs source transferees from the same country and country-specific visa regulations are restricted. However, once MNCs overcome collective action problems, I expect more intense bureaucratic lobbying to succeed in relaxing the implementation of country-specific visa regulations.

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[14]Other long-run solutions include setting up new subsidiaries in countries given more relaxed visa restrictions or ultimately exiting the host country. I argue that firms choose lobbying, at least in the short to medium-run, given the high costs of such long run options.

[15]The fact that the most recent major immigration reform enacted in the United States traces back to the Immigration Reform and Control Act of 1986 and the Immigration Act of 1990 demonstrates such challenges (Tichenor 2002:243-245).

[16]See You (2014:8) for more discussion on firm size and the choice of legislative versus bureaucratic lobbying.

Overall, I derive three testable implications of the theory:

Hypothesis 1: *All else equal, MNCs are more likely to lobby bureaucracies when immigration policy implementation is stricter, and concentrate on lobbying the legislature when policy implementation is more relaxed.*

Hypothesis 2: *All else equal, MNCs are less likely to lobby on immigration at the implementation stage when more firms source transferees from the same country given collective action problems.*

Hypothesis 3: *All else equal, more intensive lobbying, by MNCs sourcing intra-company transferees from the same country, leads to more relaxed visa regulations implemented by bureaucracies.*

4 High-Skilled Immigration Policies in the U.S.

Two main types of immigration policies regulate the mobility of skilled migrant workers in the U.S. The L-1 Intra-Company Transfer visa regulates migrant workers who hold firm-specific human capital. In contrast, the H-1B Specialty Occupation visa regulates migrant workers who hold generic human capital.

Table 1 shows two main differences between the L-1 and H-1B visa in immigration legislation. First, L-1 visas have higher entry barriers compared to H-1B visas. L-1 visas are only eligible to multinational firms and employees who have worked for the multinational firm continuously for at least one year.[17] In contrast, any U.S.-based company can file a petition for H-1B workers. Second, regulations for the L-1 visa are more relaxed than the H-1B visa once eligibility requirements are met. There is no annual quota, educational requirement, or need for Labor Condition Application (LCA) for the L-1 visa. This contrasts the 85,000 annual visa quota, minimum bachelor degree, and LCA requirement for the H-1B visa.

These differences illustrate how public attitudes constrain immigration policymaking in the legislature. First, we observe more restrictions on migrants with generic human capital. H-1B workers hold more generic human capital that increase the substitutability between migrant workers and natives. The fact that any U.S.-based firm can petition for H-1B visas exacerbates natives' concern about labor market competition. In contrast, transferees are

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[17]More precisely, employers must "have a qualifying relationship with a foreign company (parent company, branch, subsidiary, or affiliate, collectively referred to as qualifying organizations)." Furthermore, employers have to "currently be, or will be, doing business as an employer in the United States and in at least one other country directly or through a qualifying organization for the duration of the beneficiary's stay in the United States as an L-1" (U.S. Citizenship and Immigration Services 2015).

	L-1 Intra-Company Transferee	*H-1B Specialty Occupation*
Skill Level	High	High
Skill Type	Firm-specific	Generic
Purpose	Non-immigrant Temporary Work Visa	Non-immigrant Temporary Work Visa
Dual Intent	Yes	Yes
Annual Quota	No limit	65,000 + 20,000 (advanced degree exemption)
Employer Eligibility	Only multinational firms qualify	Any U.S. based company, assuming other requirements are met
Labor Condition App.	Not required	Required
Employee Eligibility	Worked for multinational firm for at least one continuous year (within the past three years) An executive/manager (L-1A) or a worker with specialized knowledge (L-1B)	Specialized knowledge in the field
Educational Requirement	No degree requirement	At minimum a bachelor's degree
Maximum Duration	7 years (L-1A); 5 years (L-1B) (No further extensions possible)	6 years (Extensions possible in up to 3 year)
Visa Validity	At State Department's Discretion (Max. 60 months)	State Department's Discretion (Max. 60 months)

TABLE 1. Visa Regulations on L-1 Intra-Company Transferee vs. H-1B Specialty Occupation. *Source*: U.S. Citizenship and Immigration Services (2015) and Title 2 Section 214 of the Immigration and Nationality Act.

highly skilled foreign executives and managers (L-1A) or workers with specialized knowledge (L-1B) who are usually tasked by multinationals to transfer proprietary knowledge to their office in the U.S. As a result, these transferees do not directly compete with natives in the labor market. In fact, firm-specific human capital complement natives and increase productivity. This further mitigates natives' concern towards L-1 inflows.

Second, we observe more restrictions on migrants that are more likely to seek to permanent resident status. While both L-1 and H-1B visas allow "dual intent," migrants on temporary non-immigration visas but seeking lawful permanent resident status, L-1 visa holders seldom convert to permanent residence status. Hira (2010:6) shows that L-1 visa immigration yields, the ratio of permanent immigration applications filed to L-1 petitions by a specific employer, is very low at a maximum of 19% in 2008. This suggests that most transferees return to their home office when their assignments expire. In contrast, H-1B visa holders account for 63% of all permanent residence applications in 2008 (Hira 2010:4). The perception of H-1Bs being more "permanent" is consistent with its tighter restrictions.

Table 1 shows differences across visa types, but masks substantial variation *within* visa types, as bureaucracies do not implement visa regulations consistently for high-skilled mi-

grants holding the *same* visa.[18] Figure 2 illustrates wide variation in the *validity lengths* of L-1 visas depending on the transferee's origin country. Depending on the origin of transferees, validity lengths range from one month (Libya) to three months (Afghanistan and Iran), twelve months (Iraq and Mexico), twenty-four months (Brazil and China), forty-eight months (Switzerland), and the maximum sixty months (Germany, India, and Japan).
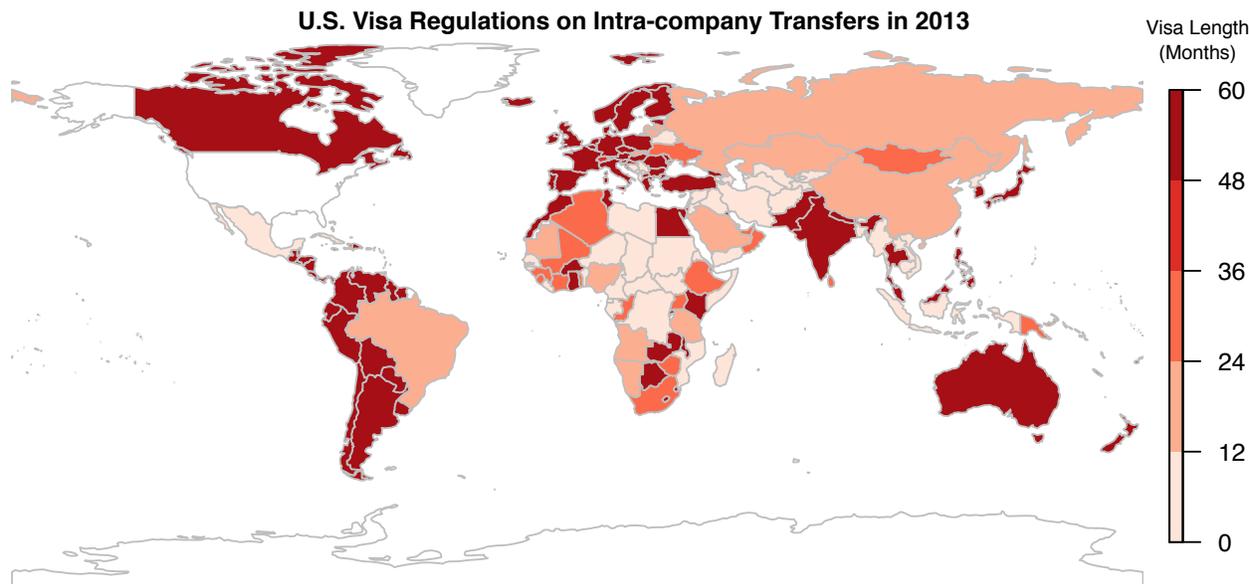

Fɪɢ 2. U.S. Visa Regulations on Intra-company Transfers by Origin-Country of Transferees in 2013. Visa regulations measured as visa validity lengths (months). Longer validity lengths in the legend indicate more relaxed regulations. *Source*: U.S. Department of State (2015a).

Furthermore, Figure 3 shows temporal changes in L-1 visa validity lengths for L-1 workers coming from the same country. For example, the State Department extended L-1 validity lengths for Indian transferees from 12 to 60 months in 2006. This poses challenges to attitudinal explanations of immigration policy if public attitudes towards migrants of similar human capital have been stable over time.

The variation in visa regulations implemented by the State Department have profound consequences for the ability of MNCs to transfer firm-specific human capital. In particular, it restricts the duration transferees are legally permitted to leave and reenter the U.S. during a given assignment, which is especially problematic for assignments that require face-to-face training. Furthermore, shorter visa validity lengths lead to more frequent visa renewals. This raises vacancy costs for MNCs when transferees need to return to their home country

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[18]Congress gives the U.S. State Department discretion to make decisions on visa validity lengths, issuance fees, or number of entries allowed per visa. The baseline L-1 visa regulations for newly independent countries are three months, no fees, and one entry, respectively (U.S. Department of State 2015a). This temporary reciprocity schedule is used until a formal reciprocity schedule is developed.
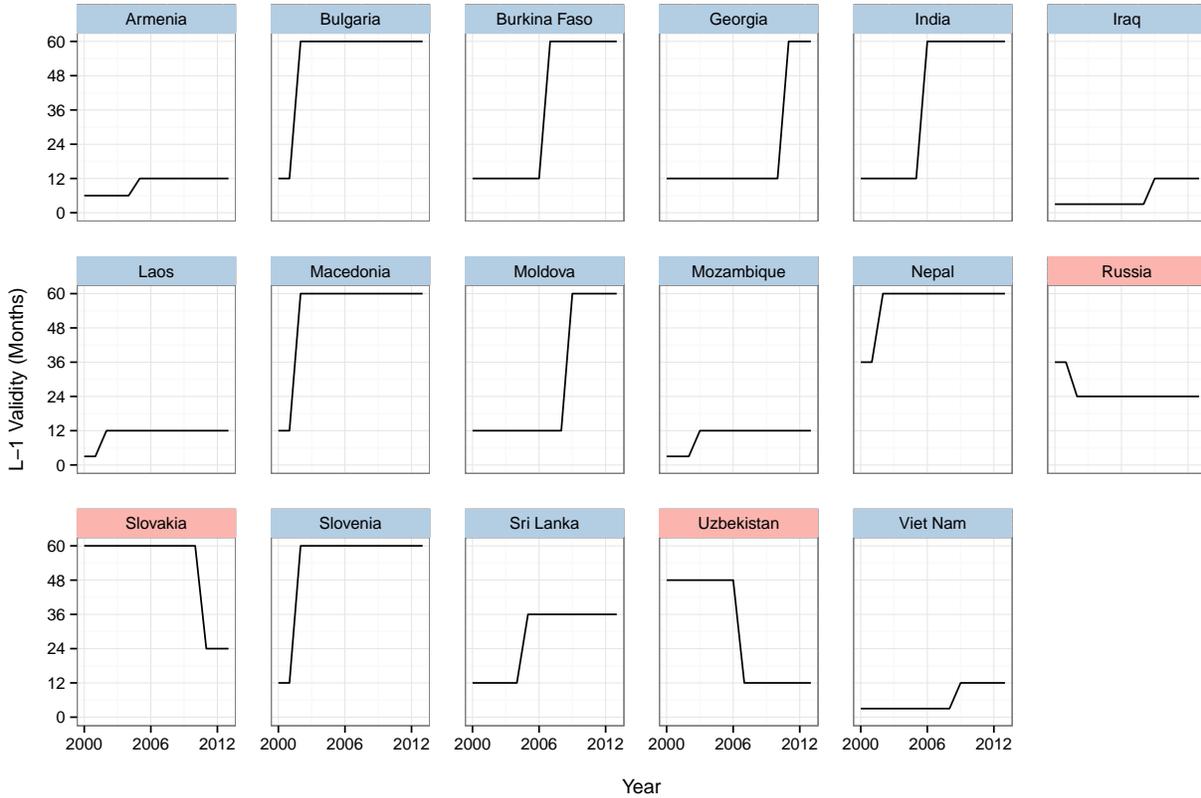
FIG 3. Changes in L-1 Validity Length for U.S. Partner Countries, 2000 - 2013. Blue country labels indicate increases in visa length while red labels indicate decreases. *Source*: U.S. Department of State (2015a).

and wait during the process of visa renewals.[19] It also increases the total fees MNCs pay for each intra-company transfer.

5 Empirical Analysis

In this section, I show evidence that MNCs lobby effectively, despite the presence of collective action problems, by strategically targeting the State Department and Congress. To test the observable implications of my theory, I compile and analyze an original data set that combines *firm*-level data on intra-company transfers, lobbying, and *country-specific* visa regulations. This data set is, to the best of my knowledge, the first one available in the literature. Given the size and complexity of the data set, I first briefly describe the construction of the data set and patterns within the data.

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[19]Vacancy costs are the opportunity costs of a position going unfilled.

5.1 An Original Data Set

5.1.1 Firm-Level Data

`Approved L-1 Petitions`. Through a Freedom of Information Act (FOIA) request, I obtained United States Citizenship and Immigration Services' (USCIS) data on all public and private firms with approved L-1 visas from 2000 to 2013. The data includes the name of the petitioning firm, the country of birth for the transferee, and the total number of approved L-1 petitions for the same firm, year, and country of birth. Overall, it covers around 82,000 unique firms, sourcing intra-company transferees from 184 countries or entities, resulting in a total of around 256,000 firm-year-country observations.

Merging firm-level data is a challenging task, as names of the same firm vary depending on abbreviations, name-changes, and even spelling errors. For example, there are at least 12 different ways the name of the top L-1 petitioner "Tata Consultancy Services" enters the data. To systematically overcome this challenge, I employ the "batch search" function in Orbis (Bureau van Dijk) to extract unique identifiers for firms in the Orbis database. Focusing only on firms in the USCIS data that produced "best" matches ("A" matches) in Orbis, I merge firm-level L-1 petitions with the following financial and lobbying data.

`Financial Data`. Based on the best-matched list of firms in the USCIS data, I select those that were publicly listed in stock exchanges worldwide. I then extract their financial data provided by Bureau van Dijk's Osiris Database. This results in a total of around 42,000 firm-year observations, from 2000 to 2013.[20]

`Lobbying Data`. For firm-level lobbying, I rely on data compiled by the Center of Responsive Politics (CRP) and obtained from the Senate Office of Public Records (SOPR). The data is based on reports filed under the Lobbying Disclosure Act (LDA). I subset the data so it only includes reports filed under "immigration" from 2000 to 2013. I further subset the data and only include lobbying reports filed by "Orbis-best-matched" public firms in the USCIS data. This results in a total of around 106,000 client-year-report-agency observations.

5.1.2 Country-Specific Visa Regulations Data

To collect data on visa regulations, I scrape all current and archived U.S. State Department websites on visa reciprocity from 2000 to 2013. These websites detail the visa issuance fees,

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[20]There is a trade-off between using Osiris and Orbis, both offered by Bureau van Dijk. On one hand, Osiris only provides data on public firms whereas Orbis provides information on both public and private firm. On the other hand, Osiris provides longer panel data for firms, many going back to years before the beginning of my empirical analysis. In contrast, Orbis only provides access to data on firms within the last 10 years (2005-2014). Furthermore, data is very sparse for small private firms. Given this trade-off, and to set a clearly defined population of interest, I focus on public firms in the study.

maximum period of visa validity, and number of entries per visa for different temporary visitors and nationalities.[21] In this study, I focus on L-1 visa regulations that govern MNCs' intra-company transfers of their foreign executives and managers (L-1A) or workers with specialized knowledge (L-1B) to their US office. The resulting data includes intra-company transfer visa regulations for 215 partner countries or entities. I then merge country-specific visa regulations with firm-level data based on the country of birth of the transferee.[22]

5.1.3 Final Sample and Patterns

The final sample is an unbalanced data set covering 2,995 unique publicly listed firms, from 2000 to 2013, sourcing transferees from 152 countries, with a total of 51,059 observations. Figure 4 illustrates main descriptive patterns within the data.

Top publicly listed firms petitioning on L-1 visas during this period include Indian MNCs that provide consultancy services such as Tata, Wipro, and Infosys. Top firms also include large MNCs in the technology industry such as Hewlett-Packard, Intel, IBM, and Microsoft. These MNCs mainly source transferees from India and developed countries such as Canada, the UK, and Japan. The patterns support the premise that technology and consultancy industries have a higher demand for firm-specific human capital and higher emphasis on protecting proprietary knowledge. Among all MNCs that petitioned for L-1 visas during this period, Microsoft lobbied the most on immigration, filing 312 reports and spending 132 million dollars.[23] Among all institutional venues targeted by MNCs, the U.S. Congress receives the most lobbying on immigration.[24]

5.2 Visa Regulations and Choice of Lobbying Venues

Exploiting the new data, I examine empirical support for Hypothesis 1: *how* MNCs lobby on immigration with regards to choice of lobbying venue. I subset the data to 98 publicly listed MNCs that *engaged in intra-company transfers* and *lobbied on immigration* between 2000 and 2013. I focus on `Institutional Venue Choice` as the outcome of interest with three unordered categories: the State Department, Congress, or both institutional venues. `L-1 Visa Regulation` at the implementation stage is my key covariate of interest. I operationalize it as L-1 visa validity lengths (months) as illustrated in Figure 2. To account for firm-level heterogeneity that may affect both visa regulations and where they lobby, I

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[21]See Figure A.6 in the appendix for an example of India's reciprocity table.

[22]I exclude all observations where the country of birth is unknown or missing.

[23]Note that data on expenditure is aggregated by reports, which may include multiple lobbying issues.

[24]Appendix A shows top firms based on *raw* data of all public and private firms, top industries that lobby on immigration, and the data sample compared to available data sources on L-1 visas.
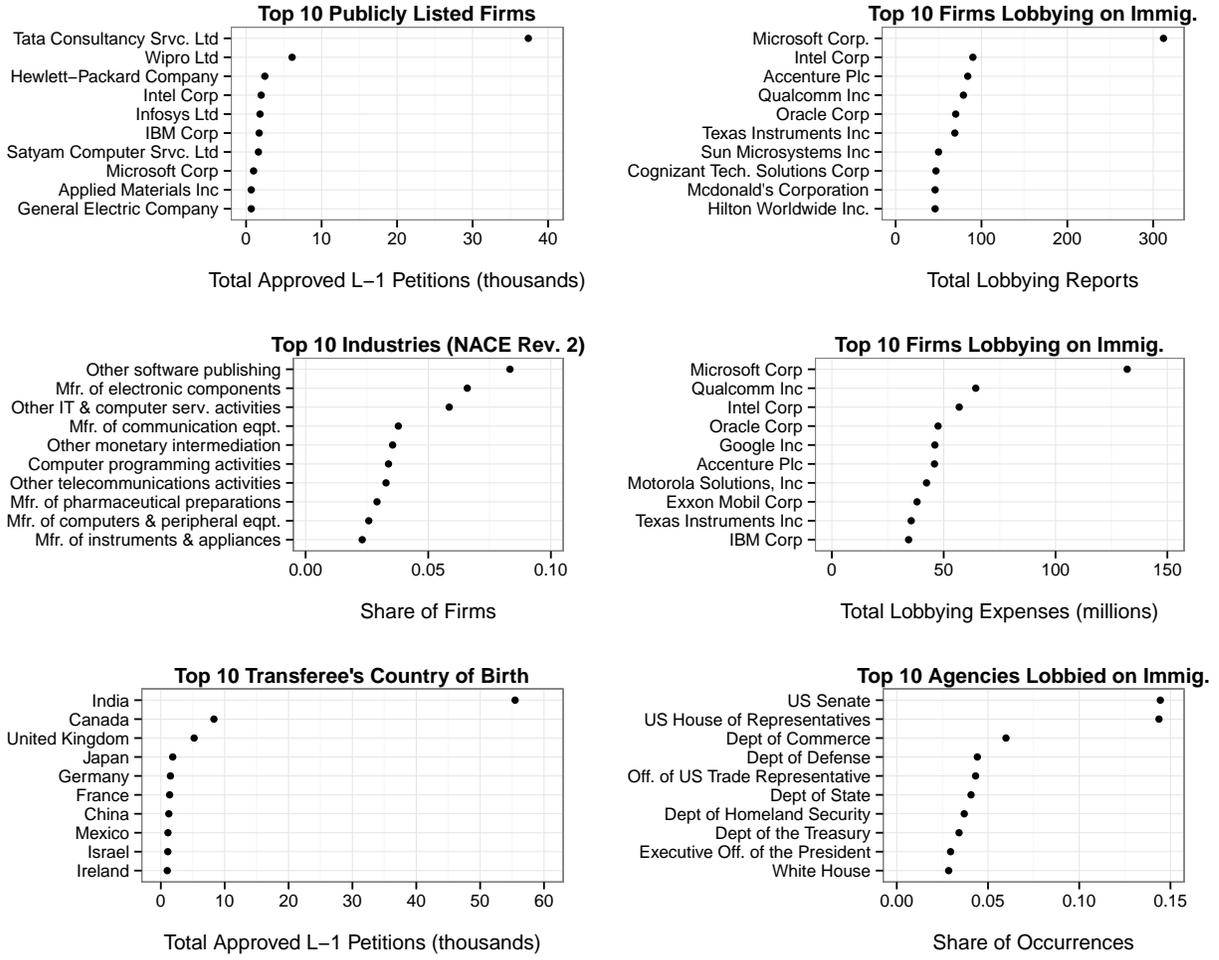
FIG 4. *Descriptive Patterns for Final Sample of Data, 2000 - 2013.* The data shows that Tata Consultancy Services is the top publicly listed MNC in terms of total approved L-1 petitions. Firms in information technology industries are top petitioners. India is the largest origin country of transferees. Microsoft lobbies the most on immigration while the U.S. Congress receives the most lobbying.

control for `Firm Size`. I measure firm size using Osiris' data on number of subsidiaries under a firm. Finally, I fit a multinomial logistic regression model given the trichotomous outcome of interest. The model is expressed formally below:

$$Y_{ijt} \sim \text{Multinomial}(y_{ijt}|\pi_{ijtk})$$

$$\pi_{ijtk}(\mathbf{X}_{ijt}) = \Pr(Y_{ijt} = k|\mathbf{X}_{ijt}) \tag{1}$$

$$= \frac{exp(\mathbf{X}_{ijt}^{\top}\beta_k)}{1 + \sum_{c=1}^{K-1} exp(\mathbf{X}_{ijt}^{\top}\beta_c)}$$

where i, j, and t index country, firm, year, respectively; Y_{ijt} represents the lobbying venue choice of firm j in year t sourcing from country i and takes one of the values from 1 to K,

the total number of categories; $\mathbf{X}_{ijt}$ is a vector of explanatory variables for firm j sourcing transferees from country i in year t that includes `L-1 Visa Regulation` and `Firm Size`; β_k is the vector of coefficients for category k.

Based on the model, I estimate the predicted probabilities of venue choice as the State Department relaxes L-1 visa validity lengths. I also use Monte Carlo simulations to account for uncertainty.[25] Figure 5 shows the results while Table C.1 in the appendix shows more details of the fitted parameters. Consistent with Hypothesis 1, the findings show that MNCs facing more relaxed visa regulations are more likely to lobby only Congress. Additionally, the majority of MNCs lobby both Congress and the State Department. This suggests that MNCs not only lobby for reforms in immigration legislation, but also lobby the bureaucracy for favorable implementation. This finding illuminates a causal mechanism understudied in the current literature on immigration policy formation. The results also suggest that MNCs strategically allocate their lobbying resources between the legislature and bureaucracies given the visa regulations they face. As visa regulations become more relaxed, the need and returns of lobbying on implementation diminishes. Therefore, MNCs turn to lobby the legislature for broader immigration reforms. The strategic choice of lobbying between different institutional venues on immigration illuminates the importance of distinguishing between multiple dimensions of immigration policy.

5.3   Collective Action Problems and Bureaucratic Lobbying

Next, I examine empirical support for Hypothesis 2: *whether* collective action problems undermine the lobbying of MNCs on the implementation of L-1 visa regulations. I focus again on firm-country-year as the unit of analysis. However, I include in this analysis the full sample of MNCs engaging in intra-company transfers. The outcome of interest is a dichotomous variable `Lobby on Immigration`, which measures whether a MNC lobbies on immigration in a given year when sourcing transferees from a given country. The key covariate of interest is a country-specific measure that captures the `Potential Lobby Group Size`. I calculate this as the total number of MNCs sourcing transferees from the same country and in the same year. Additionally, I control for `Firm Size` in the models. Small MNCs are more likely to source transferees from the same small set of countries given their more limited resources, which increase the size of potential lobby groups. Meanwhile, the size of small MNCs also restricts their lobbying resources. Therefore, the size of firms may influence both the number of MNCs sourcing from the same country and also whether a MNC decides to lobby. To account for additional heterogeneity at the level of industry, source-country, or year that

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[25]I simulate predicted probabilities following King, Tomz, and Wittenberg (2000).
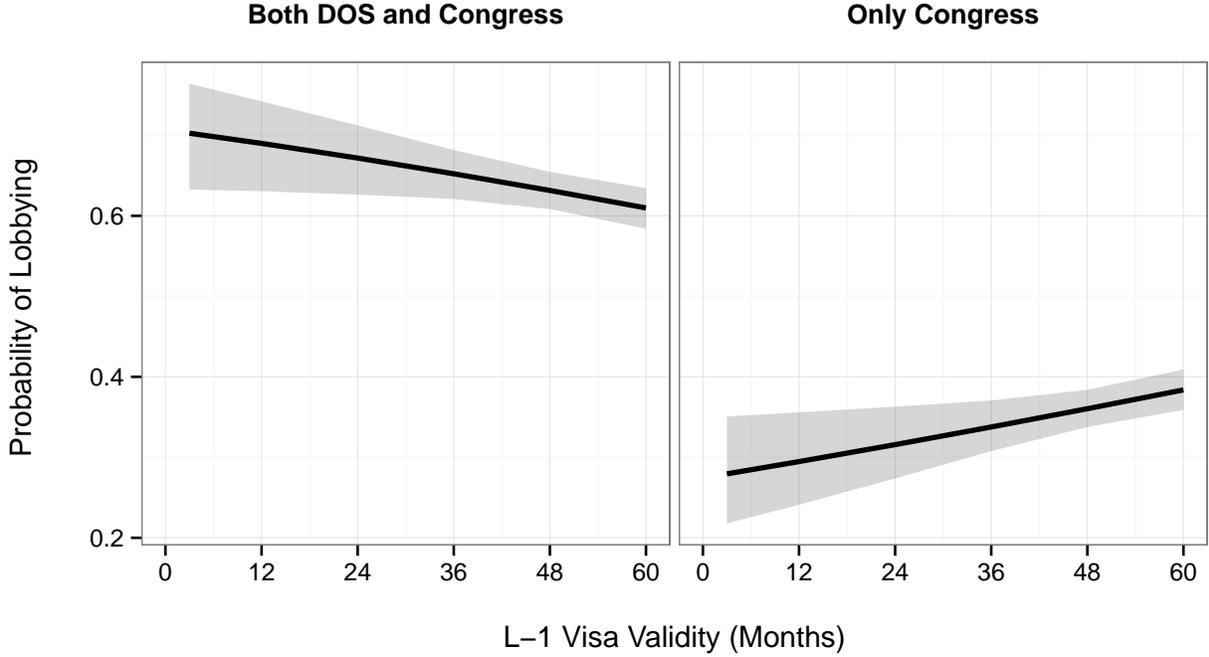
FIG 5. L-1 Validity and Predicted Probabilities of Venue Choice. The probability of lobbying both Congress and the State Department decreases (and lobbying only Congress increases) as L-1 visa regulations at the implementation stage become more relaxed.

may bias my estimates, I fit mixed effects logistic regression models with varying intercepts for each level.[26] I express the model formally below:

$$
\Pr(\text{LOBBY}_{ijt} = 1) = \text{logit}^{-1}(\alpha_s + \delta_i + \lambda_t + \beta_1 \text{LOBGROUPSIZE}_{it} + \beta_2 \textit{FIRMSIZE}_{ijt})
$$
$$
\alpha_s \overset{i.i.d.}{\sim} \mathcal{N}(\alpha, \sigma_\alpha^2), \ \delta_i \overset{i.i.d.}{\sim} \mathcal{N}(\delta, \sigma_\delta^2), \ \lambda_t \overset{i.i.d.}{\sim} \mathcal{N}(\lambda, \sigma_\lambda^2),
$$
(2)

where i, j, and t index countries, firms, and years, respectively; α_s, δ_i and λ_t indicate varying intercepts for industry, country, and year, respectively; and the varying intercepts are assumed to be normally distributed.

Based on the models, I estimate the predicted probabilities of lobbying the State Department on immigration as the size of the potential lobby group increases. Figure 6 shows the results while Table C.2 in the appendix shows more details of the fitted parameters. The left panel shows results for a mixed effects model with varying intercepts for both industry and year while controlling for firm size. Consistent with Hypothesis 2, the results suggest that MNCs, similar in size and in the same industry and year, are less likely to lobby on immigra-

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[26]I employ mixed effects models instead of fixed effects models due to the large number of groups (industries at the two-digit level, countries, and years) and the sparseness of observations in some groups.

tion when they source transferees from countries together with more MNCs. The right panel shows similar results using a mixed effects model with varying intercepts for both industry and transferee origin-country while controlling for MNC size. It suggests that MNCs, similar in size and in same industry while sourcing transferees from the same country, become less likely to lobby on immigration as more MNCs join to source transferees. The relatively large confidence intervals reflect the fact that only around 1.5% of all L-1 petitioning MNCs, at the maximum, lobbied on immigration in any venue between 2000 and 2013.[27] Additionally, Table C.2 in the appendix shows that larger firms are more likely to lobby on immigration despite collective action problems. This suggests that lobbying at the implementation stage still requires large MNCs to bear more costs even when benefits of lobbying are private. Altogether, these results suggest the severity of collective action problems when MNCs make decisions on lobbying at the implementation stage. It also offers an explanation for why U.S. L-1 visa regulations remain restricted for many partner countries.
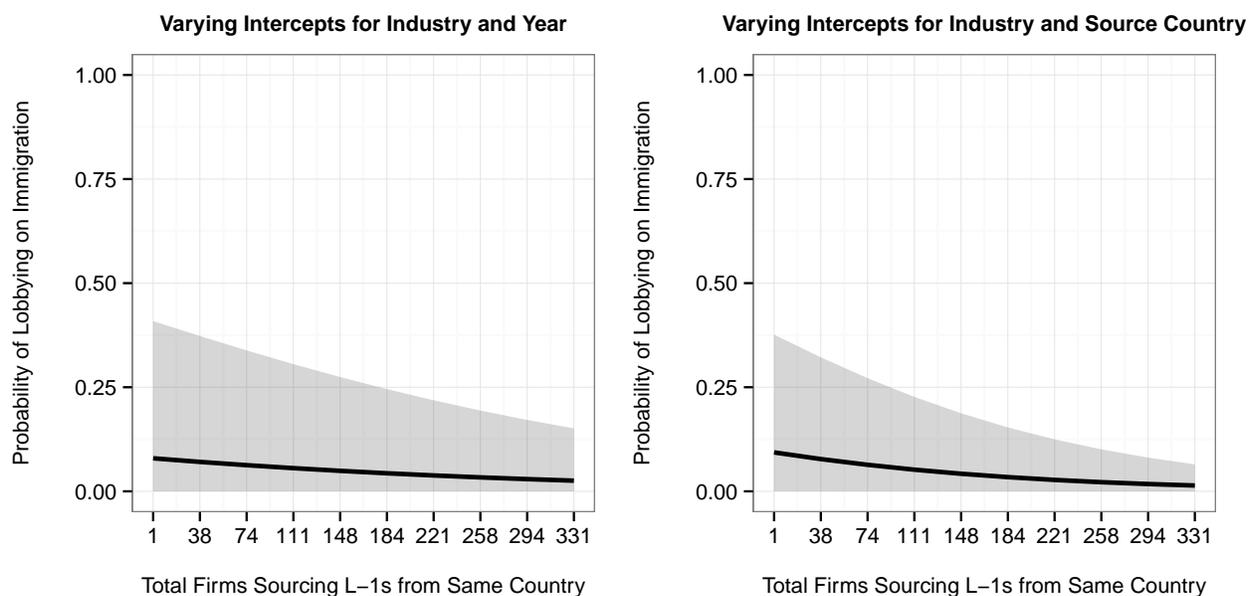
FIG 6. Potential Lobby Group Size and Firm's Decision to Lobby on Immigration. The panels show that the probability of a MNC lobbying on immigration decreases when more MNCs source transferees from the same country. The results are consistent when including varying intercepts for industry and year or when including varying intercepts for industry and transferee origin-country in mixed effects logistic regression models.

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[27]See Figure A.5 in the appendix for details and comparison with the H-1B visa.

5.4 Firm-Lobbying and the Implementation of L-1 Visa Regulations

Finally, I examine empirical support for Hypothesis 3: the *influence* of MNCs' collective lobbying on the implementation of L-1 visa regulations. `L-1 Visa Regulation` is the outcome of interest in this analysis, which I operationalize as the natural logarithm of L-1 visa validity lengths (months). For the key predictor, I focus on the collective lobbying intensity of MNCs on country-specific L-1 visa regulations.

Measuring the country-specific lobbying intensity of MNCs is challenging for several reasons. First, it is difficult to acquire data or any confirmation from the State Department on MNCs' lobbying behavior. Second, although SOPR's lobbying data shows the general issue of every lobbying report filed (e.g. immigration), it does not systematically document more specific issues (e.g. H-1B & L-1 visa programs).

To overcome these challenges, I combine information on MNCs' demand for the L-1 visa and their lobbying behavior to construct two country-year measures of lobbying intensity. To construct measures, I first subset the data set and only include observations for publicly listed MNCs engaging in intra-company transfers and previously lobbied the State Department on immigration. Next, I group MNCs by the country they source transferees from, and aggregate the total yearly lobbying reports filed (or total yearly lobbying expenses spent) by MNCs in the same group. I use these measure to capture the yearly lobbying intensity from MNCs sourcing transferees from the same country. Finally, I calculate the `cumulative total of lobbying reports` and the `cumulative total lobbying expenses` for each country since 2000 up to year t. Given the "sluggishness" of visa regulations, I use cumulative measures to capture the "stock" of lobbying efforts MNCs sourcing from the same country have spent. Although this approach greatly reduces my sample size to 543 observations, it allows me to construct measures of country-specific bureaucratic lobbying intensity by MNCs that have shown both motivation and actions. Figure B.1 in the appendix illustrates the variation in yearly cumulative total of lobbying reports across different transferee origin-countries.

I fit a set of Ordinary Least Squares (OLS) models with (log) L-1 visa validity lengths as my outcome of interest and (log) cumulative total lobbying reports (expenses) as my main predictor. The models include a simple bivariate linear regression, linear models that include either country or year fixed-effects, and linear models with both controls and fixed-effects. I include country fixed-effects to account for any time-invariant factors that explain baseline differences in L-1 visa validity lengths across countries. The country fixed-effects account for any negative or positive perceptions of natives toward migrants from certain countries of origin. Such public attitudes may influence State Department's decisions on visa validity

lengths and bias my estimated effects of lobbying if omitted. Year fixed-effects account for any country-invariant global shocks or trends that lead to longer (shorter) L-1 visa validity lengths.

I also include a set of country and year-varying covariates for U.S. economic dependence (`US trade dependence`), partner country `regime type`, and security concerns (partner country `cumulative total terrorist attacks`). These bilateral strategic factors may confound the relationship between MNCs' lobbying intensity and country-specific L-1 visa validity lengths.[28] Finally, given the relatively small sample size, I also fit a linear mixed effects model that includes varying intercepts for countries and years, varying slopes for lobbying intensity (by both country and year), and the same set of control covariates. The full model specification is expressed formally below:

$$\log(\text{VISAREG})_{it} \;=\; \beta_1 \log(\text{LOBBYINTENSITY})_{it} + \boldsymbol{\beta_2 Z_{it}} + \delta_i + \lambda_t + \epsilon_{it} \qquad (3)$$

where i and t index countries and years, respectively. $\boldsymbol{Z_{it}}$ is a vector of control covariates discussed above. δ_i and λ_t indicate country and year fixed-effects (or varying intercepts in the mixed effects model), respectively. For details about variables and descriptive statistics, see Appendix B.

I estimate the coefficients for cumulative total lobbying reports under different OLS model specifications.[29] Figure 7 compares the estimated coefficients. In particular, linear models with country fixed-effects (or varying intercept in the mixed effects model) have smaller estimated coefficient than models with year fixed-effects. This is consistent with the broader pattern that most variation in L-1 visa validities is cross-sectional instead of temporal. As a result, a temporal increase in lobbying intensity within a given country is statistically significant but yields smaller estimates.

Substantively speaking, I find that doubling total cumulative lobbying reports targeting the State Department is associated with 2% to 7% longer L-1 visa validity lengths for that given country.[30] This suggests an additional 2 to 6 months of total visa validity length for

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[28]In correspondence with the State Department, a spokesperson indicated that "The (State) Department, in consultation with the Department of Homeland Security makes determinations to increase visa validity. With increases, the Department considers whether a foreign government has agreed to offer similar visa validities for equivalent categories. In addition, the Department considers whether increasing visa validity is consistent with the *overall strategic goals of the bilateral relationship* [emphasis added]."

[29]Table C.3 in the appendix shows further details.

[30]Since both the main predictor and the outcome of interest are logged, one can interpret predictive effect sizes in terms of elasticity. For example, doubling total cumulative lobbying reports (i.e., a 100% increase) combined with an estimated coefficient of 0.1 yields $e^{0.1 \times log(2)}$, which equals 1.07, or 6.8% longer visa validities.
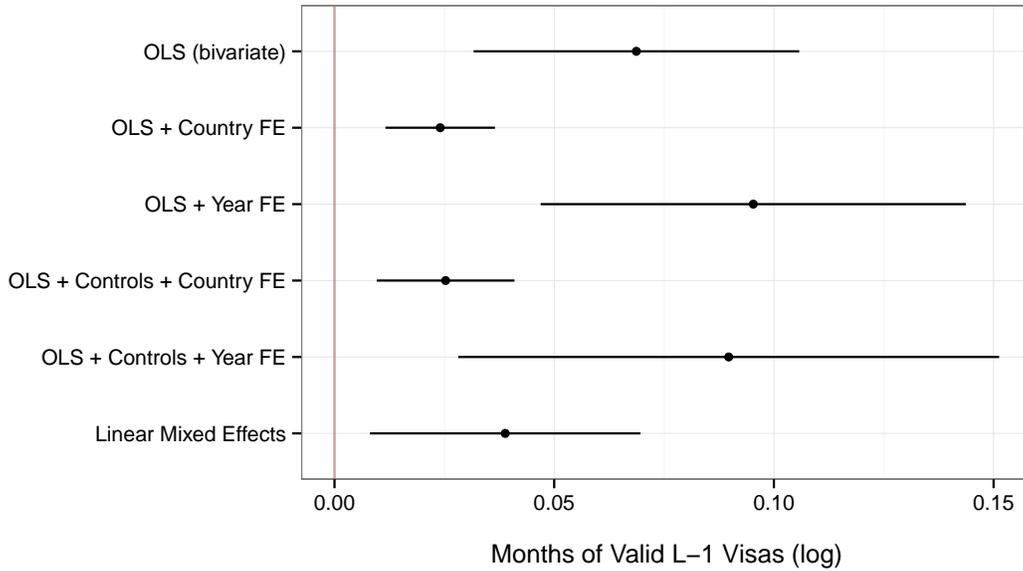
FIG 7. Estimated Coefficients for Cumulative Lobbying Reports (Log) Under Different Model Specifications. The outcome of interest is months of valid L-1 visas. Doubling total cumulative lobbying reports targeting the Department of State, by publicly listed firms with approved L-1 visas and sourcing transferees from the same country, is associated with, on average, 2% to 7% longer L-1 visa validity lengths for the given country.

high-skilled executives and workers on intra-company transfer assignment for a typical firm in a given year.[31]

Based on coefficient estimates from the most conservative country fixed-effects model and Monte Carlo simulations, Figure 8 shows changes in predicted L-1 visa validity lengths as cumulative lobbying reports increase. As cumulative country-specific lobbying reports increase from one standard deviation below the mean to above the mean, predicted L-1 visa validity lengths increase from around 42 to 48 months.

Figure C.1 in the appendix shows the heterogeneity of the predicted effects of lobby intensity by country based on results from a mixed effects model. For most countries, the estimated varying slopes (random effects) are not significantly different from the average positive estimate shown in Figure 7. However, lobby intensity has large and positive predictive effects in a few countries such as India, Vietnam, and Sri Lanka. For example, doubling the lobbying intensity for these countries is associated with 41%, 43%, and 26% longer L-1 visa validities, respectively. These large and positive effects contrast shorter baseline predictions about validity lengths for the countries. This suggests that the lobbying of MNCs overcame negative time-invariant characteristics of these countries when liberalizing

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[31]A typical MNC in the data set faces, on average, a 53-month L-1 visa validity length restriction, and receives 2 transferees per year.
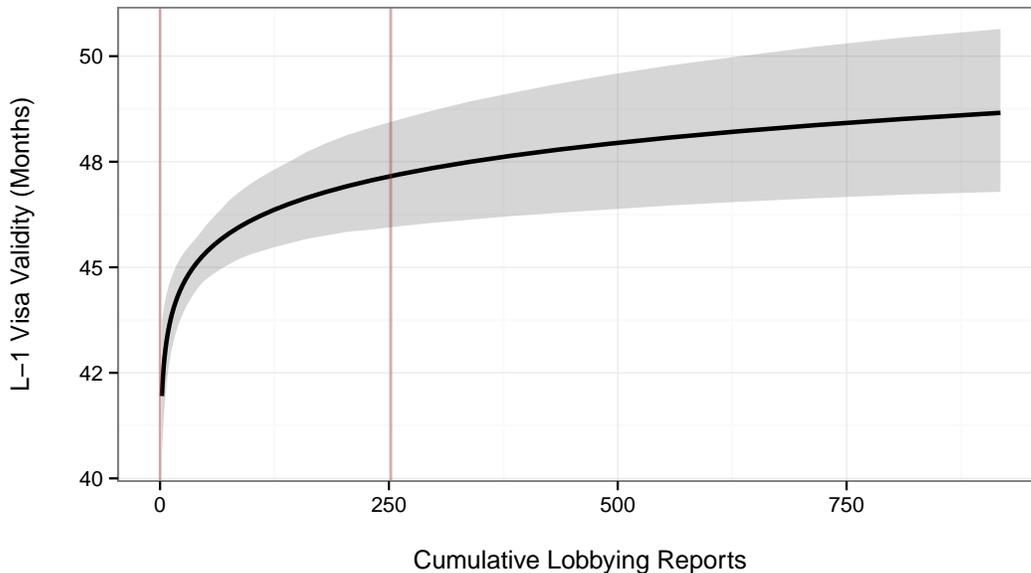
FIG 8. Predicted Effects of Cumulative Lobbying Reports. Red lines indicate one standard deviation above and under the mean. The figures shows that L-1 visas become more relaxed as cumulative country-specific lobbying reports increase.

the implementation of L-1 visa regulations.

The findings are robust to alternative measures and estimators. First, the substantive findings are consistent when using the natural logarithm of cumulative lobbying *expenses*. See Table C.4 in Appendix C for details. However, this measure should be treated with caution given the way firms report lobbying expenses. For each report, total lobbying expenses sums the expenses firms spend lobbying on a specific issue across different institutional venues. While the measure is precise when firms only lobby the State Department on immigration, it can be problematic when firms lobby many other venues including the Senate, the House, and Homeland Security. The latter scenario introduces a substantial amount of noise since one cannot tease out the proportion of expenses firms spend on lobbying the State Department. Despite the measurement problem with lobbying expenses, results are consistent with findings using lobbying reports.

Second, results are also consistent when treating L-1 visa validities (months) as count data. The discrete distribution of L-1 visa validities on its original scale, shown in Figure B.2 in the appendix, raises concerns about violations of i.i.d (Independent and Identically Distributed) or homoscedastic error terms under linear regressions. Such violations can lead to problematic standard errors and levels of uncertainty for estimates of predictors. As a result, I fit two alternative sets of count models: Poisson and quasi-Poisson. Both models include country fixed-effects. The latter model further accounts for problems of over-dispersion that

usually lead to overconfident estimates. Substantive results, shown in the first two columns of Table C.5, are consistent with the main findings.

Third, I collapse L-1 visa validity lengths into a dichotomous variable (60 months as 1 and 0 otherwise) given the break in distributions shown in Figure B.2. I then fit logistic regression models to estimate the change in probability of long vs. short L-1 visa validity lengths for a given country as firm lobbying intensity changes. In particular, I fit a logistic regression model that includes aforementioned controls and a separate conditional logistic regression model with country fixed effects. The latter addresses the well-known incidental parameter problem when including fixed effects in binary response models Lancaster (2000). Substantive results, shown in the last two columns of Table C.5, are also consistent with main findings.

Altogether, these findings provide supportive evidence that the collective lobbying of MNCs helped relax L-1 visa regulations implemented by the State Department between 2000 and 2013.

6 Concluding Remarks

Understanding why economic liberalization is possible despite public opposition is a central question to many areas of International Political Economy. In this study, I show that the influence of MNCs plays a key role in answering this question in immigration. In particular, I find that MNCs influence immigration policymaking through their choice of lobbying venue. Exploiting firm-level data and country-specific visa regulations from the U.S., I show that MNCs lobby Congress on immigration legislation but also lobby the State Department on the implementation of visa regulations. Furthermore, MNCs concentrate their lobbying resources on Congress as the implementation of visa regulations is relaxed. Finally, MNCs lobby the implementation of immigration policies effectively despite the presence of collective action problems. Overall, the findings provide empirical support for both the influence and the mechanisms through which MNCs shape immigration policymaking.

The study makes a number of contributions to the literature. First, the study challenges the common focus on individual and public attitudes in immigration policy formation. A main strand of research in immigration has focused on studying the formation of public attitudes. This literature builds on rich political economy and psychology survey research to explain individual attitudes toward immigration.[32] This literature contributes to our under-

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[32]See, for example, Scheve and Slaughter (2001), Mayda (2006), Hainmueller and Hiscox (2007), Brader, Valentino, and Suhay (2008), Hainmueller and Hiscox (2010), Dancygier and Donnelly (2013), Freeman, Hansen, and Leal (2013), Malhotra, Margalit, and Mo (2013), Hopkins (2014), and Hainmueller and Hopkins (2015).

standing of the political incentives in receiving countries for *restricted* borders.[33] Yet, a large literature documents a frequent discrepancy between public attitudes and expected policy outcomes: immigration policies are systematically more open than public attitudes appear to prefer.[34] This study offers an answer to this puzzle by demonstrating the importance of *MNCs* in immigration policymaking.

Second, by focusing on high-skilled temporary migrants, the study reveals insights about behind-the-scenes "interest group politics" in immigration where policies have concentrated costs and benefits. This complements extant research in low-skilled permanent immigration that focuses on "majoritarian politics" where costs and benefits are widely distributed. Overall, the study contributes to the growing empirical literature on the domestic politics of immigration policymaking (Amegashie 2004; Facchini and Mayda 2009; Facchini, Mayda, and Mishra 2011; Freeman and Tendler 2012; Peters 2014).

Third, the findings in migration complement a large literature that examines the effectiveness and mechanisms of domestic lobbying on economic policies such as trade and finance. The study's focus on bureaucratic lobbying, however, distinguishes itself from the common emphasis on legislative lobbying. This responds to recent calls in the International Political Economy literature for a better understanding about lobbying and the economic policymaking of bureaucrats (Martin 2015:466).

Finally, the results raise normative concerns about the trade-off between legislative control and economic efficiency in representative democracies. Human capital is beneficial for both MNCs and national economies. Therefore, we see an increasing global competition for human capital. Not only are receiving countries seeking high-skilled migrants (Docquier and Machado 2015), sending countries are also trying to either retain or encourage their return with diaspora engagement policies (Gamlen 2008; Agunias and Newland 2012; Leblang 2014) due to concerns about "brain drain" (Docquier and Rapoport 2012). Yet, we also observe strong public opposition towards increasing levels of immigration. Such public attitudes exert strong influence over policymaking in the legislature. The rising challenge for decision-makers is thus how to balance between the benefits of immigration liberalization and the preferences of the masses.

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[33]For example, we know that self-concerns about labor market competition (Scheve and Slaughter 2001; Mayda 2006; Malhotra, Margalit, and Mo 2013) and sociotropic concerns about the cultural or economic impact of immigrants (Hainmueller and Hiscox 2007; Hainmueller and Hiscox 2010; Hainmueller and Hopkins 2014; Hopkins 2014; Hainmueller and Hopkins 2015) play important roles in shaping public attitudes toward immigration.

[34]See for example Messina (1989), Freeman (1995), Joppke (1999), Fetzer (2000), Tichenor (2002), Cornelius (2004), Cornelius and Rosenblum (2005), Citrin and Sides (2008), Facchini and Mayda (2008), Schain (2008), Facchini and Mayda (2009), Freeman and Tendler (2012), Gilens (2012), and Hainmueller and Hopkins (2014).

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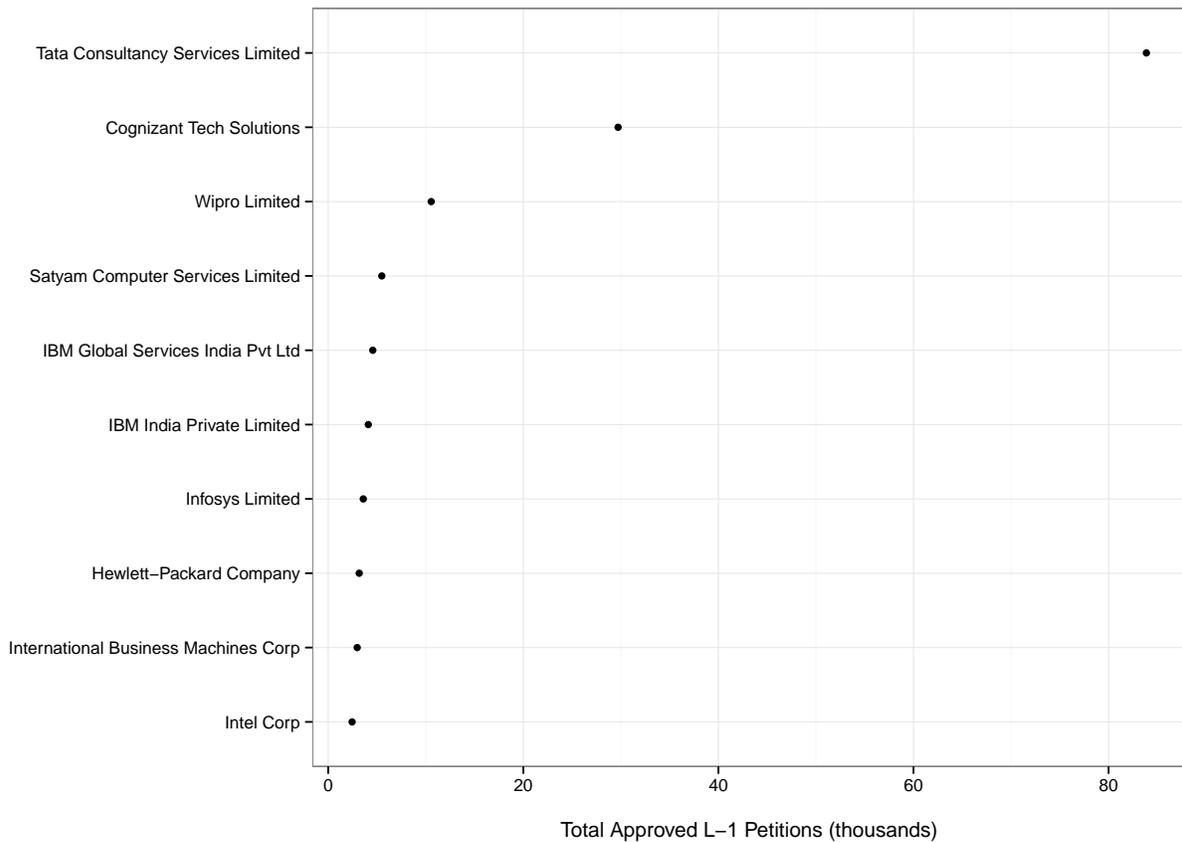# Appendix A   Data Appendix: Additional Descriptive Patterns

FIG A.1. Top 10 Publicly Listed or Private Firms Approved of L-1 Petitions, 2000 - 2013.
This figure plots top MNCs using raw petitions data, which includes petitions with transferee's country of birth missing or unknown.
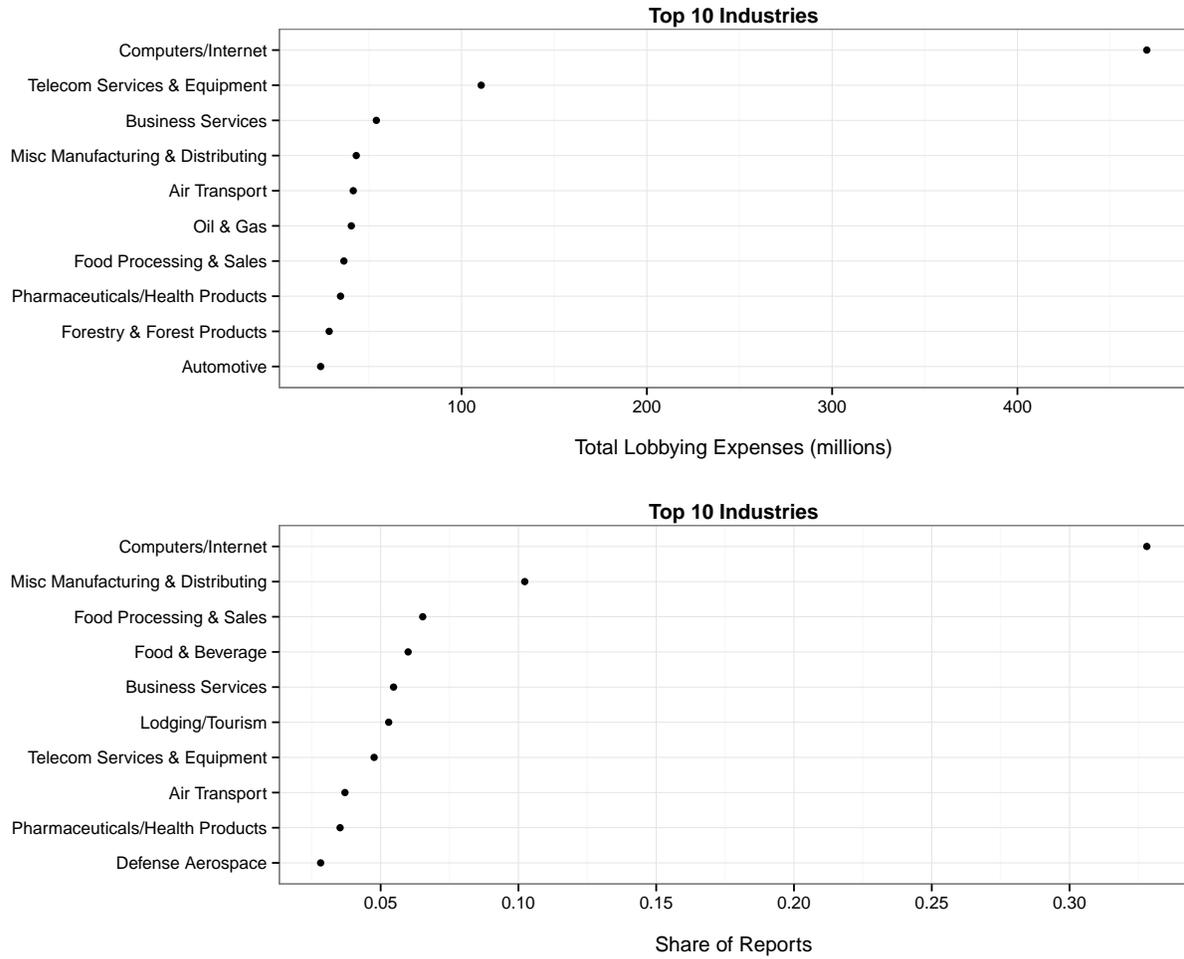
Top 10 Industries

Total Lobbying Expenses (millions)

Top 10 Industries

Share of Reports

FIG A.2. Top 10 Industries of Firms in Sample that Lobbied on Immigration, 2000-2013.

Annual Migrant Worker Inflows (Visa Issuance)
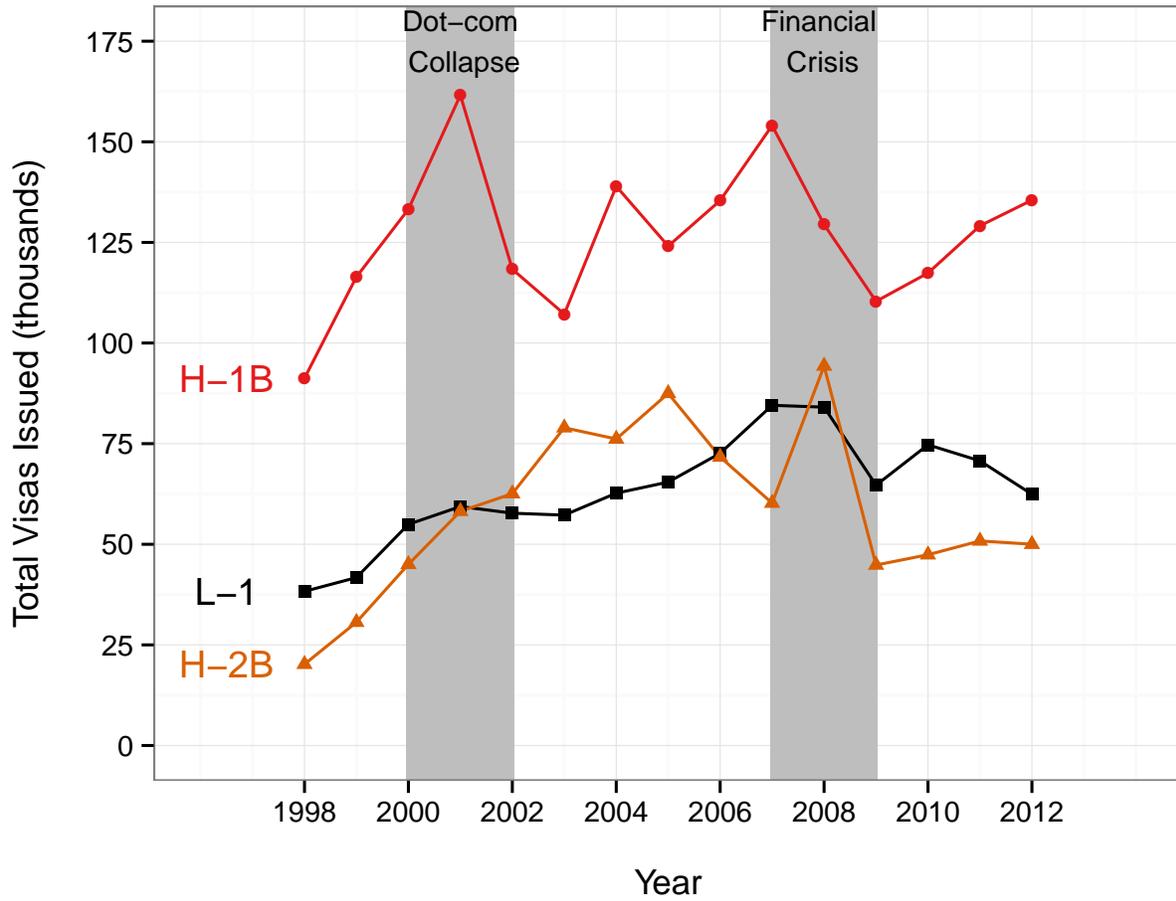
FIG A.3. Migrant Inflows Measured by Visas Issued, 2000 - 2013. *Source*: U.S. Department of State (2015b).
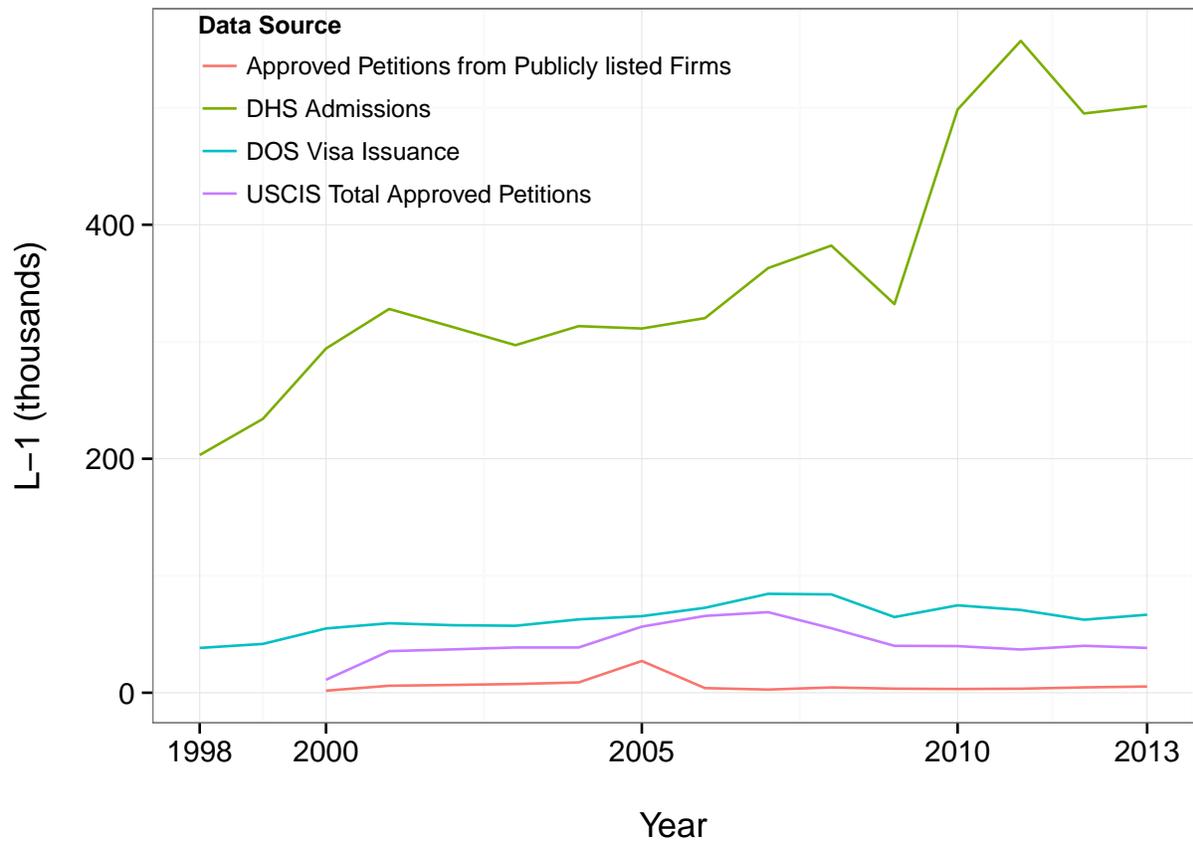
FIG A.4. Comparing Final Sample of Data With All Existing Data on L-1 Visas.
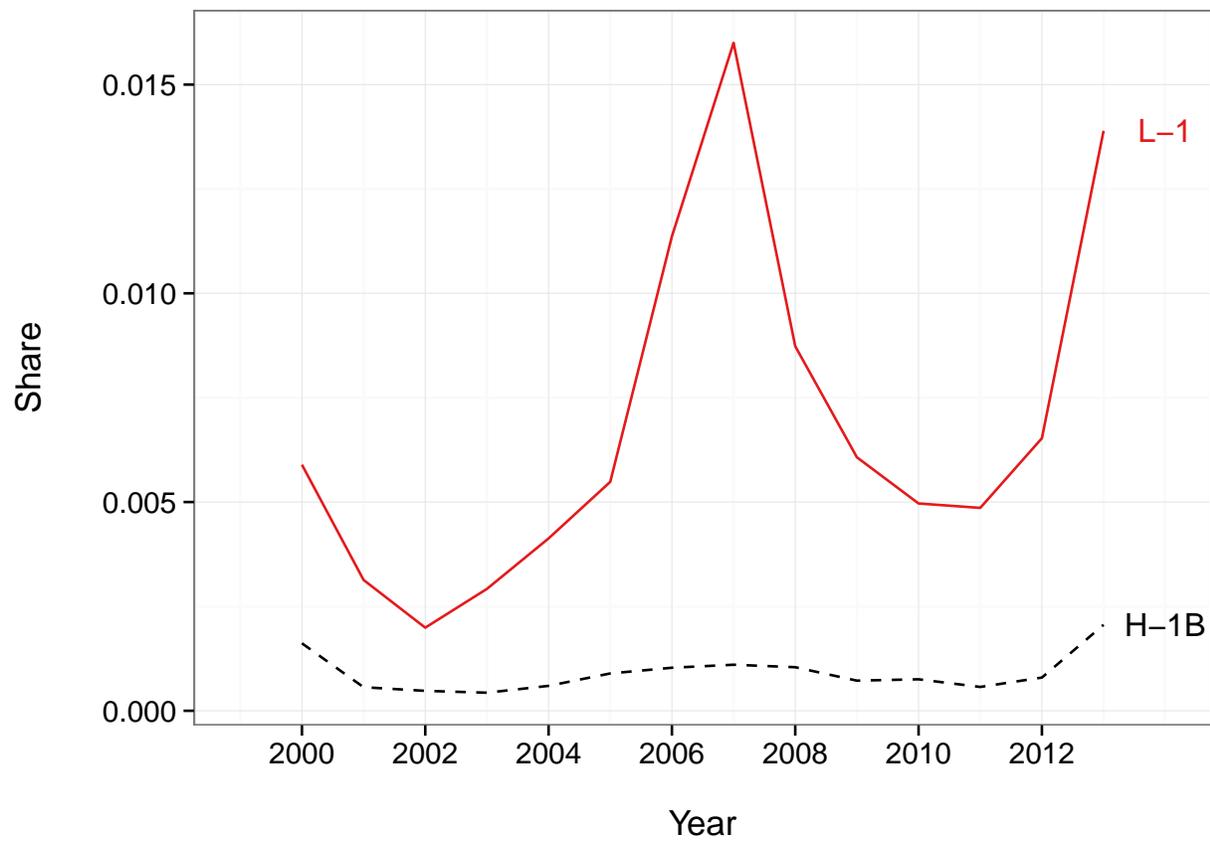
FIG A.5. Share of Petitioning Firms that Also Lobby on Immigration.

Fɪɢ A.6. Screenshot of India's Reciprocity Table from the State Department's Official Website.

Appendix B   Variables and Descriptive Statistics

Variable	*Operationalization*	*Source*
L-1 Visa Validity Length	The maximum length of time for which L-1 visa holders are permitted to travel to a port-of-entry in the US (logged months).	State Department
Cumulative Total Lobbying Reports	The cumulative total of lobbying reports filed by MNCs sourcing transferees in the same country and year.	constructed by author
Cumulative Total Lobbying Expenses	The cumulative total of lobbying expenses spent by MNCs sourcing transferees in the same country and year.	constructed by author
US Trade Dependence	Bilateral trade of goods (exports + imports)/ US Real GDP (log).	UN Comtrade (2013), Feenstra, Inklaar, and Timmer (2013), Taiwan National Statistics (2013)
Regime Type	Polity Score 2.	POLITY IV (Marshall, Jaggers, and Gurr 2012)
Cumulative Terrorist Attacks	Cumulative sum of terrorist attacks in partner country (log).	National Consortium for the Study of Terrorism and Responses to Terrorism (START) (2013)

Table B.1. Variables, Operationalization, Sources
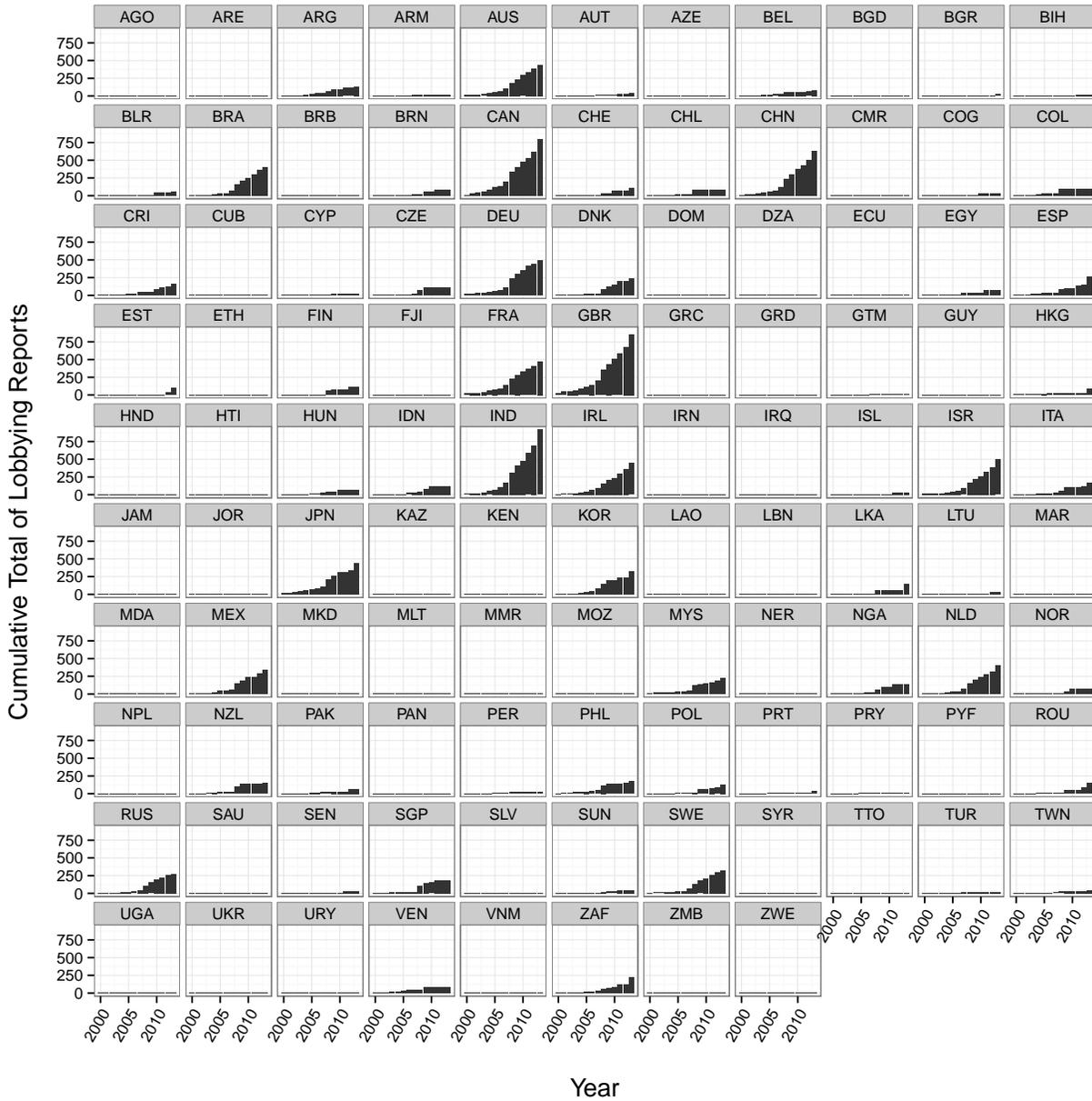
FIG B.1. Cumulative Lobbying Reports by Transferee Origin-Country and Year. India, the United Kingdom, Canada, China, and Israel have the largest total cumulative lobbying reports. The U.S. extended L-1 visa validity lengths for India, the country with the largest total cumulative lobbying reports, from twelve to sixty months in 2006.
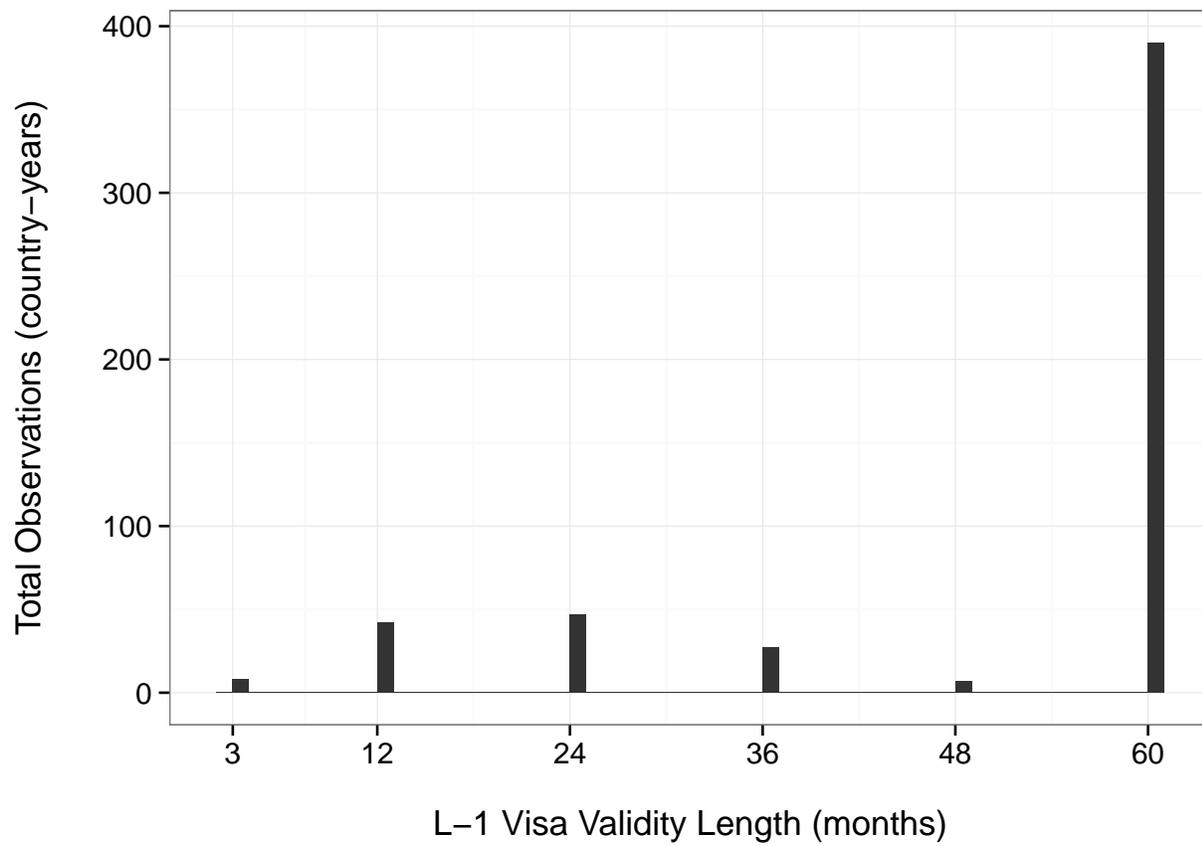
FIG B.2. L-1 Validity by Total Observations (country-years).

Appendix C   Details for Fitted Models

	Multinomial
Intercept (DOS)	-7.554^{***}
	(1.297)
Intercept (Congress)	-0.322
	(0.262)
L-1 Visa Validity (DOS)	-0.006
	(0.013)
L-1 Visa Validity (Congress)	0.008^{**}
	(0.003)
Firm Size (log, DOS)	0.741^{***}
	(0.215)
Firm Size (log, Congress)	-0.137^{**}
	(0.042)
Num obs.	1846
Log Likelihood	-1296.823
AIC	2605.646

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\wedge}p < 0.1$

TABLE C.1. Empirical Analysis on the Choice of Lobbying Venue: Estimates from a Multinomial Logistic Regression Model. Lobbying both venues as the omitted category.

	(1)	(2)
Intercept	−8.667***	−8.550***
	(0.593)	(0.555)
Group Size (Standardized)	−0.408***	−0.651***
	(0.052)	(0.079)
Firm Size	0.750***	0.723***
	(0.033)	(0.032)
Varying Intercept (Industry)	✓	✓
Varying Intercept (Year)	✓	
Varying Intercept (Country)		✓
AIC	6457.620	6791.974
BIC	6496.641	6830.995
Log Likelihood	−3223.810	−3390.987
Num. obs.	18111	18111
Num. groups: industry	55	55
Num. groups: year	14	
Num. groups: country		151

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, ^$p < 0.1$

TABLE C.2. Empirical Analysis on Collective Action Problems in Bureaucratic Lobbying: Estimates from Mixed Effects Logistic Regression Models.

	OLS	OLS + FE	OLS + FE	OLS + FE	OLS + FE	LMM
(Intercept)	3.560***	3.152***	3.600***	3.165***	3.342***	3.541***
	(0.083)	(0.158)	(0.112)	(0.158)	(0.106)	(0.100)
Cumulative Lobbying Reports (log)	0.069***	0.024***	0.095***	0.025**	0.090**	0.039*
	(0.019)	(0.006)	(0.025)	(0.008)	(0.031)	(0.016)
US Trade Dependence				−0.006	−0.085*	
				(0.042)	(0.035)	
Regime Type				0.007	0.055***	
				(0.010)	(0.005)	
Cumulative Terrorist Attacks				−0.003	−0.023**	
				(0.004)	(0.009)	
Country FE		✓		✓		
Year FE			✓	✓		
Country & Year Varying Intercept						✓
Num. obs.	521	521	521	433	433	521
R^2	0.031	0.944	0.046	0.948	0.297	
Adj. R^2	0.029	0.930	0.020	0.934	0.272	
AIC						−361.518
BIC						−323.216
Log Likelihood						189.759
Num. groups: iso3c						105
Num. groups: year						14

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\wedge}p < 0.1$

TABLE C.3. Empirical Analysis on the Effect of Lobbying Intensity: Estimates from OLS and Linear Mixed Effects Models. Cumulative lobbying reports as the main predictor.

	OLS	OLS + FE	OLS + FE	OLS + FE	OLS + FE	LMM
(Intercept)	3.054***	3.012***	3.066***	3.050***	3.030***	3.039***
	(0.357)	(0.171)	(0.291)	(0.174)	(0.303)	(0.271)
Cumulative Lobbying Expenses (log)	0.044*	0.015**	0.049**	0.013*	0.030	0.037*
	(0.020)	(0.006)	(0.019)	(0.006)	(0.021)	(0.015)
US Trade Dependence				0.021	−0.053	
				(0.041)	(0.033)	
Regime Type				0.007	0.059***	
				(0.010)	(0.005)	
Cumulative Terrorist Attacks				−0.002	−0.018*	
				(0.004)	(0.009)	
Country FE		✓				
Year FE			✓	✓	✓	
Country & Year Varying Intercept						✓
Num. obs.	521	521	521	433	433	521
R²	0.016	0.943	0.031	0.947	0.287	
Adj. R²	0.014	0.929	0.005	0.932	0.261	
AIC						−268.396
BIC						−230.094
Log Likelihood						143.198
Num. groups: iso3c						105
Num. groups: year						14

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\wedge}p < 0.1$

TABLE C.4. Empirical Analysis on the Effect of Lobbying Intensity: Estimates from OLS and Linear Mixed Effects Models. Cumulative lobbying expenses as the main predictor.
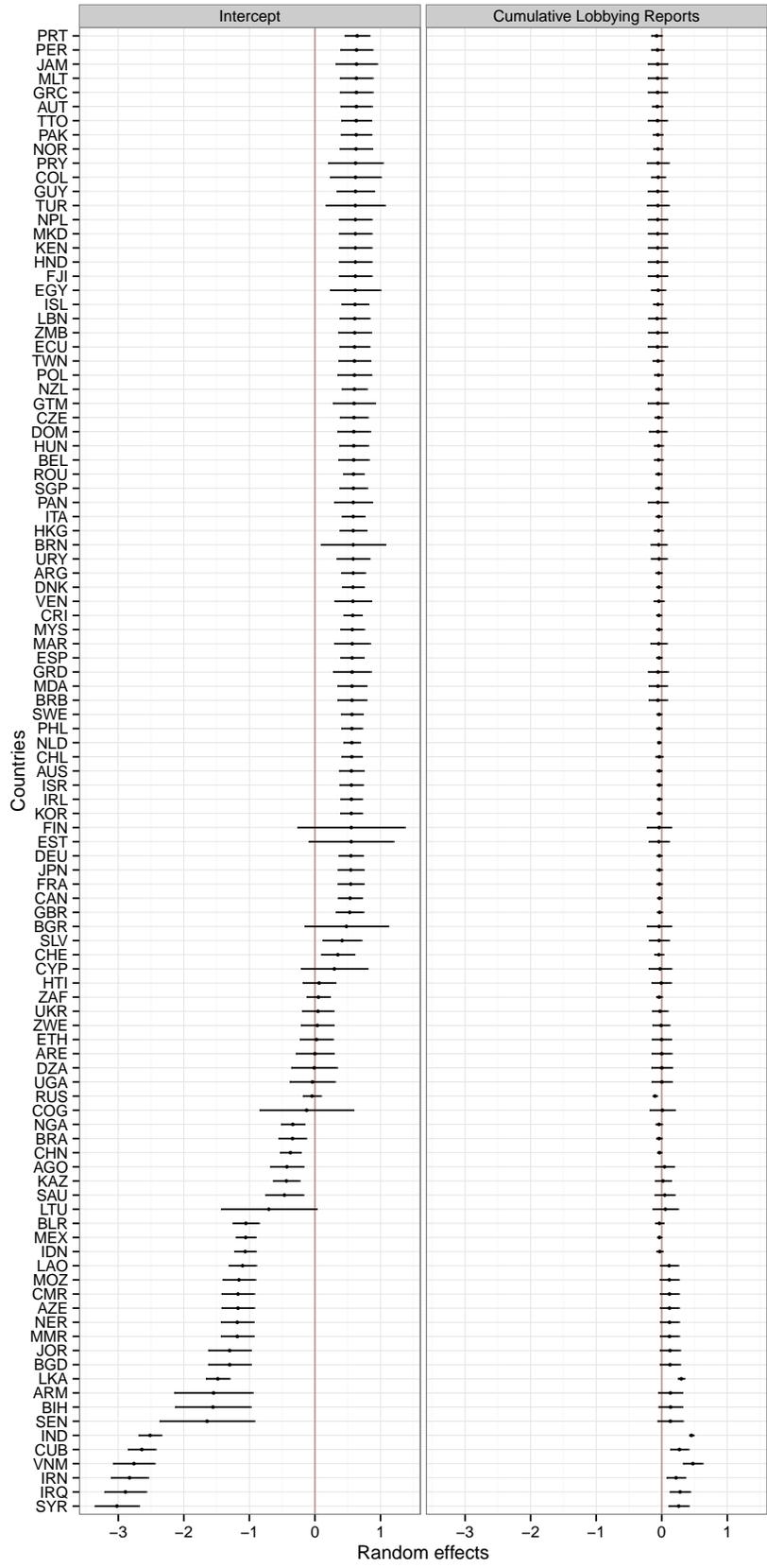
FIG C.1. Fitted Values from Mixed Effects Model: Varying Intercepts for Countries and Varying Slopes for Cumulative Lobbying Reports.

	Poisson	Quasi-Poisson	Logit	Conditional Logit
(Intercept)	3.164***	3.164***	−0.496	
	(0.204)	(0.145)	(0.337)	
Cumulative Lobbying Reports (log)	0.013*	0.013**	0.201*	31.767***
	(0.006)	(0.004)	(0.101)	(0.000)
US Trade Dependence			−0.288^	
			(0.160)	
Regime Type			0.207***	
			(0.026)	
Cumulative Terrorist Attacks			−0.088*	
			(0.041)	
Country FE	✓	✓		✓
AIC	3397.567		405.175	2.000
BIC	3848.676		425.529	
Log Likelihood	−1592.783		−197.588	
Deviance	242.276	242.276	395.175	
Num. obs.	521	521	433	521

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\wedge}p < 0.1$

TABLE C.5. Robustness Tests: Estimates from Count and Logistic Regression Models. Cumulative Lobbying Reports as the main predictor.