Globalized production processes and foreign governmental lobbies:Analysing the United States Foreign Agents Registration Act reports*

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Abstract

This study examines two potentially opposing effects that the current state of trade globalization can have on foreign governmental lobbies in the United States. On one hand, economic globalization and increased flows of goods may lead to more and more contentious issues between trading partners. On the other hand, the growing networks of global value chains (GVCs) may mobilize interest groups in foreign lobbies' target countries (the United States in this study), whose activities might substitute for those of foreign governmental lobbies. With such linkages, an increase in lobbying activities by domestic producers may reduce the need for direct foreign lobbying on contentious issues. The study reveals different effects of forward and backward GVC linkages, and the results have two main policy implications: first, policymakers should be aware of the growing intricate nature of foreign influence; second, more attention must be paid to political consequences of GVCs' distributive effects, particularly those from backward linkages.

Keywords: global value chains, interest groups, international political economy, lobbying

JEL classification codes: D72, F5, F6, F13, F50, O24

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1. Introduction

In the late 1970s Robert Keohane and Joseph Nye presented "complex interdependence" as an alternative to the then-dominant State-centred approach to international relations (Keohane and Nye, 2001). They demonstrated the utility of a model in which the State is not monolithic and multiple channels of contact exist between societies. As globalization continues, their analysis has become increasingly influential.

One aspect of this complex interdependence is the attempt by foreign government agencies and private actors to lobby democratic governments. On one hand, such attempts are often regarded as a threat to legitimate procedures of democracy (Newhouse, 2009). On the other, theorists such as G. John Ikenberry (2001) consider that multiple channels of communication among democracies secure predictability in foreign policy and stabilize the so-called liberal international order. Whether one evaluates such debates positively or negatively, their presence suggests the political significance of foreign lobbies, and understanding their nature is of relevance to policymakers in any democratic country.

The present study explores how the globalization of production, resulting in the expansion of global value chains (GVCs), affects the lobbying activities of foreign government entities in the United States, a democracy that allows extensive lobbying activities by foreign agents and records them. It is based on analyses of Department of Justice reports, semi-annually submitted to Congress, under the Foreign Agents Registration Act (FARA). How foreign actors influence the democratic process is an important issue as flows of goods, services and money across borders increase globally. The findings of this study reveal the evolving nature of foreign lobbying, particularly through linkages with domestic actors, as well as how it reflects the distributive consequences of globalization and thus bears implications for policymakers as well as researchers.

This study contrasts and quantitatively tests two potentially opposing effects that current trade globalization can have on foreign governmental lobbies in the United States. On one hand, the deepening economic ties might cause more friction internationally, thereby offering governments overseas more reasons for lobbying. Economic globalization and greater flows of goods may spur greater contention on more issues between trading partners, issues on which the foreign counterpart will end up lobbying (de Vries, 1990; Lee, 2020). On the other hand, such an increase in economic interdependence might also open multiple channels of communications across borders, lessening the need for lobbying. Today GVC networks have grown, owing to innovation in information technology and foreign direct investment. They may mobilize interest groups in foreign lobbies' target countries (the United States in this study), whose activities might substitute for those of foreign lobbies, as those processes link suppliers and buyers who share interests across borders.

With such linkages, greater lobbying activities by producers in the target country may reduce the need for direct foreign lobbying over contentious issues. This paper focuses on foreign government entities, rather than private actors, as lobbying agents, in part owing to data limitations (i.e. by using FARA reports as data sources); the focus can be justified in light of the roles that foreign government establishments such as embassies play in responding to economic issues, including trade frictions. Still, the scope of this study is limited by this choice; in fact, foreign private actors, especially multinational corporations, today have a variety of ways to influence democratic processes, such as through subsidiaries (Lee, 2022), and so research must give attention to recent work on the role of these actors.

2. Economic interdependence, global value chains and foreign lobbying

The effects of economic interdependence and globalization on international disputes have long been discussed (Barbieri and Schneider, 1999; Mansfield and Pollins, 2001), and the debate regarding the nature of the relationship between globalization and conflict continues (Barbieri, 1996; Li and Reuveny, 2011). Of relevance, prior studies agree that globalization leads to more intensive (both cooperative and conflictual) interactions between States (de Vries, 1990; Peterson and Zeng, 2021). The present study investigates one of various means by which States try to influence other States in this context: foreign governmental lobbying.

Scholars of United States politics have studied the influence of organized interest groups, which have varying degrees of financial resources and mobilizing capacity, and the nature and variety of their lobbying activities (De Figueiredo and Richter, 2014). Lobbying is distinct from making campaign contributions to politicians: it involves spending money on conveying information and messages to people in office rather than directly transferring funds to politicians (De Figueiredo and Richter, 2014).

Lobbying is equally important to foreign government agents who intend to influence policymaking processes in the United States, which are characterized by separation of executive and legislative powers (Tidwell, 2016). Some scholars emphasize that these multiple access points have made the United States–centred international order more benign and "open" (Ikenberry, 2001, p. 205). To realists in the United States, however, such "domestic political penetration" may hinder the pursuit of national interests (Walt, 2005, p. 194).

Contrary to common presumption, lobbying activities by foreign agents typically involve exchanging information and building confidence, rather than seeking immediate policy changes in a particular direction, except under special circumstances. In general, foreign agents are perhaps even more defensive than their domestic counterparts. They lack the electoral leverage enjoyed by domestic interest groups unless they can find connections to powerful groups organized by others of their heritage, as in the case of Israel (James, 2021).

Most foreign lobbying activities, therefore, are conducted in accordance with "the self-perceived political vulnerabilities of these countries" (Calder, 2014, p. 133). Successful lobbying usually stems from making personal and organizational connections, thereby gaining credibility as a provider of information relevant to policymaking and/or building coalitions with politicians and businesses in the country where influence is sought, rather than aggressively seeking to buy influence (Shinoda, 1989).

Scholars have also examined how effective foreign lobbying activities are at achieving specific goals (Pevehouse and Vabulas, 2019). Gawande et al. (2006, p. 563) find that foreign lobbies targeting a specific industrial sector in the United States are effective at reducing tariffs, and thus, not only do those lobbying groups benefit, but also "U.S. consumers gain unambiguously from the presence of foreign political activity." The causes of these activities and how deepening globalization affects them are still underexplored.

Particularly lacking in the literature is research on the effects of GVCs, despite the increased interest they have drawn from scholars and practitioners in recent decades. The growing attention to this particular aspect of globalization is due to the distributive effects of GVCs, how they alter preferences of domestic and transnational actors, and how they result in the formation of coalitions (Dallas et al., 2019).

Baldwin (2012, p. 4) characterizes the deepening globalization of production in recent decades as the "second unbundling", enabled by reduced costs of communication, following the "first unbundling", which was the facilitated flow of goods enabled by reduced transportation costs. Since ideas and information required for complex production processes can be easily transmitted as a result of innovations in information technology, production stages that traditionally needed proximity to one another can be dispersed across borders (Baldwin, 2012).

Scholars of international political economy have recently started to explore the political consequences of this transformation in global production processes (Jensen et al., 2015; Osgood, 2017). A growing literature considers the effect of GVCs on lobbying and trade policymaking domestically (Curran and Eckhardt, 2018; Zeng, 2021), but how they affect foreign lobbies has not been examined sufficiently. An important exception is Lee (2020), who studied diverse security and economic determinants of foreign lobbying activities but did not consider GVCs. The current study contributes by exploring the effects of GVCs on lobbying activities from overseas. Other scholars are now paying more attention to the lobbying activities of multinational firms (Kim and Milner, 2021), particularly those of foreign firms through their subsidiaries

(Lee, 2022 and 2023). The current study seeks to complement this research by focusing on governmental actors, which still play an important role, particularly in relation to foreign private actors that do not have overseas subsidiaries.

3. Trade, GVCs and foreign lobbies: theoretical background

This section presents a theoretical argument for how GVC integration can affect foreign lobbying activities in the United States, in contrast to the trade in goods traditionally measured, focusing on the connections to mobilizing domestic interest there.

Gross trade volume has long been used as a measure to capture economic interdependence in bilateral relations (OECD and WTO, 2012). Scholars still use total trade volumes to measure economic interdependence and the opportunity costs of potential military disputes between trading partners and their allies (Chen, 2021). Research has also shown positive effects of trade on foreign lobbying activities resulting from greater independence (Lee, 2020). Here, the logic of collective action (Olson, 1965) and the framework of exit or voice proposed by Hirschman (1972) are used to explain how participation in GVCs can add to the effects of trade (Zeng, 2021).

In traditional trade relations, both imports and exports mobilize interest groups whose interests might clash with those of foreign producers or governments. Importcompeting producers can organize themselves more easily, because of their small size and their concentration, whereas consumers who benefit from those imports cannot overcome the collective action problem (Irwin, 1994). Scholars discuss how import competition from abroad, particularly from emerging economies such as China, could dampen wages and employment, fostering protectionist sentiments and policies in the United States (Autor et al., 2020). Foreign governments and companies whose exports to the United States cause friction must alleviate such negative consequences by lobbying United States government institutions to gather information and by seeking to influence policy outcomes when possible.

Similarly, United States exporters could mobilize to demand lower barriers to foreign trade. The United States Trade Representative issues the annual *National Trade Estimate Report on Foreign Trade Barriers*, which documents United States firms' complaints about foreign trade practices (Ryu and Stone, 2018), to which foreign governments may feel compelled to respond.

Participation by United States firms in global production networks may affect the details, as firms are now intricately tied across borders. Zeng (2021) proposes to frame firms' preferences for trade liberalization and protectionism according to Hirschman's (2010) logic of exit and voice, but under globalization, foreign actors can utilize voice in the target country to pursue their interests. For instance,

a foreign firm providing auto parts to a car manufacturer in the United States will more easily find an ally in the United States on trade issues, lessening the need for diplomats from the firm's country to lobby.

The present study argues from the United States perspective that two types of GVC participation affect foreign governmental lobbying differently. The first mode is forward linkages, by means of which United States firms sell intermediary goods and services, and the second is backward linkages, whereby United States firms purchase intermediary goods and services (Baldwin, 2012).

Among the modes of GVC participation, the effects of forward participation for United States firms and the consequences for foreign governments and companies should not be overlooked. Forward GVC linkages tend to mobilize United States firms to lobby on behalf of, rather than against, foreign buyers that source intermediaries from them. It is therefore likely that deeper GVC linkages will lead to less need for lobbying by the foreign governments those foreign firms reach out to.

Scholars of industrial organization have emphasized that power relations between suppliers and downstream firms depend on the type of governance of the value chains. Gereffi et al. (2005), in their seminal work, classified the types into hierarchical, captive, relational, modular and market-based, in order of higher to lower vertical integration. Suppliers in a more arms-length production network will find it easier to switch buyers (Gereffi et al., 2021).

Yet, Dallas et al. (2019, p. 670) emphasize that "with a few exceptions, the ability of lead firms to determine the functional division of labor along a GVC through buyer power continues, as the central hypothesis and empirical result of much firm and industry-level GVC research". Such deepening relations may also hurt users of those services or inputs in domestic value chains (Pan, 2020), but the hurdle of organizing themselves to demand that the foreign importing countries raise trade barriers would be much higher than in the case of mobilization by United States firms that operate domestically. Even when they are mobilized against imports of final products using inputs from the United States, the country's upstream firms will act as a counterweight. In one case study, Meckling and Hughes (2017) demonstrate that upstream electronics and toolmaking firms and organizations in the United States, as well as upstream manufacturers in Japan and Europe, oppose the imposition of trade sanctions against solar photovoltaics.

Conversely, the participation mode that draws the most attention as regards GVC effects on lobbying in the United States is backward participation – mainly United States firms engaging in input sourcing with overseas producers upstream (e.g. a car manufacturer sourcing its auto parts from East Asian suppliers) (Jensen et al., 2015; Zeng, 2021). How this type of production network affects foreign governmental lobbies is more uncertain, as it mobilizes two opposing lobbies domestically.

The development of such GVC linkages has caused a backlash against globalization, particularly from local economies and specific industries, which face concentrated impacts from such changes (Congressional Research Service, 2020). For example, Di Tella and Rodrik (2020) demonstrated that information on trade shocks stemming from outsourcing (particularly to developing countries) led to stronger protectionist demand than did information on technology or demand shocks.

As Osgood (2017) points out, firms that participate in globalized production processes make better profits and are better poised to lobby as proponents of trade. Meanwhile, trade opponents are forced to be much less active, as the presence of trade associations representing them has diminished. In contrast to trade in goods, beneficiaries of those imports are firms, not individuals, and can organize themselves more easily. Thus, disruption in such supply chain networks would lead to increased costs for United States buyers, who would oppose policies that hurt overseas suppliers in the production network.

Yet, as explained earlier, there remain opponents to this kind of progress in economic integration. Thus, despite the potential transnational coalitions stemming from backward GVC participation by United States firms, the influence of these coalitions is offset by the opposition to deepening GVC linkages, prompting foreign agents to engage in more lobbying to counter them.

The argument so far suggests that both forward and backward GVC participation can lead to increased domestic lobbying, leading us to posit that *the degree of GVC participation in an industry is positively associated with domestic lobbying in that industry in the United States (H1)*.

Regarding foreign lobbying, this argument requires distinguishing forward and backward linkages. It posited that increased lobbying from United States sectors linked to GVC networks through forward linkages can substitute for lobbying by foreign lobbies while facing only minor countervailing forces such as protectionist demands (which emerge in the case of backward linkages), and thus predict that *forward GVC participation reduces lobbying activities by the government of the foreign country in the production network (H2a).* Conversely, domestic lobbying in response to backward linkages includes both activities that complement foreign lobbies and those that further stimulate them, especially from actors that are discontented with competitive pressures from foreign suppliers. Therefore it is predicted that *backward GVC linkages have more positive effects on lobbying activities in the United States by a foreign government than does forward GVC participation in such a GVC network (H2b)*, although it is difficult to predict the exact direction of such effects.

The argument here should apply to both foreign lobbying specific to trade issues and to foreign lobbying in general. Trade-related vulnerabilities that foreign governments experience and are compelled to address through lobbying can also be exploited

in connection with other issues, such as security; the experience of Japan in the 1980s illustrates this point (Calder, 2014; Shinoda, 1989). Similarly, the expansion of lobbying operations by Australia in the 1980s can be ascribed to deepening tensions over agricultural trade and the concern that they might undermine the Australia–United States alliance (Tidwell, 2016).

4. Research design and quantitative results

4.1. Data and methods

To test the theoretical arguments, the author uses two panel data sets. First, to test H1, on how GVC linkages affect domestic lobbying in the respective industries in the United States, data on domestic lobbying expenditures by industry were collected from the LobbyView database used in Kim (2018).¹ For GVC participation rates, the author used the UIBE-GVC indicators developed by the Research Institute for Global Value Chains of the University of International Business and Economics in China (RIGVC UIBE, 2021) and averaged the forward and backward GVC participation rates for each country-year. The model controls for gross output (United States, Bureau of Economic Analysis, 2021b), size of employment (United States, Bureau of Economic Analysis, 2021a) and gross import and export volumes in each industry (OECD, 2021). The data were merged using the International Standard Industry Classification (ISIC) codes,² after converting data with the North American Industry Classification System (NAICS) into ISIC codes.

For the main models testing the relationship between GVC linkages and foreign governmental lobbying, another data set was compiled,³ this one covering 194 economies between 2000 and 2015 (unit of analysis is country-year).⁴ The primary dependent variable is the annual amount of lobbying expenditure (in constant 2010 United States dollars) from each country, reported under the FARA. The current study uses spending on lobbying as the primary measurement of lobbying intensity, following previous studies on domestic (Zeng et al., 2020) and foreign (Pevehouse and Vabulas, 2019) lobbying. A problem with this measurement is that reporting expenditures is not mandatory, whereas registering agents is, as Lee (2020) points out.⁵

¹ Available at www.lobbyview.org/query.

² From the UIBE-GVC data, 05T06 was used for mining (05T09 in other data sets) and 90T96 for arts, entertainment and other services (90T98 in other data sets).

³ The replication materials for this study will be made available on the author's Harvard Dataverse page.

⁴ Territories that are not assigned country codes in the Correlates of War data set (https://correlatesofwar. org/data-sets/cow-country-codes-2/), such as Bermuda and Hong Kong (China), are not included.

⁵ Alternatively, these expenditures can be viewed as costly public signals of how serious agents are about the issues that they are lobbying for (Zeng et al., 2020).

These analyses are thus complemented with ones using the annual number of records from each country in the FARA reports, using negative binomial models (Prakash and Potoski, 2006).

Several scholars have used FARA reports to explore the causes and consequences of overseas lobbying activities in the United States. You (2020) provides an overview of the history of the FARA reporting system and explains how to obtain information (from supplemental documents that accompany the reports) about which government officials lobbying agents have contacted. Lee (2020) compiles annual and semi-annual FARA reports from 1971 to produce a data set on foreign lobbying activities in the United States. As of this writing, those data sets are not publicly available; thus, the texts were extracted from FARA reports to obtain the information needed, partly based on these scholars' methodologies, in particular Lee's (2020).

The reports cover several activities of agents who represent foreign principals, from the promotion of tourism and investments to advertising to public relations and lobbying. This study limits the entries to those whose services include the terms lobbying, public relations and consultant, as they evidence activities linking foreign principals and United States public officials.

The lobbying activities analysed in this study are limited to those conducted by foreign government entities (both central and subnational). This is partly owing to the difficulty of assuming homogeneous motivations behind lobbying by foreign private actors. Foreign private entities also dramatically decreased the activities they reported under FARA starting in the 2000s, as the Lobbying Disclosure Act of 1995 allowed foreign companies with subsidiaries in the United States to submit their reports under this less stringent act (You, 2020). In this study, the keywords used to identify government entities from client names include the following: government, embassy, republic, ministry, department, consulate and ambassador – following the coding rule in Lee (2020, p. 79), to which the author added kingdom, delegation, mission, authority, administration, province, provincial, prefecture and city, as well as agencies and offices as part of the government, domestic regions and incumbent presidents, monarchs, ministers and governors.⁶

The author tests the theoretical argument on the relationship between GVC linkages and gross trade volume with the data on lobbying activities in general and on trade-related ones. To identify trade-related lobbying, following Lee (2020), in the sections explaining the services provided by the agents the author uses these

⁶ The keywords listed did not cover government entities of the Russian Federation or of the Federation of Bosnia and Herzegovina. Because the keyword "federation" alone covers both governmental and private entities, the names of the nation and the region were included as keywords to ensure coverage.

key terms: trade, export, import, FTA, NAFTA, CAFTA, DRCAFTA, FTAA, NAFTAS, KFTA, CAFTAS, KORUSFTA, TPP, GSP, MCOOL, tariff, custom, customs, AGOA, TPL, WTO, GATT, MFN, anti-dump and Caribbean & Basin.

As the main independent variables for United States forward and backward GVC participation, the author uses the UNCTAD-Eora Global Value Chain database (Casella et al., 2019), which has the most extensive geographical coverage (189 countries) among several alternatives. The variable for forward GVC linkage indicates the amount of value added from the United States to each target country's exports, and backward GVC linkage refers to the amount of value added from each target country to the United States exports (both in thousands of constant 2010 United States dollars). The other two variables to be compared with the GVC linkages are total (gross) exports and imports; these come from the Correlates of War data set on international trade (Barbieri and Keshk, 2016; Barbieri et al., 2009) (in millions of constant 2010 United States dollars).⁷

Regarding control variables, as this statistical analysis explores the causal effects of GVC and trade variables rather than foreign lobbying activities per se, the models include only those that can be considered as correlating with both independent and dependent variables.

Previous research has shown that free trade agreement (FTA) negotiations and alliance relations positively affect lobbying activities in the United States, whereas the presence of an FTA and a greater degree of democracy make lobbying from a country less active (Lee, 2020). These variables could also correlate with the GVC integration of the United States with those countries; therefore, this study controls for them. The present formation of FTAs is found to be associated with GVC networks (Anderer et al., 2020). Here, a country is regarded as being in FTA negotiation (one variable) in a given year from one to three years before the conclusion of an FTA that is registered at the World Trade Organization.⁸ Also included is a variable for pre-FTA negotiation, indicating one to three years before the assumed start of negotiation of an FTA. Furthermore, security alliances affect trade (Gowa, 1995); thus, to identify United States allies, this study uses the Alliance Treaty Obligations and Provisions (ATOP) data (version 5.1) (Leeds et al., 2002).⁹

Moreover, the United States imports heavily from resource-rich countries; such trading relations do not seem to require GVC formation.¹⁰ A variable for democracy

⁷ Missing observations in trade flows in the original data set are replaced with zeros.

⁸ The data for FTAs come from the Gravity data set of CEPII (Centre d'Études Prospectives et d'Informations Internationales) (Conte et al., 2022).

⁹ From the ATOP data set, only the alliance relationships that include defensive obligations are included.

¹⁰ See tables 3 and 4 later in this section.

is included, measured with the Electoral Democracy Index from the Varieties of Democracy (V-Dem) data set.¹¹

Finally, as lobbying may be affected by the relative importance of trade for the lobbying governments, rather than in the other direction, the models account for trade dependence – namely (log((US export + US import)*100/GDP+1))) – as well as population, gross domestic product (GDP) per capita and membership in the General Agreement on Trade and Tariffs (GATT) from the CEPII Gravity data set.¹²

Figure 1 shows how total and trade-related lobbying expenditures changed during 2000–2015, indicating that the level of spending had not quite recovered since the financial crisis of 2007–2008. In particular, trade-related lobbying expenditures declined steadily since then.



Figure 1. Total and trade-related lobbying expenditures, 2000–2015 (Millions of constant 2010 United States dollars)

Source: Author's calculation, based on FARA reports, 2000–2015.

¹¹ The data set used for this study was "Country-year: V-Dem core", V-Dem Dataset version 9 (2019) (https://v-dem.net/data/dataset-archive). For the construction of the variable, see V-Dem Codebook (Coppedge et al., 2019).

¹² They compiled the population and GDP data from the World Bank Development Indicators, Barbieri (2005), Angus Maddison's Statistics on World Population and the national statistical agency of Taiwan Province of China and the GATT membership data from WTO. For a detailed explanation of the original sources, see Conte et al. (2022).

The biggest lobbying spenders in the three periods (2000–2004, 2005–2009, 2010–2015) are listed in table 1. These are mainly United States allies (e.g. Canada, the Republic of Korea, Türkiye), geostrategically important non-allies (e.g. Ethiopia, Qatar, Saudi Arabia) and several post-conflict countries (e.g. Angola, Haiti, Liberia). The list of the largest spenders on trade-related lobbying (table 2) looks similar but also includes those with stronger economic ties with the United States, such as Israel and Japan.

Figure 2 shows the general trends in United States GVC participation, both backward and forward. It indicates that both modes of participation increased steadily until the Great Recession and have stagnated since then. The top 10 countries with the strongest GVC linkages to the United States are listed in tables 3 and 4, and more detailed descriptive statistics appear in appendix table.

Table 1. Reported lobbying expenditures, top 10 economies (Constant 2010 United States dollars)

	2000–2004		2005-	2009	2010–2015	
	Country	Lobbying expenditure	Country	Lobbying expenditure	Country	Lobbying expenditure
1	Liberia	67 897 981	Liberia	140 654 436	Liberia	81 934 527
2	Angola	38 693 451	Saudi Arabia	51 361 921	Saudi Arabia	35 021 495
3	Ethiopia	27 658 884	Iraq	42 051 845	United Arab Emirates	24 702 743
4	Saudi Arabia	26 163 673	United Arab Emirates	32 304 207	Morocco	18 681 517
5	Canada	21 181 366	Canada	23 037 507	Canada	17 974 186
6	Türkiye	17 807 193	Türkiye	16 718 522	Republic of Korea	16 859 305
7	Panama	13 356 192	Bahamas (the)	13 205 094	Türkiye	14 655 624
8	Bahamas (the)	12 887 730	Morocco	12 248 073	Iraq	13 674 078
9	Haiti	9 581 371	Cyprus	12 149 029	Mexico	13 180 793
10	Ukraine	8 282 708	Taiwan Province of China	11 816 856	Japan	12 047 397

Source: Author's calculation, based on FARA reports 2000-2015.

Table 2. Reported trade-related lobbyin	g expenditures, top 10 countries
(Constant 2010 United States dollars)	

	2000–2004		2005	2005–2009		2010–2015	
	Country	Trade lobbying	Country	Trade lobbying	Country	Trade lobbying	
1	Ethiopia	19 550 693	Canada	17 651 461	Canada	8 451 322	
2	Canada	13 721 355	Saudi Arabia	15 112 404	Republic of Korea	8 004 483	
3	Angola	7 868 161	Iraq	9 487 138	Israel	7 229 387	
4	Barbados	3 952 214	Trinidad and Tobago	7 410 350	Japan	6 419 709	
5	Israel	3 701 906	Angola	4 867 077	Iraq	5 740 443	
6	Venezuela (Bolivarian Republic of)	3 387 498	Panama	4 191 747	Bahrain	1 948 427	
7	Bahamas (the)	3 171 577	Israel	4 042 695	Angola	1 628 135	
8	Mexico	3 000 314	Japan	2 450 351	Trinidad and Tobago	1 484 699	
9	Qatar	2 857 195	Côte d'Ivoire	2 373 136	Qatar	1 356 323	
10	India	2 789 144	China	2 313 484	Mexico	1 271 678	

Source: Author's calculation, based on FARA reports, 2000–2015.

Figure 2. United States forward and backward GVC participation, 2000–2015

(Billions of constant 2010 United States dollars)



Source: Author's calculation, based on Casella et al. (2019).

Table 3. Top 10 economies for United States forward GVC linkages (Thousands of constant 2010 United States dollars)

	2000–2004		2005-	2005-2009		2010–2015	
	Economy	Forward GVC	Economy	Forward GVC	Economy	Forward GVC	
1	Canada	369 952 976	Canada	456 915 112	Canada	580 897 344	
2	Mexico	169 311 694	Germany	249 251 708	Germany	336 733 376	
3	Germany	160 298 190	Mexico	191 636 560	Mexico	258 469 956	
4	Netherlands (Kingdom of the)	102 295 088	Netherlands (Kingdom of the)	145 073 816	Netherlands (Kingdom of the)	194 439 854	
5	United Kingdom	86 835 496	United Kingdom	110 747 500	China	165 920 230	
6	Japan	79 442 428	Japan	109 023 722	Singapore	149 974 186	
7	Belgium	70 678 563	Belgium	103 285 800	United Kingdom	141 894 690	
8	Ireland	69 415 163	Ireland	98 259 978	Japan	137 648 634	
9	Singapore	68 321 286	Singapore	97 824 169	Belgium	131 784 354	
10	France	64 041 228	China	95 844 915	Ireland	127 819 476	

Source: Author's calculation, based on Casella et al. (2019).

Table 4. Top 10 economies for United States backward GVC linkages (Thousands of constant 2010 United States dollars)

	2000–2004		2005–2009		2010–2015	
	Economy	Backward GVC	Economy	Backward GVC	Economy	Backward GVC
1	Canada	103 367 518	Canada	172 093 718	Canada	251 884 704
2	Japan	66 986 874	Japan	73 879 920	China	125 953 668
3	Germany	36 667 870	Venezuela (Bolivarian Republic of)	68 487 859	Venezuela (Bolivarian Republic of)	117 417 438
4	Mexico	34 758 215	China	68 229 595	Japan	89 032 426
5	China	30 044 325	Germany	58 522 648	Mexico	83 038 129
6	Venezuela (Bolivarian Republic of)	27 690 500	Mexico	54 968 497	Germany	80 720 300
7	United Kingdom	25 814 765	United Kingdom	33 618 563	United Kingdom	44 217 666
8	France	19 245 055	France	29 542 367	France	40 618 621
9	Italy	13 906 191	Italy	21 641 891	Republic of Korea	31 009 113
10	Taiwan Province of China	12 861 937	Republic of Korea	20 527 935	Russian Federation	29 854 645

Source: Author's calculation, based on Casella et al. (2019).

To analyse the relationship between GVC participation and United States domestic lobbying in individual industries, we estimate the following dynamic model (Croissant and Millo, 2019), as industry lobbying in a given year is expected to be strongly predicted by that in the past year:

$$y_{it} = y_{i(t-1)}\rho + , \mathbf{x_{it}}\beta + \alpha_i + \gamma_t + u_{it}$$

where y_{it} is the dependent variable (lobbying expenditure or count in a given ISIC industry group *i* in year *t*), \mathbf{x}_{it} is the vector of independent variables, and α_i and γ_t are industry and time-fixed effects, respectively.

Because the data set for this analysis is characterized by particularly short time periods (T = 11), the traditional estimators with lagged dependent variables might suffer from Nickell's bias (Nickell, 1981). Recently, Breitung et al. (2022) and Kripfganz and Breitung (2022) proposed a bias-corrected estimator implementable with the STATA command *xtdpdbc*, which corrects the bias by adjusting moment conditions while retaining small variance of the fixed-effects (and random-effects) estimators.

In building a statistical model for the main hypotheses (*H2a* and *H2b*, on the relationship between GVC linkages and foreign lobbying) to explore the relationship between the dependent and independent variables, an issue must be addressed: the data set contains many observations for the dependent variable – lobbying expenditure – that are zero, indicating that the dependent variable is censored at zero, which can lead to biased coefficient estimates from ordinary least squares or other conventional regression models (Henningsen, 2010). Therefore, the author estimates random-effect panel tobit models, a common approach taken in studies of international political economy that handle censored dependent variables, such as foreign aid allocation (Dreher et al., 2012). Its estimation model (Berthélemy and Tichit, 2004; Henningsen, 2010; Tobin, 1985) can be written as follows:

$$y_{it} = max(0, y_{i(t-1)}\rho + \mathbf{x}_{it}\beta + v_t + u_{it})$$

where y_{it} , the dependent variable, stands for the amount of lobbying expenditure by a given country *i* in year *t*; \mathbf{x}_{it} is a vector of independent variables; and v_t is the time fixed effects (that are not reported in the regression tables); y_{it} is zero when $y_{itt-1}\rho + \mathbf{x}_{it}\beta + v_t + u_{it} < 0$.

As most of the registered foreign agents continue their activities over multiple years, we can expect that the current level of lobbying from a given foreign country will depend on that in the past year, so we include the lagged dependent

variable $y_{i(t-1)}$.¹³ Considering the time to respond from the foreign agents' perspective, GVC and trade variables are lagged by one year (which applies to the negative binomial models below, too). It is estimated with the maximum-likelihood method using the mean-variance adaptive Gauss–Hermite quadrature, with the STATA command *xttobit*.

Similar models with annual numbers of records as the dependent variable are also estimated. Since the dependent variable consists of integers equal to or more than zero and the data pose an issue of overdispersion, the models are estimated with the negative binomial random-effects model with year fixed effects (Cameron and Trivedi 2013; Prakash and Potoski 2006), with the following equation:

$$\boldsymbol{\mu}_{tt} = exp(\boldsymbol{y}_{i(t-1)}\boldsymbol{\rho} + \boldsymbol{x}_{tt}\boldsymbol{\beta}), var(\boldsymbol{y}_{it}) = g\boldsymbol{\mu}_{tt} \cdot \boldsymbol{\alpha}$$

where g is the negative binomial distribution function and α indicates the dispersion parameter.

4.2. Results

Table 5 presents the results of the analyses on how GVC participation affects *domestic* lobbying by industry in the United States (*H1*). GVC linkages are positively correlated with the logged number of lobbying activities by firms in their respective industries, but not with the amount of their spending. Perhaps lobbying expenditure reflects a lot of factors, such as agents' efficiency and pricing, so the count may reflect the intensity of lobbying for our purposes here. Contrary to our expectations, the results demonstrate a statistically significant negative coefficient for gross exports, with the log number as the dependent variable. One possible explanation is that export interests concentrate their effort in their delegation to the United States Trade Representative (De Bièvre and Dür, 2005). There needs to be further discussion on how future traditional trade in goods mobilizes domestic interest groups.

Figure 3 presents the coefficients and standard errors for the main independent variables (for the full results, see table 6). Overall, the hypotheses about forward (*H2a*) and backward (*H2b*) GVC participation are supported. Forward GVC linkages are associated with reduced foreign lobbying activities, in terms of both overall and trade-related foreign government lobbying (*H2a*). Moreover, the results for backward GVC linkages are consistent with *H2b*, showing positive correlations

¹³ Due to concerns over the problem of incidental parameters (Cameron and Trivedi, 2013; Lancaster, 2000) and Nickell's bias (Nickell, 1981), the tobit models and the negative binomial models explained below do not include country fixed effects.

Table 5. Effects of GVC participation on domestic lobbying by industry, 2005–2015

	(1)	(2)		
Variable	Lobbying spen	ding (logged)	Lobbying count (logged)		
Gross output (logged)	0.237 (0.531)		0.555*	(0.248)	
Import (logged)	0.056	(0.482)	-0.092	(0.120)	
Export (logged)	-0.541	(0.675) -0.		(0.127)	
Employment (logged)	0.869	(1.100)	-0.103	(0.288)	
GVC participation	3.640 (5.533) 4.301		4.301*	(1.996)	
Observations	320		320		

Source: Author's estimations.

Note: Standard errors in parentheses. Dynamic panel model with a one-year lag and two-way fixed effects (not shown in the data set) using bias-corrected method-of-moments estimators proposed by Breitung et al. (2022). * p < 0.05, ** p < 0.01.

Figure 3. Effects of trade and GVC participation on foreign lobbying



Source: Author's estimation.

Note: Confidence intervals of 90 per cent (thin) and 95 per cent (thick).

with both overall and trade-related lobbying activities, which seems to lead to more lobbying than forward GVC linkages. Notably, while gross exports are positively associated with foreign lobbying activities, gross imports do not seem to be associated in a significant way. As discussed in the theory section, the distributional impacts of import competition may be felt more strongly by industries integrated into the global production processes through backward GVC linkages, particularly as they develop at the expense of domestic suppliers. These effects may have broad ramifications such as exciting public sentiment against countries to which activities are outsourced or deteriorating bilateral relations, which need to be dealt with outside the scope of trade negotiations, and which may explain why the association is statistically significant for overall lobbying activities as well.

	(1)	(2)			
	Foreign go lobbying	vernment , overall	Foreign government lobbying, trade-related			
Lagged dependent variable	1.022**	(0.047)	1.265**	(0.097)		
Log US exports	0.903*	(0.398)	2.225**	(0.907)		
Log US imports	-0.036	(0.307)	-0.060	(0.720)		
Log Forward participation	-1.106**	(0.328)	-1.405*	(0.659)		
Log Backward participation	0.488+	(0.280)	1.106+	(0.651)		
Democracy	-2.492+	(1.513)	-4.538	(2.952)		
US ally	-0.000	(0.823)	-0.077	(1.652)		
FTA partner	0.023	(1.069)	-0.577	(1.950)		
FTA negotiation	2.827*	(1.370)	9.123**	(2.234)		
Pre-FTA negotiation	1.689	(1.439)	5.158*	(2.405)		
Trade dependence on the United States, log percentage	0.774	(0.696)	1.966	(1.544)		
Log Population	1.018	(0.681)	0.306	(1.522)		
Log GDP per capita	0.618	(0.620)	-0.891	(1.431)		
WTO/GATT member	0.634	(0.824)	0.378	(1.640)		
Trend	-0.048	(0.070)	-0.160	(0.147)		
Constant	-11.40**	(4.296)	20.55*	(9.577)		
Observations	2 534		2 53	34		

Table 6. Panel tobit model of foreign lobbying expenditures

Source: Author's estimations.

Note: Random-effect tobit model with year fixed effects (not shown in the table). Standard errors in parentheses. * p < 0.10, * p < 0.05, ** p < 0.01.

The signs of the control variables' effects are mostly as expected based on this model. Countries that score lower on the electoral democracy index spend more money on overall lobbying. Countries engaging in FTA negotiations are more active in lobbying (and also those in the pre-negotiation stage for trade-related lobbying), although being an FTA partner does not seem to reduce activities in a statistically significant way. Trade dependence on the United States appears to increase lobbying activities, but this effect is not statistically significant. A security alliance with the United States does not seem to have a significant effect.

The results for the negative binomial models shown in figure 4 are similar to the ones with lobbying expenditures as the dependent variable (for the full results, see table 7).

Figure 4. Effects of trade and GVC participation on foreign lobbying: negative binomial model



Source: Author's estimation.

Note: Confidence intervals of 90 per cent (thin) and 95 per cent (thick).

	(1)		(2)		
	Foreign go lobbying co	vernment unt, overall	Foreign government lobbying count, trade-relate		
Lagged dependent variable	0.111**	(0.004)	0.301**	(0.021)	
Log US exports	0.147**	(0.057)	0.206	(0.128)	
Log US mports	-0.019	(0.044)	-0.032	(0.102)	
Log Forward participation	-0.110*	(0.053)	-0.262**	(0.100)	
Log Backward participation	0.102*	(0.046)	0.285**	(0.105)	
Democracy	-0.435+	(0.247)	-0.632	(0.453)	
US ally	-0.371*	(0.156)	-0.006	(0.267)	
FTA partner	-0.020	(0.146)	0.275	(0.263)	
FTA negotiation	0.397**	(0.152)	1.189**	(0.265)	
Pre-FTA negotiation	0.207	(0.160)	0.921**	(0.267)	
Trade dependence on the United States, log percentage	0.187+	(0.099)	0.402+	(0.211)	
Log population	0.164	(0.109)	0.187	(0.225)	
Log GDP per capita	0.054	(0.095)	-0.090	(0.197)	
GATT/WTO member	-0.093	(0.097)	-0.015	(0.216)	
Trend	-0.011+	(0.007)	-0.022 (0.015		
Constant	-0.161	(0.676)	-1.420 (1.403)		
Observations	2 5	34	2 534		

Table 7. Panel negative binomial models on foreign lobbying cases

Source: Author's estimations.

Note: Standard errors in parentheses. Random-effects negative binomial models with year-fixed effects (not shown in the table). p < 0.10, p < 0.05, p < 0.01.

5. Discussion and illustrative cases in the literature

The quantitative analysis in section 4 mostly supports the theoretical argument in section 3. First, the analyses with the first data set on domestic lobbying activities by industry provide partial evidence of a positive association between GVC participation and private lobbying activities in the United States. Second, the results from the main models on foreign lobbying demonstrate that United States exports are strongly associated with increased lobbying activities from importing countries, whereas the United States forward GVC linkages are seemingly negatively correlated with lobbying activities. Moreover, the effects of backward GVC participation aligned with the author's expectation, although those of United States imports did not. The results showed null effects with United States imports, and GVC participation was associated with increased overall lobbying activities from overseas. This may indicate that the current phenomena representing the backlash to globalization derive from GVC integration rather than from overall imports. Although the first part of the analysis concerns the industry level and the second looks at the country level, when combined they provide partial support for the argument that forward GVC linkages make United States domestic lobbying a substitute for foreign lobbying, whereas backward GVC linkages increase both at the same time.

The remainder of this section presents several cases discussed in the literature, in order to probe the plausibility of the theorized effects of trade and GVC linkages, mainly focusing on the latter, thereby illustrating the possible relationships between trade, GVC linkages and foreign lobbying activities.

Figure 5 shows graphs of United States trade and GVC linkages with three countries in the Asia-Pacific region – China, India and Malaysia. The connection between the United States and China has been the strongest during the period under consideration; both trade and GVC linkages have increased dramatically, although the latter slowed around the Great Recession. Trade volumes in India have grown steadily and reached the level of those of Malaysia for both exports and imports, but its backward (forward from the United States perspective) linkage with the United States seems relatively weak. Notably, the United States forward GVC linkage with Malaysia is quite strong compared with the total trade volume between them, suggesting their integration into strong value chain networks.

Thus, the graphs of government lobbying expenditures (figure 6) indicate that the trend of expenditures from China has not followed that of its economic interdependence with the United States. By contrast to China, lobbying activities from India appear constant, especially when examining overall government lobbying expenditures. Malaysia spent the least on lobbying.



Figure 5. United States trade and GVC integration with China, India and Malaysia, 2000–2014 (Billions of constant 2010 United States dollars)

Source: Barbieri et al. (2016) and Casella et al. (2019).





Source: Author's calculation, based on FARA reports 2000-2015.

All these data must be treated with some caution, particularly those for China, as they do not include officially private organizations (Diamond and Schell, 2018).

The question arises as to how strong supply chain linkages can mobilize domestic interest groups in the United States that support the agendas of foreign governments. The shared interests between foreign governments and private actors in the United States can be either explicit or implicit (Wagreich 2013). Studying the multifaceted aspects of Chinese influence in United States politics, Diamond and Schell (2018, p. 109) note that "recognizing the importance of American companies in American politics, China has frequently cultivated, even leveraged, American executives to lobby against policies it opposes". Wagreich (2013) mentions Boeing's pro-China lobbying activities as an example of China leveraging its own market power to influence United States policies, but as Diamond and Schell (2018, p. 110) state, "its key role in international supply chains is also its source of leverage".

Such linkages are, however, often implicit, and it is not always easy to observe instances in which foreign governments, such as China, exercise their influence. This is because "the motivation for U.S. multinational corporations to lobby on China's behalf usually did not result from direct communication or orders from Chinese governmental officials" (Wagreich, 2013, pp. 151–152). Such instances become visible when salient issues occur. Amid heightened political tensions over the rate of the yuan in 2010 and 2011, various interest groups in the United States raised their voices in support of or against a China currency reform bill. For example, in July 2010, a group of retailers and other trade organizations, such as TechAmerica and the Coalition of New England Companies for Trade, stated their opposition to the bill under discussion, in a letter to House Speaker Nancy Pelosi and Majority Leader Steny Hoyer, mentioning its potential impact on United States industries connected with China through trade and supply chains.¹⁴

Moreover, from the perspective of backward GVC participation by the United States, the lack of a position taken by the National Association of Manufacturers was more telling, because "there was no agreement on whether legislation would help or hurt achievement of that goal [of addressing the undervaluation of the yuan]," according to Frank Vargo, the then vice president.¹⁵ The extent of success of these counter-lobbies and of the modest expenditures by the Government of China on lobbying requires further examination. The Currency Reform for Fair Trade Act of 2009, which was passed by the House, was unable to garner enough

¹⁴ National Foreign Trade Council, "Association letter to House members on China currency legislation", 22 July 2010, www.nftc.org.

¹⁵ Wolfgang Armbruster, "US-China policy: Is a trade war brewing?", *The Journal of Commerce*, 25 October 2010.

support in the Senate (Hilland and Devadoss, 2013). The Senate passed the Currency Exchange Rate Oversight Reform Act of 2011, which was more modest than the House bill, but it failed to be considered in the then Republican-controlled House, whose speaker, John Boehner, was opposed to both bills.¹⁶

In the recent trade tensions between the United States and China, the strong opposition of United States suppliers to Chinese producers was clearer. Opponents included suppliers such as Eastman Chemical as well as industry organizations, including the Semiconductor Industry Association (SIA). Eastman Chemical's chief executive officer remarked that it was difficult to reorganize its supply chain in the short term because of its high degree of specialization.¹⁷

A more surprising move came from the SIA, which had played a major role in the trade tensions with Japan in the 1980s and 1990s).¹⁸ Bown (2021, p. 373) pointed out that this shift was owing to the reorganization of the semiconductor industry supply chains, which in turn reorganized the SIA membership by "[a]ccommodating common interests of key input suppliers". The SIA was also among the United States business organizations that supported the negotiation of the Trans-Pacific Partnership Agreement, in which Malaysia took part. It mentioned the "global supply chain, with Japan, Malaysia, Singapore and [Viet Nam] specializing in the diverse segments that make up the semiconductor ecosystem"¹⁹ to explain the agreement's importance to the industry, which may have alleviated the need for lobbying for South-East Asian countries with strong GVC linkages to the United States. These observations also suggest that, although the data set for the quantitative analysis covers only up to 2015, a similar lobbying dynamism seemingly held well beyond that time.

India has also sometimes been able to invoke ties with interest groups (particularly those of Indian-American communities) and big companies, as in the case of the civilian nuclear agreement in 2005 (Mistry, 2013). However, it enjoys few such ties related to its GVC linkages with the United States. In another relatively high-profile case, in 2010–2011, when the Congress linked the Mexican border security issue with an increase in visa fees for highly skilled workers from India, only the National Association of Software and Services Companies, an Indian consortium, lobbied on this issue, according to Kim's (2018) search on LobbyView. The cosponsors of the bill even said that it "affects outsourcing companies such as Wipro, Tata,

¹⁶ Ross Eisenbrey, "House Republicans block remedy for China's job-killing currency intervention", Working Economics Blog, Economic Policy Institute, 22 December 2012, www.epi.org.

¹⁷ Kyo Kitazume, "Year one in US–China trade war takes \$20bn toll on their exports", *Nikkei Asia*, 6 July 2019.

 ¹⁸ "SIA statement on Trump Administration tariff announcement", 15 June 2018. www.semiconductors.org.
 ¹⁹ SIA, "Post-hearing brief in response to investigation No. TPA-105-001", letter to the Secretary, United

States International Trade Commission, 22 January 2016, www.semiconductors.org/wp-content/ uploads/2018/06/ITC-TPP-Post-Hearing-Statement-Final.pdf.

Infosys, Satyam, but does not affect American companies such as Microsoft, Oracle, Intel, and Apple" (Calder, 2014, p. 219). The Government of India was actively lobbying at about this time, but its efforts made little change to the United States policy (Calder, 2014).

6. Conclusions and policy implications

Through the analysis of FARA reports, this study has revealed the opposing effects that current economic globalization can have on lobbying activities by foreign governmental entities. Although the growing interdependence caused by trade increases the need for lobbying, the globalization of production – in particular United States participation through forward linkages – may make their activities less aggressive, as they are more likely to find allies in the United States who can serve as proxies. Conversely, United States backward GVC linkages increase lobbying activities from countries from which United States firms source their inputs. Thus, regarding the distributional impacts of import competition, the relevance seems to have shifted from conventional trade to GVCs.

These findings bear two main implications for policymakers. First, the negative correlation between forward GVC linkages and lobbying activities by foreign governments may give policymakers pause, because it suggests that foreign lobbying measures are becoming more intricate and indirect, while FARA registration and stated lobbying expenditures may no longer be enough to capture the extent of their actual influence (Wagreich, 2013). Foreign countries linked with domestic companies through investments and GVCs can benefit from those companies to address their concerns without engaging directly in lobbying themselves. Corporate owners and policymakers involved in decisions on investment overseas and expansion of GVC networks need to be aware of these intricacies and make sure that the pursuit of economic benefits does not harm democratic accountability.

Second, the apparent shift of significance from traditional imports to backward GVC linkages in their effects on foreign lobbying provides another takeaway: that more attention must be paid to GVCs' distributive consequences (Curran and Eckhardt, 2018), particularly as backward GVC integration, or offshoring of segments in value chains, is associated with growing discontent with globalization (Butzbach et al., 2019). The growing links with outsourcing destinations such as Viet Nam have caused concerns among various actors, from industries in which workers might lose their jobs to people who worry about labour conditions, both domestic and abroad (Cezar, 2021; van Assche and Gangnes, 2019), which explain the motivations of lobbying from those countries. Policymakers need to reconcile these competing interests while also addressing the distributive concerns at their root.

Recent studies have started to emphasize the need to focus on private actors and found that deeper integration into the global economy through foreign direct investment and supply chains increases lobbying activities from overseas (Lee, 2022 and 2023). The current study complements those findings by pointing to more nuanced effects regarding foreign governmental actors, and thereby pointing to the importance of distinguishing forward and backward GVC linkages. Of course, the current study's findings do not necessarily contradict existing research: Like domestic suppliers who may play the role of foreign proxies, foreign subsidiaries may also serve as a substitute for foreign governmental lobbies.

The empirical strategy of this paper faces certain limitations arising from data availability. Notably, the current study has not been able to establish the linkage between domestic actors' responses in the United States and changes in the lobbying activities of foreign government entities. Moreover, as noted above, the study has highlighted only foreign governmental lobbying. Due to this choice, inferences drawn from this study may be biased towards the preferences of smaller actors overseas, such as foreign firms that cannot have subsidiaries in the United States and have to rely on their home governments. The theory posited in this paper can be elaborated in its application to the activities of bigger private actors overseas, as well as multinational corporations. Future research should explore GVCs' impacts on those actors, as recent scholars have been utilizing newly available data on their lobbying (Lee, 2022).

This study contributes to the growing literature on the political consequences of GVC networks by analysing lobbying activities by foreign governmental entities in the United States. The country's susceptibility to lobbying, partly owing to the clear separation of powers, justifies this focus. Yet, this choice poses a challenge to the external validity of the study's findings. An interesting avenue for future research would be to examine foreign lobbies in other democratic countries and polities, such as the European Union, and explore how the growing GVC networks have affected them.

References

- Anderer, Christina, Andreas Dür and Lisa Lechner (2020). "Trade policy in a 'GVC world': Multinational corporations and trade liberalization", *Business and Politics*, 22(4), pp. 666–639.
- Autor, David, David Dorn, Gordon Hanason and Kaveh Majlesi (2020). "Importing political polarization? The electoral consequences of rising trade exposure", *American Economic Review*, 110(10), pp. 3139–3183.
- Baldwin, Richard (2012). "Global supply chains: Why they emerged, why they matter, and where they are going", CEPR Discussion Papers, No. 9103, 26 August (London: Center for Economic Policy Research). https://cepr.org/publications/dp9103.
- Barbieri, Katherine (1996). "Economic interdependence: A path to peace or a source of interstate conflict?", *Journal of Peace Research*, 33(1), pp. 29–49.

______ (2002). *The Liberal Illusion: Does Trade Promote Peace?* (Ann Arbor, Michigan: University of Michigan Press).

- Barbieri, Katherine, and Omar Keshk (2016). Correlates of War Project, Trade Data Set Codebook, version 4.0. http://correlatesofwar.org.
- Barbieri, Katherine, Omar M. Keshk and Brian M. Pollins (2009). "Trading data: Evaluating our assumptions and coding rules", *Conflict Management and Peace Science*, 26(5), pp. 471–491.
- Barbieri, Katherine, and Gerald Schneider (1999). "Globalization and peace: Assessing new directions in the study of trade and conflict", *Journal of Peace Research*, 36(4), pp. 387–404.
- Berthélemy, Jean-Claude, and Ariane Tichit (2004). "Bilateral donors' aid allocation decisions – A three-dimensional panel analysis", *International Review of Economics and Finance*, 13(3), pp. 253–274.
- Bown, Chad P. (2021). "How the United States marched the semiconductor industry into its trade war with China", *East Asian Economic Review*, 24(4), pp. 349–388.
- Breitung, Jörg, Sebastian Kripfganz and Kazuhiko Hayakawa (2022). "Bias-corrected method of moments estimators for dynamic panel data models", *Econometrics and Statistics*, 24, pp. 116–132.
- Butzbach, Olivier, Douglas B. Fuller and Gerhard Schnyder (2020). "Manufacturing discontent: National institutions, multinational firm strategies, and anti-globalization backlash in advanced economies", *Global Strategy Journal*, 10(1), pp. 67–93.
- Calder, Kent E. (2014). Asia in Washington: Exploring the Penumbra of Transnational Power (Washington, D.C.: Brookings Institution Press).
- Cameron, A. Colin, and Pravin K. Trivedi (2013). *Regression Analysis of Count Data*, 2nd ed. (Cambridge, United Kingdom: Cambridge University Press).
- Casella, Bruno, Richard Bolwijn, Dominic Moran and Keiichiro Kanemoto (2019). "Improving the analysis of global value chains: the UNCTAD-Eora Database", *Transnational Corporations*, 26(3), pp. 115–142.
- Cezar, Rodrigo Fagundes (2021). "The intricacies of firms' support for labor provisions in US trade agreements", *Global Policy*, 13(4), pp. 483–494.

- Chen, Fan Ruochen (2021). "Extended dependence: Trade, alliances, and peace", *The Journal of Politics*, 83(1), pp. 246–259.
- Congressional Research Service (2020). "Global value chains: Overview and issues for Congress", CRS Report, R46641, 16 December (Washington, D.C.: Congressional Research Service).
- Conte, Matthieu, Pauline Cotterlaz and Thierry Mayer (2021). "The CEPII Gravity database", CEPII Working Paper, 26 May (Paris: Centre d'Études Prospectives et d'Informations Internationales).
- Coppedge, Michael, John Gerring, Carl H. Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Pamela Paxton, Daniel Pemstein, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Agnes Cornell, Lisa Gastaldi, Haakon Gjerløw, Valeriya Mechkova, Johannes von Römer, Aksel Sundtröm, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig and Daniel Ziblatt (2019). "V-Dem Codebook v9", Varieties of Democracy (V-Dem) Working Paper, April. University of Gothenburg, V-Dem Institute. https://dx.doi.org/10.2139/ssrn.3441060.
- Croissant, Yves, and Giovanni Millo (2018). *Panel Data Econometrics with R* (Mahwah, New Jersey: John Wiley & Sons).
- Curran, Louise, and Jappe Eckhardt (2018). "Influencing trade policy in a multi-level system Understanding corporate political activity in the context of global value chains and regime complexity", *Business and Politics*, 20(1), pp. 132–164.
- Dallas, Mark P., Stefano Ponte and Timothy J. Sturgeon (2019). "Power in global value chains", *Review of International Political Economy*, 26(4), pp. 666–694.
- De Bièvre, Dirk, and Andreas Dür (2005). "Constituency interests and delegation in European and American trade policy", *Comparative Political Studies*, 38(10), pp. 1271–1296.
- De Figueiredo, John M., and Brian Kelleher Richter (2014). "Advancing the empirical research on lobbying", *Annual Review of Political Science*, 17, pp. 163–185.
- De Vries, Michiel S. (1990). "Interdependence, cooperation and conflict: An empirical analysis", *Journal of Peace Research*, 27(4), pp. 429–444.
- Diamond, Larry, and Orville Schell (2018). *Report of the Working Group on Chinese Influence Activities in the United States: Promoting Constructive Vigilance* (Stanford, California: Hoover Institution Press).
- Di Tella, Rafael, and Dani Rodrik (2020). *Labour Market Shocks and the Demand for Trade Protection: Evidence from Online Surveys* (Oxford: Oxford University Press).
- Dreher, Axel, Peter Nunnenkamp, Hannes Öhler and Johannes Weisser (2012). "Financial dependence and aid allocation by Swiss NGOs: A panel tobit analysis", *Economic Development and Cultural Change*, 60(4), pp. 829–867.
- Gawande, Kishore, Pravin Krishna and Michael J. Robbins (2006). "Foreign lobbies and U.S. trade policy", *Review of Economics and Statistics*, 88(3), pp. 563–571.
- Gereffi, Gary, John Humphrey and Timothy Sturgeon (2005). "The governance of global value chains", *Review of International Political Economy*, 12(1), pp. 78–104.
- Gereffi, Gary, Hyun-Chin Lim and Joonkoo Lee (2021). "Trade policies, firm strategies, and adaptive reconfigurations of global value chains", *Journal of International Business Policy*, 4(4), pp. 506–522.

- Gowa, Joanne (1995). *Allies, Adversaries, and International Trade* (Princeton, New Jersey: Princeton University Press).
- Henningsen, Arne (2010). "Estimating censored regression models in R using the censReg package", *R Package Vignettes Collection*, 5(2), art. 12.
- Hilland, Amy, and Stephen Devadoss (2013). "Implications of yuan/dollar exchange rate for trade", *Journal of International Trade Law and Policy*, 12(3), pp. 243–257.
- Hirschman, Albert O. (1972). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (Cambridge, Massachusetts: Harvard University Press).
- Ikenberry, G. John (2001). After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars (Princeton, New Jersey: Princeton University Press).
- Irwin, Douglas A. (1994). "The political economy of free trade: Voting in the British general election of 1906", *The Journal of Law and Economics*, 37(1), pp. 75–108.
- James, William D. (2021). "Influencing the United States: Is the game worth the candle for junior allies?" *International Politics*, 59(6), pp. 1029–1044.
- Jensen, J. Bradford, Dennis P. Quinn and Stephen Weymouth (2015). "The influence of firm global supply chains and foreign currency undervaluations on US trade disputes", *International Organization*, 69(4), pp. 913–947.
- Keohane, Robert O., and Joseph S. Nye, Jr. (2001). *Power and Interdependence* (New York: Longman).
- Kim, In Song (2018). "LobbyView: Firm-level Lobbying & Congressional Bills Database", 30 August. Massachusetts Institute of Technology. http://web.mit.edu/insong/www/pdf/ lobbyview.pdf.
- Kim, In Song, and Helen V. Milner (2021). "Multinational corporations and their influence through lobbying on foreign policy", in C. Fritz Foley, James Hines and David Wessel, eds., *Global Goliaths: Multinational Corporations in a Changing Global Economy* (Washington, D.C.: Brookings Institution), pp. 497–536.
- Kripfganz, Sebastian, and Jörg Breitung (2022). "Bias-corrected estimation of linear dynamic panel data models", 28th United Kingdom Stata Conference, 9 September, London.
- Lancaster, Tony (2000). "The incidental parameter problem since 1948", *Journal of Econometrics*, 95(2), pp. 391–413.
- Lee, Dong Ju (2020). "Who lobbies and when: Analyzing patterns of foreign lobbying", PhD dissertation, University of Pittsburgh.
- Lee, Jieun (2022). "Foreign lobbying through domestic subsidiaries", *Economics & Politics*, https://doi.org/10.1111/ecpo.12232.

_____ (2023). "Foreign direct investment in political influence", *International Studies Quarterly*, 67(1), sqad005, https://doi.org/10.1093/isq/sqad005.

- Leeds, Brett A., Jeffrey M. Ritter, Sara M. Mitchell and Andrew G. Long (2002). "Alliance treaty obligations and provisions, 1815–1944", *International Interactions*, 28(3), pp. 237–260.
- Li, Quan, and Rafael Reuveny (2011). "Does trade prevent or promote interstate conflict initiation?" *Journal of Peace Research*, 48(4), pp. 437–453.

- Mansfield, Edward D., and Brian M. Pollins (2001). "The study of interdependence and conflict", *Journal of Conflict Resolution*, 45(6), pp. 834–859.
- Meckling, Jonas, and Llewelyn Hughes (2017). "Globalizing solar: Global supply chains and trade preferences", *International Studies Quarterly*, 61(2), pp. 225–235.
- Mistry, Dinshaw (2013). "The India lobby and the nuclear agreement with India", *Political Science Quarterly*, 128(4), pp. 717–746.
- Newhouse, John (2009). "Diplomacy, Inc.", Foreign Affairs, 88(3), pp. 73-76.
- Nickell, Stephen (1981). "Biases in dynamic models with fixed effects", *Econometrica: Journal* of the Econometric Society, 49(6), pp. 1417–1426.
- OECD (Organisation for Economic Co-operation and Development) (2021). OECD Statistics on Trade in Value Added, https://doi.org/10.1787/36ad4f20-en (accessed 9 July 2021).
- OECD and WTO (World Trade Organization) (2012). "Trade in value added: Concepts, methodologies and challenges", Joint OECD-WTO Note (Paris: OECD).
- Olson, Mancur (1965). *The Logic of Collective Action* (Cambridge, Massachusetts: Harvard University Press).
- Osgood, lain (2017). "Industrial fragmentation over trade: The role of variation in global engagement", *International Studies Quarterly*, 61(3), pp. 642–659.
- Pan, Zuohong (2020). "Employment impacts of the US global value chain participation", *International Review of Applied Economics*, 34(6), pp. 699–720.
- Peterson, Timothy M., and Yuleng Zeng (2021). "Conflict and cooperation with trade partners", *International Interactions*, 47(2), pp. 266–290.
- Pevehouse, Jon C., and Felicity Vabulas (2019). "Nudging the needle: Foreign lobbies and US human rights ratings", *International Studies Quarterly*, 63(1), pp. 85–98.
- RIGVC UIBE (Research Institute for Global Value Chains, University of International Business and Economics) (2021). UIBE GVC Index, http://rigvc.uibe.edu.cn/english/D_E/database/ index.htm (accessed on 14 July 2021).
- Ryu, Jeheung, and Randall W. Stone (2018). "Plaintiffs by proxy: A firm-level approach to WTO dispute resolution", Review of International Organizations, 13(2), pp. 273–308.
- Shinoda, Tomohito (1989). アメリカ議会をロビーする: ワシントンの中の日米関係 [Lobbying the American Congress: Japan–US Relations Inside Washington] (Tokyo: Japan Times).
- Tidwell, Alan (2016). "The role of 'diplomatic lobbying' in shaping US foreign policy and its effects on the Australia–US relationship", *Australian Journal of International Affairs*, 71(2), pp. 184–200.
- Tobin, James (1985). "Estimation of relationships for limited dependent variables", *Econometrica*, 26(1), pp. 24–36.
- United States, Bureau of Economic Analysis (2021a). Employment by industry tables, table 6.4A, 24 July, https://apps.bea.gov/national/Release/XLS/Survey/Section6All_xls.xlsx.

_____ (2021b). Gross output by industry tables, table TG0105, 30 July. https://apps. bea.gov/industry/Release/XLS/GDPxInd/GrossOutput.xlsx.

Van Assche, Ari, and Byron Gangnes (2019). "Global value chains and the fragmentation of trade policy coalitions", *Transnational Corporations*, 26(1), pp. 31–60.

- Wagreich, Samuel (2013). "Lobbying by proxy: A study of China's lobbying practices in the United States 1979–2010 and the implications for FARA", *The Journal of Politics and Society*, 24(1), pp. 130–159.
- Walt, Stephen M. (2005). *Taming American Power: The Global Response to U.S. Primacy* (New York: W.W. Norton).
- You, Hye Young (2020). "Foreign Agents Registration Act: A user's guide", *Interest Groups* and Advocacy, 9(3), pp. 302–316.
- Zeng, Ka (2021). "'Exit' vs. 'voice': Global sourcing, multinational production, and the China trade lobby", *Business and Politics*, 23(2), pp. 282–308.
- Zeng, Ka, Karen Sebold and Yue Lu (2020). "Global value chains and corporate lobbying for trade liberalization", *The Review of International Organizations*, 15(2), pp. 409–443.

Appendix

Appendix table: Descriptive statistics for the main data set

Variable	Minimum	Mean	Median	Maximum	Standard deviation	Number of observations
Log Foreign government lobbying expenditures, overall	0.00	4.79	0.00	17.64	6.23	3 077
Log Foreign government lobbying expenditures, trade- related	0.00	1.53	0.00	16.02	4.12	3 077
Foreign government lobbying count, overall	0.00	2.09	0.00	60.00	3.76	3 077
Foreign government lobbying count, trade-related	0.00	0.34	0.00	19.00	1.07	3 077
Log US exports	0.00	5.69	5.65	12.45	2.83	3 072
Log US imports	0.00	5.53	5.74	12.99	3.35	3 072
Log Forward participation	5.05	11.23	10.86	18.43	2.94	2 799
Log Backward participation	0.01	10.52	10.17	17.64	2.97	2 799
Democracy	0.01	0.53	0.54	0.95	0.26	2 741
US ally	0.00	0.33	0.00	1.00	0.47	3 077
FTA partner	0.00	0.07	0.00	1.00	0.25	2 960
FTA negotiation	0.00	0.02	0.00	1.00	0.13	3 077
Pre-FTA negotiation	0.00	0.01	0.00	1.00	0.12	3 077
Trade dependence on the United States, log percentage	0.00	1.76	1.59	4.61	0.98	2 871
Log Population	0.01	2.19	2.12	7.22	1.47	2 946
Log GDP per capita	4.86	8.26	8.25	11.64	1.55	2 868
GATT member	0.00	0.77	1.00	1.00	0.42	2 960
Trend	0.00	7.53	8.00	15.00	4.61	3 077

Source: Author's estimations.