



Incentivizing embedded investment: Evidence from patterns of foreign direct investment in Latin America

Sarah Bauerle Danzman^{1,2}  · Alexander Slaski^{1,2}

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Abstract

Governments frequently offer tax incentives to induce localized investments. This is puzzling because previous research finds tax incentives are rarely decisive factors in firms' locational decision-making. Some argue incentives reflect hyper capital mobility, which strengthens multinational enterprises' bargaining leverage vis-à-vis governments that wish to attract investment. Others emphasize the domestic political institutions and electoral considerations that incentivize politicians to publicly court investors. We argue that firms' leverage over governments stems from investment characteristics associated with governments' broader development objectives. We test our argument on deal-level data on investment incentives in Latin America from 2010 to 2017. Our results indicate firms are more likely to receive incentives when they are already embedded in local markets and when they exhibit characteristics associated with low ex post mobility. These results challenge widely held beliefs over what provides firms political power in an age of globalization, and suggest that governments use incentives primarily to fulfill their economic and political objectives rather than because globalization destroys states' capacity to tax mobile capital.

Keywords FDI · MNEs · Incentives · Capital Openness · Globalization

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 Sarah Bauerle Danzman
sbauerle@indiana.edu

Alexander Slaski
a.m.slaski@fsw.leidenuniv.nl

¹ Indiana University Bloomington, 355 N Jordan Ave, Bloomington, IN 47401, USA

² Leiden University, Leiden, Netherlands

The outsized political influence of business – particularly multinational enterprises (MNEs) – is one of the most central and enduring concerns in international political economy. While early work mostly considered how domestic capital can use its structural power to shape political outcomes in its favor (e.g. Frieden 1991; Hacker and Pierson 2002; Lindblom 1977), the most recent wave of globalization has led to a large literature that considers how firms’ threat of exit constrains states’ ability to tax and regulate MNEs (Hays 2003; Li 2006, 2016; Mosley 2003; Pond and Zafeiridou 2019; Rudra 2008; Strange 1996). The seeming proliferation of investment incentives, in which governments provide targeted preferential tax treatment or subsidies to induce firms – often MNEs – to invest locally, is a particularly stark illustration of how states may have increasingly limited capacity to tax globally mobile firms. Over 160 countries have at least one investment promotion agency (IPA) charged with attracting multinational firms through a combination of image promotion, tax incentives, and assistance with bureaucratic procedures associated with investment. According to the United Nations Conference on Trade and Development (UNCTAD), countries have passed 181 new investment incentive measures from January 2010 to September 2020.¹ The distributive implications of such programs are worrisome to scholars of inequality because incentives transfer resources from local taxpayers to global firms, often resulting in decreased funding for education and other social services.

Beyond normative concerns about inequality, governments’ continued use of investment incentives is puzzling because such inducements are costly, even though there is little evidence that they are effective tools of investment attraction. The most recent estimates available suggest developing countries spend over \$50 billion yearly in such subsidies (Tavares-Lehmann et al. 2016; Thomas 2011). This figure is dwarfed by investment incentives provided by developed economies; the US alone spent \$45 billion on these programs in 2015 (Bartik 2017). Despite the costs of investment incentives, a large body of research consistently finds that these policy tools are ineffective at generating high-quality investment and fostering economic growth (UNCTAD 2016; World Bank 2017; James 2010; Jensen 2017). A World Bank survey of multinational firms investing in twelve developing countries found 58 to 98% of firms would have invested in these locations without an investment incentive.² Similar earlier studies also consistently demonstrate that firms are much more motivated by political stability, macroeconomic conditions, and logistics issues than they are by access to tax incentives (McKinsey Global Institute 2003; Fortune/Deloitte and Touche 1997; UNIDO 2011). In the words of UN development officials, firms view incentives primarily as “icing on the cake” that further sweetens an investment deal but does not drive it.³

What then explains the proliferation of investment incentives, given that they are costly and there is little evidence that such programs change investor behavior? This article answers that question by examining the state- and firm-level attributes that determine the distribution of investment incentives in Latin America. Previous research on the supply of investment incentives has studied whether governments offer

¹ See UNCTAD’s Investment Policy Monitor <http://investmentpolicyhub.unctad.org/IPM>, accessed September 16, 2020.

² James (2013), see also Tavares-Lehmann et al. (2016) for a review.

³ Remarks made by James Zhan, UNCTAD at the World Investment Conference in Istanbul, Turkey, October 18, 2016.

incentives to compensate for poor quality domestic institutions (Li 2006), to respond to incentive offers in competing investment locational choices (Rodriguez-Pose and Arbix 2001; Li 2016), or to claim credit for economic development and thereby generate voter approval (Jensen et al. 2015; Jensen and Malesky 2018). However, because it is often difficult to obtain systematic deal-level data on investment incentives, this literature has relied on measures of the existence of tax incentive programs, on small case studies, on investment flows as revealed preference, on data exclusive to one country such as the US, or on survey experiments. These data limitations have made it difficult to adjudicate between institutional and firm-level effects, particularly beyond the US context, where data availability issues are less pronounced and existing research is more developed.

Our contribution to this debate is twofold. First, we offer a new project-level dataset that allows us to ask and answer different questions than could country-level datasets used in previous research. We leverage the most comprehensive, proprietary database on incentives currently available to examine the determinants of over twelve hundred deal-level incentives concluded in thirteen Latin American countries from 2010 to 2017. To our knowledge, this is the first such use of the data in political science literature. This dataset is also merged with information on all existing foreign direct investment projects, allowing us to look not only at the characteristics of projects where incentives were provided but also at projects that did not receive incentives. Second, by leveraging project-level data, we demonstrate that the attributes associated with receiving incentives are not connected to capital mobility, but rather are more associated with broad development objectives of host governments as well as the links between investors and host country politicians. This finding is an important corrective to narratives that incentives are driven primarily by the bargaining advantages that accrue to the most globally mobile firms. Indeed, our findings indicate that the factors associated with less *ex post* mobility are the strongest predictors of whether an investment incentive will be realized.

To summarize our argument, the patterns of investment incentives for FDI - at least in Latin America - indicate that firm power often comes not from exit, but from voice, and that governments provide incentives strategically to specific kinds of investment that they most want to cultivate. Our argument is not that immobility *per se* confers bargaining strength to firms, but governments are most willing to provide incentives to projects that have characteristics such as high levels of fixed capital requirements and job creation that are also associated with low *ex post* mobility. This argument stands in contrast to predominant theories in the International Political Economy literature that MNEs have the greatest bargaining power *vis-à-vis* governments when they have a high degree of capital mobility that provides them with a credible threat of exit.⁴ Consequently, the relationship between MNE mobility and bargaining strength is more

⁴ The idea that capital mobility is central to explaining the firm/government bargaining dynamic is central to contemporary mainstream IPE. Building from insights that financial liberalization has decreased partisan differences in macroeconomic management (e.g. Boix (2000)), scholars frequently point to asset mobility as key to explaining a wide variety of outcomes including firm valuation (e.g. Pond and Zafeiridou (2019)), why and when governments commitment themselves to investor-state dispute settlement (e.g. Simmons (2014)), and the emergence of tax incentives for foreign investment (e.g. Morisset (2003)). The International Business literature has taken a more eclectic view of the factors that influence this bargaining dynamic (e.g. Eden, Lenway, and Schuler (Eden et al. 2005)), and we view our findings are complementary to that line of research.

nuanced than typically assumed and governments retain a degree of power that scholars and observers often overlook.

We concentrate on one region primarily due to data availability issues. The investment incentives database that we use has better and more complete coverage of Latin America than other developing regions such as Africa or less developed regions of Asia. This is because the dataset relies on both open source news reporting and on relationships with countries' development agencies to gather information on realized incentives. These data collection methods favor more complete coverage in Latin America because it has higher levels of press freedom than other developing regions, translation issues are easier because only two languages are widely used in the region, and the database administrators have more connections to economic development agencies in Latin America than in other areas for idiosyncratic reasons. By limiting our analysis to Latin American countries, we can also hold mostly constant political institutions such as presidentialism. The region's factor endowments and history with import substitution industrialization ensure both a variation in investment across sectors and that governments make incentive decisions within the context of relatively strong domestic business interest groups. The downside to this regional approach is that our ability to confidently assert our theory and findings travel to other regions is limited. However, we choose to prioritize data completeness in restricting our analysis to this one region.

Generating knowledge over the factors that influence incentive deals is important to advancing inquiry around several key questions about the effects of increasingly global firm activities on the international system of political economy. First, better descriptive information about the factors that influence incentive deals can help confirm or discredit the assumptions about incentives that underpin most research on the politics of investment promotion. Do incentives go to the most mobile firms? Do incentives privilege foreign firms? Do incentives increase as the political risk environment deteriorates? All of these inquiries are ultimately empirical questions, but the absence of deal-level data has made assessing these claims challenging. Second, how do the answers to the questions posed above affect theory about the relative bargaining power of global firms and localized governments? Does the threat of exit render firms powerful (Hirschman 1970; Lindblom 1977)? Or does their mobility leave them less able to extract rents from the state (Wibbels 2000)?

We argue that politicians use incentive policies to target investments that have characteristics that are associated with a greater likelihood of generating local economic benefits, and so the market for locational incentives is an assortative matching process in which both firms and governments seek to maximize complementarity between them and a partner. Importantly, the logic of our theory can accommodate instances in which politicians' incentive preferences are driven by welfare maximization or by political survival calculations. While capital mobility provides a background condition that allows global firms to expand their locational search beyond a pre-determined border, governments are not passive price takers in the market for investment. Instead, they prefer to attract some forms of investment more than others, and therefore are more willing to incentivize investment deals that are more likely to support broader development objectives. Because the characteristics of investment that governments most desire – high levels of fixed capital investment, creation of large numbers of skilled jobs, and higher value-added activity – also render investment less mobile, investment

incentives are more likely to be rewarded to firms that have high redeployment costs and more location-specific requirements. Therefore, patterns of investment incentives should reflect the development policies and electoral priorities of governments rather than solely the bargaining leverage of firms characterized by hyper capital mobility.

Our empirical evidence supports this theory. Using a dataset of all greenfield FDI projects in Latin American from 2010 to 2017, we find evidence that capital mobility is a poor predictor of receiving an incentive, while characteristics of investments more likely to contribute meaningfully to economic growth are. We find the strongest evidence that employment generation leads to investment incentives, as well as substantial but more qualified evidence that the size of capital investment and the capital intensity of the industry also increase the probability of incentives. Moreover, expansion deals are more likely to receive incentives than are deals for new locations. These findings challenge long-held assumptions about the nature of firm-government bargaining dynamics in an era of deep economic integration.

The remainder of this article is organized as follows. First, we situate our research in a broader literature on the relationship between mobile capital and developing state, develop our theory of immobility as a source of bargaining strength, and derive distinct observable implications from this theory. Next, we use deal-level incentive data across Latin America to test these hypotheses. We end by offering some initial conclusions about the factors that influence investment incentives and suggesting avenues for future research.

1 Existing explanations for investment incentives

Existing research provides three potential explanations to the puzzle of investment incentives: firm bargaining strength, compensatory rewards for poor investment climates, and domestic political concerns.

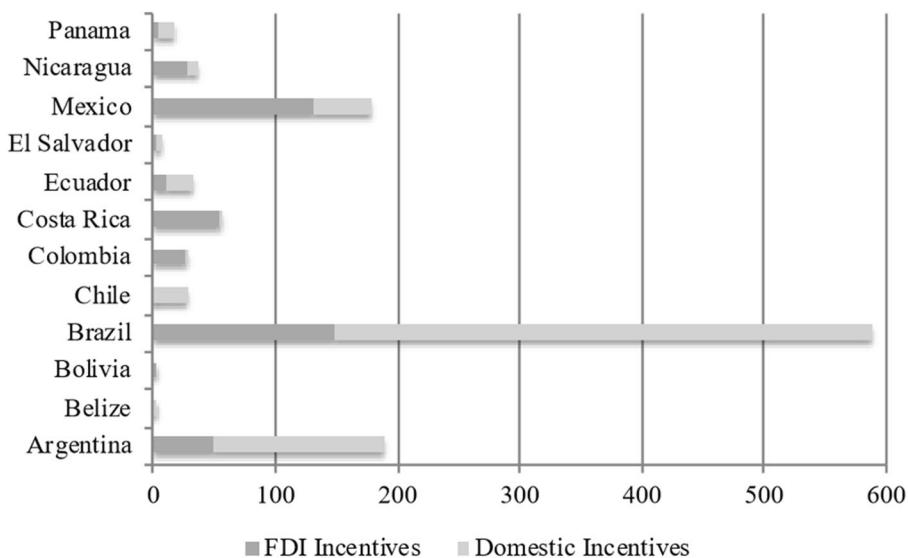


Fig. 1 Investment Incentive Deals by Country and Type. All Latin American Countries with reported investment incentives, 2010 - July 2017. Source: IncentivesMonitor

First, incentives may reflect the growing power of globally mobile capital. Since MNEs have the flexibility to invest in multiple locations, their threat of non-entry is credible and therefore they are able to extract more benefits from governments seeking to attract growth-promoting investment. Research on firm mobility and bargaining strength has typically focused on the relationship between FDI and corporate tax rates, with the majority of studies finding evidence of a negative relationship between corporate tax rates and FDI flows (Bellak and Leibrecht 2009; Blonigen and Davies 2004; Egger et al. 2009; Mutti and Grubert 2004). While these studies emphasize tax rates rather than tax incentives, the general theoretical argument that firm mobility reduces governments' capacity to tax business extends from statutory rates to tax holidays.

Political scientists, in contrast to economists, have been quick to point out the role domestic political concerns play in mitigating "race to the bottom" dynamics across multiple policy domains including taxation, labor rights, and environmental regulations (Basinger and Hallerberg 2004; Blanton and Blanton 2007; Greenhill et al. 2009; Hays 2003; Plumper et al. 2009; Mosley 2011). For example, Jensen argues that decreases in corporate taxation are not exogenously given, and instead may reflect broader commitments to pro-business economic policies (2012). Once correcting for endogeneity, he finds no evidence that corporate tax rates are related to FDI flows among 19 OECD countries from 1980 to 2000. In contrast, Egan argues the relationship between FDI and taxation policy is reversed; he finds evidence that increased FDI flows led to subsequent declines in corporate tax rates among Latin American countries from 1978 to 1998 (2010). Yet others have advocated for subnational designs to leverage how differences among subnational tax authorities drive patterns of FDI, with most subnational studies finding decreased corporate tax rates leading to increased FDI inflows (Baccini et al. 2014; Hines 1996; Becker et al. 2012). Indeed, rather than erasing "race to the bottom" dynamics, fiscal decentralization may instead exacerbate bargaining asymmetries between firms and states by encouraging subnational units to engage in "fiscal wars" as they compete for scarce investment projects (Li 2016; Rodriguez-Pose and Arbix 2001).

Second, incentives may be tools that governments can use in attempts to compensate investors for poor investment environments. Because firms are relatively mobile *ex ante* investment deployment and immobile *ex post*, firms have much stronger bargaining positions before completing an investment project. This leaves them vulnerable to host governments who may attempt to renegotiate the terms of the regulatory and tax environment after firms have sunk un-recoupable investments into their country (Vernon 1980; Kobrin 1987; Hogan and Sturzenegger 2010). Expropriation risk may be higher in countries with political institutions that do not adequately protect the rule of law (Jensen et al. 2012; Jensen 2006; Li and Resnick 2003; Henisz 2000).⁵ Accordingly, autocratic governments that have fewer institutional constraints on arbitrary and extralegal takings by executives and legislatures may offer foreigners more generous tax incentives than do democracies in order to offset the extra costs of insuring against expropriation risk (Li 2006). Extending a similar logic to the possibility of partisan reversals of investment policy, leftist governments may pursue labor

⁵ But see Graham, Johnston, and Kingsley (Graham et al. 2017), who argue democracies still engage in expropriating behavior, just more opaquely.

Table 1 Summary Statistics Across Sectors in 2010

Industry	Capital Intensity	Projects	Incentives
Aerospace	0.80	184	1
Alternative/Renewable energy	0.83	451	0
Automotive Components	0.80	822	23
Automotive OEM	0.80	399	14
Beverages	0.87	143	1
Biotechnology	0.86	29	0
Building & Construction Materials	0.74	119	1
Business Machines & Equipment	0.64	150	1
Business Services	0.49	1303	9
Ceramics & Glass	0.74	61	0
Chemicals	0.86	586	5
Coal, Oil and Natural Gas	0.97	475	1
Communications	0.83	922	5
Consumer Electronics	0.64	190	1
Consumer Products	0.70	295	4
Electronic Components	0.64	403	3
Engines & Turbines	0.75	81	0
Financial Services	0.66	954	0
Food & Tobacco	0.87	569	6
Healthcare	0.77	41	0
Hotels & Tourism	0.64	375	1
Industrial Machinery & Equipment	0.73	798	2
Leisure & Entertainment	0.64	24	0
Medical Devices	0.70	158	8
Metals	0.86	952	5
Minerals	0.82	30	0
Non-Automotive Transport OEM	0.80	100	2
Paper, Printing & Packaging	0.67	142	2
Pharmaceuticals	0.86	216	1
Plastics	0.79	351	1
Real Estate	0.89	233	0
Rubber	0.79	154	6
Semiconductors	0.64	54	1
Software & IT services	0.43	1618	5
Space & Defence	0.80	16	0
Textiles	0.65	175	10
Transportation	0.62	604	0
Warehousing & Storage	0.62	118	0
Wood Products	0.79	35	0

Note: Industries grouped by industry classifications used in fDiMarkets data.

Table 2 Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Incentive	14,330	0.008	0.091	0	1
ln(Capital Investment)	14,330	2.958	1.647	0.005	10.597
ln(Jobs Created)	14,330	4.299	1.508	0.000	9.210
Capital Intensity	14,330	0.705	0.156	0.368	0.977
Expansion Deal	14,330	0.178	0.382	0	1
Fiscal Federalism	14,330	0.848	0.359	0	1
ln(GDP Per Capita)	14,325	8.939	0.504	6.818	9.734

intensive foreign investment through tax incentives designed to compensate against a potentially less friendly firm-government relationship once right governments with more ties to local (as opposed to foreign) capitalists gain power (Pinto 2013).

Investment incentives can also compensate for geographic features that make a location less attractive to investors. Governments may offer incentives to firms that invest in more rural and poor areas that have substandard infrastructure and require increased transportation costs in order to stimulate development and job creation in distressed areas (Henderson et al. 2002). For example, North Carolina has a tiered investment incentive program in which tax incentives increase as firms locate in progressively more disadvantaged areas of the state. The European Union's rules on "state aid," which includes investment incentives, restrict members' subsidies to domestically operating firms but provides exceptions for geographically disadvantaged

Table 3 Bivariate relationship between firm- and country-level variables and probability of incentive

	1	2	3	4
Capital Intensity	2.413*** (0.679)			
ln(Capital Investment)		0.257*** (0.057)		
ln(Jobs)			0.570*** (0.068)	
Expansion Deal				0.721*** (0.201)
Intercept	-5.741*** (0.562)	-4.796*** (0.296)	-6.735*** (0.425)	-4.169*** (0.227)
Country Fixed Effects	X	X	X	X
Observations	14,330	14,330	14,330	14,330
Log-Likelihood	-605.3	-602.3	-573.9	-606.3
Akaike Inf. Crit.	1252.6	1246.5	1189.8	1254.7
Standard Errors in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$				

Table 4 Multivariate relationship between firm- and country-level variables and probability of incentive

	Dependent Variable: Incentive			
	5	6	7	8
Capital Intensity	2.229*** (0.761)	2.581*** (0.790)	2.356*** (0.758)	2.419*** (0.775)
ln(Capital Investment)	-0.334*** (0.078)	-0.211** (0.084)	-0.341*** (0.078)	-0.203** (0.086)
ln(Jobs)	0.736*** (0.080)	0.669*** (0.087)	0.768*** (0.082)	0.718*** (0.090)
Expansion Deal	0.449** (0.199)	0.343* (0.205)	0.417** (0.200)	0.173 (0.212)
ln(GDP Per Capita)			0.603*** (0.217)	2.864*** (0.491)
Fiscal Authority			-0.648* (0.227)	1.372 (1.125)
Constant	-9.078*** (0.643)	-8.540*** (0.719)	-14.189*** (2.077)	-36.463*** (4.787)
Country Fixed Effects		X		X
Observations	14,330	14,330	14,325	14,325
Log Likelihood	-634.2	-565.8	-626.8	-537.6
Akaike Inf. Crit.	1278.4	1179.6	1267.6	1127.1

Standard Errors in parentheses * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

regions.⁶ Similarly, countries often create export processing zones (EPZs) in attempts to foster rural development (Moran 2002; Johansson and Nilsson 1997). For example, Vietnam has designed its EPZs to extend into more economically depressed locations in order to stimulate job growth in these regions and avoid massive migration to the most developed cities (Malesky 2008; Malesky and Schuler 2010).

Third, rather than reflecting dynamics of firm-country bargaining, the use of investment incentives may evince the imperatives local politicians face to claim credit for economic growth and employment generation. Because tax incentive policy is highly technical, voters likely under-invest in informing themselves on optimal policies toward investment attraction, and instead defer to the judgment of politicians who have better information about policy efficacy (Tullock 2005). When faced with such information asymmetries, politicians have incentives to pander by enacting policies based on their popularity rather than their economic efficiency (Maskin and Tirole 2004). Since voters value economic development and job creation, politicians face powerful incentives to offer tax holidays and other inducements to firms in order to signal to voters their strong “record” on economic growth, even if these inducements are rarely pivotal to attracting inward investment. Previous research has found voters in the US are more likely to vote for state-level incumbent politicians who pursue active incentive

⁶ However, EU members frequently circumvent these rules; See Rickard (2018).

programs, even if attempts to attract investment are ultimately unsuccessful (Jensen et al. 2014). Additionally, US cities with elected mayors provide more incentives than do cities with non-elected executives (Jensen et al. 2015).

2 Firm immobility and bargaining strength

While the extant literature has helped provide explanations for why investment incentives may be politically expeditious despite their economic inefficiency, several puzzling aspects of incentive use remain poorly explained. First, a capital mobility explanation of investment incentives predicts that the most mobile firms should receive incentives. But this does not seem to be the case. Of the investment incentives Latin American countries provided from 2010 to 2017, about 61% were awarded to domestic firms. Among incentives to foreign investors, automotive manufacturing projects, which are typically highly fixed and capital-intensive and therefore less mobile, received the most incentive packages. In contrast, information technology firms, which are typically more globally mobile due to low fixed capital intensity of production, received far fewer inducements. Second, compensatory theories provide a logic for why certain countries and regions are more likely to offer incentives but provide no explanation for variations in the type of investments that governments choose to incentivize. Third, a pure political pandering story suggests politicians should offer incentives indiscriminately – if citizens generally reward political leaders for aggressively pursuing investments, then politicians will reap substantial benefits from offering any firm incentives but will face few costs for doing so. Yet, investment incentives are actually relatively rare outside of the US. For perspective, Latin American countries received 14,331 greenfield foreign investment projects from 1 January 2010 to 1 October 2017 (The Financial Times Ltd., 2016). Over the same time frame, these countries announced 472 foreign investment incentives, which represents 3 % of all new investment deals (WAVETEQ, 2017).

We address these gaps in existing theory by considering how investment project-level attributes influence the likelihood that governments will incentivize investment. We argue that firms with characteristics that make them less globally mobile are actually more likely to receive investment incentives than are their “footloose” brethren. We build on the insight that domestic politics condition the bargaining strength of globally mobile capital by considering firm-specific traits that may align the preferences of MNEs and local politicians. We argue that a firm’s bargaining strength derives from the extent to which it possesses certain characteristics and resources that governments are keen to acquire such as high levels of fixed capital formation and employment generation. Consequently, international mobility is less instrumentally powerful than many scholars and policymakers assume. Indeed, many of these characteristics are associated with less mobility, rather than more, running counter to the traditional narratives about which firms have more bargaining power in relationships with policymakers. Part of our explanation is that more immobile investments are likely to become increasingly more embedded in local markets and are therefore a more attractive to politicians seeking, either for social welfare reasons or for electoral reasons, to attract investment that will hasten economic growth and development. In this way, our theory complements others who find that immobile firms do not pay

higher taxes than do more mobile investors (Jensen 2013; Pond and Zafeiridou 2019), and we extend this insight to explain why capital immobility may be associated with greater, rather than similar, tax concessions than more mobile firms. Crucially, immobility itself does not confer bargaining strength, rather firm and project characteristics that also happen to render an investor less mobile do.

We start by considering how politicians view the utility of offering incentives. Political leaders do not seek foreign investment for simply the sake of increased MNE presence in their economy. Instead, political leaders are motivated to attract foreign investment that they believe will generate economic growth and employment opportunities that benefits local communities. Politicians may seek this growth for either social welfare maximizing reasons or because they seek to attract the types of investment that will lead to re-election. The observable outcomes of our theory would be the same regardless of whether one assumes the former or the latter. We should also note that the latter interpretation is consistent with and builds on existing research that focuses on political “pandering” as a way to explain investment incentives (Jensen and Malesky 2018; Jensen et al. 2015). Incentives are sometimes, albeit infrequently, influential in firms’ site selection processes. For example, Costa Rica’s successful bid to attract Intel in 1996 included a concession to eliminate taxes on assets of companies operating in its free trade zones (Multilateral Investment Guarantee Agency 2006, 42). The uncertainty over whether an incentive package is necessary for attracting an investment means that politicians will be willing to make incentive offers – despite their low probability of effectiveness – if the potential benefits a particular investment are high enough. This willingness to incentivize high-impact investment projects despite the likelihood of overbidding is bolstered by the discrete nature of investment announcements that make it easy for politicians to claim credit for attracting a particular investment. Thus, investment projects that politicians view as high-impact are more enticing to politicians, and the firms making these investments can extract more concessions.

We focus on three project-level characteristics that should influence the propensity of a government to offer incentives. First, governments prefer investments that add substantially to domestic fixed capital formation and that employ many local workers. Accordingly, they will target large investments, measured both by capital outlays and employment generation. This expectation aligns with previous theories of politicians’ motivations to offer incentives, but, to our knowledge, this expectation has not yet been directly tested.

Hypothesis 1: Investment projects should be more likely to receive tax incentives when they include larger capital outlays and when they expect to generate substantial employment.

Second, governments prefer investments that are likely to stay once attracted. If attracting investment provides politicians with substantial performance legitimacy, “losing” investment can create perceptions that political leaders are poor managers of economic growth. Accordingly, governments will be more likely to seek investments with high proportions of fixed capital as these types of activities face higher redeployment costs if they later choose to relocate. For example, we should expect governments to be more likely to provide incentives to capital intensive manufacturing such as

automobile manufacturing and assembly rather than to garment factories even though the latter is far more globally mobile. Firms that are less globally mobile *ex post* investment are also more likely to embed themselves in local communities by developing capacity among local suppliers and investing in worker training. These features associated with *ex post* immobility make such firms more valuable to governments in the long term and therefore politicians are more likely to offer incentives. This expectation runs counter to obsolescing bargaining models that view immobility as a source of firm bargaining weakness (Kobrin 1987), as well as to related arguments that asset immobility leaves firms vulnerable to government predation (Antras 2005; Albornoz et al. 2012; Pond and Zafeiridou 2019). It is consistent with a political bargaining model that predicts firms will have greater bargaining strength the more that their firm specific assets align with host country development priorities (Brewer 1992; Eden et al. 2005; Vachani 1995), but emphasizes the importance of MNEs' contributions to local employment and likelihood of embedding into local economies over their possession of specific tangible or intangible technologies. It also complements and extends arguments that incentives can be used to compensate for weak institutions that could lead the government to renege on its commitments in the future (Li 2006; Pinto 2013), as well as those that consider the conditions under which firms can strengthen property rights protections through political engagement and the development of local knowledge (Medina et al. 2019; Yan and Gray 1994).⁷

Hypothesis 2: Investment projects with higher proportions of fixed capital should be more likely to receive tax incentives.

Finally, governments attuned to economic performance legitimacy should be disproportionately motivated to expand existing MNE establishments rather than pursue new investment deals. Again, this insight is counter-intuitive because investment is more globally mobile prior to establishment. If capital mobility drives the bargaining dynamic between firms and governments, we should instead expect incentives to accrue mostly to new investment projects. However, there are at least two reasons why governments might be more likely to incentivize follow-on investment than they are new establishments: loss aversion and transactional ties.

First, political leaders are more likely to act to prevent the loss of investment than they are to generate new investment. Individuals are rarely fully rational when making decisions, but instead evaluate their choices based on their valuation of potential gains and losses, and are likely to behave in ways that minimize losses (Kahneman and Tversky 1979). Political scientists have applied these insights from prospect theory to explain a host of puzzling government behavior such as the enactment of unpopular economic reforms (Vis 2011), engagement in international conflict (Tailaferro 2004), and the pursuit of costly trade disputes with limited potential benefits (Elms 2004). In the context of investment promotion, existing MNE establishments have visible positive effects on the local economy, and politicians will work hard to keep firm decision-makers happy. In contrast, politicians and the voters they serve are likely to not value as highly a potential investor, whose impact on the community is only abstract and hypothetical, and therefore political leaders may feel less pressure to attract such a

⁷ We thank an anonymous reviewer for making this connection explicit.

firm. In this case, an established firms' threat of threat of non-expansion may be more persuasive to a loss-avoiding politician than a potential investors' threat to locate elsewhere. This is especially the case when governments view incentives for expansion as opportunities to prevent relocation, and when firms claim that they could take an expansion opportunity to another jurisdiction rather than increase production locally (Eden et al. 2005). Even though the potential investor faces no redeployment costs for moving her investment elsewhere, and therefore has a more credible threat of exit, the potential losses from an established firm choosing to expand elsewhere, however low probability they may be, will be weighted more heavily by the politician in making a decision about whether to offer an incentive.

Second, transactional ties make the granting of incentives more likely. Firms that already have a presence in a country – and are thus “embedded” in the country’s political and economic networks – have important personal ties to government officials. The increased contact facilitated by firm locational presence allows firm management to more easily navigate bureaucratic structures necessary to apply for incentives. In addition, politicians are likely to have more personal ties to firm management and therefore will be more amenable to providing the firm with incentives. As a result of both loss aversion and pre-existing contacts, incentives will likely accrue not to firms with the most credible exit threats, but to firms already established in the country.

Hypothesis 3: Expansion investment projects should be more likely to receive tax incentives than new investment projects.

3 Data and methods

As outlined above, our theory about the politics of investment incentives generates a particular set of expectations about how firm-level factors influence patterns of incentive deals. We test this theory by using data on investment incentive deals in Latin America to model the relationship between the number of such deals concluded in Latin American countries and attributes of both hosts and states that may influence deal outcomes. We proceed in this section by first describing the strengths and limitations of our outcome variable. After providing some basic descriptive information about the outcome variables and the dataset from which they are drawn, we discuss our operationalization strategy to test the hypotheses introduced in the previous section. We then provide results of our cross-national empirical tests.

3.1 Incentive data

We use deal-level data on investment incentives from IncentivesMonitor - a proprietary dataset that collects detailed information about investment incentive deals globally from 2010 onward. Because the dataset is constantly changing as new deals are added, we have archived the dataset⁸ to facilitate replication and verification. This dataset captures 1203 incentive deals across 13 countries, 472 of which were granted to foreign

⁸ as of July 24, 2017

firms. Figure 1 displays information about the distribution of deals across the countries in our sample.

It is important to note the limitations of these data. First, these data represent incentives that were offered, accepted, and executed. They tell us nothing about attempts at deals that did not come to fruition. Second, they reflect deals that have been made public either through official reports from governments or through media reporting. It may be the case that governments sometimes want to hide the existence of certain incentive deals; these data provide us with no information about whether such deals may even exist. We believe these data are nonetheless useful for the following reasons. First, we are interested in exploring the determinants of incentive deals, not necessarily incentive offers. Governments may try unsuccessfully to attract investors with certain enticements. We are interested in the characteristics of incentives that are both offered and accepted. Unaccepted offers may influence an accepted incentive deal through competitive bidding, but we choose to control for this possibility by restricting our analysis to a single region. Second, if the purpose of incentives is to attract investment, then at some point governments must communicate to firms the extent of their incentive program. IncentivesMonitor is designed as a tool for globally mobile firms to consider while making locational choices. Most of the data on incentive deals collected for the dataset comes from economic development offices and investment promotion agencies. Officials in these organizations would have little incentive to hide deals when their mandate is to promote investment. Further, the dataset is the largest available dataset on incentives, with few comparable alternatives.

We match the incentives data to all known greenfield FDI projects in Latin America from 2010 to 2017, data we obtain from fDiMarkets. This allows us to construct a dependent variable Incentive, which is coded “1” if an investment deal recorded in the fDiMarkets dataset of greenfield FDI investments corresponds with an investment incentive located in the IncentivesMonitor dataset and “0” otherwise. The main drawback of this approach is that we have no deal level data on all domestic investment in Latin America, and so we must restrict our sample to only investment incentives for FDI. However, since our theory is largely about incentives for foreign investment, and since the existing literature with which our work engages is also focused on FDI incentives, limiting the analysis to incentives for foreign investment is appropriate.

Of the 1203 incentive deals listed in IncentivesMonitor, 472 were granted to foreign firms. Of these, we were able to match 120 deals to investment projects listed in fDiMarkets. The remaining deals are not recorded in fDiMarkets as having been executed. It is unclear why there is so much discrepancy between IncentivesMonitor and fDiMarkets. It could be that fDiMarkets is not capturing all investment deals. However, we find it more likely that IncentivesMonitor includes announced incentive deals that never come to fruition.

We run several analyses to ascertain whether there are statistically significant differences between matched and unmatched incentive deals. If there are major differences between the two subsamples, the validity of inference on the matched incentives would be called into question. We find no evidence of any systematic differences between the two subsamples. A t-test for difference in means of the size of investments fails to reject the null.⁹ We run chi-squared tests to test for systematic differences in

⁹ $t = -0.27$, $df = 454.1$, p value = 0.78

categorical markers including **Destination Country**, **Project Type**, **Industry Sector**, **Incentive Type**, and **Industry Function**. Each of these tests either fail to reject the null, or are unable to compute a chi statistic due to large number of factors. In these cases, we test for differences in the instance of the most frequent category in these factors. For instance, more deals exist in manufacturing than in other industry sectors; a chi squared test for differences in the instance of manufacturing between matched and unmatched deals fails to reject the null.¹⁰ Likewise, the two subsamples exhibit no discernible differences in the prevalence of tax incentives versus other categories of incentives.¹¹ Jointly, these tests assure us that the samples do not differ systematically. To further allay concerns about any differences between the matched and unmatched samples, we run an analysis of the full sample that includes both matched and unmatched data as a robustness check. The results, available in the appendix, show results that are consistent with the primary findings (A6-A9, A11).¹²

There are important benefits to using this new dataset. Having deal-level data allows us to ask and empirically assess questions that were previously unanswerable with country-level datasets that outline the generosity of incentive programs (Li 2016; Li 2006). While such datasets allow scholars to assess the drivers of country-level policies, perhaps at the industry level, they have no visibility into when incentives are actually realized. They cannot distinguish which firms actually receive incentives, and because policy changes slowly they have limited leverage over temporal questions. In contrast, our deal-level data allow us to generate insights into the characteristics of investments that make them most likely to obtain incentives – crucially because we have data on all greenfield FDI deals and not just deal with incentives – and how incentive deals may change over time. A key limitation of a deal-level approach, however, is that it is more challenging to assess how country-level variables affect incentives because most of our sample is driven by within country observations rather than across country observations. This is particularly so because we limit our analysis to one region for reasons explained in the introduction.

3.2 Operationalization and model specification

To test the hypotheses outlined above, we estimate a series of logistic regressions that follow the same basic construction:

$$\Pr(\text{Incentive}|\text{Investment})_{i,j,t} = \alpha + \beta_1 * \text{FirmCharacteristics} + \beta_2 * \text{HostCharacteristics} + \epsilon \quad (1)$$

Our dependent variable is **Incentive**, indexed by deal (i), country (j), and year (t). While incentives are relatively rare in our dataset (120 of 14,330 investment deals, or 0.83%), it is generally the case that standard logistic regression is appropriate so long as the absolute number of positive events is sufficiently large. Nonetheless, the most appropriate estimation strategy for relatively rare events remains a contested topic in the

¹⁰ $\chi^2 = 0.04$, df = 1, p value = 0.89

¹¹ $\chi^2 = 0.94$, df = 1, p value = 0.33

¹² The online appendix is available at the Review of International Organization's website.

literature (King and Zeng 2001), so we confirm in supplementary materials that our results are generally robust to probit and rare events logit (A3-A4).

We include several key explanatory variables. First, to test Hypothesis 1, we include measures for the size of **Capital Investment** and the number of Jobs. These variables come from fDiMarkets and are log transformed to account for skew. Second, to test hypothesis 2, we use **Capital Intensity**, measured as the ratio of capital inputs over the total cost of production on a yearly basis. Following convention in the economics literature,¹³ we use the U.S. as our baseline since cognate data are not available for most other countries. Our underlying data are derived from the U.S. Bureau of Labor Statistics data on multifactor productivity at the industry level. These data are available at the North American Industry Classification System (NAICS) three-digit industry level from 1987 to 2014. The fDiMarkets data, however, classify industry data using a slightly different system. Therefore, we match the NAICS data to the appropriate industry in the fDiMarkets data. This creates a unique capital intensity measure for 33 industries; Table 1 reports these industries along with their 2010 value of capital intensity. This variable provides a measure of the degree to which the investment is capital-oriented, and is a close proxy for the degree to which the investment is high-fixed cost. We also estimate models using an alternative measure of capital intensity that relies on a narrower definition of fixed capital assets in order to capture our concept of firm mobility.¹⁴ The results from this additional model are available in the appendix (A13) and also support our main findings.

To test Hypothesis 3, we include an indicator for **Expansion Deal**, which we obtain from fDiMarkets. Additionally, we control for **Level of Development**, which we proxy through the natural log of GDP per capita, obtained from the World Development Indicators. We do so because we know that wealthy countries often have more fiscal capacity to offer incentives, but also poorer countries may be more desperate for investment and therefore face more pressure to provide incentives. Next, following Li (2006, 2016), we control for **Fiscal Federalism** using the Database of Political Institution's (DPI) measure of subnational authority, which is coded “1” if a country's state or provinces have authority over taxes, spending, or legislation (Cruz et al. 2016, 22). Because the country sample is small, our data are not particularly well suited to test questions regarding cross-national variation such as fiscal federalism. Therefore, we think of the inclusion of this variable as an important control given its prevalence in the literature, but not as a strong test for whether fiscal federalism is or is not an important explanation of incentive use. We include these measures in our main models in addition to the four primary variables and with country fixed effects.

We do not have the statistical power necessary, given the relatively few incentives in our sample, to include a large number of additional economic control variables. However, in robustness checks, we include a variety of other country-level economic

¹³ See, for example, Gupta (2005).

¹⁴ We compute our alternate measure of capital intensity using data from the Bureau of Economic Analysis to compute the share of Net Property, Plant, and Equipment over Total Assets. A summary of the values for this measure is available in the appendix (A19). We prefer the measure reported in our main models because the PPE-based measure places all intangible assets such as intellectual property, trademarks, and brands in the denominator. This has the effect of deflating the PPE ratio of many industries since MNEs tend to be very large firms with highly-valued global brands. However, as reported in A20, our results are robust to this measure.

control variables. These include **Economic Growth, Inequality, FDI Stock, Government Debt, Political Constraints, and Political Risk** (A10).

We use the Amelia II package to impute missing explanatory variables in R, and report combined results.¹⁵ Table 2 provides descriptive data for our unimputed variables. A correlation matrix is available in the appendix (A1). As reported in the appendix (A2), no single variable has a variance inflation factor over two, which suggests that multicollinearity is not inflating our standard errors.

4 Results

We begin by reporting spare, bivariate models for each of the four explanatory variables that we use to test our hypotheses.¹⁶ Table 3 reports these results. In general, we find strong support for our hypotheses. As anticipated by hypothesis 1, investment deals that bring large number of jobs and capital investment are statistically significantly associated with an increased probability of incentive. More capital-intensive industries are also more likely to be incentivized, providing support for hypothesis 2. Hypothesis 3 predicted expansion projects to existing establishments would be more likely to receive incentives than would completely new investment deals. Again, we see evidence to this effect.

To what extent are these relationships robust to multivariate analysis? Table 4 reports results of models that include all explanatory variables simultaneously and controls for **Level of Development** and **Fiscal Federalism**. In general, we find our results are mostly robust to these analyses with one important exception. Building on the bivariate models, we find that investments associated with larger numbers of **Jobs** continue to have statistically significant higher probabilities of receiving incentives (Hypothesis 1). In simulations and while holding all other variables at their means, increasing the number of jobs from the first quartile (24 jobs) to the third quartile (215 jobs) increased the probability that an incentive is offered from 0.225% to 1.1%. While these probabilities are nominally small, it is important to remember that incentives are very rare in our dataset – occurring in 0.83% of cases – and so predicted probabilities will also be quite small. Thus, moving from the first to third quartile increases the probability of receiving an incentive by 490%.

Similarly, **Capital Intensity** has a statistically significant and positive effect on the probability of a project receiving an incentive. Holding all other variables at their means, a project that is in the third quartile of capital intensity (such as chemical manufacturing, which includes pharmaceuticals) is approximately 56% more likely to receive an incentive than a project at the first quartile of capital intensity (such as transportation services). Again, due to the rarity of incentives, the raw predicted probabilities are quite low, with the first quartile associated with a 0.45% probability and the third quartile associated with a 0.7% probability. Still, the relative size of effect is large, though the substantive effect of employment creation is even greater.

¹⁵ Most of our data display little missingness (for example, Growth had 1.25% missingness prior to imputation). In supplementary materials, we confirm our results retain when using unimputed data (A3)

¹⁶ Assessing bivariate relationships is important because inclusion of control variables can often induce statistical significance. See Lenz and Sahn (2020).

While employment and capital intensity remain positively and statistically significantly associated with investment incentives in multivariate models, the coefficient estimate for the size of **Capital Investment** substantively changes when subjected to multivariate analysis. In bivariate modeling, capital investment was positively and statistically significantly associated with incentives (Model 2), but the point estimate for capital investment in multivariate models (Table 4) is negative and statistically significant. This switch in sign but retaining of statistical significance is a little puzzling. It may be that capital intensity of the industry is more important than initial capital outlay, since governments might expect firms operating in capital intensive industries to provide continual injections of investment into an established plant to facilitate plant maintenance and upgrading. It may also reflect firms' bargaining tactic of apportioning large investments into a series of smaller capital injections to overcome obsolescing bargaining dynamics (Eden, Lenway, and Schuler, 2005).

Expansion deals continue to be statistically significantly more likely to receive incentives than de novo investments, though the size of effect and precision of estimation fall. In fact, expansion deals are not significant in the Model 4, where there are additional country controls and country fixed effects, perhaps due to our small number of successes in the dependent variable and increasing number of variables in the model. The statistical significance of **Expansion Deal** is also fragile to other estimation strategies including analyzing unimputed data, probit, rare events analysis, and inclusion of additional controls (A2-A5, A10). In other words, while expansion deals are always positively associated with incentives, the statistical significance of this relationship is somewhat precarious.

In the series of robustness checks, we find that our primary results hold. The results are robust to a variety of different model specifications, including probit (A4) and rare events logistic regression (A5), as well as in the bivariate models. We also include different model specifications, showing that choice of inclusion of different variables and country fixed effects does not determine the main findings (A11); in addition, we find similar effects for both our primary and alternate measures of capital intensity (A20). Moreover, our findings are also robust to alternative versions of our dataset, including the unimputed dataset (A3) as well as the dataset that includes unmatched investment projects (A7, A8, A9, A10, A17). Because Brazil accounts for a large percentage of incentives, we rerun analysis dropping Brazil and find that our results hold (A18). Finally, we include models that use clustered standard errors (A6) and again find that our primary results hold. Together, this variation of alternative specifications and robustness checks should provide credibility that our findings are not statistical anomalies resulting from particular modeling choices.

In short, our results provide evidence that incentives are granted to investments that generate larger numbers of jobs and those that are more capital intensive, as well as more qualified evidence that companies that already have a presence in the country are also more likely to receive incentives. These findings run counter to typical narratives in which globally mobile capital can extract increasingly more lucrative concessions from governments. In fact, deals that are characterized by a greater degree of *ex post*, and even *ex ante* immobility, are more likely to receive incentives than more mobile investments. Deals that generate more jobs and that are in more capital-intensive industries are likely to have higher redeployment costs and therefore are less mobile *ex post* investment. Nonetheless, we find consistent and robust evidence that such deal

characteristics are associated with an increased likelihood of an investment receiving an incentive. Additionally, firms engaged in expansion are less globally mobile than firms engaged in de novo investment, since the efficiency improvements associated with expanding in place rather than developing a brand-new establishment make it difficult for firms to credibly threaten to widen their locational search. Yet, despite their *ex ante* immobility, such deals are more likely to receive investment incentives.

4.1 Probing mechanisms

We undertake further analysis to probe what might drive government preferences for targeting investments associated with large employment effects, capital intensity, and expansion of existing businesses. While our theoretic logic can accommodate politicians motivated by narrow political survival, ideological commitments, or genuine welfare concerns, our data allows us an opportunity to probe which of these motivations are likely to drive incentive policy implementation.

First, we examine how ideology shapes incentives. To do so, we use partisan alignment of both the executive and legislature to determine whether the partisan orientation of government predicts the probability of an incentive being offered.

Executive Partisanship codes the orientation of the executive's party's economic policy into three categories: "Right," "Center," and "Left" (Cruz et al. 2016, 8).

Legislative Partisanship applies the same coding procedure to the largest government party in the legislature (Cruz et al. 2016, 12). We argue that left governments – the party of labor – are more likely to provide incentives to foreign firms than are right governments. This contradicts a large literature in comparative political economy that suggests right governments are more likely to embrace global capital and business-friendly regulations, but echoes Pinto's research that argues left government are likely to embrace FDI for its income-generating effects (2013).¹⁷ Our models, presented in A12, provide statistical evidence consistent with the argument that left executives and legislatures make it more likely that investments receive incentives. In simulations, having a left executive in power increases the probability of a project being granted an incentive by almost 10% compared to when a right executive is in power, making it nearly as large an effect as increasing the number of jobs.

Second, we probe whether election cycles influence incentive patterns using election year data from the Database of Political Institutions (Cruz et al. 2016). Crucially, we can be sure that elections within our data are exogenous since Latin American countries have presidential systems with fixed electoral calendars. We find no evidence that incentive deal implementation follows an electoral cycle.¹⁸ The probability of an investment receiving an incentive is statistically indistinguishable between election and non-election years for both executive and legislature elections (A13, A14). The structure of our dataset may bias against finding a relationship between elections and incentives. First, the dataset is at the investment deal level, and firms may hold back investment in election years due to the uncertainty that elections generate over future

¹⁷ See also Pinto and Pinto (2015), who argue investment decisions follow partisan business cycles, largely because left governments provide more incentives to investors who will generate substantial employment opportunities. They argue that such incentives are forward looking compensation for the likelihood that future right-leaning governments will treat such investors less kindly.

¹⁸ We urge caution in interpreting these models since our temporal coverage is limited.

economic policy (Bunte et al. 2019). Second, it may be that only close elections generate incentives for incumbents to offer investment incentives.¹⁹ Third, as discussed before, the dataset only captures incentive deals that have been offered and accepted. This means the dataset will miss any increase in incentive offers that are not accepted by investors. We partially address this problem by analyzing just the IncentivesMonitor data without matching to the fDiMarkets data to assess whether countries provide more incentives in election years than in off-elections years. In these models, we find that incentives are more likely in executive election years than in off-cycle years. However, we find no such effect for legislative elections (A15). This provides some suggestive, but by no means conclusive evidence, that executives may exert more effort to attract investments through tax incentives when they are facing the ballot box. It also may provide an additional mechanism for the finding that incentives are more likely to accrue to follow-on investments - these types of projects are often more “shovel ready” and therefore are more likely to quickly deliver jobs and growth in the advance of an election.²⁰

Finally, we consider whether governments are more likely to provide investment incentives to projects that are more likely to facilitate integration into global value chains. To do so, we use **Import Content of Exports** from the Organization for Economic Cooperation and Development’s (OECD) database on trade in value added. This variable measures the foreign value-added component of gross exports as a percent of total gross exports for each country, industry, year. A high score on this measure indicates that the associated industry is highly integrated into global value chains through backward linkages. This would be the case, for example, for high-end electronics which often require imported inputs such as advanced semiconductors, which are incorporated into final products for which there is an export market. We focus on backward linkages because industries with imported backward linkages are more likely to be in more advanced technology and higher added value industries, and previous empirical work has demonstrated that firms tend to only integrate downstream components of their supply chain when inputs are not highly substitutable (Alfaro et al. 2019). Conversely, industries that are located high upstream tend to be lower-tech commodities. We find, consistent with the expectation that governments are discriminating in their incentive policy, that projects operating in industries with a high degree of **Import Content of Exports** are more likely to receive incentives than are other projects (A16). The coefficient estimate for **Import Content of Exports** is consistently positive across all our models and is statistically significant in country fixed effects models. While these findings are suggestive, and require further validation, they do provide evidence consistent with the expectation that governments’ investment incentive activities are at least partially driven by larger industrial policy objectives.

5 Conclusion

This paper is an initial attempt to more vigorously interrogate claims that multinational firms receive investment incentives because the factors associated with their mobility

¹⁹ We thank an anonymous reviewer for making this point.

²⁰ We again thank an anonymous reviewer for making this point.

make them powerful vis-à-vis states. We find surprisingly little evidence to support this claim. Instead, using project-level data from 2010 to 2017 in Latin America, we find that FDI projects that exhibit characteristics associated with less mobility are more likely to receive incentives than their more mobile counterparts. Investment deals that generate more jobs, that operate in industries characterized by greater capital intensity, and that expand pre-existing operations are more likely to receive incentives than other FDI projects. Because these characteristics are associated with less globally mobile investments, we argue that our empirical analysis suggests patterns of investment incentives reflect government investment priorities more than the increasingly tenacious demands of unfettered global businesses. Importantly, our argument is not that immobility itself drives firm bargaining strength. Instead, we show that investment characteristics that also tend to render investment less mobile are more desirable to political leaders and therefore are more likely to receive incentives.

As with any research project, there are important limitations to our analysis here. The nature of our data allows us to make inferences only over realized investments, not over investments that are considered but never enacted. Therefore, our results should be interpreted with several caveats: we do not test the usefulness of incentives in attracting investment, we cannot speak to the process through which investors and government officials negotiate over incentives, and our data do not allow us to test when governments offer incentives that firms ultimately reject. Moreover, our interpretations rest heavily on the assumption that capital intensity and the size of a localized workforce render investment relatively immobile *ex post* investment. Nonetheless, we believe our data exercise provides an important contribution to understanding project-level variation in investment incentives.

These findings provide an important corrective to much of the literature on investment incentives that characterize such inducements as the product of increasingly constrained governments in the face of fierce competition over scarce and globally mobile investment. We do not suggest that capital mobility is unimportant, but that the bargaining relationship between global firms and local governments is more nuanced than commonly thought. These frictions arise for a few reasons. First, firms want to invest in countries with manageable political risks, with access to important inputs such as a well-trained workforce, adequate infrastructure and utilities, easy access to value chains, and access to consumer markets. This is particularly true among the high-value-added, efficiency-seeking investments that governments most want to attract (World Bank 2017). Thus, firms cannot credibly locate anywhere – countries with attractive investment climates retain more leverage due to possessing attributes that firms look for. Second, most governments hold more refined preferences over investment attraction than just generating aggregate investment flows. That is, governments prefer some kinds of investment over others. For many governments, there is a growing understanding that the development spillovers from FDI are largest when investments help countries' industries move up the value chain by assisting with technological upgrading and the generation of more high-skilled employment. Accordingly, governments increasingly target incentives to the types of industries and activities that they believe will be most likely to generate positive development spillovers, and this limits the extent to which capital mobility drives patterns of incentives. In other words, investment incentives are as much instruments of industrial policy as they are concessions to globally mobile firms.

At a more abstract level, our analysis challenges basic assumptions and theories that underpin much of the literature on the role of multinational corporations in the global economy. Rather than emphasizing the structural power of mobile firms vis-à-vis territorially-bounded states, we push scholars to consider more fully how economic activity must ultimately exist in the context of domestic politics, and how the place-making of global production networks confers substantial leverage to policymakers in locations that are particularly attractive to firms. Rather than view countries as price-takers in a global competition for investment, it may be fruitful to think about the relationship between capital and states as one characterized by assortative matching.

Conceptualizing the political economy of finance and production in this way provides a useful frame through which to re-examine a host of interesting and important questions about agglomeration and inequality in the contemporary global political and systems. In particular, we see two especially important avenues for future research. First, why do so many policymakers talk and act as if the demands of global business must override domestic governance priorities if firms actually enjoy less bargaining leverage than typically assumed? Are policymakers' behaviors driven by cognitive mistakes that over-estimate the power of capital? Or, are they driven by material interests that align with those of global capital? How do these dynamics influence democratic institutions, attempts at economic redistribution, and citizens' beliefs about the usefulness of democratic governance? Second, if governments retain greater policymaking space in relation to global capital, under what conditions do they use their authority to generate inclusive growth and when do these use this power to enrich their domestic and international allies? How do politicians use investment promotion policy as tools of statecraft, meaning how do they use these policy levers to shape their own comparative advantages in relation to other governments, and what does this mean for patterns of global investment and inequality? Future work should explore these questions in greater detail.

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