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Powerful Multinational or Persecuted Foreigners: 'Foreignness' and Influence over Government

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Abstract

One of the enduring themes of the globalization debate is whether international law should be strengthened to protect foreign firm from discriminatory host governments, or rather strengthened to protect host governments from powerful multinational firms. This paper uses firm-level data from the World Business Environment Survey (WBES) to lend some empirical evidence to the debate. In doing so it contributes to academic understanding of what a `foreign firm' is, and challenges the notion that institutional superiority makes OECD governments less prone to anti-foreign bias. Although the terms `foreign firm' and `multinational subsidiary' are often used interchangeably, in the WBES data the managers of only about half of the firms with more than ten percent foreign ownership view themselves as part of a multinational. This distinction between multinational and non-multinational foreign firms was important in regression analysis of self-reported influence over government. In non-OECD countries - where we find no evidence of anti-foreign bias - multinationals appear significantly more influential than other firms. Meanwhile, in OECD countries, foreign non-multinationals *do* appear at a disadvantage in terms of influence relative to domestic firms, but this `liability of foreignness' does not appear to extend to foreign-multinational affiliates.

JEL Codes: F02, F23, F52, P16

Keywords: Multinational Firms, Foreign Firms, Political Economy, Government

1. Introduction

> "The ultimate subject and sovereign ruler of the world is the transnational corporation, operating by collective prescription and enforcement through the World Trade Organization in concert with its prototype the NAFTA, its European collaborator, the EU, and such derivative regional instruments as the APEC, the MAI, the FTAA, and so on.
>
> Together these constitute the hierarchical formation of the planet's new rule by extra-parliamentary and transnational fiat."
>
> (John McMurtry 2002, p.202)

As with many aspects of globalization, the debate over the relationship between foreign firms and host governments seems to suggest that the two sides are living in parallel worlds with differing objective realities. On the one hand critics of globalization believe multinational corporations are extremely politically powerful and are 'writing the rules' of globalization to suit their own balance sheets at the expense of the rest of society. On the other side are those who believe foreign firms are discriminated against and suffer substantial political risk. This paper uses a large dataset of managers' own perceptions to contribute some empirical evidence on whether foreign-owned and/or multinational firms are more or less influential over governments than domestic firms. In doing so, we will also question the extent to which substantive foreign ownership can be viewed as synonymous with multinational operations.

The debate over whether foreign firms are powerful or persecuted has numerous policy implications. Perhaps the most obvious of these policy linkages is the design of and participation in international investment agreements. Modern international investment agreements provide a raft of protections from host government actions for foreign investors which are supported by international law. These protections are predicated on the idea that foreign investors are at particular risk of government predation. Ratner (2008, p.475) provides us with a typical quote:

> "[N]ational governments emphasize political participation of domestic actors, while foreign actors must rely on international law standards for protection."

On the other side, some participants in this debate believe that the rapid spread of international investment agreements is actually evidence of the increasing power of multinational

corporations relative to nation states since the late nineteen eighties (Sornarajah 2006, Mann 2006).

Despite the robust policy debate, very few papers appear to have attempted to compare the political vulnerability of domestic and foreign firms.[1] This is not to say that there is a paucity literature on the interactions between foreign firms and host governments. Rather, the existing literature somewhat mirrors the public debate in either focusing only on the special problems foreign firms encounter in their relationship with governments, or only on the problems hosts have in governing for social good while competing for 'footloose capital'[2].

There are two main streams within the management literature which have focused on the challenges faced by foreign firms in their relationship with host governments. The first is the host-multinational bargaining literature which originated in the 1980s with seminal contributions such as Vernon's (1980) paper on the obsolescing bargain between foreign investors and host governments.[3] This literature was motivated by the wave of nationalizations by developing countries during the nineteen seventies of foreign firms in the resource sector, and it essentially maintains the assumption that the welfare of foreign firms is of no interest to host governments (except where the interests of host and investor are aligned). This assumption follows from the observation that foreign investors do not have voting rights and that the profits of foreign investments are repatriated to the source country. A central intuition of this literature is that the threat of exit and the possession of rent-generating knowledge-capital are important sources of bargaining power for foreign firms and that this power lessens over time as costs are sunk and knowledge transferred to the host economy. Similar assumptions about the relationship between foreign investors and host governments are made in the economics literature on the theory of international investment agreements (Markusen 2001, Aisbett et al. 2010).

The second strand of the management literature of relevance to our paper was developed by authors such as Zaheer (1995) and examines the liabilities of foreignness. In contrast to

[1] We are only aware of Hansen and Mitchell (2000) and Luo and Mezias (2002).

[2] Government efforts to attract a larger share of globally mobile capital have been hypothesized to lead to negative policy outcomes such as 'race to the bottom', 'regulatory chill', and 'pollution havens'.

[3] More recent contributions to this literature have broadened the view of government-firm bargaining to other sectors such as manufacturing (Kobrin 1987) and broadened and adapted the theory toward a political bargaining model to reflect the significantly less adversarial nature of government-firm relations in recent decades (Eden et al. 2005). The empirical contributions to this literature test the importance of various sources of firm or host bargaining power for bargaining outcomes such as ownership shares of foreign firm-host government joint ventures. See for example Fagre and Jr. (1982), Lecraw (1984), Kobrin (1987), Gomes-Casseres (1990) and Lee (2004). Yet, being an international management literature, none of these contributions are concerned with comparing the bargaining strength of multinationals to that of local firms.

the multinational-government bargaining literature discussed above, this literature focuses on investments into developed countries. This literature also differs from the former in that the sources of the liability of foreignness are not outright disenfranchisement, but rather cultural and institutional differences between the firm's home and host countries. One of the contributions of our paper is to study the government-firm relationship across a broad cross-section of countries, rather than focusing only on developing countries (as in the bargaining literature) or developed countries (as in the 'liability of foreignness literature'). We also check whether there are systematic differences in the determinants of influence in OECD versus non-OECD countries.

One of the more important contributions of the current paper is to head Zaheer's (2002) call that the literature pay more attention to what is meant by 'foreign' versus 'local' firms and examine separately the implications of a firm's foreignness and its status as a multinational. Zaheer particularly noted that foreign multinationals may be competing against both purely domestic firms and local firms who are themselves multinationals. Our paper addresses Zaheer's concern and goes beyond it to also consider the converse case - that not all 'foreign firms' consider themselves part of a multinational.

Zaheer's (2002) point that foreign multinationals may be competing against locally-based multinationals is uncontroversial. However, the idea that firms with substantial foreign ownership may actually not consider themselves part of a multinational requires some elaboration. The standard definition of a multinational enterprise is a firm which engages in foreign direct investment (FDI), where FDI is defined as "investments in which the firm acquires a substantial controlling interest in a foreign firm or sets up a subsidiary in a foreign country" (Markusen 2004, p.5). Following this definition, the standard method in the empirical literature in either economics or management is to define any firm with more than a certain percentage (ranging from ten to fifty percent) foreign ownership as a 'foreign-owned firm', a label which is used inter-changeably with 'multinational subsidiary' or simply 'foreign firm'.[4] Any firm which has positive but smaller levels of foreign ownership is considered to be the recipient of portfolio investment. It is generally thought that FDI is associated with the transfer of specific resources and capabilities such as management style or technology to the recipient firm or subsidiary, while portfolio investment is not (Markusen 2004). We examine the extent to which a percentage-based definition of FDI aligns with managers' beliefs about whether their firm is part of a multinational enterprise.

The analysis in this paper uses the World Business Environment Survey (WBES) con-

[4]See for example Albornoz et al. (2009), Heyman et al. (2007) and Dasgupta et al. (2000).

ducted by the World Bank across 80 countries in 1999-2000. The WBES was designed specifically to examine the government-firm relationship in a wide range of countries and has been used by a number of previous papers to test theories relating to firm influence over government (Campos and Giovannoni 2007, Chong and Gradstein 2007, Desai and Olofsgard 2008). Questions of 'foreignness' were not central to any of the previous papers and although a foreign ownership dummy was included in their regressions, the econometric approach was not ideal for the purposes of this paper.[5] In particular, all of the previous studies appear to have used a dummy indicating *any* foreign ownership to define foreign firms, and none of them made use of the question in the WBES which allowed firms to identify themselves as part of a multinational. Independently identifying foreign ownership and multinationality is important since the two characteristics have potentially opposite implications for a firms ability to influence government.

Our analysis in Section 2 suggests that substantive foreign ownership does not correlated with a firm's identification as part of a multinational as well as is typically assumed. Furthermore, the results in Section 4 indicate that foreign-ownership and multinational operations have very different implications for the relationship with the host government. Managers of firms which are part of a multinational report significantly higher influence over governments than those who do not, while foreign ownership is generally not correlated with influence. The checks discussed in Sections 3 and 5 indicate that the magnitudes of the estimated coefficients are remarkably robust across a range of specifications and within subsamples of the data, including the large-firm subsample. The only subsample for which our central findings did not appear to hold was OECD, where multinationals do *not* appear more influential, and foreign non-multinational firms *are* significantly less influential than their local counterparts. Section 6 concludes with some implications for the policy debate and considerations for future research.

2. Data

The World Business Environment Survey (WBES) is a survey of over 10,000 firms in 80 countries and one territory conducted in 1999-2000. The survey was conducted thought face-to-face interviews with firm managers and owners and covers a large range of questions

[5]For example Chong and Gradstein (2007) and Campos and Giovannoni (2007) were interested in country characteristics such as national income and therefore did not include country dummies in their specification, while Desai and Olofsgard (2008) using a matching approach and do not report the coefficient on foreign ownership.

concerning the firm's relationship with the government, including perceptions of regulations, corruption, influence, macroeconomic policies, competition, and infrastructure.[6] We use data from all countries except those in Africa and the Middle East as these regions do not have data on firm beliefs about influence on government. The countries for which there was at least one firm with all the data required for our base specification are listed in the Table 13 in the Appendix.

2.1 Foreign-ownership, Multi-nationality, and the definition of 'Foreign Firms'

The distinction between foreign firms and multinational firms is important to our analysis. In the public discourse critics of globalization tend to refer to 'multinationals' (usually in the pejorative) while proponents of globalization prefer to talk about 'foreign firms'. The two terms are often used interchangeably by economics and management scholars, who define foreign firms as those having at least 10% or 50% foreign ownership respectively. The WBES dataset is richer than most used in the literature because, in addition to foreign ownership[7], it also contains information on whether the firm beleives itself to be part of a multinational[8].

In regard to relationship with government, the extent to which a firm sees itself - and the government sees it - as part of a multinational may matter more than the share of foreign capital in the company. The extent to which these two measures align, and which of the two matter more for the relationship with government are empirical questions addressed by this paper. The former question is the subject of Tables 1-3 which provide cross-tabulations of firm's multi-nationality and their foreign ownership using a 1%, 10% and 50% foreign defintion respectively.

Firms in the top right of Tables 1-3 have multi-national operations but are not classified as foreign-owned. We consider these firms to be multi-nationals operating in their home country (parent companies). Depending on the foreign-ownership criterion chosen, roughly half to two-thirds of the firms in our sample which identify as multinationals are operating in their home country.[9] These firms do not tell us anything about the validity of classifying

[6]Permanent url http://go.worldbank.org/RV060VBJU0

[7]The exact wording in the survey was "Does any foreign company or individual have a financial stake in the ownership of your firm?", for those firms which answered yes, the survey asked what the total percent of foreign holdings was.

[8]The exact wording of the question was "Does your firm have holdings or operations in other countries?"

[9]In Table 1 when firms are considered foreign if they have any foreign ownership, 597 of the 1,256 multinationals are classified as multinationals at home, while in Table 3 when the foreign-firm criterion is

foreign multinationals on the basis of ownership share, but their numbers large enough that we can be confident of identifying the co-efficient on multinationality independently of that for foreign ownership in our later regression analysis.

The firms in the bottom right of Tables 1-3 identify themselves as multinationals and are classified as foreign-owned. We consider these firms to be foreign multinationals (subsidiaries). As recipients of direct investment by multinationals we might expect these firms to gain brands, knowledge, technology, management style and bargaining power along with funds from the parent. In Tables 2 and 3 these firms are the ones for which firms' own identification of their multi-nationality aligns with the proxies used in empirical work in the economics and management literatures.

Firms in the bottom left of Tables 1-3 are classified as foreign-owned but do not identify themselves as part of a multinational. We consider these firms to be the recipient of foreign portfolio investment where - in contrast to the recipients of direct investment - the foreign involvement is restricted to the provision of funds. In Tables 2 and 3 these firms are the ones for which firms' own identification of their multi-nationality does not align with the proxies used in empirical work in the economics and management literatures respectively.

The question of whether the proxies used in the literature to identify foreign direct investment by multinationals align well with firm's self classifications is answered by comparing the bottom left and right columns in Tables 2 and 3. The answer is that the classifications used by either the economics of management literatures identify roughly twice as many firms as foreign multinational subsidiaries as do firms' own classifications.[10] While the 50% foreign ownership defintion has less type I error (excessive identification of foreign multinationals) than the 10% or 1% classifications in the upper two tables, we should be cautious of claiming its superiority as a proxy given that it is likely to be associated with an increase in type II error (falsely classifying foriegn multinational subsidiries as home multinational parents).

For the purposes of this paper the definition of a foreign firm used in the economics literature - that is the 10% ownership criterion - appears to offer the best trade-off between type I and type II errors of classification of firms as foreign. Based on this defition of foreign we construct four mutually exclusive types of firm: purely local firms (the reference group in our regressions), multinationals operating in their home country (MN at Home), subsidiaries

raised to a 50% ownership share, the number classified as home multinationals rises to 813.

[10]In Table 2 605 of the 1,183 firms which would be classified as recipients of foreign direct investment by the economics literature do not report their firm having operations or holdings in other countries, these figures improve only slightly to 372 out of 815 using the management literature's classification as in Table 3.

of foreign multinationals (Foreign MN), and foreign-owned firms that do not identify as part of a multinational (Foreign nonMN).[11] We summarize the characteristics of these four types of firm under the next heading.

Foreign Ownership $> 0\%$	**Multi-national**		
	0	1	Total
0	6,046	597	6,643
1	709	659	1,368
Total	6,755	1,256	8,011

Table 1: Cross-tab of multinational operations and some foreign ownership indicates that co-linearity of these measures is not a concern in our regression analysis.

Foreign Ownership $\geq 10\%$	**Multi-national**		
	0	1	Total
0	6,150	678	6,828
1	605	578	1,183
Total	6,755	1,256	8,011

Table 2: Cross-tab of multinational operations and at least 10% foreign ownership shows low correlation between the two and highlights the limitations of the practice in the economics literature of using the latter to identify direct investment by multinational firms.

Foreign Ownership $\geq 50\%$	**Multi-national**		
	0	1	Total
0	6,383	813	7,196
1	372	443	815
Total	6,755	1,256	8,011

Table 3: Cross-tab of multinational operations and at least 50% foreign ownership shows low correlation between the two and highlights the limitations of the practice in the management literature of using the latter to identify direct investment by multinational firms.

2.2 Firm Characteristics by 'Foreignness' Classification

The WBES data contains a number other firm characteristics which we might expect to be associated with a firm's ability to influence government decisions of relevance to its

[11] "MN at Home" is coded 1 for all firms who answered 'yes' to the question of whether their firm had holdings or operations in other countries, and less than 10% foreign ownership. "Foreign MN" is coded 1 for all firms who answered 'yes' holdings or operations in other countries, and at least 10% foreign ownership. "Foreign nonMN" is coded 1 for all firms who answered 'no' to the other country question but report at least 10% foreign ownership. Thus these three categories are mutually exclusive.

operations. The variables utilized in our primary analysis are:[12]

- Export status: coded 1 if firms export some product and 0 otherwise,
- Government ownership: coded 1 if firms reported having any share of government ownership, 0 otherwise,
- Size: coded 1 for small ($5-50$ employees), 2 for medium ($51-500$ employees) and 3 for large (>500 employees),
- Age: coded 1 for $0-5$ years, 2 for $6-20$ years, and 3 for more than 20 years firm age,
- Capital intensity as measured by ratio of reported value of sales to fixed assets[13],
- Number of competitors category[14],
- Sector: manufacturing, services, other, agriculture, and construction, and
- Country of operation of respondent firm.

Table 4 shows the distribution of firms across the categorical control variables. The right-most column of Table 4 summarizes the sample as a whole, while the other columns provide the information for the subsamples: purely domestic, multinational at home, foreign multinational, and foreign non-multinational; where foreign ownership is defined using the economics literature's 10% ownership rule. Overall, Table 4 provides further evidence that the subsidiaries of foreign multinationals are, indeed, quite different to other foreign firms. In regard to propensity to export, size, and age, foreign multinational firms are more similar to local multinationals than to foriegn, non-multinational firms. Close to two-thirds of both foreign and local multinationals export. Export propensity drops to just over half for foreign non-multinationals and only a quarter for purely domestic firms. Foreign multinationals are the largest firms, followed in decreasing size by domestic mulitnationals, foreign non-multinationals, and purely local firms. Multinational firms tend to be older than non-multinationals, and foreign ownership appears to have no effect on the age distribution for the

[12]We also make use of a number of other variables from the WBES in our robustness checks. Variables used in the robustness checks are discussed in Section 3.3.

[13]In some countries the data for these variables was only collected in categories. Since the WBES surveys varied only by region, we correct for this in our regression analysis by interacting the capital intensity measure with region dummies.

[14]The categorization of number of competitors varied region, thus our regressions interact the competition measure with region dummies.

latter group. Foreign multinationals are also more similar to their local counter-parts than to foreign non-multinationals in their propensity to operate in the service sector, however, foreign ownership does seem to be associated with a higher likelihood of manufacturing for both multinationals and non-multinationals.

Arguably the most interesting summary statistics in Table 4 are those for the fraction of firms with government ownership. Foreign multinationals stand-out from the three other types of firm in being substantially less likely to have some government ownership. Our implicit assumption is that all of the variables in Table 4 cause differences in firm bargaining power and influence over government decisions of importance to the firm's operations. However, in the case of government ownership, there is also a long lineage of papers arguing the reverse causality, namely that joint ventures of foreign multinationals which have more bargaining power will have lower levels of foreign ownership than those in which the foreign firm has less intrinsic bargaining power.[15] Thus, the relatively low fraction of foreign multinationals with government ownership may actually be an indicator of their strength in bargaining with governments compared to other types of firms.

Variable	**Mean**				
	Domestic	MN at Home	Foreign MN	Foreign nonMN	All
Govt. Ownership	**0.13**	0.12	0.07	0.11	0.13
Exporter	0.24	**0.63**	0.62	0.55	0.33
Medium	0.41	0.43	0.40	**0.52**	0.42
Large	0.11	0.36	**0.44**	0.27	0.17
Middle-aged	0.34	0.29	0.28	**0.36**	0.33
Old	0.33	**0.57**	0.45	0.34	0.36
Manufacturing	0.35	0.44	0.50	**0.53**	0.38
Services	**0.47**	0.44	0.45	0.39	0.46

Table 4: Summary of Firm Characteristics for firms grouped by concepts of 'foreignness'. The highest value in each row is in bold. Foreign-owned multinational firms are seen to differ substantively from non-multinational foreign-owned firms. Foreign ownership in this table is defined using the minimum 10% ownership criterion common in the empirical economics literature.

2.3 Influence over Government

The dependent variable in our regressions is the self-reported influence which managers believe their firm has over various branches of the national government in the country in

[15] See for example Fagre and Jr. (1982), Lecraw (1984), Kobrin (1987), Nakamura and Xie (1998), and Lee (2004).

which they are operating. Specifically, the WBES asked firms for each of the Executive, Legislature, Ministry and Regulatory Agency:

> "When a new law, rule, regulation, or decree is being discussed that could have a substantial impact on your business, how much influence does your firm typically have at the national level of government on the content of that law, rule, regulation or decree? Would you say very influential, frequently influential, influential, seldom influential or never influential?"

Table 5 shows that the average level of influence firms feel they have over all four branches of government is roughly equal at around $1.6 - 1.7$, suggesting that the average firm feels it is somewhere between "never" and "seldom" influential.

Variable	**Mean**	**Std. Dev.**	**Min.**	**Max.**	**N**
Influence Executive	1.659	1.016	1	5	6095
Influence Regulator	1.701	1.034	1	5	5971
Influence Legislature	1.617	0.987	1	5	6104
Influence Ministry	1.656	1.012	1	5	6094

Table 5: Summary Statistics for Influence Measures.

A high degree of co-linearity between the four measures of influence in Table 5[16] suggests that treating them as four separate dependent variables would amount to duplication and limit the space available for other analysis and robustness checks. However, the ordinal nature of the variables means that creating a composite variable by averaging or adding them is not appropriate. Additionally, we have no means by which to judge which of the four measures of influence is the most important for any given firm, since the most important branch of government over which to exert influence is likely to vary by firm and country of operation. Thus the analysis in this paper is based on a variable constructed from the maximum reported influence over any branch of government for each firm (henceforth referred to as the 'maximum-influence variable').[17] In Section 3.3 we additionally run our base regression using the original four influence variables in order to confirm that our choice of composite variable has not had a substantial impact on our results.

Figure 1 compares firm responses for our dependent variable across foreignness groups. It shows the mean and standard error of the mean maximum-influence by 'foreignness' classification. The unconditional means displayed in the figure suggest that neither type of

[16] Pair-wise correlations for the four influence variables range from $0.77 - 0.83$.

[17] For example, if a firm reports influence scores of 1 1 2 and 3 for the Executive, Regulator, Legislature and Ministry respectively, then the maximum-influence variable takes a value of 3 for that firm.

foreign firm (multinational or non-multinational) suffer from a lack of influence over host governments relative to purely domestic firms - indeed both are significantly more influential on average. Furthermore, foreign multinationals do not appear any more or less influential than their local counter-parts, while both groups of multinationals are significantly more influential than foreign non-multinationals. We will see below that this pattern is robust to conditioning the mean on a variety of relevant controls.

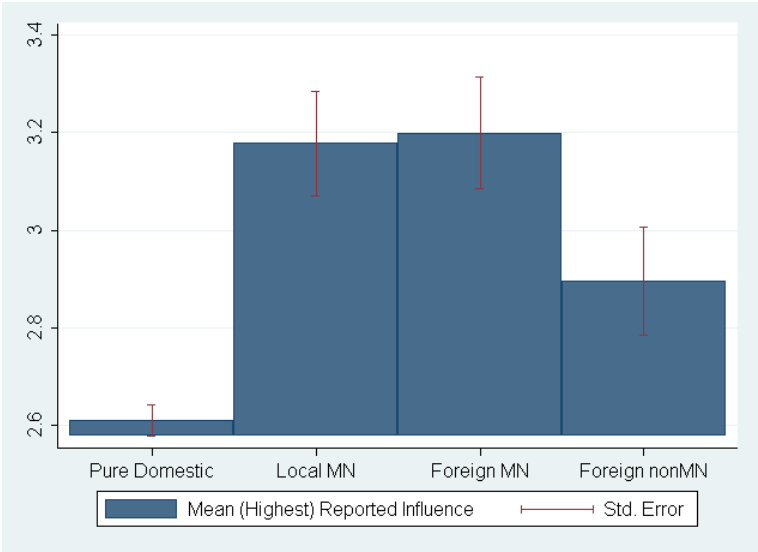

Figure 1: Comparison of reported influence across firms grouped by 'foreignness'. Displays the mean and standard error of mean for each foreignness classification of the maximum-influence variable. Multinational firms can be seen to report significantly higher influence.

3. Empirical Approach and Hypotheses

Our ambition in this paper is not to test causal relationships, rather, we suggest that there is much insight to be gained through careful regression analysis which allows us to examine the correlation between foreign ownership and/or multinational status and perceived influence over government, controlling for other observable characteristics (e.g. size) which may be correlated with 'foreignness'. Our empirical emphasis notwithstanding, it seems appropriate to outline the theoretical intuition which has motivated our choice of control variables and which underlies our discussion of the results.

3.1 Hypotheses and Intuition

The multinational-host bargaining literature discussed in the Introduction is the primary theoretical basis for our hypotheses - although we note that many of our predictions could be based on alternative theories. The basic intuition which we take from the bargaining literature is that the influence a firm has over the government is increasing in the benefits which the operation of the firm produces both directly for the government and for the national economy more broadly, and also increasing in the credibility of the firm's threat to relocate its operations elsewhere.

We apply this logic first to the firm characteristic of multinational operation and predict that multinationals will be more influential for two reasons. Firstly, multi-nationality is the best example of a characteristic will which generate higher influence due to a more credible relocation threat. Secondly, the leading theories of multinational firms suggest that they have special characteristics which allow them to generate excess profits compared to their competitors and which will not be transferred to an economy without the operation of that firm in the economy (Markusen 2004, Helpman 2006). Thus multinationals are also likely to be more influential because they have more benefits to offer governments and economies.

In contrast to our clear predictions for multi-nationality, the average relationship between foreign-ownership and influence not easy to predict. On the one hand most governments around the world are keen to attract for investment in order to cover shortfalls in domestic savings and investment. Foreign ownership may also be associated with higher relocation or shut-down threat. On the other hand, xenophobia on behalf of a voting public and lack of voting rights on behalf of foreign owners mean that foreign ownership is likely to be associated with lower political benefits for the government. Repatriation of profits to the home nation and tax treaties may also lower the economic benefits the government expects from foreign-owned firms. Given this complexity, it is also possible that the impact of foreign-ownership on influence is different for firms with and without multinational operations. We allow for this in our regression specification.

Moving on to our control variables, firm size and export status are characteristics which we expect to find associated with influence because they generate more benefits for the economy as a whole, and particularly in areas on which governments tend to place emphasis such as employment and generation of foreign earnings. Government ownership is another characteristic which we expect to be associated with influence due to the direct alignment of firm and government interests. The relationship between firm age and influence is slightly

more difficult to predict. The multinational-host bargaining literature predicts decreasing influence with age for this type of firm as costs are sunk and capabilities transferred to the local economy. However, other types of firms may be come increasingly politically embedded with age, thus might be expected to become more influential over time. We examine possible interactions between age and 'foreignness' in one of our specifications.

The influence of sunk costs on bargaining power motivates our inclusion of sales to capital ratio in our regressions. We would expect more capital intensive firms to have less influence. We also expect firms with more competitors to be less influential as competition erodes rents, some of which can be transferred to government in return for influence. We include both these controls in our regressions but do not test hypotheses about either due to data limitations discussed in Section 2.2.

The sector in which a firm operates is another variable which we include in our regression but whose relationship with influence we do not predict. Sector dummies are included in the specification because sectors differ in regard to their impacts on government objectives. For example agriculture is most closely related to rural growth and poverty reduction, while services such as utilities, telecommunications and financial services have also have important welfare implications. Sectors also differ in regard to the extent to which domestic production is substitutable with foreign imports and thus the credibility of the threat of shut-down or relocation due to less favorable conditions compared to alternative production locations. For example, we expect manufacturing to be more easily substitutable for foreign production than the other sectors.

Our final control variables are country dummies. There are many possible reasons for including country effects in our regressions, but in regard to our basic bargaining intuition we can understand the country-dummies as capturing the differences between states in the benefits they expect from firm operations and expansion (including growth, poverty reduction, and productivity gains) compared to the costs they expect to incur due, for example, to natural resource degradation or social change.

3.2 Regression Specification

Since the dependent variable is an ordered categorical variable, we use a robust ordered logit estimation of the regression equation:[18]

[18] We have also run the regressions using a robust ordered probit estimator and found negligible change in the estimated coefficients.

$$
\begin{aligned}
infl_i = \alpha_1 mnch_i + \alpha_2 mncf_i + \alpha_3 fnmn_i + \alpha_4 exp_i + \beta_1 gvt_i + \beta_2 size_i + \beta_3 age_i \\
+ \sum_r \beta_{4r} D_r skr_i + \sum_r \beta_{5r} D_r cmp_i + \sum_s \beta_{6s} D_s + \sum_k \beta_{7k} D_k
\end{aligned} \tag{1}
$$

Where D indicates a dummy variable, r indexes the region, k the country, and s the sector of operation of the firm. Capital intensity and number of competitors are interacted with region in Equation (1) due to data inconsistencies across regions. The short, medium and long descriptions other variables in Equation (1) are given in Table 3.2:

Short:	Medium:	Long
infl:	Influence:	Maximum reported influence over any branch of govt.
mnch:	MNC at Home:	Multinational firm operating in home country
mncf:	MNC Foreign:	Multinational firm outside home/MNC subsidiary
fnmn:	Foreign non-MNC:	Foreign ownership but no operations in other countries
exp:	Exporter:	Export some proportion of output
gvt:	Govt. Ownership:	Some government ownership of firm
size:	Medium, Large (Small excluded):	Dummies for size categories
age:	Middle-aged, Old (Young excluded):	Dummies for age categories
skr:	Sales to Capital:	Value of sales to Fixed Assets
cmp:	Competitors:	Categorical measure of Number of Competitors
D_r:	Region:	Region dummies
D_i:	Services, Other, Agriculture, Construction (Manufacturing excluded):	Sector Dummies
D_k:	Country:	Country dummies

Table 6: Primary regression variables' names and descriptions. Detailed descriptions and summary statistics are in Section 2. Additional variables used in robustness checks are discussed in Section 3.3.

Estimated regression co-efficients rather than marginal effects are reported throughout this paper as we are more interested in the relationship between the explanatory variables and the latent influence variable than their impact on the probability of reporting a particular categorical level of influence.

The specification in Equation (1) includes dummies which allow different intercepts for firms in different size categories and industries. It may be the case, however, that all the coefficients in the regression equation vary according to these classifications. For this reason we also run regressions by size category and separately for services and manufacturing. A similar concern motivates our inclusion of regression results by regional subsample.

3.3 Robustness Checks and Empirical Issues

Numerous additional variables from the WBES dataset were used to test the robustness of the results obtained in our base specification given by Equation (1). Some of these robustness checks addressed potential omitted variable biases due to other determinants of influence, while others addressed potential survey-related biases such as representativeness of sampling and general optimism of respondents.

Three previous papers by Chong and Gradstein (2007), Campos and Giovannoni (2007) and Desai and Olofsgard (2008) have used the same or similar data from the World Bank to ask questions related to firm influence over government. Between them these papers included a number of potential determinants of influence which are not included in our base specification. These variables included lobby group membership, the concentration of ownership of the firm, the legal organization of the company, whether the headquarters of the firm were located in a capital city, the firm's attitudes towards irregular "additional payments" to government, and how predictable the firm views changes in rules, laws and regulations to be. While an argument could be made for each of these variables as a determinant of influence, we have not included them in our base regression either due to endogeneity concerns (e.g. firms may resort to "additional payments" if they do not have other means of influence) or due to missing values excessively reducing the sample size (as was the case for lobby group membership[19], legal organization of the company, location of headquarters and concentration of ownership). Rather than include these variables in our base specification we have run a series of robustness checks including different combinations of these variables. We find they have minor quantitative and no qualitative impact on our findings with regard to any of our firm-level measures of global connectedness.[20]

In addition to other potential determinants of firm influence, Desai and Olofsgard (2008) pay close attention to the problems of comparability when respondents are asked to use

[19] There was no variable indicating lobby group membership in the WBES data.

[20] Results of these regressions are available on request from the author.

ordinal response categories. They note that

> "Different respondents may interpret concepts such as "influence" in vastly different ways based on unobservable characteristics ("culture," socialization, etc.). Ordinal scales may mean different things to different respondents based on idiosyncratic factors such as mood or overall optimism."
>
> (Desai and Olofsgard 2008, p.13)

Consequently the authors employ two methods to correct for the potential biases arising from idiosyncratic respondent differences in reporting influence on an ordinal scale. Firstly they construct their influence variable as a deviation from the respondent's perception of their own firm's influence and that of other firms' influence. This approach is not available to us as the WBES data does not contain responses to questions about the influence of other firms.

The second technique Desai and Olofsgard (2008) use to address idiosyncratic respondent differences is to try to control for the overall optimism of the respondent by including variables which they believe should affect all firms equally. Specifically, they use the managers' responses to questions about the degree to which they view macroeconomic instability (specifically inflation) and economic policy uncertainty as constraints to their business as proxies for the propensity of the respondent to complain. Both of these variables are available to us in the WBES data, however, it is not altogether clear *ex ante* that the impact of macroeconomic instability or economic policy uncertainty should be the same for all types of firms. In particular, it seems likely that the impact of these variables might vary systematically with our variables of interest, namely foreign connections. Thus we do not include these variables in our base regression, but do include them in our robustness checks. Our robustness checks also included two alternative proxies for the overall optimism of the respondents, namely how problematic they consider street crime/theft/disorder, and organized crime/Mafia for the operation and growth of their business.

An additional source of bias which is not discussed by Desai and Olofsgard (2008) is unobserved heterogeneity in the respondents' general attitudes toward the government in the country of operation. These attitudes may vary for cultural or historical reasons, as well as due to the respondent's personal experiences outside the management of their firm. Including proxies for these attitudes in the base regression specification is not justified as reverse causality from success in influencing government to general attitudes may bias the coefficients. On the other hand, ignoring this source of heterogeneity may lead to omitted

variable bias. Thus we run an additional robustness check in which we include a number of proxies for general attitude toward government, namely the responses to the questions:

- Please evaluate the following statement: "The process of developing new rules, regulations or policies is usually such that businesses are informed in advance of changes affecting them." This is true: always, mostly, frequently, sometimes, seldom, never.
- Do you regularly have to cope with unexpected changes in economic and financial policies which materially affect your business? Responses were on a six-point scale from completely predictable to completely unpredictable.
- Please rate your overall perception of the relation between government and/or bureaucracy and private firms on the following scale. "All in all, for doing business I perceive the state as": very helpful, mildly helpful, neutral, mildly unhelpful, very unhelpful. The question was asked separately for national and local governments.

Since none of our attempts to address unobserved respondent heterogeniety had any material effect on our results we do not report them in the paper.[21] Our interpretation of the finding of no effect on our coefficients of interest is that although unobserved respondent heterogeniety is certainly present, it did not cause bias because it was not correlated with our explanatory variables of interest.

4. 'Foreignness' and Influence over Government

We begin our analysis by comparing results from our base specification with those for specifications typically used in the literature which identify foreignness purely on the basis of foreign ownership. The dependent variable in Table 7 is the maximum influence firms report over any of the four arms of government: Executive, Legislature, Ministry and Regulator. Column 1 of Table 7 shows coefficient estimates and standard errors for key variables estimated from our base regression specification in Equation (1). In the base specification we use the our 10% foreign-ownership criterion and the multi-national variable to create four mutually exclusive groups, multinationals operating in their home country, multinationals operating in a foreign country (i.e. subsidiaries), firms with foreign ownership which do not identify as part of a multinational, and the excluded category is purely domestic firms. The results in column 1 are a key contribution of this paper. They show that foreign non-multinational

[21] Please contact the author for these results.

firms are no more or less influential than domestic non-multinationals (referred to here as purely domestic firms). Similarly foreign multinationals are no more or less influential than local multinationals.[22] However, both foreign and domestic multinationals are significantly more influential than other types of firms.

Other coefficients in Column 1 of Table 7 are also interesting and largely conform to our prior expectations. Exporters are significantly more influential than non-exporters, firms with government ownership are significantly more influential than purely private firms and size is significantly related to influence. Among the sectors, service firms stand out as significantly more influential than similar firms in other sectors. Only age seems to be less strongly correlated with influence than we might have expected. We return to this issue in Table 8 and the discussion thereof. With the exception of Table 8, the coefficients on sector, size and age are generally not reported in the rest of the tables in the body of this paper as they are not our primary interest.[23]

Column 2 of Table 7 presents results based on the specification typically used in the literature. Foreign firms are identified on the basis of ownership and multi-country operations is excluded. The result in column 2 that foreign-ownership is uncorrelated with influence echo the findings of Chong and Gradstein (2007). Additionally controlling for multinationality, as in Column 3, does not affect the coefficient on foreign-ownership. This is no surprise in light of our findings from Column 1.

We noted earlier that firm age is only weakly positively correlated with influence in Table 7. Intuitively we might expect more established firms to be more influential. It is often suggested that firms become more politically embedded with time. On the other hand there is a large literature - dating back to Caves (1971) - on the obsolescing bargain between foreign multinationals and host governments. Thus it may be that the weak correlation between age and influence may be due to different age-influence trajectories for different types of firms. Table 8 confirms this. Column 1 of Table 8 reports the relevant coefficients from our base specification, note age is only weakly associated with increasing influence. Column 2 of this table reports coefficients where interaction terms between age and "foreignness" classification have been added.

The results suggest that the influence of different types of firms does indeed evolve differently over time. The coefficient on the non-interacted 'Old' dummy is now positive and

[22] It is easy to see that there is no statistically significant differences between the coefficients for MN at Home and Foreign MN.

[23] The interested reader may, however, find the full set of regression results in the Appendix.

Table 7: Regression of Influence over Government on Firm Characteristics shows significant relationship with multinational affiliation but none with foreign ownership. Country dummies, firm sales to capital ratio and number of competitors included but coefficients not reported. Results including cut points are reported in Table 15.

	(1)	(2)	(3)
	nflc_max	nflc_max	nflc_max
MN at Home	0.159**		
	(0.0529)		
Foreign MN	0.179**		
	(0.0564)		
Foreign non-MN	0.0451		
	(0.0566)		
Exporter	0.130**	0.155**	0.136**
	(0.0361)	(0.0354)	(0.0360)
Govt. Ownership	0.312**	0.328**	0.335**
	(0.0478)	(0.0472)	(0.0474)
Medium	0.184**	0.193**	0.185**
	(0.0356)	(0.0354)	(0.0356)
Large	0.420**	0.449**	0.422**
	(0.0483)	(0.0476)	(0.0484)
Middle_age	-0.0140	-0.0184	-0.0158
	(0.0383)	(0.0382)	(0.0382)
Old	0.107*	0.103*	0.104*
	(0.0421)	(0.0419)	(0.0422)
Services	0.174**	0.178**	0.172**
	(0.0343)	(0.0341)	(0.0343)
Other	-0.0743	-0.0638	-0.103
	(0.171)	(0.173)	(0.174)
Agriculture	-0.00173	-0.00283	-0.00106
	(0.0649)	(0.0646)	(0.0646)
Construction	0.0976	0.0977	0.0916
	(0.0560)	(0.0560)	(0.0561)
frk10		0.0813	0.0368
		(0.0419)	(0.0439)
MNC			0.145**
			(0.0435)
Observations	6096	6089	6051

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 8: Regression of Influence over Government on Firm Characteristics including interactions between age and measures of . Results are consistent with an for foreign-owned firms. Country dummies, government ownership, firm sector, export status, sales to capital ratio and number of competitors included but coefficients not reported.

	(1)	(2)
	nflc_max	nflc_max
MN at Home	0.159**	-0.0431
	(0.0529)	(0.133)
Foreign MN	0.179**	0.304*
	(0.0564)	(0.123)
Foreign non-MN	0.0451	0.159
	(0.0566)	(0.103)
Medium	0.184**	0.179**
	(0.0356)	(0.0357)
Large	0.420**	0.424**
	(0.0483)	(0.0486)
Middle_age	-0.0140	-0.0177
	(0.0383)	(0.0426)
Old	0.107*	0.130**
	(0.0421)	(0.0472)
Services	0.174**	0.175**
	(0.0343)	(0.0343)
Other	-0.0743	-0.0631
	(0.171)	(0.173)
Agriculture	-0.00173	0.00103
	(0.0649)	(0.0650)
Construction	0.0976	0.101
	(0.0560)	(0.0560)
MNC Home X Mid-age		0.299
		(0.163)
MNC Home X Old		0.194
		(0.146)
MNC Foreign X Mid-age		-0.0678
		(0.155)
MNC Foreign X Old		-0.218
		(0.141)
Foreign non-MNC X Mid-age		-0.136
		(0.136)
Foreign non-MNC X Old		-0.199
		(0.135)

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

significant at the 1% level, confirming that older purely domestic firms are indeed more influential than younger ones. Local multinationals also appear to gain influence with age - at a somewhat higher rate than other domestic firms. Indeed the negative insignificant sign on the non-interacted MN Home coefficient suggests that local multinationals only become influential relative to other domestic firms as they age. In contrast, the large and significant coefficient on the non-interacted Foreign MN variable confirms that foreign multinationals are influential from the time they are established in a new host country. Also in contrast to domestic firms, it seems that both multinational and non-multinational foreign firms become somewhat less influential with age [24]. Thus the results in column 2 of Table 8 appear to be consistent with growing influence for domestic firms and something of an obsolescing bargain for foreign firms.

Our base regression includes sector dummies will allow for different intercepts, however, it may be the case that all the coefficients vary by sector of operation of the firm as the primary objectives of the relationship which firms foster with governments varies among the sectors. For example, utilities in the service sector may be most concerned about competition policy, while mining companies are concerned about royalties, property rights, and expropriation, and textile manufacturers about labor and environmental standards. Similarly the relative importance of different firm characteristics to their influence over government may vary by sector. For example, a credible threat of relocation to a different country is likely to be more useful to a firm in a tradable sector than a non-tradable one. In light of these potentially significant sector-level differences, Tables 9 and 17 report the regression results by sector.

Table 9 confirms that the importance of the globalization-related variables (multinationality, foreign ownership, and exporting) do indeed vary significantly across sectors. Comparing the results in Table 9 to those for the full sample reported in Column 1 of Table 7 we see that some of the conclusions from the full sample were driven by only one or two sectors. Exporters and local multinationals appear to only be significantly more influential in the services sector. Meanwhile foreign multinationals derive their influence only from the manufacturing sector. Foreign non-multinationals remain no more or less influential than purely domestic firms, with the exception of agriculture where they appear to be relatively influential.

The difference evident in Table 9 between the sectors in which local and foreign multi-

[24] The coefficients on the foreign MN and non-MN foreign x age interaction terms in column are not statistically significant even at the 10% level. However, in regressions not reported here, foreign ownership and age were interacted. The coefficient on this combined interaction term for both types of foreign firms with the old dummy was negative and significant at the 5% level.

Table 9: Firm Characteristics and Influence on Government by Sector of Firm showing variation across Sectors in the correlates of influence. Country dummies, firm size, age, sales to capital ratio and number of competitors included but coefficients not reported. Results including size, age, and cut points are reported in Table 17.

	Manuf.	Services	Agri.	Constr.
MN at Home	0.0209	0.240**	-0.315	0.480
	(0.0867)	(0.0748)	(0.666)	(0.254)
Foreign MN	0.263**	0.140	0.649	0.241
	(0.0906)	(0.0788)	(0.641)	(0.306)
Foreign non-MN	-0.0654	0.0994	0.821*	-0.136
	(0.0816)	(0.0863)	(0.401)	(0.315)
Exporter	0.0579	0.222**	0.217	-0.0291
	(0.0574)	(0.0543)	(0.215)	(0.197)
Govt. Ownership	0.390**	0.297**	0.313	0.139
	(0.0794)	(0.0753)	(0.187)	(0.209)
Observations	2171	2914	462	505

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

nationals are most influential is worthy of further comment. Firstly it provides additional evidence to that from Table 8 that the reasons for the influence of foreign multinationals might be quite different to the explanation of the relative influence of domestic multinationals. We might also hypothesize about the source of this influence if we believe manufacturing tends to be more tradable than services. In this case the high degree of influence of foreign multinationals in the manufacturing sector might be partly attributable to them being the most 'footloose' type of firm. In other words, the credible threat of departure to a competitor state may be an important source of influence for foreign multinationals.

Thus far our regressions have pooled the data from the wide variety of countries in the WBES data. Yet - as discussed in the Introduction - the literature has tended to treat developed countries separately to developing and transition economies on the topic of government-firm relations - on the basis that their institutions are fundamentally different. In Tables 10 and 18 we allow for this possibility and find that there are important differences between the OECD and non-OECD subsamples in regard to the coefficient on our foreignness variables.

In Table 10 we see that multinationals do not appear to be more influential than other firms in the OECD. Furthermore, foreign non-multinationals appear to be significantly *less* influential than similar firms. While this result may come as a surprise to people familiar

Table 10: Regression of Influence over Government on Firm Characteristics for OECD and non-OECD Country-groups suggests that OECD countries are less foreign-friendly and less influenced by multinationals. Country dummies, firm size, age, sector, sales to capital ratio and number of competitors included but coefficients not reported. Results including size, age, sector and cut points are reported in Table 18.

	All	Non-OECD	OECD
MN at Home	0.159**	0.176**	0.00794
	(0.0529)	(0.0582)	(0.141)
Foreign MN	0.179**	0.200**	0.0334
	(0.0564)	(0.0629)	(0.139)
Foreign non-MN	0.0451	0.0931	-0.485**
	(0.0566)	(0.0601)	(0.187)
Exporter	0.130**	0.133**	0.145
	(0.0361)	(0.0387)	(0.108)
Govt. Ownership	0.312**	0.315**	0.341*
	(0.0478)	(0.0502)	(0.150)
Observations	6096	5374	722

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

with the policy rhetoric and practice in many OECD countries,[25] it is readily understandable in light of the basic economic intuition discussed in Section 3.1. Our fundamental intuition was that the influence a firm has over the government is increasing in the benefits which the operation of the firm produces both directly for the government and for the national economy more broadly, and also increasing in the credibility of the firm's threat to relocate its operations elsewhere. It is not difficult to argue that OECD countries are generally less desperate for foreign capital to boost their investment rates and also less in need of the advanced management skills and technology that often accompanies foreign direct investment (particularly when it comes in the form of a multinational subsidiary). Furthermore, foreign direct investment into OECD countries is dominantly market-seeking or horizontal. Market-seeking foreign firms have a much less credible relocation threat than resource-seeking or vertical forms of foreign investment. Thus we believe that our finding of relatively low influence for both foreign-owned and multinational firms in OECD countries supports our intuition about the determinants of firms' influence over governments.

[25]For example, while OECD countries are keen to emphasize the need for binding investor protections in via international investment treaties in their dealings with non-OECD countries, they almost never enter such treaties with another OECD country. Of the many thousands of investment treaties in existence, we are not aware of a single one which includes investor-state arbitration clauses but does not involve at least one non-OECD country.

5. Checks on the Robustness of the Findings

As described in Section 3, we undertook numerous robustness checks based partly on the work of previous authors using the same or similar data. The majority of these checks did not result in any new insights or implications for our findings. In the current section we report only the results of the two checks which did produce some insight.

Table 11 reports results for the base regression applied to subsamples by size classification. The purpose of this table is both to check whether our "foreignness" variables are somehow picking-up unexplained heterogeneity between size classes, and to see whether our findings hold within all size categories. Table 11 shows that, as we might expect, all our explanatory variables matter more within the group of small firms. [26] In particular, exporting appears to *only* explain differences among small firms. The magnitude of the coefficients on the foreign and local multinational variables are fairly robust across the groups and it would appear that the loss of statistical significance is largely due to smaller sample size compared to the pooled regression.

Table 11: Firm Characteristics and Influence on Government by Size Category of Firm shows results are qualitatively consistent across size categories. Country dummies, firm age, sector, sales to capital ratio and number of competitors included but coefficients not reported. Results including sector and cut points are reported in Table 19.

	All	Small	Medium	Large
MN at Home	0.159**	0.203	0.134	0.164
	(0.0529)	(0.109)	(0.0829)	(0.0985)
Foreign MN	0.179**	0.359*	0.105	0.203*
	(0.0564)	(0.155)	(0.0828)	(0.101)
Foreign non-MN	0.0451	0.144	0.0209	0.0443
	(0.0566)	(0.124)	(0.0824)	(0.112)
Exporter	0.130**	0.236**	0.0716	0.0778
	(0.0361)	(0.0651)	(0.0541)	(0.0888)
Govt. Ownership	0.312**	0.425**	0.227**	0.367**
	(0.0478)	(0.144)	(0.0647)	(0.107)
Observations	6096	2448	2651	997

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 12 reports regression results where the dependent variable in each column is the

[26] Somewhat surprisingly, however, there is weak evidence that our control variables are better at explaining influence patterns among large firms than among medium-sized ones.

reported influence over each of the four branches of government: Executive, Legislature, Ministry and Regulator. Our central findings are robust across the branches of government, with the exception that the statistical significance of the influence of foreign multinationals does not extend to the legislature. There is also weak evidence that this relative lack of influence applies to non-multinational foreign firms and to both executive and legislature. One way of viewing such a result would be that foreign firms are relatively less influential over the more directly elected branches of government.

Table 12: Firm Characteristics and Influence on Different Branches of Government. Country dummies, firm size, age, sector, sales to capital ratio and number of competitors included but coefficients not reported. Results including size, age, sector, and cut points are reported in Table 16.

	Executive	Legislator	Ministry	Regulator
MN at Home	0.186**	0.204**	0.187**	0.151**
	(0.0548)	(0.0539)	(0.0540)	(0.0558)
Foreign MN	0.123*	0.0944	0.170**	0.152**
	(0.0574)	(0.0592)	(0.0568)	(0.0557)
Foreign non-MN	-0.0156	-0.0471	0.0374	0.0856
	(0.0595)	(0.0578)	(0.0601)	(0.0570)
Exporter	0.0944**	0.114**	0.139**	0.115**
	(0.0366)	(0.0370)	(0.0370)	(0.0373)
Govt. Ownership	0.293**	0.265**	0.345**	0.206**
	(0.0496)	(0.0501)	(0.0499)	(0.0503)
Observations	6074	6071	6047	6050

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

6. Conclusion

Concern that multinational firms have disproportionate influence over government decisions, particularly in developing countries, is a central feature of the critique of 'corporate' globalization. At the same time there have been significant developments in international law in recent decades protecting foreign direct investments from supposedly discriminatory and expropriatory actions of host governments - particularly in developing countries. This paper used data on managers' perceptions of their firm's influence over government from the World Business Environment Survey (WBES) to examine whether either of these apparently contradictory world-views has empirical support.

A particularly important feature of the WBES for our purposes is that in addition to a question on the extent of foreign ownership, it includes a question on whether the firm has operations or holdings in other countries. Thus, unlike most empirical work on foreign direct investment, we were able to differentiate between firms which merely had substantive foreign ownership and firms which identified themselves as part of a multinational. This distinction was important, with only about half the foreign-owned firms associating themselves with a multinational. The characteristics of non-multinational foreign firms differed from those of multinational foreign firms in systematic ways which supported our hypothesis that they were the recipients of substantial amounts of portfolio investment. The significant numbers of firms in this group suggest they are worthy of more research attention than they have received to date.

The distinction between multinational and non-multinational foreign firms was important to understanding the relationship with host governments. On average across our sample of countries multinational (both foreign and domestic) were significantly more influential than non-multinationals. Foreign ownership, alone, was not correlated with influence: foreign multinationals were as influential as domestic multinationals and foreign non-multinationals were as influential as purely domestic firms.

In view of the distinct strands of literature addressing the relationship between foreign firms and host governments in developed and developing countries, we also ran separate regressions for OECD and non-OECD subsamples. The results for the non-OECD subsample were consistent with the whole sample results. The OECD sample, however, showed important differences. In the OECD sample neither foreign nor domestic multinationals were more influential than purely domestic firms, but foreign non-multinationals *did* report significantly less influence.

Our theoretical understanding of the determinants of influence in both OECD and non-OECD countries is that they are consistent with a government-firm bargaining model in which a firm's influence is increasing in the benefits the government expects from the firm's operation in the economy. However, we have not attempted to formally test any theory and note that the results for the OECD are also likely to be consistent with theories on the 'liability of foreignness'.

Taken together our results suggest that anti-foreign bias is - if anything - a rich country phenomena, while multinational 'dominance' might be based on developing country experiences. For governments of non-OECD countries the benefits of foreign capital appear to

outweigh potential sources of disenfranchisement for foreign firms and there appears little justification for an emphasis on protecting foreign investments in developing countries, particularly in regard to investments by foreign multinationals.

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7. Appendix

Region	Country
Transition Europe	Albania, Armenia, Azerbaijan, Belarus, Bosnia, Bulgaria, Croatia, Czech Rep, Estonia, Georgia, Hungary, Kazakhstan, Kyrgizstan, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Turkey, Ukraine, Uzbekistan
East Asia	China, Malaysia, Indonesia, Singapore
South Asia	India
Latin America	Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Peru, Trinidad & Tobago, Uruguay, Venezuela
OECD	Canada, France, Germany, Italy, Portugal, Spain, Sweden, United Kingdom, United States

Table 13: Countries with data included in the base regression by WB Region

Variable	Mean				
	Domestic	MN at Home	Foreign MN	Foreign nonMN	All
Govt. Ownership	0.13	0.12	0.07	0.13	0.13
Exporter	0.24	0.63	0.62	0.55	0.33
Medium	0.41	0.44	0.39	0.51	0.42
Large	0.11	0.34	0.45	0.27	0.17
Middle-aged	0.34	0.29	0.28	0.35	0.33
Old	0.33	0.57	0.47	0.37	0.36
Manufacturing	0.34	0.45	0.49	0.54	0.38
Services	0.48	0.43	0.46	0.37	0.46

Table 14: Summary of Firm Characteristics by foreign/MNC classification

Table 15: Firm Characteristics and Influence on Government. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	(1)	(2)	(3)
	nflc_max	nflc_max	nflc_max

MN at Home	0.159**		
	(0.0529)		
Foreign MN	0.179**		
	(0.0564)		
Foreign non-MN	0.0451		
	(0.0566)		
Exporter	0.130**	0.155**	0.136**
	(0.0361)	(0.0354)	(0.0360)
Govt. Ownership	0.312**	0.328**	0.335**
	(0.0478)	(0.0472)	(0.0474)
Medium	0.184**	0.193**	0.185**
	(0.0356)	(0.0354)	(0.0356)
Large	0.420**	0.449**	0.422**
	(0.0483)	(0.0476)	(0.0484)
Middle_age	-0.0140	-0.0184	-0.0158
	(0.0383)	(0.0382)	(0.0382)
Old	0.107*	0.103*	0.104*
	(0.0421)	(0.0419)	(0.0422)
Services	0.174**	0.178**	0.172**
	(0.0343)	(0.0341)	(0.0343)
Other	-0.0743	-0.0638	-0.103
	(0.171)	(0.173)	(0.174)
Agriculture	-0.00173	-0.00283	-0.00106
	(0.0649)	(0.0646)	(0.0646)
Construction	0.0976	0.0977	0.0916
	(0.0560)	(0.0560)	(0.0561)
frk10		0.0813	0.0368
		(0.0419)	(0.0439)
MNC			0.145**
			(0.0435)
cut1	-2.324	-1.918	-1.905
	(0.193)	(0.107)	(0.106)
cut2	-0.631	-0.226	-0.216
	(0.192)	(0.106)	(0.106)
cut3	-0.00579	0.395	0.405
	(0.192)	(0.106)	(0.106)
cut4	0.600	0.998	1.008
	(0.193)	(0.107)	(0.107)
cut5	1.137	1.533	1.544
	(0.193)	(0.108)	(0.108)
Observations	6096	6089	6051

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 16: Interacted Firm Characteristics and Maximum Influence on Government. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	Executive	Legislator	Ministry	Regulator
MN at Home	0.186**	0.204**	0.187**	0.151**
	(0.0548)	(0.0539)	(0.0540)	(0.0558)
Foreign MN	0.123*	0.0944	0.170**	0.152**
	(0.0574)	(0.0592)	(0.0568)	(0.0557)
Foreign non-MN	-0.0156	-0.0471	0.0374	0.0856
	(0.0595)	(0.0578)	(0.0601)	(0.0570)
Exporter	0.0944**	0.114**	0.139**	0.115**
	(0.0366)	(0.0370)	(0.0370)	(0.0373)
Govt. Ownership	0.293**	0.265**	0.345**	0.206**
	(0.0496)	(0.0501)	(0.0499)	(0.0503)
Medium	0.157**	0.132**	0.162**	0.170**
	(0.0361)	(0.0369)	(0.0369)	(0.0356)
Large	0.405**	0.379**	0.424**	0.363**
	(0.0497)	(0.0497)	(0.0499)	(0.0497)
Middle_age	-0.0533	-0.0384	-0.0267	-0.0836*
	(0.0391)	(0.0393)	(0.0391)	(0.0388)
Old	0.0548	0.0679	0.0801	0.0825
	(0.0426)	(0.0431)	(0.0430)	(0.0433)
Services	0.131**	0.108**	0.145**	0.178**
	(0.0353)	(0.0351)	(0.0352)	(0.0352)
Other	-0.210	-0.0707	-0.119	0.00740
	(0.195)	(0.202)	(0.199)	(0.192)
Agriculture	-0.00705	-0.0440	-0.0354	-0.0115
	(0.0661)	(0.0664)	(0.0675)	(0.0663)
Construction	0.0584	0.0206	0.0670	0.150**
	(0.0564)	(0.0575)	(0.0578)	(0.0572)
cut1	-1.866	-2.018	-1.856	-2.136
	(0.115)	(0.105)	(0.135)	(0.213)
cut2	0.0310	-0.0759	0.0808	-0.310
	(0.114)	(0.103)	(0.134)	(0.212)
cut3	0.743	0.635	0.762	0.358
	(0.114)	(0.104)	(0.135)	(0.212)
cut4	1.286	1.163	1.324	0.957
	(0.116)	(0.104)	(0.136)	(0.213)
cut5	1.813	1.668	1.863	1.516
	(0.116)	(0.106)	(0.138)	(0.213)
Observations	6074	6071	6047	6050

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 17: Firm Characteristics and Influence on Government by Sector of Firm. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	Manuf.	Services	Agri.	Constr.
MN at Home	0.0209	0.240**	-0.315	0.480
	(0.0867)	(0.0748)	(0.666)	(0.254)
Foreign MN	0.263**	0.140	0.649	0.241
	(0.0906)	(0.0788)	(0.641)	(0.306)
Foreign non-MN	-0.0654	0.0994	0.821*	-0.136
	(0.0816)	(0.0863)	(0.401)	(0.315)
Exporter	0.0579	0.222**	0.217	-0.0291
	(0.0574)	(0.0543)	(0.215)	(0.197)
Govt. Ownership	0.390**	0.297**	0.313	0.139
	(0.0794)	(0.0753)	(0.187)	(0.209)
Medium	0.213**	0.138**	0.334	0.0856
	(0.0642)	(0.0509)	(0.178)	(0.130)
Large	0.431**	0.441**	0.365	0.349
	(0.0816)	(0.0710)	(0.256)	(0.232)
Middle_age	0.0302	-0.00167	-0.0228	0.0270
	(0.0707)	(0.0542)	(0.150)	(0.138)
Old	0.172*	0.148*	-0.284	0.419**
	(0.0735)	(0.0627)	(0.211)	(0.157)
cut1	-2.329	-2.412	-0.127	-4.031
	(0.449)	(0.216)	(0.591)	(0.510)
cut2	-0.554	-0.723	1.500	-2.108
	(0.447)	(0.214)	(0.597)	(0.491)
cut3	0.141	-0.0891	1.983	-1.512
	(0.448)	(0.214)	(0.602)	(0.486)
cut4	0.789	0.500	2.710	-0.845
	(0.449)	(0.216)	(0.593)	(0.492)
cut5	1.292	1.076	3.334	-0.281
	(0.450)	(0.214)	(0.615)	(0.501)
Observations	2171	2914	462	505

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 18: Regression of Influence over Government on Firm Characteristics for OECD and non-OECD Country-groups. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	All	Non-OECD	OECD
MN at Home	0.159**	0.176**	0.00794
	(0.0529)	(0.0582)	(0.141)
Foreign MN	0.179**	0.200**	0.0334
	(0.0564)	(0.0629)	(0.139)
Foreign non-MN	0.0451	0.0931	-0.485**
	(0.0566)	(0.0601)	(0.187)
Exporter	0.130**	0.133**	0.145
	(0.0361)	(0.0387)	(0.108)
Govt. Ownership	0.312**	0.315**	0.341*
	(0.0478)	(0.0502)	(0.150)
Medium	0.184**	0.169**	0.359**
	(0.0356)	(0.0380)	(0.114)
Large	0.420**	0.385**	0.775**
	(0.0483)	(0.0518)	(0.147)
Middle_age	-0.0140	-0.00226	-0.206
	(0.0383)	(0.0394)	(0.148)
Old	0.107*	0.0973*	0.0978
	(0.0421)	(0.0451)	(0.139)
Services	0.174**	0.168**	0.240*
	(0.0343)	(0.0364)	(0.109)
Other	-0.0743	-0.0703	
	(0.171)	(0.167)	
Agriculture	-0.00173	0.00378	-0.245
	(0.0649)	(0.0645)	(0.443)
Construction	0.0976	0.0723	0.347
	(0.0560)	(0.0597)	(0.178)
cut1	-2.324	-2.365	-0.728
	(0.193)	(0.205)	(0.290)
cut2	-0.631	-0.731	0.0950
	(0.192)	(0.204)	(0.290)
cut3	-0.00579	-0.132	0.657
	(0.192)	(0.204)	(0.294)
cut4	0.600	0.483	1.442
	(0.193)	(0.204)	(0.302)
cut5	1.137	0.984	
	(0.193)	(0.206)	
Observations	6096	5374	722

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 19: Firm Characteristics and Influence on Government by Size Category of Firm. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	All	Small	Medium	Large
MN at Home	0.159**	0.203	0.134	0.164
	(0.0529)	(0.109)	(0.0829)	(0.0985)
Foreign MN	0.179**	0.359*	0.105	0.203*
	(0.0564)	(0.155)	(0.0828)	(0.101)
Foreign non-MN	0.0451	0.144	0.0209	0.0443
	(0.0566)	(0.124)	(0.0824)	(0.112)
Exporter	0.130**	0.236**	0.0716	0.0778
	(0.0361)	(0.0651)	(0.0541)	(0.0888)
Govt. Ownership	0.312**	0.425**	0.227**	0.367**
	(0.0478)	(0.144)	(0.0647)	(0.107)
Medium	0.184**			
	(0.0356)			
Large	0.420**			
	(0.0483)			
Middle_age	-0.0140	-0.0365	0.00818	-0.0421
	(0.0383)	(0.0567)	(0.0605)	(0.133)
Old	0.107*	0.139	0.0878	0.121
	(0.0421)	(0.0726)	(0.0621)	(0.123)
Services	0.174**	0.202**	0.114*	0.357**
	(0.0343)	(0.0585)	(0.0511)	(0.0925)
Other	-0.0743	-0.108	-0.0209	
	(0.171)	(0.224)	(0.283)	
Agriculture	-0.00173	-0.0450	0.0383	-0.0718
	(0.0649)	(0.133)	(0.0861)	(0.173)
Construction	0.0976	0.149	0.0200	0.160
	(0.0560)	(0.0873)	(0.0855)	(0.167)
cut1	-2.324	-2.359	-2.820	-2.439
	(0.193)	(0.312)	(0.323)	(0.330)
cut2	-0.631	-0.515	-1.179	-0.842
	(0.192)	(0.309)	(0.322)	(0.325)
cut3	-0.00579	0.0715	-0.565	-0.0486
	(0.192)	(0.310)	(0.322)	(0.326)
cut4	0.600	0.556	0.0675	0.717

	(0.193)	(0.311)	(0.322)	(0.327)
cut5	1.137	1.117	0.579	1.310
	(0.193)	(0.312)	(0.321)	(0.327)
Observations	6096	2448	2651	997

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$

Table 20: Firm Characteristics and Different Measures of Influence on Government. Country dummies, sales to capital ratio and number of competitors category included but coefficients not reported.

	Firm Influence	Predictable Law Changes	Firm and Business Org. Voice
MN at Home	0.159**	0.00182	0.117*
	(0.0529)	(0.0496)	(0.0517)
Foreign MN	0.179**	-0.0527	0.0850
	(0.0564)	(0.0519)	(0.0538)
Foreign non-MN	0.0451	-0.0727	0.0780
	(0.0566)	(0.0468)	(0.0513)
Exporter	0.130**	-0.0679*	0.0974**
	(0.0361)	(0.0326)	(0.0334)
Govt. Ownership	0.312**	-0.174**	0.298**
	(0.0478)	(0.0447)	(0.0463)
Medium	0.184**	-0.123**	0.167**
	(0.0356)	(0.0324)	(0.0341)
Large	0.420**	-0.190**	0.348**
	(0.0483)	(0.0444)	(0.0458)
Middle_age	-0.0140	-0.0291	0.0927*
	(0.0383)	(0.0341)	(0.0364)
Old	0.107*	-0.0874*	0.178**
	(0.0421)	(0.0393)	(0.0409)
Services	0.174**	-0.105**	0.0918**
	(0.0343)	(0.0318)	(0.0325)
Other	-0.0743	-0.273	0.247
	(0.171)	(0.168)	(0.171)
Agriculture	-0.00173	0.0124	0.0299
	(0.0649)	(0.0605)	(0.0616)
Construction	0.0976	-0.167**	-0.0317
	(0.0560)	(0.0518)	(0.0537)
cut1	-2.324	-1.638	-0.672
	(0.193)	(0.179)	(0.218)
cut2	-0.631	-0.946	0.0744

	(0.192)	(0.178)	(0.218)
cut3	-0.00579	0.184	0.896
	(0.192)	(0.177)	(0.218)
cut4	0.600	1.035	1.458
	(0.193)	(0.178)	(0.219)
cut5	1.137	1.612	2.156
	(0.193)	(0.178)	(0.219)
Observations	6096	6780	6681

Standard errors in parentheses

Ordered probit regressions, coefficients reported.

* $p < 0.05$, ** $p < 0.01$