

Local Politics, Global Capital: The Effects of Domestic Political Ties on Foreign Direct Investment Attraction*

Carolina Moehlecke[†] Iasmin Goes[‡] Ariana Ribeiro Costa[§]

June 2025

Abstract

What attracts foreign direct investment (FDI) to specific municipalities? We argue that political ties across levels of government play a key role: local administrators aligned with the national governing coalition are better positioned to promote their municipalities to foreign investors. We test this claim using a novel municipal-level dataset on FDI transactions in Brazil (2012–2021), the largest FDI recipient in the developing world. Multilevel regression models and a regression discontinuity design support our argument. Qualitative evidence and additional statistical tests suggest that political ties boost FDI by encouraging mayors and members of parliament to steer investment toward electorally relevant areas and by increasing firms' expectations about the varied (and often opaque) benefits of cultivating political connections. Our study underscores the heterogeneous local effects of economic globalization, highlighting the relevance of political ties for subnational economic outcomes.

* Authors listed in reverse alphabetical order. We thank audiences at EPSA 2023, SWIPE 2024, ISA 2024, FGV-USP Symposium 2025 and research seminars at FGV RI, Colorado State University and FEA-USP for helpful feedback. We also thank FGV RI's students Gabriel Camargo, Julia Maciel de Rodrigues, Augusto de Oliveira, and Rafael Villela for excellent research assistance and Apex-Brasil, the Brazilian Trade and Investment Promotion Agency, for directing us to the municipality-level FDI data. We acknowledge funding from Brazil's National Council for Scientific and Technological Development (403686/2023-7 – Call CNPq/MCTI 10/2023). This project was approved by the Institutional Review Boards of Fundação Getulio Vargas (Protocol P.652.2024) and Colorado State University (Protocol 6442).

[†]Fundação Getulio Vargas, carolina.moehlecke@fgv.br

[‡]Colorado State University, iasmin.goes@colostate.edu

[§]Fundação Getulio Vargas, ariana.costa@fgv.br

1 Introduction

Foreign direct investment (FDI) is often analyzed from a global perspective, yet its impacts also manifest locally. Foreign capital creates jobs, enhances public infrastructure, reduces inequality, and increases the incumbent party’s local reelection prospects (Bunte et al. 2018; Jensen and Rosas 2007; Owen 2019). Unsurprisingly, state and local governments spare no effort trying to attract FDI. They promote overseas investment missions (McMillan 2009), set up international investment offices and promotion agencies (Bauerle Danzman and Slaski 2022), distribute generous investment incentives (Baccini et al. 2018), attend “networking events” — including soccer games and Taylor Swift concerts — to rub shoulders with potential investors (Hamilton 2024), and claim credit for boosting the economy (Jensen and Malesky 2018). Beyond these efforts, what aspects of subnational politics draw investment projects to specific locations?

We argue that domestic political ties crucially shape FDI inflows at the subnational level. Having decided to invest in a host country, foreign firms search for information about potential specific locations. Mayors connected to the national governing coalition benefit from prominent advocates who raise their municipality’s profile among foreign investors and act as marketing agents, promoting local assets. Meanwhile, investors pay attention to local characteristics that are critical to business operations, such as infrastructure quality and labor availability, but can also be persuaded by “softer factors”, including perceptions of stability and political support (Zhu et al. 2015). Since foreign firms value political connections (Betz and Pond 2023), mayors aligned to the national governing coalition can more effectively signal the strength of their political ties, thus presenting their municipalities as more attractive destinations for FDI than their non-connected counterparts.

As the largest FDI recipient in the developing world (UNCTAD 2022) and a federal democracy with strong intergovernmental linkages, Brazil is a strategic case to test our argument. Intergovernmental linkages are central to electoral coordination across government levels (Novaes 2018) and to the country’s model of coalitional presidentialism (Zucco and Power 2024). Mayors rely on allied members of the National Congress to secure resources that boost their electoral prospects,

while members of Congress depend on local partners to mobilize voters and maintain territorial support. Because the benefits of FDI — such as job creation — are visible and politically valuable, these political actors share an interest in directing foreign capital to strategic municipalities. This incentive is amplified by Brazil’s proportional representation system, which encourages federal legislators to cultivate support across municipalities within their state. Consequently, mayors whose party belongs to the national governing coalition should be better positioned to attract FDI, supported by congressional allies who help promote their municipalities to foreign investors.

We test our argument using a novel, publicly available dataset of all FDI transactions received by Brazilian municipalities between 2012 and 2021. Given the hierarchical structure of our data, with 5,570 municipalities nested within 26 states, we estimate multilevel regression models with different specifications, controlling for a range of political, social, and economic covariates. We also implement a regression discontinuity design (RDD) that leverages the close election of either a connected or a non-connected mayor. Both approaches show that political ties across government levels significantly increase the count of FDI transactions, an effect that is robust to different specifications. The RDD allows us to make causal statements about close elections, whereas the multilevel models identify broader trends across the entire sample, reinforcing the generalizability of our results.

Finally, we investigate the mechanisms connecting political ties to FDI. An in-depth case study of the Dutch beverage manufacturer Heineken supports the promotion mechanism: as interviews and local news reports confirm, credible political connections raised the visibility of a small municipality, helping it secure a large investment from Heineken around 2020. Statistical analyses applied to the whole sample discard alternative explanations based on material advantages that could also stem from domestic political connections, such as intergovernmental transfers, investment incentives, or reduced regulatory barriers. Further qualitative evidence underscores the role of domestic political coalitions in helping municipalities compete for foreign investment across different sectors and scales. Taken together, our evidence suggests that political ties attract FDI primarily by enhancing visibility to investors rather than delivering direct material benefits.

This study makes three key contributions. First, while most of the literature on the effects of political alignment emphasizes public goods provision (e.g. Alberti et al. 2022; Migueis 2013; Callen et al. 2020; Brollo and Nannicini 2012), we show that political ties also influence the subnational distribution of FDI. Second, we build on recent evidence that investors value political connections (Betz and Pond 2023), demonstrating that these ties enhance the perceived credibility of potential host municipalities. Third, we contribute to a growing effort to bridge international and comparative political economy by examining the uneven effects of globalization within countries (Ballard-Rosa et al. 2021; Rickard 2022). We do so from the perspective of the developing world, an underrepresented but essential context, given its pronounced internal economic disparities and the political salience of foreign capital flows (Rickard 2020). Our contribution is also empirical: we leverage fine-grained, municipal-level data to advance prior research that largely used state- or provincial-level FDI data (Garriga and Phillips 2022; Garriga 2022; Halvorsen and Jakobsen 2013; Simmons et al. 2018). Overall, these contributions advance our understanding of how domestic political factors mediate the local effects of globalization.

2 How Local Factors Attract FDI

Much of the literature on FDI attraction focuses on national-level determinants (Pandya 2016), including bilateral investment treaties (Elkins et al. 2006) and their investor-state dispute settlement clauses (Moehlecke and Wellhausen 2022), property rights (Jensen 2003; Li and Resnick 2003), screening requirements in strategic sectors (Bauerle Danzman and Meunier 2023), local content requirements (Pandya 2014), tax and regulatory policies (Li 2006; Jensen 2012), electoral cycles (Canes-Wrone and Park 2014; Chen et al. 2019), partisanship (Pinto 2013), party structure (Simmons et al. 2018), and human rights protection (Blanton and Blanton 2007). The influence of subnational factors in attracting foreign capital has received far less attention, aside from a few notable contributions.

From a socioeconomic standpoint, low education levels, low trust in state authorities, high

crime, and organized criminal competition deter investment at the subnational level, as shown by studies of Mexican states (Escobar Gamboa 2012; Samford and Gómez 2014; Garriga and Phillips 2022). Agglomeration, or geographic clustering, also plays an important role (Duranton and Puga 2001; Knoben 2009; Rodríguez-Pose and Crescenzi 2008). Business activities — especially those of high added value — tend to cluster in large cities, which offer competitive consumer markets, knowledge-based services (like finance and IT), transportation networks (airports, ports, and roads), and telecommunications infrastructure (Duranton and Puga 2001). While large cities often display “diseconomies of scale” (high rental costs, congestion, and salaries), this can push firms to adjacent locations and fuel the development of metropolitan areas, an important determinant of firm location itself (Crescenzi et al. 2019).

Concerning politics, an emerging literature examines how the partisanship and ideology of subnational governments affect their ability to attract investment. According to Garriga (2022), multinational corporations (MNCs) prefer Mexican states ruled by left-wing governors, who are more likely to invest in human capital. In contrast, right-wing mayors in Brazil are linked to higher business creation (Arvate and Story 2021). In the US, Republican-governed states attract more investment from China (Lu and Biglaiser 2020) and in the manufacturing sector (Wang and Heyes 2021) than Democratic-led states. As a compromise, Halvorsen and Jakobsen (2013) posit that divided state governments attract more FDI in the US; since Republicans support low taxes and Democrats favor public goods provision, a mix of both is optimal for MNCs.

There is also growing interest in whether investment incentives affect firms’ subnational location decisions. The general answer is no: incentives sweeten the deal for firms that would have chosen a given location anyway (Oman 2000; Jensen and Malesky 2018). Yet much of the evidence comes from OECD countries (e.g. Jensen 2012; Bartik 2018). In developing countries, at least some incentives seem to matter: lower corporate income taxes and longer tax holidays attract more investment to Latin America (Klemm and Parys 2012), and tax cuts on direct investment profit increase FDI in some Russian jurisdictions (Baccini et al. 2014). Firms that receive incentives are often already embedded in local markets, in sectors conforming to governments’

broader economic policy goals, at least in Latin America (Bauerle Danzman and Slaski 2022). These patterns suggest that subnational politics matter for investment attraction.

The literature thus shows that subnational politics and institutions shape FDI in important ways. Yet, much of the literature treats subnational governments as largely autonomous actors, with limited attention to how their relationship with national authorities may affect investment outcomes. In reality, local politics is embedded in national politics. In what follows, we examine an understudied dimension of this relationship: domestic political ties — that is, the extent to which local politicians are aligned with or opposed to the national governing coalition — and how these ties affect the municipal allocation of FDI.

3 Argument

Subnational entities compete for FDI (Jensen and Malesky 2018). Some disputes occur at the global level, where states, provinces, counties, or municipalities vie with counterparts in other countries (Markusen and Nesse 2007, p. 7). In other circumstances, the competition is primarily domestic, as foreign investors who have already chosen a host country must then decide on a specific municipality within it (Mataloni Jr 2011; Bauerle Danzman and Slaski 2021).

In the context of domestic competition, we argue that — all else equal — municipalities led by mayors with political ties to the national governing coalition are more likely to attract FDI than those without such ties. This argument rests on two premises. First, investors value the visible benefits that well-connected municipalities can offer. Second, politicians across different levels of government have a shared interest in attracting FDI to strategic locations and promoting their political ties as an asset to foreign investors.

MNCs evaluate potential locations based on several factors (Maitland and Sammartino 2015). A World Bank report highlights how firm perceptions and “softer factors” influence location decisions, particularly at the final selection stage (Zhu et al. 2015, p. 12). While economic fundamentals like infrastructure, market access, and labor availability remain the primary determinants,

perceptions of political support, stability, predictability, and other less tangible aspects may be decisive. This applies to efficiency-seeking, market-seeking, but also resource-seeking projects: even firms constrained by specific, immobile factors weigh the local political landscape ([Zhu et al. 2015](#), p.10). Correspondingly, the World Bank encourages cities to “promote effective partnerships and coordination” with regional and national governments to enhance their attractiveness to multinational firms ([Zhu et al. 2015](#), p. 18). Political alignment is a kind of partnership that can enhance a municipality’s appeal.

Importantly, political connections are not hidden. Investors can observe or infer these connections through clear signals. For example, national governments actively promote FDI, leading trade delegations abroad and showcasing investment opportunities at home.¹ Municipalities aligned with the ruling coalition are more likely to appear in promotional materials or on the itineraries of visiting foreign investors and diplomats (e.g. [Durante 2020](#); [InfoGEI 2024](#)). These efforts amplify a municipality’s visibility and showcase its political ties. Even a municipality with strong economic fundamentals, such as high-quality infrastructure or low crime, can gain an edge from this political marketing, relative to competitors that lack political connections.

Regarding our second premise, both local and national politicians have strong incentives to attract foreign capital. At the municipal level, FDI can generate employment, boost tax revenues, and enhance political standing with constituents. Mayors, in particular, reap electoral rewards ([Owen 2019](#); [Jensen and Malesky 2018](#)). For national legislators, who often depend on local constituencies for electoral support,² channeling FDI to aligned municipalities helps consolidate their influence at the local level. New investment projects offer shared credit-claiming opportunities, allowing mayors and allied legislators to reap electoral benefits. For the national governing coalition, promoting investments in municipalities governed by allies is thus politically valuable as it increases their reach at the local level. While this behavior is in the interest of most (if not

¹See examples from the Philippines ([Esguerra 2024](#)), Peru ([Embajada del Perú en Reino Unido 2023](#)), and Nigeria ([U.S. Mission Nigeria 2023](#)).

²This dynamic is clearest in majoritarian electoral systems (like the US and UK) and mixed-member systems (such as Germany and Japan), but it also applies in proportional representation systems with informal regional power bases, such as Brazil, Colombia, and Indonesia.

all) mayors and national-level politicians, those who belong to parties in the national governing coalition have the best opportunities to engage in it.

The benefits of political alignment to investors may take various forms, including a mix of tangible and intangible advantages. From a tangible perspective, foreign investors may view politically connected municipalities as having better access to national resources. In Brazil (Brollo and Nannicini 2012; Meireles 2018), Chile (Alberti et al. 2022), Croatia (Glaurdic and Vuković 2017), India (Arulampalam et al. 2009), Italy (Bracco et al. 2013), Portugal (Migueis 2013), Spain (Solé-Ollé and Sorribas-Navarro 2008), and the US (Berry et al. 2010), local governments aligned with the national level request and receive more financial resources than non-aligned ones (Goldstein and You 2017; Meireles 2018). These intergovernmental transfers serve to reward allies and punish opponents: as more resources flow to friends, fewer resources are available to foes (Martin 2003; Brollo and Nannicini 2012).³ For investors, these additional resources might increase the appeal of a politically connected municipality by supporting infrastructure upgrades and enhancing public services. Political ties may also expedite bureaucratic processes, reduce regulatory hurdles, and improve fiscal management, all known to enhance FDI prospects (Tomasi et al. 2023). Additionally, MNCs may believe that access to investment incentives hinges on strong ties between local and national authorities, especially in federal systems with complex fiscal transfers.

On the more intangible side, political ties can signal to foreign investors that an aligned municipality has advocates within the national governing coalition. This logic aligns with research showing that investors seek to build political goodwill in host countries (Bhagwati et al. 1992) and expect to benefit from political connections (Faccio 2006; Szakonyi 2018; Betz and Pond 2023). In this context, investing in a municipality ruled by a mayor aligned with the national coalition may also offer firms a channel to cultivate national-level influence.

In short, political connections between mayors and the national governing coalition signal to foreign investors that they may obtain both material benefits and access to broader political networks. Regardless of the specific advantage investors seek, we can derive an empirical expec-

³A related strategy is to bypass local-level opponents by distributing resources to non-state organizations instead (Bueno 2018).

tation:

Central Hypothesis: *All else equal, municipalities governed by mayors with political ties to the national governing coalition will attract more FDI than those without such ties.*

4 The Case of Brazil

4.1 Background

We test our central hypothesis using data from Brazil, an especially relevant case for two reasons. First, Brazil is the largest FDI recipient in the developing world ([UNCTAD 2022](#)), and its size and deep regional inequalities allow for substantial within-country variation in FDI inflows — a necessary condition for examining what makes municipalities more attractive to foreign investors. Second, Brazil is a presidential democracy whose federal structure grants significant autonomy to its 5,570 municipal governments, sorted into 26 states and one federal district. General elections for president, governors, and the National Congress occur every four years, with midterm elections for mayors and city councils. All municipalities follow a mayor-council system, with directly elected mayors who hold substantial executive powers.⁴

In Brazil, political connections across levels of government are central to intergovernmental relations. Mayors value ties with the national governing coalition because these connections often bring material benefits. For example, mayors from parties in the federal governing coalition tend to attract more federal resources ([Brollo and Nannicini 2012; Bueno 2018; Meireles 2018](#)). At the same time, municipal elections are strategically important for members of the National Congress, who are elected through proportional representation with regional lists and rely on entrenched local political networks. Mayors act as local brokers for national legislators, mobilizing electoral support ([Novaes 2018](#)), while legislators help advance the president's agenda in

⁴There are only two exceptions: the capital Brasília does not have a local-level government, and the island of Fernando de Noronha has a city manager appointed by the state government of Pernambuco. Both are excluded from our discussion and subsequent analysis.

Congress, making it easier to govern (Zucco and Power 2024). This interdependence is so strong that members of Congress and presidents actively campaign for allied mayoral candidates (e.g. Ribeiro 2024; Ferreira 2024; Martins 2024).

To our knowledge, this is the first study to systematically investigate how political alignment shapes the subnational distribution of FDI. Brazil offers a “most likely” case for theory testing, a setting where the hypothesized relationship is most plausible. Still, our theoretical framework is likely relevant to other major FDI recipients with federal or semi-federal systems where vertical intergovernmental ties matter, like Mexico, Argentina, and the US (see, for example, Giraudy et al. 2024). These cases point to opportunities for future cross-national comparisons.

4.2 Case Study: Heineken in Brazil

Before conducting statistical analyses to test our hypothesis using data from all Brazilian municipalities, we present a case study that illustrates how local-national political connections influence FDI attraction. We analyze the case of the Dutch beverage manufacturer Heineken in Brazil. Heineken established its presence in the country — the world’s third-largest beer market — through mergers and acquisitions in 2017. In December 2020, Heineken announced its first greenfield project in Brazil: the construction of a brand new brewery in Pedro Leopoldo, a small town of 60,000 located 40 km (25 miles) away from Belo Horizonte, the capital of the state of Minas Gerais. Pedro Leopoldo met two key technical criteria: high-quality freshwater (crucial for beer production) and proximity to Brazil’s most densely populated regions.

However, in September 2021, Brazil’s Ministry of Environment halted construction due to concerns over wildlife displacement, water depletion, and threats to archaeologically significant caves, including the site of the oldest human fossil found in the Americas (Adler 2021). Despite legal support at the state level, Heineken ultimately withdrew its investment, citing reputational concerns and potential policy reversal (the state-level permit was a preliminary injunction that could be overturned). Heineken’s director of Corporate Affairs justified the decision by pointing to “the instability in legal interpretation between state and federal bodies, along with the

involvement of other departments” ([Valverde 2021](#)).

Heineken remained committed to building a factory in Minas Gerais. After the Pedro Leopoldo deal collapsed, 230 of the state’s 853 municipalities expressed interest in hosting the brewery, underscoring the intense subnational competition for FDI. Among at least six serious contenders, two — Uberlândia and Uberaba — were favored by Governor Romeu Zema for their proximity to his hometown ([Alves 2022](#)). Two weeks before the final announcement, Heineken even pre-leased land in Uberaba ([Manfrim 2022](#)). However, Uberaba’s bid suffered from poor coordination between local and national political actors. Congressman Franco Cartafina – who had won about a third of his votes in Uberaba and once sat on its city council – offered to meet with Heineken representatives and lobby for his hometown, but was reassured by the municipal administration that “everything was on track.”⁵ Congressman Aelton Freitas (a resident of Uberaba) and Brazil’s then-Minister of Agriculture, Marcos Montes (Uberaba’s former mayor), were not even approached to help with negotiations ([Prata 2022](#)). According to City Council member Paulo César Soares, Mayor Elisa Araújo overestimated the strength of her political connections: “[Mayor] Elisa claims to be a good friend of [Governor] Zema, but he doesn’t even remember that she exists.”⁶

One of the other contenders was Passos, with a population of 112,000. Crucially, Passos was the hometown of the President of the National Congress, Senator Rodrigo Pacheco. To negotiate with Heineken, Pacheco mobilized a network of allies, including a member of the National Congress, Emidinho Madeira; a former member of the National Congress, Renato Andrade; a member of the state legislature, Cássio Soares; and the mayor of Passos, Diego Oliveira — all members of parties in the president’s governing coalition. On April 19, 2022, Pacheco approved funding to pave a state highway leading to Passos ([Alves 2022](#)). Exactly one week later, Heineken announced that Passos would host its new Brazilian brewery ([Nascimento 2022](#)).

State representative Soares downplayed the role of politics: “Heineken’s decision is not po-

⁵This anecdote was relayed in one of Uberaba’s City Council meetings: <https://www.youtube.com/watch?v=I80f5mmcSA>

⁶For a transcription of the Council member’s remarks, see <https://portal.camarauberaba.mg.gov.br/noticias/uberaba-perde-oportunidade-e-heineken-anuncia-instalacao-em-passos/>

litical. Heineken chose Passos because it has characteristics that favor industrialization... we have a town with an airport, a public university..., abundant water, and a reasonable Human Development Index” ([Peixoto and Garcia 2022](#)). Yet other towns offered similar or even superior characteristics. Uberaba has a population of 340,000, higher Human Development Index, abundant water, an airport, a public university, a more extensive road network, and better access to major cities. Uberaba’s local politicians also had strong political connections that could have provided credible information to investors and facilitated negotiations. However, these connections went unused. In contrast, Passos’s political actors were proactive and coordinated. The Secretary of Planning described their strategy: “We made presentations, we took [Heineken] to the locations, we presented studies showing the strategic location of Passos, what audience they wanted to reach, what demand, and on top of that, we showed that Passos had these characteristics that they were looking for” ([EPTV2 2022](#)). Mayor Oliveira, re-elected with 88.05 percent of the votes in 2024 and now dubbed “Heineken’s mayor,” noted: “We spared no effort, we went after it, we ran, we knocked on the doors of comrades who helped us” ([Folha da Manhã 2023](#)). Passos swiftly approved licenses and granted generous tax incentives. Construction of the brewery began in March 2023 and is expected to be completed by 2025 ([EPTV2 2022](#)).

The case of Heineken is exceptional: foreign firms rarely invest \$350 million and create 350 direct jobs in a single municipality. Still, this case is useful to highlight several key aspects of our argument. First, foreign corporations wield significant bargaining power at the entry stage: they have multiple viable options even after accounting for location preferences.⁷ Second, foreign investors are not always familiar with the specifics of potential sites. Heineken representatives may have known Brazil’s largest cities, but not the 230 smaller towns vying for the brewery, many of which were virtually indistinguishable from one another on economic grounds. When the final decision comes down to a handful of locations with comparable fundamentals, political ties are crucial. They increase visibility and credibility. What matters is not merely having political ties,

⁷In a large country like Brazil, even resource-seeking investors have options. For instance, mining companies can choose between iron deposits in the states of Pará (North), Rio Grande do Norte, Piauí, and Bahia (Northeast), Minas Gerais (Southeast), and Goiás (Center-West).

but leveraging them effectively to build informal networks. While places like Uberaba and Uberlândia may have had marginally stronger fundamentals, the mobilization of Passos’s proactive use of political connections helped elevate its bid above the rest.

Third, the case of Heineken casts doubt on alternative explanations. Tangible benefits derived from political alignment — like generous investment incentives, larger intergovernmental transfers, or lower regulatory barriers — might strengthen a municipality’s economic appeal, but they do not automatically translate into more foreign investment. Even with strong fundamentals, like large markets, airports, public universities, or extensive roads, local politicians who fail to cultivate strong political connections at the national level may struggle to attract investment. Political alignment must be leveraged strategically through active coordination and coalition-building. Ultimately, the political support behind Passos proved decisive. In what follows, we draw more from this illustrative case to a comprehensive analysis of FDI transactions across all Brazilian municipalities, testing our hypothesis more systematically.

5 Data

5.1 Outcome Variable: FDI Transactions

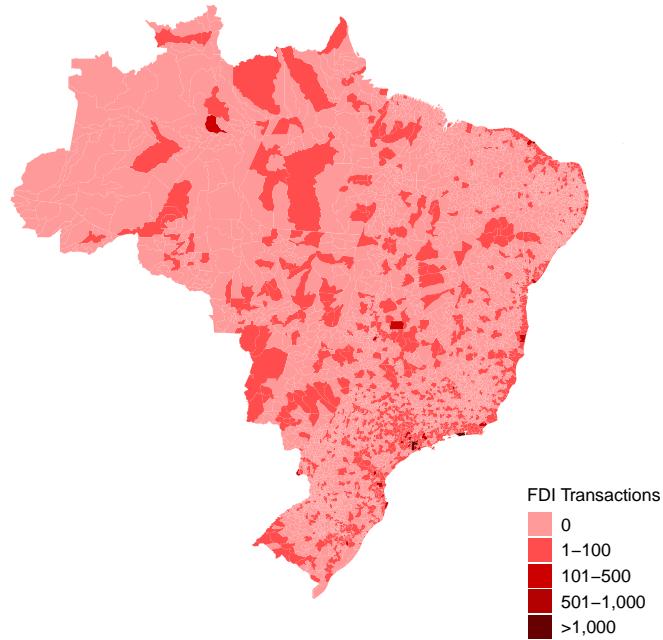
Our outcome variable is the annual *FDI Transaction Count* to each Brazilian municipality from January 1, 2012, to December 31, 2021, using data from the Brazilian Central Bank (BCB). The BCB records all firm-level FDI transactions in Brazil. Whenever a foreign firm transfers capital to a Brazilian firm, the latter must report this information to the BCB within 30 days, using the digital platform SCE–IED (a Portuguese acronym for “Foreign Capital Reporting System – Foreign Direct Investment”). Each transaction represents a foreign firm’s decision to invest in Brazil, whether through a greenfield project (where capital funds a newly created firm) or a brownfield project (where capital flows into an existing firm).

The original BCB data is recorded at the *foreign firm-Brazilian firm* level. We use Brazil’s National Registry of Legal Entities (CNPJ) to identify each domestic firm’s municipality and ag-

gregate the transactions to the *municipality-year* level. To avoid artificially inflating FDI activity, we only consider the *first* annual transfer from any foreign investor to each domestic firm. This approach mitigates concerns that investors may split transfers into smaller amounts for fiscal or administrative reasons. If multiple foreign partners invest in the same Brazilian firm within a year, we treat it as a single transaction, assuming their decisions are interdependent. Thus, our outcome variable reflects the number of distinct firms in each municipality that received foreign capital at least once per year, reflecting how frequently foreign firms decide to invest in each location.

From 2012 to 2021, Brazil recorded 33,254 FDI transactions. As Figure 1 illustrates, the geographic distribution aligns with expectations: excluding São Paulo and Rio de Janeiro — with 13,238 and 3,692 transactions, respectively —, the average municipality attracted 0.597 transactions each year. Notably, 4,382 municipalities received no FDI transactions during the entire period.

Figure 1: FDI Transactions to Brazilian Municipalities, 2012–2021



This figure shows the total number of FDI transactions to Brazil's 5,570 municipalities between 2012 and 2021.

Our publicly available data offer several important advantages over other sources used in the

politics of FDI literature. First, our municipal-level data provides a level of granularity rarely seen in subnational FDI studies (Garriga and Phillips 2022; Garriga 2022, e.g), enabling a closer empirical test of our theory. Second, our data originate from a national registry and thus comprehensively capture FDI across the entire country. In contrast, datasets that rely on news reports or other secondary sources, like *fDi Markets*, may underreport FDI activity in remote regions, where coverage is more sparse. As such, our dataset is unlikely to exhibit non-random missingness. Third, the BCB data capture actual financial transactions, rather than announcements that may never materialize. Announcements are appropriate to answer other research questions (e.g. Owen 2019), but in our case, they could introduce noise.⁸ Fourth, our data captures both greenfield and brownfield investment, giving us a broader and more nuanced view of FDI across the country.

5.2 Independent Variable: Political Alignment

Following other studies of Brazilian politics (e.g. Brollo and Nannicini 2012; Meireles 2018; Power and Rodrigues-Silveira 2019), we rely on party affiliations to infer political ties. In Brazil's highly fragmented party system, presidents must assemble multi-party coalitions to govern effectively (Zucco and Power 2024). Accordingly, for each year in our dataset, we identify the composition of the national governing coalition and classify whether a mayor belongs to a party within this governing coalition, the most influential political group in Brazil.⁹

Concretely, to quantify the political connections between municipal governments and the national governing coalition, we construct the *Political Alignment* variable in a two-step process.

⁸We initially considered the possibility that Brazilian firms might report transactions that had not yet occurred or would not occur. However, interviews with BCB officials indicated that firms are unlikely to report “intent to invest” without concrete plans, as reporting involves administrative costs. While some firms may report transactions one or two months in advance, our annual aggregation helps mitigate this concern.

⁹In settings like the US, it is possible to measure a municipality’s political ties more directly, as House Representatives – elected through plurality voting in single-member districts – hold direct connections with a narrowly defined local constituency. In contrast, Brazilian members of Congress are elected through proportional representation in large multi-member districts, so there is no formal institutional link between legislators and specific municipalities. For instance, the 53 federal congressional representatives from Minas Gerais collectively represent the state’s 20.5 million residents, so no individual legislator is directly accountable to a municipality like Passos. Given these features of the Brazilian electoral system, a coalitional proxy offers a more appropriate measure of political ties.

First, we use data from the Superior Electoral Court (Tribunal Superior Eleitoral, TSE) to identify the winner of all mayoral elections in 2008, 2012, 2016, 2020, and in over 500 special elections used to fill vacant mayor seats.¹⁰ For each year of a mayor’s term, we record their party affiliation.

Second, we link municipal data to voting records on motions in the lower chamber of the National Congress. For each motion, the president can issue a formal voting recommendation, reflecting the Latin American pattern of “proactive presidents” and “reactive assemblies” (Cox and Morgenstern 2001). We then calculate the share of motions, in each year, for which the mayor’s party leadership voted in accordance with the president’s voting recommendation.¹¹ The resulting *Political Alignment* variable is a continuous measure; higher values indicate stronger alignment with the federal executive, and thus with the national governing coalition. In separate analyses, we also dichotomize this variable, such that mayors count as aligned if their parties vote with the president at least 90 percent of the time.

5.3 Control Variables

To identify relevant control variables, we draw both on the broader literature and on insights from our case study of Heineken. *Mayor Ideology*, the ideology of the mayor’s party, ranges from -1 (extreme left) to 1 (extreme right), using data from Zucco and Power (2024). As noted in our literature review, ideology has been shown to affect FDI attraction in other subnational settings (Halvorsen and Jakobsen 2013; Arvate and Story 2021; Garriga 2022). We also include dichotomous variables that take the value of 1 in years of *Mayoral Election* or *Mayor Second Term*, as electoral rules only allow mayors to serve for two full consecutive terms. Election years may deter FDI by increasing uncertainty, while reelection may encourage FDI by signaling stability and continuity to investors.

While our main focus is on political variables, economic and geographic fundamentals are

¹⁰Special elections (Eleições Suplementares) usually take place when the elected mayor is suspended from office because of involvement with corruption or other irregularities.

¹¹Although Brazilian parties vary in internal discipline (Amorim Neto 2002), studies covering our time frame find consistently high levels of party discipline, typically between 80% and 90% (Ribeiro et al. 2022; Picussa et al. 2023). These findings support the use of legislative voting as a proxy for party alignment and, by extension, municipal-federal ties.

core to MNCs' location decisions. Thus, models control for several of these, all lagged by one year to avoid simultaneity bias. From the Brazilian Institute of Geography and Statistics (IBGE), we obtain *GDP* (in current Brazilian reais) and *Population Density* (total population divided by total area) to capture a municipality's economic output and market size, respectively. From the Ministry of Labor's RAIS database, we capture labor market characteristics using the percentage of *STEM Workers* (engineers, mathematicians, statisticians, computer scientists, physicists, chemists, and biologists, as labeled by the Brazilian Classification of Occupations) and *Manufacturing Workers*. The four aforementioned variables are logged; before logging, we add one to all municipalities and years with no STEM or manufacturing workers.

The municipal homicide rate (out of 100,000, logged), reported by DATASUS (the Ministry of Health's administrative dataset), serves as a measure of "diseconomies of scale" that might deter FDI. Two dichotomous, time-invariant measures indicate the presence of a public airport or port (maritime, river, or lake), reported by the Civil Aviation Agency and the Federal Revenue Service, respectively. In a country as large as Brazil, access to airports and ports is crucial for connecting firms to supply chains and distribution networks.¹² Finally, we include a one-year lag of the dependent variable, as FDI tends to agglomerate at the local level and current investment decisions are likely influenced by past decisions (Garriga 2022).

6 Evidence from Multilevel Models

6.1 Model Specification

Count outcomes are often modeled using a Poisson distribution, which assumes that the mean and the variance of the outcome are equal. However, *FDI Transaction Count* suffers from overdispersion: its variance (354.192) far exceeds its mean (0.597). This suggests that the Poisson model is not appropriate. A more flexible alternative, the negative binomial distribution, introduces a dispersion parameter that accounts for unobserved heterogeneity or extra variability in the data,

¹²Ideally, we would control for road density, which is not available at the municipal level.

allowing the variance to exceed the mean. Yet our outcome presents an additional challenge: *FDI Transaction Count* contains many zeros, as nearly 80 percent of all municipalities did not attract a single transaction between 2012 and 2021. Therefore, we estimate a zero-inflated negative binomial model, combining a negative binomial model with a logistic regression that predicts the occurrence of excess zeros; both use the same set of predictors.

Additionally, the data follow a hierarchical structure: municipalities within the same state are likely more similar to each other than to municipalities from different states, and municipalities in one year are likely more similar to each other than to municipalities in other years. For this reason, we estimate multilevel models with state and year random intercepts.¹³ Random intercepts estimate a single variance parameter for the distribution of state-specific or year-specific intercepts. This captures unobserved differences between states, for example, which may be due to cultural, economic, or geographic factors that are difficult to quantify. By assuming that the state-specific intercepts are drawn from a common distribution, the model pools information across states. This helps stabilize parameter estimates and improves the reliability of inference, particularly for states with smaller sample sizes.

6.2 Results

Table 1 presents three zero-inflated negative binomial models that support our central hypothesis. Models 1 and 2 include all municipalities. Model 3 excludes Rio de Janeiro and São Paulo, two municipalities that received half of all transactions in the period under study and could skew the results.¹⁴ In all models, coefficients indicate how a one-unit change in the corresponding predictor affects the logged incidence rate of *FDI Transaction Count*. Exponentiating these coefficients yields incidence rate ratios, which indicate the *percentage change* in the expected number of FDI transactions for a one-unit increase in the predictor.

¹³The large number of units prevents us from using random intercepts at the municipal level, hence our decision for state-level random effects. This approach follows other studies focusing on subnational phenomena in the discipline (e.g Han et al. 2023).

¹⁴Since firms' headquarters are heavily concentrated in São Paulo and Rio de Janeiro, excluding them also helps account for potential overestimation concerns.

Table 1: The Effect of Political Alignment on FDI Transactions

| | FDI Transaction Count | | |
|-------------------------------------|---|---|--------------------------------------|
| | (1) | (2) | (3) |
| | All Transactions, All Municipalities | All Transactions, All Municipalities | All Transactions, Excl. RJ and SP |
| Political Alignment, t-1 | 0.43*** (0.14) | 0.20** (0.08) | 0.19** (0.08) |
| FDI Transaction Count, t-1 | | 0.00*** (0.00) | 0.05*** (0.00) |
| Mayor Ideology, t-1 | | 0.01 (0.05) | -0.05 (0.05) |
| Mayoral Election, t-1 | | -0.19 (0.15) | -0.24 (0.15) |
| Mayor Second Term, t-1 | | 0.06 (0.05) | 0.04 (0.05) |
| GDP (Log), t-1 | | 0.59*** (0.03) | 0.45*** (0.03) |
| Population Density (Log), t-1 | | 0.15*** (0.02) | 0.10*** (0.02) |
| STEM Workers, % (Log), t-1 | | 0.25*** (0.03) | 0.18*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | | -0.38*** (0.02) | -0.25*** (0.02) |
| Homicides per 100k (Log), t-1 | | -0.03 (0.03) | -0.01 (0.02) |
| Airport | | -0.01 (0.05) | -0.06 (0.05) |
| Port | | 0.18** (0.08) | 0.12* (0.07) |
| Intercept | -1.63*** (0.26) | -8.46*** (0.39) | -6.57*** (0.36) |
| AIC | 42371.13 | 27106.50 | 26410.08 |
| Log Likelihood | -21176.57 | -13522.25 | -13174.04 |
| Observations | 55245 | 51693 | 51675 |
| Number of States | 26 | 26 | 26 |
| Number of Years | 10 | 10 | 10 |
| Variance: States (Intercept) | 1.23 | 0.69 | 0.41 |
| Variance: Years (Intercept) | 0.01 | 0.06 | 0.07 |

This table presents the results of three multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Holding all other variables constant at their mean (for continuous variables) or reference category (for dichotomous variables), politically aligned municipalities attract 22.1 percent more FDI transactions ($e^{0.20} = 1.221$) than non-aligned municipalities, according to Model 2. This effect is statistically significant ($p < 0.05$) and robust to the exclusion of Rio de Janeiro and São Paulo in Model 3. Put simply, municipalities are better positioned to attract FDI when their mayors are politically connected to influential national-level politicians, as signaled by their membership in

parties that form part of the national governing coalition, the country's most powerful political bloc.

Table 2: The Effect of Political Alignment on FDI Transactions in Goods and Services

| | FDI Transaction Count | | |
|-------------------------------------|--|--|---|
| | (1) Goods and Services, All Municipalities | (2) Goods and Services, All Municipalities | (3) Goods and Services, Excl. RJ and SP |
| Political Alignment, t-1 | 0.37*** (0.14) | 0.19** (0.09) | 0.19** (0.08) |
| FDI Transaction Count, t-1 | | 0.01*** (0.00) | 0.07*** (0.00) |
| Mayor Ideology, t-1 | | 0.04 (0.06) | -0.02 (0.06) |
| Mayoral Election, t-1 | | -0.26 (0.19) | -0.30* (0.18) |
| Mayor Second Term, t-1 | | 0.09 (0.06) | 0.08 (0.05) |
| GDP (Log), t-1 | | 0.57*** (0.03) | 0.43*** (0.03) |
| Population Density (Log), t-1 | | 0.10*** (0.02) | 0.06*** (0.02) |
| STEM Workers, % (Log), t-1 | | 0.21*** (0.03) | 0.15*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | | -0.34*** (0.03) | -0.23*** (0.02) |
| Homicides per 100k (Log), t-1 | | -0.05* (0.03) | -0.03 (0.03) |
| Airport | | -0.04 (0.05) | -0.07 (0.05) |
| Port | | 0.11 (0.08) | 0.07 (0.07) |
| Intercept | -2.04*** (0.27) | -8.26*** (0.42) | -6.34*** (0.40) |
| AIC | 35911.03 | 23012.68 | 22413.77 |
| Log Likelihood | -17946.51 | -11475.34 | -11175.88 |
| Observations | 55245 | 51693 | 51675 |
| Number of States | 26 | 26 | 26 |
| Number of Years | 10 | 10 | 10 |
| Variance: States (Intercept) | 1.29 | 0.69 | 0.40 |
| Variance: Years (Intercept) | 0.02 | 0.10 | 0.11 |

This table presents the results of three multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table 2 narrows the focus to transactions in what we call goods and services: agriculture, manufacturing, electricity, water, sewage, construction, retail, transport, food and accommodation, information and communication, and extractive sectors.¹⁵ We are unable to examine each

¹⁵In the Brazilian National Classification of Economic Activities (CNAE), this matches all sectors with code num-

sector separately due to data sparsity. Still, investments in goods and services are more attractive to municipalities, given their greater tangibility relative to, say, financial activities. Therefore, these types of investment may be more responsive to political ties: mayors might go to greater lengths to form broad political coalitions that improve the visibility of their municipality to investors, as the case of Heineken illustrates. Table 2 confirms our core finding: political alignment continues to predict more FDI, reinforcing the idea that political factors play a critical role in shaping investment flows in sectors with more tangible activities.

Table 3 probes two alternative measures of political alignment. First, we examine alignment with the House Speaker, that is, the proportion of times that the mayor's party leadership followed the voting recommendation of the House Speaker's party. Second, we compute a measure of "triple alignment" that takes the value of one if the mayor, governor, and president come from the same party. Both alternative measures have positive and significant effects on the outcome. Our results are also robust to a series of changes reported in Appendices B and C – for example, replacing random effects with fixed effects, replacing zero-inflated negative binomial models with Poisson or negative binomial models, lagging political alignment at $t - 2$ or $t - 3$, or dichotomizing political alignment. In Appendix C, we also restrict our analysis to greenfield projects like Heineken's, confirming that this type of investment is more susceptible to political dynamics because it requires new permits, zoning approvals, environmental impact assessments, tax break requests, etc. In contrast, *Political Alignment* has a weaker effect on brownfield investment, since the existing infrastructure is already in place and many regulatory hurdles have already been overcome. Overall, our statistical analysis confirms that domestic political ties shape the within-country distribution of foreign investment inflows.

bers 1 to 63. The correspondence between CNAE and ISIC+, NACE, NAICS, ANZSIC, and JSIC systems can be found at <https://www.unepfi.org/impact/impact-radar-mappings/impactmappings/sectors-mapping/>

Table 3: The Effect of Political Alignment on FDI Transactions, Alternative Alignment Measures

| | FDI Transaction Count | | | |
|--|---|---|--------------------------------------|--------------------------------------|
| | (1) | (2) | (3) | (4) |
| | All Transactions, All Municipalities | All Transactions, All Municipalities | All Transactions, Excl. RJ and SP | All Transactions, Excl. RJ and SP |
| Political Alignment (House Speaker), t-1 | 0.25*** (0.09) | | 0.21** (0.09) | |
| Triple Political Alignment, t-1 | | 0.25* (0.13) | | 0.23* (0.12) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.00*** (0.00) | 0.05*** (0.00) | 0.05*** (0.00) |
| Mayor Ideology, t-1 | -0.02 (0.06) | 0.04 (0.05) | -0.07 (0.05) | -0.02 (0.05) |
| Mayoral Election, t-1 | -0.18 (0.15) | -0.19 (0.15) | -0.23 (0.15) | -0.24 (0.15) |
| Mayor Second Term, t-1 | 0.06 (0.05) | 0.05 (0.05) | 0.04 (0.05) | 0.04 (0.05) |
| GDP (Log), t-1 | 0.59*** (0.03) | 0.59*** (0.03) | 0.45*** (0.03) | 0.45*** (0.03) |
| Population Density (Log), t-1 | 0.15*** (0.02) | 0.15*** (0.02) | 0.10*** (0.02) | 0.10*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.24*** (0.03) | 0.24*** (0.03) | 0.18*** (0.03) | 0.18*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | -0.38*** (0.02) | -0.38*** (0.02) | -0.25*** (0.02) | -0.25*** (0.02) |
| Homicides per 100k (Log), t-1 | -0.04 (0.02) | -0.04 (0.03) | -0.01 (0.02) | -0.01 (0.02) |
| Airport | -0.01 (0.05) | -0.01 (0.05) | -0.06 (0.05) | -0.06 (0.05) |
| Port | 0.18** (0.08) | 0.18** (0.08) | 0.12* (0.07) | 0.12* (0.07) |
| Intercept | -8.51*** (0.39) | -8.37*** (0.39) | -6.60*** (0.37) | -6.46*** (0.36) |
| AIC | 27105.68 | 27104.70 | 26410.47 | 26408.38 |
| Log Likelihood | -13521.84 | -13521.35 | -13174.24 | -13173.19 |
| Observations | 51693 | 51693 | 51675 | 51675 |
| Number of States | 26 | 26 | 26 | 26 |
| Number of Years | 10 | 10 | 10 | 10 |
| Variance: States (Intercept) | 0.70 | 0.70 | 0.41 | 0.41 |
| Variance: Years (Intercept) | 0.06 | 0.06 | 0.07 | 0.07 |

This table presents the results of four multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

7 Evidence from Close Elections

7.1 Model Specification

Our multilevel models control for several sources of heterogeneity across municipalities and mayors, yet it is still possible that aligned and non-aligned mayors differ in relevant, unmeasured

ways. To identify the causal effect of political alignment on FDI attraction, we estimate a close-election regression discontinuity design (RDD), which exploits the as-if random assignment of candidates who narrowly win or lose an election. Close-election RDDs are often used in the context of the US – for example, to show that Republican governors attract more FDI than their Democratic counterparts (Wang and Heyes 2021). But this empirical design is also valid for mayoral elections in Brazil, as recent work shows (Brollo and Nannicini 2012; Litschig and Morrison 2013; De Magalhães 2015; Bueno 2018; Johannessen 2020; Toral 2024).¹⁶

We structure our analysis much like Alberti et al. (2022), who use an RDD to show that political alignment reduces crime in Chile. Our outcome, like the authors’, is a count. We restrict the sample to all elections in which (1) more than one candidate received valid votes¹⁷ and (2) the two most-voted candidates have different alignments (excluding instances where both are aligned, for example, or both are non-aligned). As before, we account for supplementary elections. Like Alberti et al. (2022), our running variable is *Margin of Victory*, the difference in vote share between the aligned and the non-aligned candidates in the mayoral election. We consider that a candidate is aligned if their party leadership follows the president’s recommendation at least 90 percent of the time. Positive values indicate that the aligned candidate won the election, whereas negative values indicate the aligned candidate lost. The probability of treatment (i.e., the probability that the mayor is aligned) jumps from 0 to 1 at the margin of victory cutoff.

The key assumption of a close-election RDD is continuity: candidates just above the cutoff are similar to those just below the cutoff, with the only systematic difference being that one narrowly won and the other narrowly lost. As Appendix D shows, this assumption holds for most pre-treatment covariates, with one exception. *Mayor Ideology* is not balanced, which means its distribution is not statistically similar across groups: a narrow winner is significantly more

¹⁶Admittedly, this politician characteristic regression discontinuity (PCRD) design (as Marshall 2024 calls it) has limitations: it cannot isolate the effect of political alignment from other individual-level characteristics. For example, political alignment might be unconditionally correlated with ideology, education, and political experience, factors that could also increase FDI attraction. Following Marshall (2024), we define alignment as a bundle of correlated characteristics, seeking to quantify their compound treatment effect.

¹⁷In 2020, for example, 117 municipalities (2 percent of the total) only had one candidate (Curado 2024). Sometimes one candidate receives 100 percent of all valid votes because the other candidates’ votes were retroactively discarded by the electoral court after these candidates were found guilty of corruption. We also exclude these cases.

conservative (i.e., has a larger value of *Mayor Ideology*) than a narrow loser ($p = 0.000$). This imbalance could affect the validity of the RDD, so we adjust for this covariate when estimating the model.

Our estimation uses the R package *rdrobust* (Calonico et al. 2015). By default, *rdrobust* estimates a local linear regression using a triangular kernel that weighs observations as a function of their distance from the cutoff, selecting the optimal bandwidth that minimizes the mean squared error (MSE) of the estimated treatment effect at the cutoff (see Appendix D for results using other bandwidth selection procedures). Following Alberti et al. (2022), our main models cluster the standard errors by municipality and election cycle; in Appendix D, we present results following the specification of Toral (2024), who includes electoral cycle fixed effects.

7.2 Results

Table 4 confirms that well-connected mayors attract more FDI, even after controlling for potential sources of imbalance. To mirror the multilevel analysis, Table 4 reports the results for *all* transactions (Models 1 and 2) and only for transactions in goods and services (Models 3 and 4). Now, the coefficients are equivalent to those of a linear model, so political alignment increases the expected number of FDI transactions by 0.08 to 0.09 (p-value < 0.01). This effect carries substantive meaning, given that most municipalities attract no FDI at all. In statistical terms, the effect is significant (p-value < 0.05) for transactions in goods and services, consistent with the expectation that such transactions are more responsive to alignment due to their attractiveness to politicians. Figure 2 provides a graphical representation of these effects, including only observations within the optimal, MSE-minimizing bandwidth selected by *rdrobust*. The red line represents the local polynomial smoothing, and the blue dots represent the evenly spaced bins of the running variable. Blue dots above the cutoff represent municipalities with aligned mayors, whereas blue dots below the cutoff represent municipalities with non-aligned mayors.

One limitation of the RDD is that it estimates the Local Average Treatment Effect (LATE), which reflects the treatment effect only for units close to the cutoff. These results may not be

Table 4: The Effect of Political Alignment on FDI Transactions

| | FDI Transaction Count | | | |
|--------------------------------|---|--|---|--|
| | (1) | (2) | (3) | (4) |
| | All Transactions, All Municipalities, No Covariates | All Transactions, All Municipalities, Covariate-Adjusted | Goods and Services, All Municipalities, No Covariates | Goods and Services, All Municipalities, Covariate-Adjusted |
| Political Alignment | 0.09* (0.08) | 0.08* (0.09) | 0.08** (0.04) | 0.08** (0.03) |
| Mayor Ideology (Pt. Estim.) | | 0.01 | | 0.00 |
| Bandwidth (MSE) | 3.32 | 3.32 | 5.63 | 5.6 |
| Effective Observations (Left) | 1534 | 1534 | 2472 | 2463 |
| Effective Observations (Right) | 1654 | 1654 | 2671 | 2648 |

This table presents the results of four regression discontinuity models with robust p-values. All models cluster standard errors by municipality and election cycle. Models 2 and 4 adjust for the covariate *Mayor Ideology*, which can lead to efficiency gains, though its point estimate has no substantive meaning (Calonico et al. 2019). *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

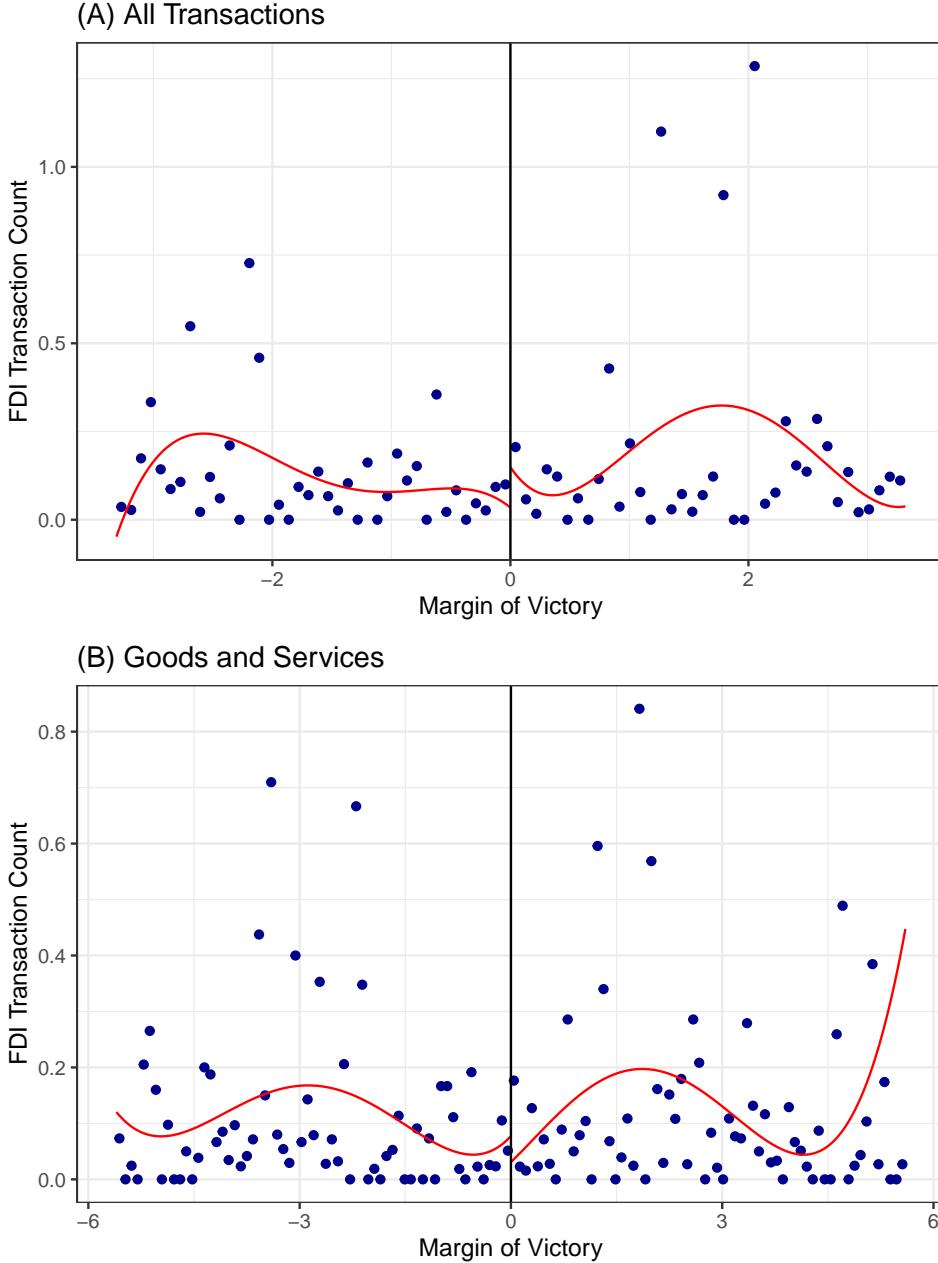
generalizable to all municipalities or aligned candidates with larger margins of victory; units further away from the cutoff might have different treatment effects. This is why the multilevel models are so important: in incorporating all observations, they allow us to examine the overall effects across all Brazilian municipalities, indicating that the treatment effect is not confined to those near the cutoff. Together, the global effect captured by multilevel models and the local effect captured by the RDD show that political ties consistently attract foreign capital at the local level.

8 Why Domestic Political Ties Attract FDI

We argue that domestic political ties increase FDI transactions by giving well-connected municipalities more opportunities to promote themselves to foreign investors. This advantage stems from the efforts of influential national politicians who have a vested interest in channeling FDI to specific locations. Of course, the benefits of political alignment depend on local politicians' ability (and willingness) to activate their connections, which is not always guaranteed, as our case study shows.

Beyond enhancing a municipality's visibility, political connections might signal a greater likelihood of favorable treatment. The case of Heineken suggests that domestic connections provide tangible and intangible advantages: a broad political coalition helped Passos stand out from its

Figure 2: The Effect of Political Alignment on FDI Transactions



This figure shows the relationship between the FDI transaction count and the margin of victory for the aligned candidate, using evenly-spaced bins (the blue dots) and local polynomial smoothing (the red line). The figure only includes observations within the optimal bandwidth selected by *rdrobust*, which minimizes the mean squared error (MSE) of the estimated treatment effect at the cutoff.

competitors by presenting a united front, but also secured a new paved road. Other investment projects may require different tangible benefits, which vary depending on a firm's sector, size, and other characteristics. Thus, we do not expect a single tangible benefit to fully explain the re-

lationship between political connections and FDI transactions. Rather, broad intangible or “soft factors” — to use the World Bank’s terminology (Zhu et al. 2015) — likely play a decisive role. Since it is challenging to test for the effects of intangible factors, we test three tangible benefits that may stem from alignment and that investors likely value: (1) more intergovernmental transfers, (2) more investment incentives, or (3) lower regulatory barriers. For any mechanism to hold, it must be significantly *affected* by alignment while also significantly *affecting* FDI.

To examine whether aligned municipalities attract more FDI due to more intergovernmental transfers, we use National Treasury data on two types of transfers from federal to municipal governments (in Brazilian reais, per capita). Non-discretionary transfers (*Fundo de Participação do Municípios*, or FPM) follow strict population thresholds,¹⁸ whereas discretionary transfers (*convenios*) follow no pre-established set of criteria.¹⁹

To assess whether alignment increases federal investment incentives, which in turn might attract more FDI, we employ data published by the Federal Revenue Service in 2024. This dataset records the name and identification number of every firm that benefited from one of Brazil’s 24 federal incentive programs since 2015, including the equivalent amount of tax revenue foregone by the federal government. We match this information with our firm-level FDI data; the resulting variable reflects the total amount of *Investment Incentives* (in Brazilian reais, per capita) granted to foreign firms, by municipality and year.

Finally, we use two proxies to test whether alignment reduces regulatory barriers that impede investment. One is a municipal-level fiscal management index created by the Industry Federation of the State of Rio de Janeiro (Firjan). This index, available since 2013, ranges from 0 to 1. The other is the average time to register a business, in hours, considering only the first step (*Pesquisa Prévia de Viabilidade*), which happens at the municipal level. This information is available for 2019–2021 from the Federal Revenue Service.

Table 5 presents the results of five RDDs examining how alignment affects the potential mech-

¹⁸However, Brollo et al. 2013 and Litschig 2012 show that these thresholds are often manipulated.

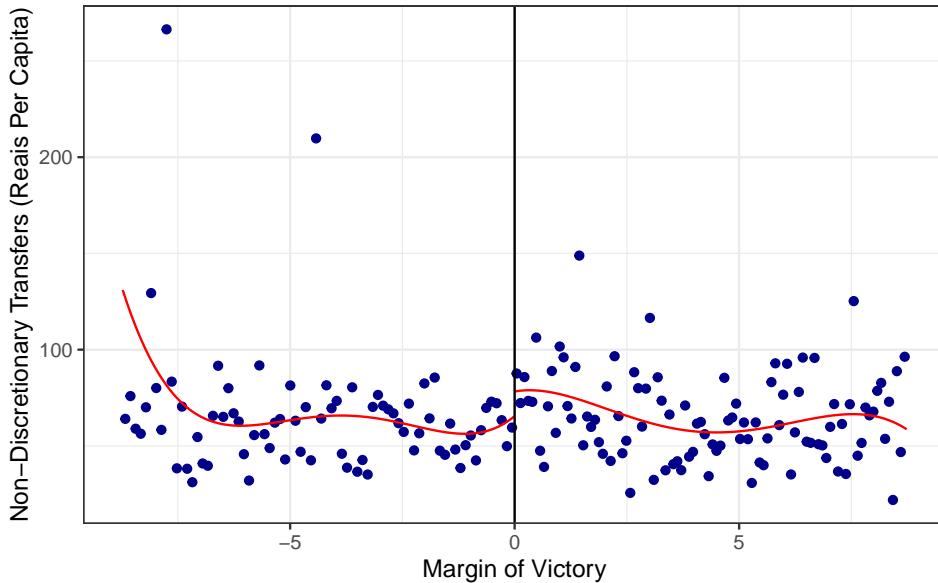
¹⁹Like Bueno (2018), we use data on *all* discretionary transfers to mayors. In Appendix E, we show that our results are robust to using only discretionary capital transfers in the infrastructure sector, as Brollo and Nannicini (2012) do.

Table 5: The Effect of Political Alignment on Intergovernmental Transfers, Investment Incentives, and Regulatory Barriers

| | Non-Discretionary Transfers | Discretionary Transfers | Investment Incentives | Fiscal Management | Time to Register a Business |
|--------------------------------|--------------------------------|----------------------------|--------------------------|----------------------|--------------------------------|
| | (1) 2012–2021 | (2) 2012–2021 | (3) 2015–2021 | (4) 2013–2021 | (5) 2019–2021 |
| Political Alignment | 4.57 (0.89) | 22.98*** (0) | -3.76* (0.08) | 0.00 (0.99) | -0.81 (0.86) |
| Mayor Ideology (Pt. Estim.) | 218.36 | -5.93 | 2.14 | 0.05 | -10.96 |
| Bandwidth (MSE) | 15.1 | 8.73 | 11.76 | 12.35 | 16.05 |
| Effective Observations (Left) | 5616 | 3664 | 4023 | 4326 | 1625 |
| Effective Observations (Right) | 6010 | 3844 | 4142 | 4422 | 1748 |

This table presents the results of five regression discontinuity models with robust p-values. All models cluster standard errors by municipality and election cycle. All models adjust for the covariate *Mayor Ideology*, which can lead to efficiency gains, though its point estimate has no substantive meaning (Calonico et al. 2019). *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Figure 3: The Effect of Political Alignment on Discretionary Transfers



This figure shows the relationship between discretionary transfers (*convênio*) and the margin of victory for the aligned candidate, using evenly-spaced bins (the blue dots) and local polynomial smoothing (the red line). The figure only includes observations within the optimal bandwidth selected by *rdrobust*, which minimizes the mean squared error (MSE) of the estimated treatment effect at the cutoff.

anisms, controlling for *Mayor Ideology* (as before). Alignment has no discernible effect on non-discretionary transfers, fiscal management, or time to register a business, and only a weak negative effect on investment incentives ($p = 0.08$). Consistent with previous studies, we find that

aligned mayors receive significantly more discretionary transfers than their non-aligned counterparts (Model 2), an effect illustrated by Figure 3. Compared to municipalities where the aligned candidate barely lost, municipalities where the aligned candidate barely won receive an average of 23.23 additional reais per capita in discretionary transfers. For context, the median municipality received 30.56 reais per capita in discretionary transfers between 2012 and 2021, suggesting that alignment can make a substantial – and statistically significant – difference.

In sum, of the potential mechanisms, only discretionary transfers are positively *affected* by political alignment. But do they *affect* FDI? Table 6 re-estimates the original multilevel models, adding *Discretionary Transfers* (logged) as an independent variable. Transfers have a *negative* effect on FDI transactions, though this effect is not statistically significant once we restrict the analysis to transactions in goods and services (Model 2). Compared to Tables 1 and 2, the coefficients and significance levels for *Political Alignment* remain practically unchanged, indicating that *Discretionary Transfers* is not a mediator: it does explain any variation in FDI that was previously attributed to alignment. In other words, the effect of alignment on FDI is not “transmitted” through transfers, just as it is not “transmitted” through investment incentives or regulatory barriers. Given that intergovernmental transfers to Brazilian municipalities have little or no benefit due to poor implementation (Brollo et al. 2013; Gadenne 2017), we speculate that investors may not perceive them as particularly relevant when making location decisions.

By exclusion, Tables 5 and 6 suggest that the mechanism linking political connections to FDI is primarily intangible – one of visibility, credibility, and perceived access. Admittedly, direct evidence that investors factor domestic political connections into their location decisions is limited, since many deals are negotiated behind closed doors. However, there is abundant evidence that politicians believe their involvement can help attract foreign investment, and they regularly engage in public efforts to court it. For example, in April 2023, recently elected Brazilian president Luiz Inácio Lula da Silva traveled to China with over 70 government ministers, special advisors, Congressional representatives, senators, and state governors. Among the many items on the agenda was the attraction of Chinese investment to Brazil. Unsurprisingly, all the political

Table 6: The Effect of Political Alignment and Intergovernmental Transfers on FDI Transactions

| | FDI Transaction Count | |
|-------------------------------------|---|---|
| | (1) | (2) |
| | All Transactions, All Municipalities | Goods and Services, All Municipalities |
| Discretionary Transfers (Log), t-1 | -0.02* (0.01) | -0.02 (0.01) |
| Political Alignment, t-1 | 0.21** (0.08) | 0.20** (0.09) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.01*** (0.00) |
| Mayor Ideology, t-1 | 0.01 (0.05) | 0.04 (0.06) |
| Mayoral Election, t-1 | -0.20 (0.16) | -0.27 (0.19) |
| Mayor Second Term, t-1 | 0.07 (0.05) | 0.09 (0.06) |
| GDP (Log), t-1 | 0.59*** (0.03) | 0.57*** (0.03) |
| Population Density (Log), t-1 | 0.14*** (0.02) | 0.09*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.24*** (0.03) | 0.21*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | -0.38*** (0.02) | -0.34*** (0.03) |
| Homicides per 100k (Log), t-1 | -0.04 (0.03) | -0.05* (0.03) |
| Airport | -0.01 (0.05) | -0.05 (0.05) |
| Port | 0.18** (0.08) | 0.11 (0.08) |
| Intercept | -8.40*** (0.39) | -8.22*** (0.42) |
| AIC | 27106.85 | 23014.52 |
| Log Likelihood | -13520.42 | -11474.26 |
| Observations | 51691 | 51691 |
| Number of States | 26 | 26 |
| Number of Years | 10 | 10 |
| Variance: States (Intercept) | 0.69 | 0.69 |
| Variance: Years (Intercept) | 0.07 | 0.10 |

This table presents the results of two multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

figures who accompanied President Lula to Beijing were close allies, including influential figures such as the aforementioned President of the National Congress, Pacheco, as well as chairs of key committees in both chambers of Congress (Haubert 2023). These actors gained privileged access to potential Chinese investors and promoted politically significant municipalities on the

international stage. A similar pattern previously emerged in 2017, when President Michel Temer delivered the following speech during a visit to Norway: “When I come here with an expressive group of ministers, house representatives, and senators, the goal is exactly this one: to strengthen our friendship ties, cultural relations, political relations, and investment relations with Norway, but to effectively seek Norwegian investments to our country” ([Temer 2017](#)). Realistically, Brazil’s 5,570 municipalities cannot all benefit equally from foreign investment. National political actors inevitably have preferences — and biases — regarding which locations *should* benefit.

9 Conclusion

This study advances a research agenda on how local political dynamics affect the subnational allocation of FDI. While previous research focused on the effects of partisanship and ideology, we uncover domestic political connections between local and national governments as a key dimension shaping where foreign investment lands. Using novel data on FDI transactions entering Brazilian municipalities between 2012 and 2021, we estimate multilevel regression models and an RDD, finding that political alignment has a positive and significant effect on foreign investment. Concretely, a municipality tends to attract more FDI transactions when the mayor’s party is a member of the president’s support coalition in Congress, our proxy for powerful domestic political ties. An in-depth case study, combined with statistical tests of potential mechanisms, suggests that political ties work primarily by raising the profile of municipalities among investors through intangible means, rather than directly altering local economic conditions. Well-connected municipalities benefit from influential advocates who represent them in meetings, trade delegations, investment roadshows, and government-prepared materials. Through these and other visibility-enhancing channels, national politicians help increase the attractiveness of specific locations.

Our results serve as a stepping stone for future research on how and when domestic political ties shape not only FDI inflows but also other patterns of local integration with the global economy. In practical terms, policies incentivizing cooperation between different government

levels might play a key role in regional economic development strategies. Although this study employs evidence from Brazil, the same analytical framework could be applied to other democracies with electoral systems that privilege regional dynamics and where FDI inflows are unevenly distributed across locations. Much of this unevenness stems from local economic, social, and geographic aspects that are difficult to change in the short run. Municipalities cannot increase their market size, build extensive roads, or improve educational outcomes overnight. However, our findings suggest that political connections can (partially) level the playing field by increasing visibility, allowing municipalities to attract foreign capital even if they lose in some aspects to competitors. Political ties make investors aware of municipalities that might otherwise go unnoticed, persuading such investors of the attractiveness of specific local investment environments.

A less optimistic reading is that while political connections facilitate FDI, they may also reinforce patterns of favoritism and clientelism, as aligned municipalities receive disproportionate attention regardless of economic merits or needs (e.g. Arulampalam et al. 2009; Brollo and Nannicini 2012; Bracco et al. 2013). Future research can assess whether political alignment enhances overall economic welfare or simply redistributes opportunities toward politically favored regions.

References

- Adler, M. (2021). Construção da fábrica da Heineken na Grande BH é embargada pelo ICMBio. *Estado de Minas*. https://www.em.com.br/app/noticia/economia/2021/09/21/internas_economia,1307758/construcao-da-fabrica-da-heineken-na-grande-bh-e-embargada-pelo-icmbio.shtml Accessed: February 11, 2025.
- Alberti, C., Díaz-Rioseco, D., and Visconti, G. (2022). Can Political Alignment Reduce Crime? Evidence From Chile. *Political Science Research and Methods*, 11(2):223–236.
- Alves, B. (2022). Passos ganha ‘corrida’ e leva a Heineken. *Diário do Comércio*. <https://diariodocomercio.com.br/economia/passos-ganha-corrida-e-leva-a-heineken/> Accessed: February 11, 2025.

Amorim Neto, O. (2002). The puzzle of party discipline in brazil. *Latin American Politics and Society*, 44(1):127–144.

Arulampalam, W., Dasgupta, S., Dhillon, A., and Dutta, B. (2009). Electoral Goals and Center-State Transfers: A Theoretical Model and Empirical Evidence from India. *Journal of Development Economics*, 88(1):103–119.

Arvate, P. and Story, J. (2021). Leaders Affect Business Creation: Evidence from Mayoral Elections. *The Leadership Quarterly*, 5(35):101577.

Baccini, L., Li, Q., and Mirkina, I. (2014). Corporate Tax Cuts and Foreign Direct Investment. *Journal of Policy Analysis and Management*, 33(4):977–1006.

Baccini, L., Li, Q., Mirkina, I., and Johnson, K. (2018). Regional Competition, Business Politicians, and Subnational Fiscal Policy. *Business and Politics*, 20(3):410–437.

Ballard-Rosa, C., Malik, M. A., Rickard, S. J., and Scheve, K. (2021). The Economic Origins of Authoritarian Values: Evidence From Local Trade Shocks in the United Kingdom. *Comparative Political Studies*, 13(54):2321–2353.

Bartik, T. J. (2018). ‘But For’ Percentages for Economic Development Incentives: What Percentage Estimates are Plausible Based on the Research Literature? *Upjohn Institute Working Paper*, 18-289.

Bauerle Danzman, S. and Meunier, S. (2023). Mapping the Characteristics of Foreign Investment Screening Mechanisms: The New PRISM Dataset. *International Studies Quarterly*, 67(2):sqad026.

Bauerle Danzman, S. and Slaski, A. (2021). Explaining Deference: Why and When Do Policymakers Think FDI Needs Tax Incentives? *Review of International Political Economy*, 29(4):1085–1111.

Bauerle Danzman, S. and Slaski, A. (2022). Incentivizing Embedded Investment: Evidence from Patterns of Foreign Direct Investment in Latin America. *The Review of International Organizations*, 17(1):63–87.

Berry, C. R., Burden, B. C., and Howell, W. G. (2010). The President and the Distribution of Federal Spending. *American Political Science Review*, 104(4):783–799.

Betz, T. and Pond, A. (2023). Politically Connected Owners. *Comparative Political Studies*, 56(4):561–595.

Bhagwati, J. N., Dinopoulos, E., and Wong, K.-Y. (1992). Quid Pro Quo Foreign Investment. *The American Economic Review*, 82(2):186–190.

Blanton, S. L. and Blanton, R. G. (2007). What Attracts Foreign Investors? An Examination of Human Rights and Foreign Direct Investment. *Journal of Politics*, 69(1):143–155.

Bracco, E., Porcelli, F., and Redoano, M. (2013). Incumbent Effects and Partisan Alignment in Local Elections: A Regression Discontinuity Analysis Using Italian Data. *CESifo Working Paper Series*, 4061.

Brollo, F. and Nannicini, T. (2012). Tying Your Enemy’s Hands in Close Races: The Politics of Federal Transfers in Brazil. *American Political Science Review*, 106(4):742–761.

Brollo, F., Nannicini, T., Perotti, R., and Tabellini, G. (2013). The Political Resource Curse. *American Economic Review*, 103(5):1759–1796.

Bueno, N. S. (2018). Bypassing the Enemy: Distributive Politics, Credit Claiming, and Nonstate Organizations in Brazil. *Comparative Political Studies*, 51(3):304–340.

Bunte, J. B., Desai, H., Gbala, K., Parks, B., and Runfola, D. M. (2018). Natural Resource Sector FDI, Government Policy, and Economic Growth: Quasi-Experimental Evidence from Liberia. *World Development*, 107:151–162.

- Callen, M., Gulzar, S., and Rezaee, A. (2020). Can Political Alignment Be Costly? *Journal of Politics*, 82(2):612–626.
- Calonico, S., Cattaneo, M. D., Farrell, M. H., and Titiunik, R. (2019). Regression Discontinuity Designs Using Covariates. *The Review of Economics and Statistics*, 101(3):442–451.
- Calonico, S., Cattaneo, M. D., and Titiunik, R. (2015). rdrobust: An R Package for Robust Nonparametric Inference in Regression-Discontinuity Designs. *R Journal*, 7(1):38–51.
- Canes-Wrone, B. and Park, J. K. (2014). Elections, Uncertainty and Irreversible Investment. *British Journal of Political Science*, 44(1):83–106.
- Chen, K., Nie, H., and Ge, Z. (2019). Policy Uncertainty and FDI: Evidence from National Elections. *The Journal of International Trade & Economic Development*, 28(4):419–428.
- Cox, G. W. and Morgenstern, S. (2001). Latin America’s Reactive Assemblies and Proactive Presidents. *Comparative Politics*, 33(2):171–189.
- Crescenzi, R., Iammarino, S., Ioramashvili, C., Rodríguez-Pose, A., and Storper, M. (2019). The Geography of Innovation: Local Hotspots and Global Innovation Networks. *World Intellectual Property Organization – Economic Research Working Paper Series*, 57.
- Curado, C. (2024). Eleições: 214 municípios têm candidato único na disputa para prefeito. *Correio Braziliense*. Available at: <https://www.correiobraziliense.com.br/politica/2024/09/6934365-eleicoes-214-municipios-tem-candidato-unico-na-disputa-para-prefeito.html> Accessed: September 29, 2024.
- De Magalhães, L. (2015). Incumbency Effects in a Comparative Perspective: Evidence From Brazilian Mayoral Elections. *Political Analysis*, 23(1):113–126.
- Durante, N. (2020). Quiénes son los ejecutivos chinos a la caza de inversiones en Chile. *Diario Financiero*. Available at: <https://www.df.cl/df-mas/por-dentro/quienes-son-los-ejecutivos-chinos-a-la-caza-de-inversiones-en-chile> Accessed: 20 March 2025.

Duranton, G. and Puga, D. (2001). Nursery Cities: Urban Diversity, Process Innovation, and the Life Cycle of Products. *American Economic Review*, 91(5):1454–1477.

Elkins, Z., Guzman, A. T., and Simmons, B. A. (2006). Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960–2000. *International Organization*, 60(4):811–846.

Embajada del Perú en Reino Unido (2023). PROINVERSION Investment Roadshow in London. Available at: <https://www.gob.pe/institucion/embajada-del-peru-en-reino-unido/noticias/865729-proinversion-investment-roadshow-in-london> Accessed: March 20, 2025).

EPTV2 (2022). Entenda quais motivos levaram cervejaria a investir R\$ 1,8 bilhão para se instalar em Passos, MG. *G1*. <https://g1.globo.com/mg/sul-de-minas/noticia/2022/04/28/entenda-quais-motivos-levaram-cervejaria-a-investir-r-18-bilhao-para-se-instalar-em-passos-mg.ghtml> Accessed: February 11, 2025.

Escobar Gamboa, O. R. (2012). FDI Determinants and Spatial Spillovers Across Mexico's States. *The Journal of International Trade and Economic Development*, 7:993–1012.

Esguerra, D. J. (2024). PH Mounting Int'l Roadshow for CREATE MORE Act. *Philippine News Agency*. Available at: <https://www.pna.gov.ph/articles/1239066>, Accessed: March 20, 2025.

Faccio, M. (2006). Politically Connected Firms. *American Economic Review*, 96(1):369–386.

Ferreira, K. (2024). Nikolas Ferreira atua para alavancar candidaturas bolsonaristas em capitais no segundo turno. *Terra Notícias*. <https://www.terra.com.br/noticias/brasil/politica/nikolas-ferreira-atua-para-alavancar-candidaturas-bolsonaristas-em-capitais-no-segundo-turno,d445ad55de26879874639d668ae402a4j2odvu9j.html> Accessed: March 27, 2025.

Folha da Manhã (2023). Diego Oliveira: o Prefeito da Heineken de Passos. *Folha da Manhã*. <https://clicfolha.com.br/diego-oliveira-o-prefeito-da-heineken-de-passos/> Accessed: February 11, 2025.

Gadenne, L. (2017). Tax Me, but Spend Wisely? Sources of Public Finance and Government Accountability. *American Economic Journal: Applied Economics*, 9(1):274–314.

Garriga, A. C. (2022). International Capital and Subnational Politics: Partisanship and Foreign Direct Investment in Mexican States. *Political Research Quarterly*, 75(4):1006–1020.

Garriga, A. C. and Phillips, B. J. (2022). Organized Crime and Foreign Direct Investment: Evidence From Criminal Groups in Mexico. *Journal of Conflict Resolution*, 67(9):1675–1703.

Graudy, A., Urdinez, F., and Freites, A. (2024). Digging Deeper: Unpacking the Subnational Political Drivers of Chinese Extractive Investment in Latin America. *Extractive Industries and Society*, 20:101555.

Glaurdić, J. and Vuković, V. (2017). Granting Votes: Exposing the Political Bias of Intergovernmental Grants Using the Within-Between Specification for Panel Data. *Public Choice*, 171:223–241.

Goldstein, R. and You, H. Y. (2017). Cities as Lobbyists. *American Journal of Political Science*, 61(4):864–876.

Halvorsen, T. and Jakobsen, J. (2013). Democrats, Republicans—or Both? An Empirical Analysis of the Effects of the Composition of State Governments on FDI, 1977–2004. *International Interactions*, 39(2):167–191.

Hamilton, C. (2024). Mayor Defends Free Taylor Swift and Match Tickets. BBC. Available at: <https://www.bbc.com/news/articles/ceqn01xp1rzo> Accessed: October 14, 2024.

Han, Z., Milner, H. V., and Mitchener, K. J. (2023). The Deep Roots of American Populism. <https://ssrn.com/abstract=4523224>.

Haubert, M. (2023). Comitiva de Lula na China tem ao menos 73 pessoas. *Poder360*. Available at: <https://www.poder360.com.br/governo/comitiva-de-lula-na-china-tem-ao-menos-73-pessoas/> Accessed: June 15, 2023.

InfoGEI (2024). Delegación de la Provincia China de Shanxi visitó la Cámara Baja de Buenos Aires. Available at: <https://infogei.com/nota/46704/delegacion-de-la-provincia-china-de-shanxi-visito-la-camara-baja-de-buenos-aires/> Accessed: March 20, 2025.

Jensen, N. M. (2003). Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization*, 57(3):587–616.

Jensen, N. M. (2012). Fiscal Policy and the Firm: Do Low Corporate Tax Rates Attract Multinational Corporations? *Comparative Political Studies*, 45(8):1004–1026.

Jensen, N. M. and Malesky, E. J. (2018). *Incentives to Pander: How Politicians Use Corporate Welfare for Political Gain*. Cambridge University Press, Cambridge.

Jensen, N. M. and Rosas, G. (2007). Foreign Direct Investment and Income Inequality in Mexico, 1990–2000. *International Organization*, 61(3):467–487.

Johannessen, P. G. (2020). Linkage Switches in Local Elections: Evidence From the Workers' Party in Brazil. *Comparative Political Studies*, 53(1):109–143.

Klemm, A. and Parys, S. V. (2012). Empirical Evidence on the Effects of Tax Incentives. *International Tax and Public Finance*, 19(3):393–423.

Knoben, J. (2009). Localized Inter-Organizational Linkages, Agglomeration Effects, and the Innovative Performance of Firms. *The Annals of Regional Science*, 43:757–779.

Li, Q. (2006). Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis. *Journal of Politics*, 68(1):62–74.

Li, Q. and Resnick, A. (2003). Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries. *International Organization*, 57(1):175–211.

Litschig, S. (2012). Are Rules-Based Government Programs Shielded from Special-Interest Politics? Evidence from Revenue-Sharing Transfers in Brazil. *Journal of Public Economics*, 96(11-12):1047–1060.

Litschig, S. and Morrison, K. M. (2013). The Impact of Intergovernmental Transfers on Education Outcomes and Poverty Reduction. *American Economic Journal: Applied Economics*, 5(4):206–240.

Lu, K. L. and Biglaiser, G. (2020). The Politics of Chinese Foreign Direct Investment in the USA. *Journal of Asian and African Studies*, 55(2):254–272.

Maitland, E. and Sammartino, A. (2015). Managerial Cognition and Internationalization. *Journal of International Business Studies*, 46:733–760.

Manfrim, R. (2022). Uberaba: Heineken assina pré-contrato de área para instalar nova fábrica. *Estado de Minas*. https://www.em.com.br/app/noticia/economia/2022/04/08/internas_economia,1358723/uberaba-heineken-assina-pre-contrato-de-area-para-instalar-nova-fabrica.shtml Accessed: February 11, 2025.

Markusen, A. and Nesse, K. (2007). Institutional and Political Determinants of Incentive Competition. In Markusen, A., editor, *Reining in the Competition for Capital*, pages 1–42. W.E. Upjohn Institute for Employment Research, Kalamazoo, MI.

Marshall, J. (2024). Can Close Election Regression Discontinuity Designs Identify Effects of Winning Politician Characteristics? *American Journal of Political Science*, 68(2):494–510.

Martin, P. S. (2003). Voting's Rewards: Voter Turnout, Attentive Publics, and Congressional Allocation of Federal Money. *American Journal of Political Science*, 47(1):110–127.

Martins, M. (2024). Deputados federais e senadores já doaram mais de R\$ 1 milhão a aliados. *Folha de Pernambuco*. <https://www.folhape.com.br/politica/deputados-federais->

[e-senadores-ja-doaram-mais-de-r-1-milhao-a-aliados/359331/](https://www.cnnbrasil.com.br/economia/microeconomia/e-senadores-ja-doaram-mais-de-r-1-milhao-a-aliados/359331/) Accessed: March 27, 2025.

Mataloni Jr, R. J. (2011). The Structure of Location Choice for New US Manufacturing Investments in Asia-Pacific. *Journal of World Business*, 46(2):154–165.

McMillan, S. L. (2009). Looking Beyond the National Level: Foreign Direct Investment Attraction in U.S. States. *International Interactions*, 35(2):155–178.

Meireles, F. (2018). Alinhamento Partidário e Demanda por Transferências Federais no Brasil. *Revista de Administração Pública*, 53(1):173–194.

Migueis, M. (2013). The Effect of Political Alignment on Transfers to Portuguese Municipalities. *Economics & Politics*, 25(1):110–133.

Moehlecke, C. and Wellhausen, R. L. (2022). Political Risk and International Investment Law. *Annual Review of Political Science*, 25(1):485–507.

Nascimento, T. (2022). Heineken terá nova fábrica em MG com investimento de R\$ 1,8 bilhão. *CNN Brasil*. <https://www.cnnbrasil.com.br/economia/microeconomia/heineken-tera-nova-fabrica-em-mg-com-investimento-de-r-18-bilhao/> Accessed: March 27, 2025.

Novaes, L. M. (2018). Disloyal Brokers and Weak Parties. *American Journal of Political Science*, 62(1):84–98.

Oman, C. P. (2000). *Policy Competition for Foreign Direct Investment*. OECD Development Centre Studies, Paris.

Owen, E. (2019). Foreign Direct Investment and Elections: The Impact of Greenfield FDI on Incumbent Party Reelection in Brazil. *Comparative Political Studies*, 52(4):613–645.

Pandya, S. S. (2014). *Trading Spaces*. Cambridge University Press, New York, NY.

Pandya, S. S. (2016). Political Economy of Foreign Direct Investment: Globalized Production in the Twenty-First Century. *Annual Review of Political Science*, 19(1):455–475.

Peixoto, G. and Garcia, L. (2022). Fábrica da Heineken em Minas Gerais será em Passos, no Sul do estado. *Estado de Minas*. https://www.em.com.br/app/noticia/economia/2022/04/26/internas_economia,1362472/fabrica-da-heineken-em-minas-gerais-sera-em-passos-no-sul-do-estado.shtml Accessed: February 11, 2025.

Picussa, R., Souza, R. A. d., and Codato, A. (2023). Estabelecidos, outsiders e renovadores: mensurando a lealdade partidária dos deputados federais eleitos em 2018. *Revista Brasileira de Ciência Política*, (41):e267142.

Pinto, P. M. (2013). *Partisan Investment in the Global Economy*. Cambridge University Press, Cambridge.

Power, T. J. and Rodrigues-Silveira, R. (2019). Mapping Ideological Preferences in Brazilian Elections, 1994–2018: A Municipal-Level Study. *Brazilian Political Science Review*, 13(1):1–27.

Prata, L. (2022). Perdemos a Heineken. *JM Online*. <https://jmonline.com.br/colunas/alternativa/perdemos-a-heineken-1.202444> Accessed: February 11, 2025.

Ribeiro, G. (2024). Bolsonaro e Lula entram nas eleições municipais com estratégias diferentes. *Gazeta do Povo*. <https://www.gazetadopovo.com.br/eleicoes/2024/bolsonaro-e-lula-entram-nas-eleicoes-municipais-com-estragetas-diferentes/> Accessed: October 14, 2024.

Ribeiro, P. F., Locatelli, L., and Assis, P. P. d. (2022). “acompanho o meu partido”: Organização partidária e comportamento legislativo no brasil. *Dados*, 65:e20200052.

Rickard, S. J. (2020). Economic Geography, Politics, and Policy. *Annual Review of Political Science*, 23(1):182–202.

Rickard, S. J. (2022). Economic Geography, Politics, and the World Trade Regime. *World Trade Review*, 21(3):367–379.

Rodríguez-Pose, A. and Crescenzi, R. (2008). Mountains in a Flat World: Why Proximity Still Matters for the Location of Economic Activity. *Cambridge Journal of Regions, Economy and Society*, 1(3):371–388.

Samford, S. and Gómez, P. O. (2014). Subnational Politics and Foreign Direct Investment in Mexico. *Review of International Political Economy*, 21(2):467–496.

Simmons, J., Hicken, A., Kollman, K., and Nooruddin, I. (2018). Party System Structure and Its Consequences for Foreign Direct Investment. *Party Politics*, 24(2):141–153.

Solé-Ollé, A. and Sorribas-Navarro, P. (2008). The Effects of Partisan Alignment on the Allocation of Intergovernmental Transfers. Differences-in-Differences Estimates for Spain. *Journal of Public Economics*, 92(12):2302–2319.

Szakonyi, D. (2018). Businesspeople in Elected Office: Identifying Private Benefits From Firm-Level Returns. *American Political Science Review*, 112(2):322–338.

Temer, M. (2017). Discurso do Presidente da República, Michel Temer, durante Encontro com investidores noruegueses – Oslo, Noruega, 22 de junho de 2017. Available at: <https://www.gov.br/mre/pt-br/centrais-de-conteudo/publicacoes/discursos-artigos-e-entrevistas/presidente-da-republica/presidente-da-republica-federativa-do-brasil-discursos/michel-miguel-elias-temer-lulia-2016-2018/disco...>. Accessed: March 24, 2025.

Tomasi, C., Pieri, F., and Cecco, V. (2023). Red Tape and Industry Dynamics: A Cross-Country Analysis. *Journal of Industrial and Business Economics*, 50(2):283–320.

Toral, G. (2024). Turnover: How Lame-Duck Governments Disrupt the Bureaucracy and Service Delivery Before Leaving Office. *The Journal of Politics*, 86(4):1348–1367.

UNCTAD (2022). *World Investment Report 2022 — International Tax Reforms and Sustainable Investment*. United Nations Publications, Geneva.

U.S. Mission Nigeria (2023). The U.S. Government Hosts Institutional Investor Roadshow to Explore Investment Opportunities in Nigeria. Available at: <https://ng.usembassy.gov/the-united-states-government-hosts-institutional-investor-roadshow-to-explore-investment-opportunities-in-nigeria/> Accessed: March 20, 2025.

Valverde, M. (2021). Heineken desiste de fábrica em Pedro Leopoldo e busca outra cidade em MG. *Diário do Comércio*. <https://diariodocomercio.com.br/economia/heineken-desiste-de-fabrica-em-pedro-leopoldo-e-busca-outra-cidade-em-mg/> Accessed: February 11, 2025.

Wang, K. and Heyes, A. (2021). Does the Party in Power Affect FDI? First Causal Evidence from Narrow Margin US State Elections. *Party Politics*, 28(5):797–810.

Zhu, T. J., Larrey, Y. A., and Santos, V.-J. (2015). Competitive Cities for Jobs and Growth: Companion Paper 5 - What Do Multinational Firms Want from Cities? Insights from Investment Promotion Intermediaries and Location Advisory Consultants. Technical report, World Bank. Available at: <https://documents1.worldbank.org/curated/en/514271468198531158/pdf/101716-WP-PUBLIC-Box394819B-CP5-Final-2-series-Competitive-cities-for-jobs-and-growth.pdf>, Accessed: Mar 16th, 2025.

Zucco, C. and Power, T. J. (2024). The Ideology of Brazilian Parties and Presidents: A Research Note on Coalitional Presidentialism Under Stress. *Latin American Politics and Society*, 66(1):178–188.

Appendix for Local Politics, Global Capital: The Effects of Domestic Political Ties on Foreign Direct Investment Attraction

June 2025

Contents

| | |
|---|-----------|
| A Summary Statistics | 2 |
| B Alternative Specifications | 4 |
| B.1 Fixed Effects | 4 |
| B.2 Poisson and Negative Binomial Models | 5 |
| C Evidence from Multilevel Models: Robustness Checks | 6 |
| C.1 Brownfield vs. Greenfield Investment | 6 |
| C.2 Delayed Effects: Longer Lags of Political Alignment | 7 |
| C.3 Alternative Measures of Political Alignment | 8 |
| D Evidence From Close Elections: Continuity Assumption | 10 |
| D.1 Running Variable | 10 |
| D.2 Covariate Balance Tests | 11 |
| D.3 Alternative RDD Specifications | 16 |
| D.4 Alternative Bandwidths | 17 |
| E Why Alignment Attracts FDI: Robustness Checks | 18 |
| F Data Sources | 20 |
| G References | 21 |

A Summary Statistics

Table A.1: Summary Statistics: Data for Multilevel Models

| Variable | N | Mean | Std. Dev. | Min | Pctl. 25 | Pctl. 75 | Max |
|--|-------|---------|-----------|---------|----------|----------|--------|
| FDI Transaction Count | 55695 | 0.5971 | 18.82 | 0 | 0 | 0 | 1863 |
| FDI Transaction Count, Goods and Services | 55695 | 0.3212 | 8.113 | 0 | 0 | 0 | 783 |
| FDI Transaction Count, Brownfield | 55695 | 0.36 | 11.53 | 0 | 0 | 0 | 1477 |
| FDI Transaction Count, Greenfield | 55695 | 0.2365 | 7.784 | 0 | 0 | 0 | 714 |
| Political Alignment (Continuous), t-1 | 55245 | 0.7749 | 0.2487 | 0 | 0.6739 | 0.9701 | 1 |
| Political Alignment (90%), t-1 | 55690 | | | | | | |
| ... 0 | 30569 | 54.89% | | | | | |
| ... 1 | 25121 | 45.11% | | | | | |
| Political Alignment (80%), t-1 | 55690 | | | | | | |
| ... 0 | 21459 | 38.53% | | | | | |
| ... 1 | 34231 | 61.47% | | | | | |
| Mayor, Governor, and President Are Co-Partisans, t-1 | 55690 | | | | | | |
| ... 0 | 53974 | 96.92% | | | | | |
| ... 1 | 1716 | 3.08% | | | | | |
| Mayor Ideology, t-1 | 51743 | 0.1602 | 0.3947 | -0.9675 | -0.1706 | 0.4343 | 0.7931 |
| Mayoral Election, t-1 | 55690 | | | | | | |
| ... 0 | 38668 | 69.43% | | | | | |
| ... 1 | 17022 | 30.57% | | | | | |
| Mayor Second Term, t-1 | 55690 | | | | | | |
| ... 0 | 47493 | 85.28% | | | | | |
| ... 1 | 8197 | 14.72% | | | | | |
| GDP (Log), t-1 | 55690 | 12.18 | 1.432 | 8.998 | 11.14 | 12.94 | 20.45 |
| Population Density (Log), t-1 | 55640 | 3.255 | 1.433 | -3.211 | 2.466 | 4.005 | 9.575 |
| STEM Workers, % (Log), t-1 | 55689 | -0.8245 | 0.8525 | -4.791 | -1.427 | 0 | 3.57 |
| Manufacturing Workers, % (Log), t-1 | 55690 | 1.734 | 1.558 | -3.81 | 0.1091 | 3.069 | 4.519 |
| Homicides per 100k (Log), t-1 | 55689 | 1.99 | 1.569 | -0.4717 | 0 | 3.304 | 5.877 |
| Airport | 55695 | | | | | | |
| ... 0 | 50865 | 91.33% | | | | | |
| ... 1 | 4830 | 8.67% | | | | | |
| Port | 55695 | | | | | | |
| ... 0 | 55155 | 99.03% | | | | | |
| ... 1 | 540 | 0.97% | | | | | |
| Fiscal Management Index, t-1 | 42566 | 0.464 | 0.2064 | 0 | 0.3068 | 0.6159 | 1 |
| Investment Incentives (Log), t-1 | 33396 | 0.04252 | 0.5691 | -7.4 | 0 | 0 | 8.113 |
| Non-Discretionary Transfers (Log), t-1 | 55648 | 6.6 | 0.6465 | 2.496 | 6.205 | 6.975 | 9.212 |
| Discretionary Transfers (Log), t-1 | 55656 | 2.962 | 1.95 | -13.99 | 1.533 | 4.419 | 9.18 |
| Capital Discretionary Transfers (Log), t-1 | 55656 | 2.529 | 2.05 | -13.99 | 0 | 4.214 | 8.893 |

Table A.2: Summary Statistics: Data for Regression Discontinuity

| Variable | N | Mean | Std. Dev. | Min | Pctl. 25 | Pctl. 75 | Max |
|-------------------------------------|-------|---------|-----------|---------|----------|----------|--------|
| FDI Transaction Count | 33043 | 0.8488 | 24.3 | 0 | 0 | 0 | 1863 |
| Margin of Victory, t-1 | 19993 | 1.507 | 22.51 | -99.55 | -10.21 | 12.84 | 99.55 |
| Mayor Ideology, t-1 | 30787 | 0.09098 | 0.413 | -0.9675 | -0.3363 | 0.3991 | 0.7931 |
| Mayoral Election, t-1 | 33039 | | | | | | |
| ... 0 | 23019 | 69.67% | | | | | |
| ... 1 | 10020 | 30.33% | | | | | |
| Mayor Second Term, t-1 | 33039 | | | | | | |
| ... 0 | 28418 | 86.01% | | | | | |
| ... 1 | 4621 | 13.99% | | | | | |
| GDP (Log), t-1 | 33039 | 12.2 | 1.462 | 8.998 | 11.14 | 12.95 | 20.45 |
| Population Density (Log), t-1 | 33006 | 3.293 | 1.458 | -2.839 | 2.486 | 4.042 | 9.547 |
| STEM Workers, % (Log), t-1 | 33039 | -0.8287 | 0.8633 | -4.266 | -1.441 | 0 | 3.57 |
| Manufacturing Workers, % (Log), t-1 | 33039 | 1.712 | 1.559 | -3.571 | 0.01907 | 3.045 | 4.505 |
| Homicides per 100k (Log), t-1 | 33038 | 2.024 | 1.559 | -0.3313 | 0 | 3.319 | 5.877 |
| Airport | 33043 | | | | | | |
| ... 0 | 30109 | 91.12% | | | | | |
| ... 1 | 2934 | 8.88% | | | | | |
| Port | 33043 | | | | | | |
| ... 0 | 32698 | 98.96% | | | | | |
| ... 1 | 345 | 1.04% | | | | | |
| Fiscal Management Index | 27727 | 0.4738 | 0.2127 | 0 | 0.3095 | 0.6328 | 1 |
| Investment Incentives | 22132 | 2.968 | 70.3 | 0 | 0 | 0 | 6876 |
| Non-Discretionary Transfers | 33018 | 946.2 | 731.4 | 12.13 | 510.7 | 1118 | 11227 |
| Discretionary Transfers | 33018 | 66.16 | 126.4 | -0.1697 | 4.004 | 81.33 | 9703 |
| Capital Discretionary Transfers | 33018 | 54.45 | 103 | -0.1697 | 0 | 66.19 | 3659 |

B Alternative Specifications

B.1 Fixed Effects

As Table B.1 shows, the results are robust to replacing random effects with fixed effects. However, fixed effects struggle with quasi-separation: some values of some independent variables predict the outcome almost perfectly, hence our preference for random effects.

Table B.1: The Effect of Political Alignment on FDI Transactions (Fixed Effects)

| | FDI Transaction Count (1) |
|---|------------------------------|
| All Transactions, All Municipalities | |
| Political Alignment, t-1 | 0.22*** (0.08) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) |
| Mayor Ideology, t-1 | 0.01 (0.05) |
| Mayoral Election, t-1 | -0.43 (0.28) |
| Mayor Second Term, t-1 | 0.06 (0.05) |
| GDP (Log), t-1 | 0.61*** (0.03) |
| Population Density (Log), t-1 | 0.13*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.25*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | -0.38*** (0.02) |
| Homicides per 100k (Log), t-1 | -0.04 (0.03) |
| Airport | -0.02 (0.05) |
| Port | 0.17** (0.08) |
| Intercept | -9.09*** (0.49) |
| AIC | 26979.32 |
| Log Likelihood | -13394.66 |
| Observations | 51693 |

This table presents the results of a zero-inflated negative binomial model with fixed effects for state and year. *** $p < 0.01$;
** $p < 0.05$; * $p < 0.1$

B.2 Poisson and Negative Binomial Models

Table B.2: The Effect of Political Alignment on FDI Transactions (Poisson and Negative Binomial)

| | FDI Transaction Count | |
|-------------------------------------|---|---|
| | (1) | (2) |
| | All Transactions, All Municipalities, Poisson | All Transactions, All Municipalities, Negative Binomial |
| Political Alignment, t-1 | 0.21*** (0.03) | 0.14* (0.08) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.00*** (0.00) |
| Mayor Ideology, t-1 | 0.20*** (0.02) | 0.06 (0.05) |
| Mayoral Election, t-1 | -0.44*** (0.13) | -0.30* (0.18) |
| Mayor Second Term, t-1 | -0.04** (0.02) | 0.03 (0.05) |
| GDP (Log), t-1 | 0.99*** (0.01) | 1.01*** (0.02) |
| Population Density (Log), t-1 | 0.13*** (0.01) | 0.17*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.38*** (0.01) | 0.04* (0.02) |
| Manufacturing Workers, % (Log), t-1 | -0.20*** (0.01) | -0.10*** (0.02) |
| Homicides per 100k (Log), t-1 | -0.04*** (0.01) | 0.05*** (0.02) |
| Airport | 0.09*** (0.02) | 0.07 (0.05) |
| Port | 0.15*** (0.03) | 0.26*** (0.09) |
| Intercept | -15.49*** (0.25) | -16.61*** (0.33) |
| AIC | 36041.91 | 29213.20 |
| Log Likelihood | -18005.96 | -14590.60 |
| Observations | 51693 | 51693 |
| Number of States | 26 | 26 |
| Number of Years | 10 | 10 |
| Variance: States (Intercept) | 0.64 | 0.82 |
| Variance: Years (Intercept) | 0.18 | 0.12 |

This table presents the results of a multilevel Poisson model and a multilevel negative binomial model. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Since our outcome variable exhibits overdispersion and excess zeros, our main analysis favors zero-inflated negative binomial models. Table B.2 presents alternative specifications that support our main findings. The Poisson model suffers from numerical instability due to its inability to properly handle overdispersion or excess zeros. While the negative binomial model can account for overdispersion, it still struggles to model the excess zeros. These limitations lead us to favor the zero-inflated negative binomial model, which is more appropriate for our data structure.

To compare the relative fit of these models, we can use the Akaike information criterion (AIC) – which penalizes models for having more parameters – and the log-likelihood – which measures how well the model explains the observed data. A lower AIC value and a higher log-likelihood value indicate a better fit. By both metrics, the zero-inflated negative binomial model in the main text outperforms the other two models, with an AIC of 27106.67 and a log-likelihood of -13523.33 .

C Evidence from Multilevel Models: Robustness Checks

C.1 Brownfield vs. Greenfield Investment

Local-level political factors might matter more for greenfield investment – when foreign firms establish new operations in Brazil – because this type of investment requires new permits, zoning approvals, environmental impact assessments, tax break requests, etc. Thus, greenfield investment requires more interaction with local, regional, and national governments and is associated with higher risks, as the case of Heineken illustrates. In contrast, brownfield investment – when foreign firms purchase existing production facilities – might be less influenced by political factors because the existing infrastructure is already in place and many regulatory hurdles have already been overcome. To test for this possibility, we estimate models that separate *FDI Transaction Count* into greenfield and brownfield transactions. Following the recommendation of our interviewees at the Brazilian Central Bank, we consider that a transaction counts as greenfield investment if it enters Brazil up to 12 months after the Brazilian firm was registered (i.e. after the firm entered the national registry of legal entities and received a registration number, CNPJ). If a transaction enters Brazil over 12 months after registration, we record this transaction as an instance of brownfield investment. Table C.1 presents the results of these models, which confirm our expectations that *Political Alignment* has a stronger influence on greenfield than on brownfield FDI.

Table C.1: The Effect of Political Alignment on FDI Transactions (Greenfield vs. Brownfield Investment)

| | FDI Transaction Count | |
|-------------------------------------|---|---|
| | (1) | (2) |
| | All Transactions, All Municipalities Brownfield | All Transactions, All Municipalities Greenfield |
| Political Alignment, t-1 | 0.03 (0.10) | 0.20* (0.12) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.01*** (0.00) |
| Mayor Ideology, t-1 | 0.05 (0.06) | 0.11 (0.08) |
| Mayoral Election, t-1 | -0.32 (0.20) | 0.03 (0.18) |
| Mayor Second Term, t-1 | 0.09 (0.06) | -0.09 (0.08) |
| GDP (Log), t-1 | 0.68*** (0.03) | 0.48*** (0.04) |
| Population Density (Log), t-1 | 0.08*** (0.02) | 0.13*** (0.03) |
| STEM Workers, % (Log), t-1 | 0.40*** (0.04) | 0.14*** (0.04) |
| Manufacturing Workers, % (Log), t-1 | -0.34*** (0.03) | -0.44*** (0.03) |
| Homicides per 100k (Log), t-1 | -0.11*** (0.03) | -0.02 (0.04) |
| Airport | -0.06 (0.05) | 0.14* (0.07) |
| Port | 0.09 (0.08) | 0.20** (0.10) |
| Intercept | -9.64*** (0.46) | -7.41*** (0.53) |
| AIC | 19863.27 | 15894.02 |
| Log Likelihood | -9900.63 | -7916.01 |
| Observations | 51693 | 51693 |
| Number of States | 26 | 26 |
| Number of Years | 10 | 10 |
| Variance: States(Intercept) | 0.63 | 0.75 |
| Variance: Years (Intercept) | 0.10 | 0.09 |

This table presents the results of two multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

C.2 Delayed Effects: Longer Lags of Political Alignment

The main models use *Political Alignment* at time $t - 1$, but the results are robust to using political alignment at times $t - 2$ and $t - 3$, as Table C.2 shows.

Table C.2: The Effect of Political Alignment on FDI Transactions (Longer Lags for Alignment)

| | FDI Transaction Count | |
|-------------------------------------|---|---|
| | (1) | (2) |
| | All Transactions, All Municipalities | All Transactions, All Municipalities |
| Political Alignment, t-2 | 0.31*** (0.08) | |
| Political Alignment, t-3 | | 0.19** (0.09) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.00*** (0.00) |
| Mayor Ideology, t-1 | 0.05 (0.06) | 0.09 (0.06) |
| Mayoral Election, t-1 | -0.16 (0.16) | -0.25 (0.15) |
| Mayor Second Term, t-1 | 0.06 (0.05) | 0.08 (0.05) |
| GDP (Log), t-1 | 0.57*** (0.03) | 0.54*** (0.03) |
| Population Density (Log), t-1 | 0.15*** (0.02) | 0.16*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.26*** (0.03) | 0.28*** (0.04) |
| Manufacturing Workers, % (Log), t-1 | -0.39*** (0.02) | -0.39*** (0.03) |
| Homicides per 100k (Log), t-1 | -0.04 (0.03) | -0.03 (0.03) |
| Airport | -0.01 (0.05) | 0.03 (0.05) |
| Port | 0.17** (0.08) | 0.19** (0.08) |
| Intercept | -8.23*** (0.41) | -7.86*** (0.42) |
| AIC | 24212.44 | 21453.60 |
| Log Likelihood | -12075.22 | -10695.80 |
| Observations | 46767 | 41852 |
| Number of States | 26 | 26 |
| Number of Years | 9 | 8 |
| Variance: States(Intercept) | 0.69 | 0.68 |
| Variance: Years (Intercept) | 0.06 | 0.05 |

This table presents the results of two multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

C.3 Alternative Measures of Political Alignment

Table C.3 presents two dichotomous measures of political alignment. In Model 1, *Political Alignment (90%)* takes the value of 1 if the voting recommendation issued by the mayor's party leadership aligns with the voting recommendation of the president at least 90 percent of the time. In Model 2, *Political Alignment (80%)* applies a less strict threshold of 80 percent. The weaker effects suggest that alignment only matters substantively and significantly after a certain thresh-

old. Since 90 and 80 percent are arbitrary thresholds, we opted to use the continuous measure in the main text.

Table C.3: The Effect of Political Alignment on FDI Transactions (Different Measures of Alignment)

| | FDI Transaction Count | |
|-------------------------------------|---|---|
| | (1) | (2) |
| | All Transactions, All Municipalities | All Transactions, All Municipalities |
| Political Alignment (90%), t-1 | 0.09* (0.05) | |
| Political Alignment (80%), t-1 | | 0.07 (0.05) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.00*** (0.00) |
| Mayor Ideology, t-1 | 0.02 (0.05) | 0.02 (0.05) |
| Mayoral Election, t-1 | -0.19 (0.16) | -0.19 (0.15) |
| Mayor Second Term, t-1 | 0.06 (0.05) | 0.06 (0.05) |
| GDP (Log), t-1 | 0.59*** (0.03) | 0.59*** (0.03) |
| Population Density (Log), t-1 | 0.15*** (0.02) | 0.15*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.24*** (0.03) | 0.24*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | -0.38*** (0.02) | -0.38*** (0.02) |
| Homicides per 100k (Log), t-1 | -0.04 (0.03) | -0.04 (0.03) |
| Airport | -0.01 (0.05) | -0.01 (0.05) |
| Port | 0.18** (0.08) | 0.18** (0.08) |
| Intercept | -8.36*** (0.39) | -8.36*** (0.39) |
| AIC | 27107.69 | 27110.12 |
| Log Likelihood | -13522.85 | -13524.06 |
| Observations | 51693 | 51693 |
| Number of States | 26 | 26 |
| Number of Years | 10 | 10 |
| Variance: States (Intercept) | 0.70 | 0.70 |
| Variance: Years (Intercept) | 0.07 | 0.06 |

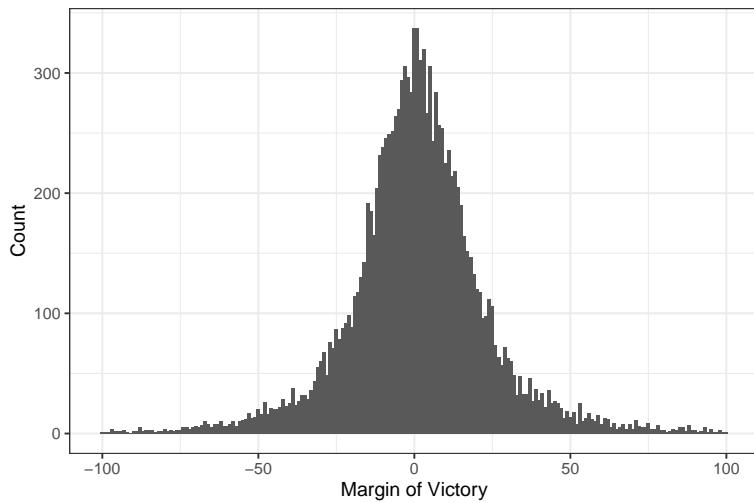
This table presents the results of two multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

D Evidence From Close Elections: Continuity Assumption

D.1 Running Variable

First, we plot the running variable — *Margin of Victory* — to check for any significant discontinuity in its density, supporting the assumption that treatment assignment is as good as random near the threshold. Note that we have “mass points:” unless a special election occurs (which is rare), the same margin of victory appears four times, corresponding to the four years of a mayor’s term. In generating the plot below, we cluster the running variable by municipality and election cycle to avoid artificially inflating the density at specific points.

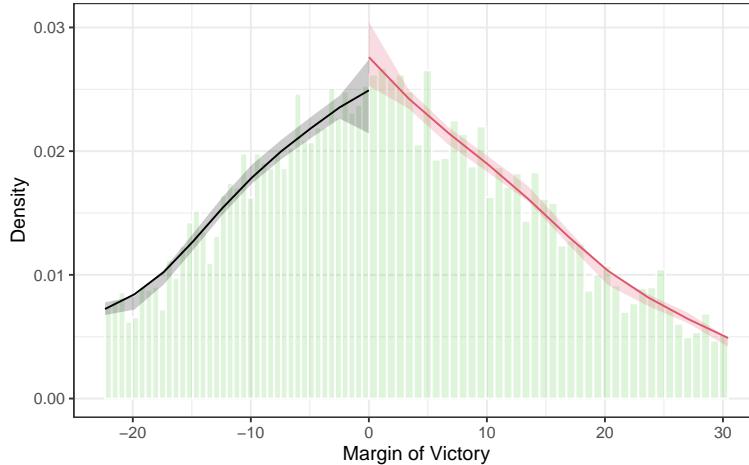
Figure D.1: Distribution of the Running Variable



This figure shows the distribution of the running variable (*Margin of Victory*), clustered by municipality and election cycle.

We also perform the McCrary discontinuity test (McCrary 2008). However, this test assumes independent observations. Mass points violate this assumption, potentially biasing the test results. As Figure D.2 shows, the McCrary test detects a mild discontinuity in the density of the running variable at the cutoff, though this discontinuity is not statistically significant at conventional levels ($p = 0.0938$). To further assess potential manipulation, we rely on covariate balance tests, which are more robust to mass points.

Figure D.2: McCrary Discontinuity Test

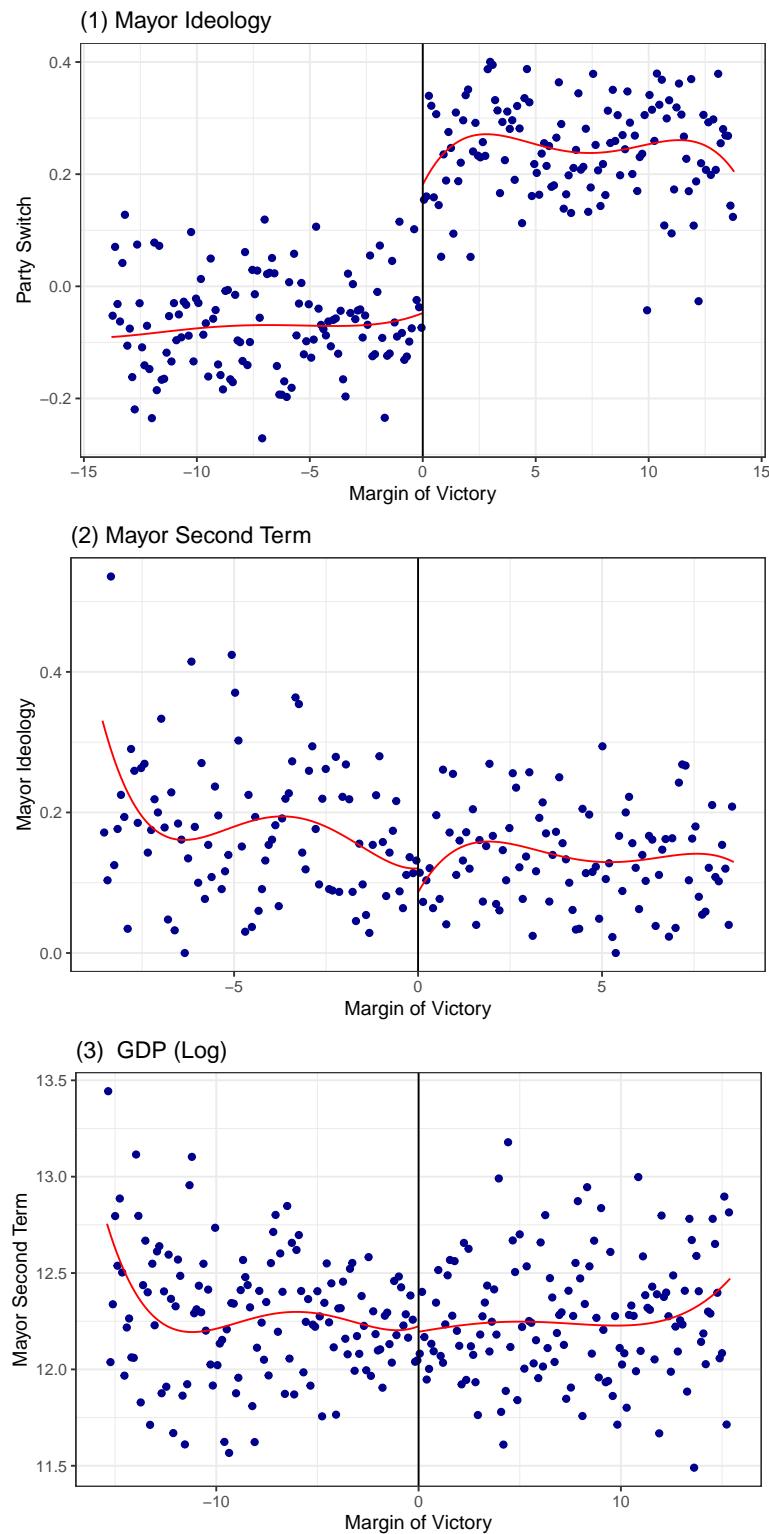


This figure plots the density of the running variable (*Margin of Victory*) around the cutoff at zero, clustered by municipality and election cycle. The McCrary discontinuity test returns a test statistic of 1.676 ($p = 0.0938$), suggesting the existence of a mild discontinuity that is not statistically significant at conventional levels. Given the presence of mass points, our data violate the assumptions of the McCrary test, which is why we view these results as inconclusive and conduct covariate balance tests to further assess potential manipulation.

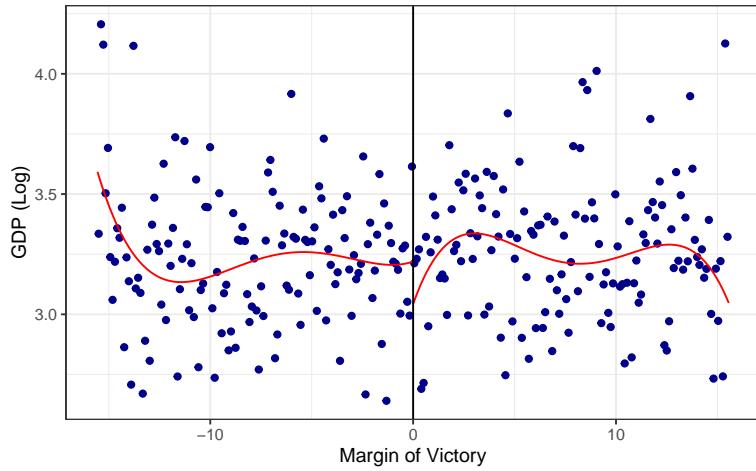
D.2 Covariate Balance Tests

Second, we examine whether the pre-treatment covariates are similar on either side of the threshold. Ideally, these covariates should not change discontinuously at the threshold: the treatment and control groups should be comparable, and the only change should be the treatment itself.

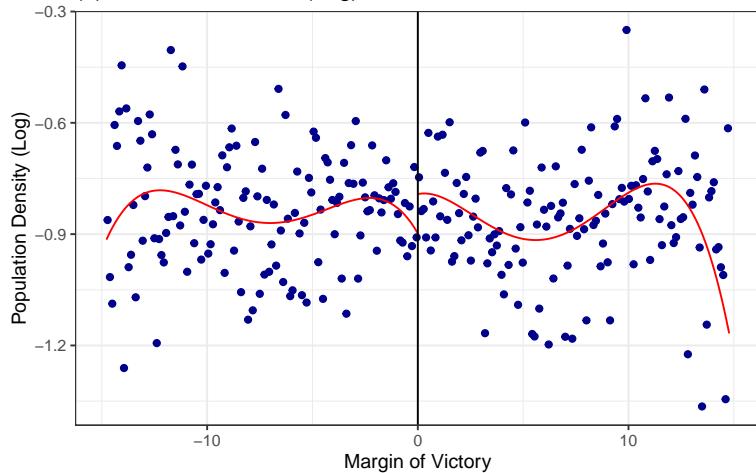
Figure D.3: The Effect of Political Alignment on Pre-Treatment Covariates



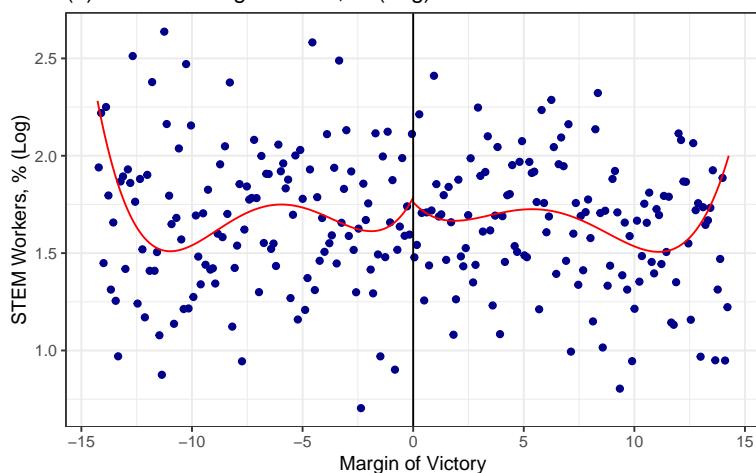
(4) Population Density (Log)

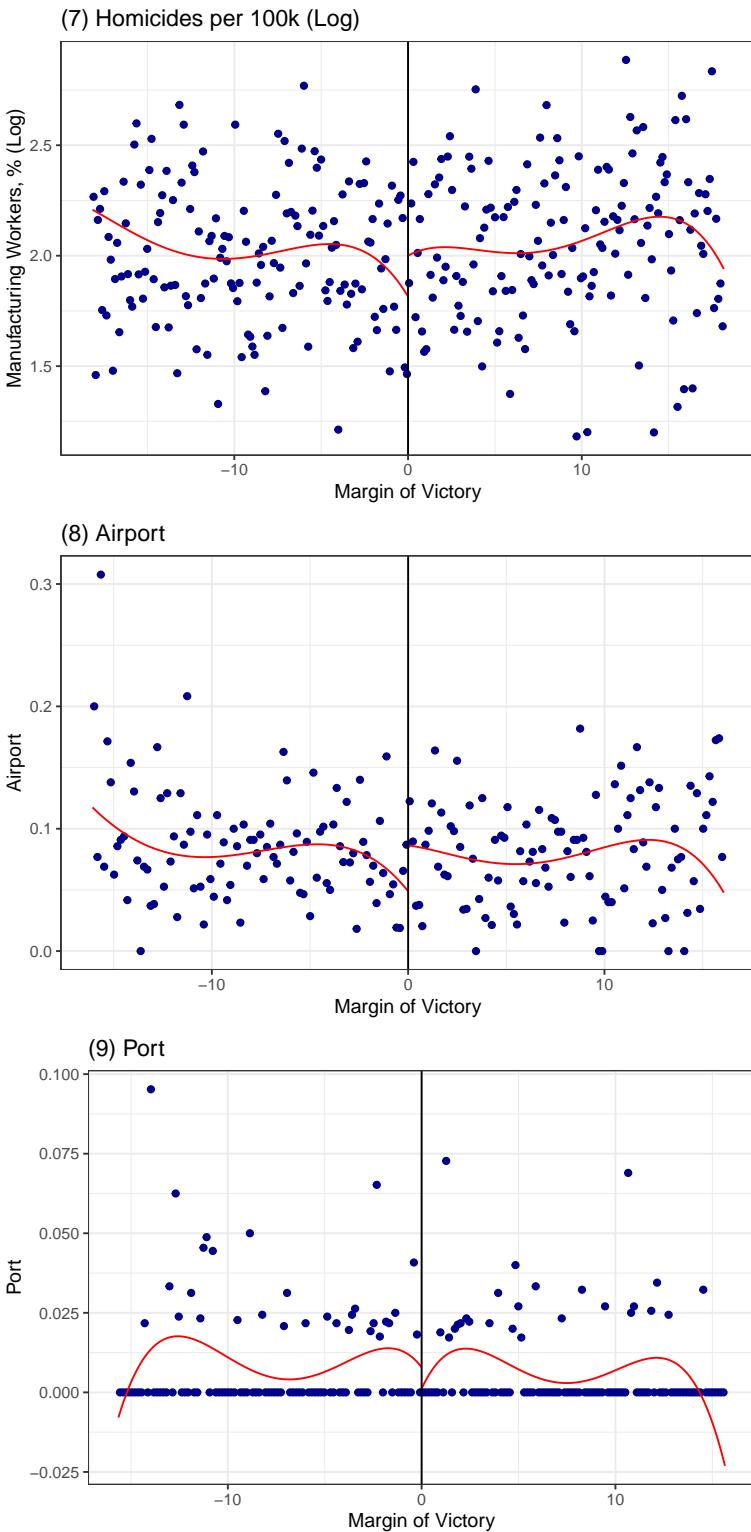


(5) STEM Workers, % (Log)



(6) Manufacturing Workers, % (Log)





Each panel of this figure shows the relationship between the variable in question and the margin of victory for the aligned candidate, using evenly-spaced bins (the blue dots) and local polynomial smoothing (the red line). The figure only includes observations within the optimal bandwidth selected by *rdrobust*, which minimizes the mean squared error (MSE) of the estimated treatment effect at the cutoff.

To test for this, we use the R package *rdrobust* (Calonico et al. 2015) to estimate models with each pre-treatment covariate as a dependent variable, clustering the standard errors by municipality and election cycle.

We begin with a visual inspection of the relationship between *Margin of Victory* and each pre-treatment covariate. These are the same covariates used in the multilevel models, except for *Political Alignment* (the treatment variable) and *Mayoral Election* (which is part of the treatment context). In Figure D.3, each panel only includes observations within the optimal bandwidth selected by *rdrobust*, which is the bandwidth that minimizes the mean squared error (MSE) of the estimated treatment effect at the cutoff. Each panel uses evenly-spaced partitioning and local polynomial smoothing (calculated using a triangular kernel that weighs observations as a function of their distance from the cutoff). We group the two time-invariant variables (*Airport* and *Port*) by municipality and election cycle to avoid distortions.

A visual inspection suggests that most variables are balanced, with one exception: *Mayor Ideology*. As Table D.1 confirms, an aligned mayor who barely wins is significantly more conservative (i.e., has a larger value of *Mayor Ideology*) than an aligned mayor who barely loses ($p = 0.000$). This imbalance could affect the validity of the RDD, as it violates the assumption that pre-treatment characteristics are independent of treatment assignment.

Table D.1: The Effect of Political Alignment on Pre-Treatment Covariates

| | Mayor Ideology | Second Term | GDP (Log) | Population Density (Log) | STEM Workers, % (Log) |
|---------------------------|-------------------|----------------|----------------|--------------------------------|-----------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Political Alignment | 0.30*** (0.00) | 0.01 (0.65) | 0.00 (1.00) | 0.02 (0.76) | 0.01 (0.85) |
| Bandwidth (MSE) | 13.79 | 8.58 | 15.40 | 15.56 | 14.78 |
| Eff. Observations (Left) | 5287 | 3633 | 5738 | 5769 | 5569 |
| Eff. Observations (Right) | 5641 | 3831 | 6156 | 6218 | 5974 |

| | Manufacturing Workers, % (Log) | Homicides per 100k (Log) | Airport (9) | Port (10) |
|---------------------------|--------------------------------------|--------------------------------|----------------|----------------|
| | (7) | (8) | (9) | (10) |
| Political Alignment | 0.05 (0.48) | 0.04 (0.47) | 0.01 (0.51) | 0.00 (0.99) |
| Bandwidth (MSE) | 14.27 | 18.17 | 16.08 | 15.65 |
| Eff. Observations (Left) | 5396 | 6262 | 3924 | 3862 |
| Eff. Observations (Right) | 5796 | 6864 | 4151 | 4080 |

This table presents the results of nine regression discontinuity models with robust p-values. All models cluster standard errors by municipality and election cycle. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

To address this imbalance, our RDD (reported in the main text) adjusts for *Mayor Ideology*. Still, we recognize the limitations of our model. Adjusting for this variable does not fully address the concern that the treatment is not as good as random. Though our models account for observable differences, unobserved confounders correlated with ideology could still pose a problem, hence the importance of using qualitative evidence to ameliorate these concerns.

D.3 Alternative RDD Specifications

Following [Alberti et al. \(2022\)](#), our main models cluster the standard errors by municipality and election cycle, adjusting for one source of imbalance: *Mayor Ideology*. As an alternative, Table D.2 follows the specification of [Toral \(2024\)](#), who includes electoral cycle fixed effects. Models 1 and 3 omit *Mayor Ideology*, whereas Models 2 and 4 include it. Across all models, *Political Alignment* has very similar effect sizes to the main models. However, this effect is only significantly associated with more FDI transactions *in goods and services*.

Table D.2: The Effect of Political Alignment on FDI Transactions, Alternative RDD Specification With Electoral Cycle FE

| | FDI Transaction Count | | | |
|-----------------------------|--|---|--|---|
| | (1) All Transactions, All Municipalities, No Covariates | (2) All Transactions, All Municipalities, Covariate-Adjusted | (3) Goods and Services, All Municipalities, No Covariates | (4) Goods and Services, All Municipalities, Covariate-Adjusted |
| Political Alignment | 0.07 (0.14) | 0.07 (0.13) | 0.09** (0.01) | 0.09** (0.01) |
| Mayor Ideology (Pt. Estim.) | | -0.03 | | -0.01 |
| Bandwidth (MSE) | 3.16 | 3.16 | 4.23 | 4.23 |
| Eff. Observations (Left) | 1451 | 1451 | 1911 | 1911 |
| Eff. Observations (Right) | 1578 | 1578 | 2042 | 2042 |

This table presents the results of four regression discontinuity models with robust p-values. Models 1 and 2 cluster standard errors by municipality and election cycle, whereas Models 3 and 4 include electoral cycle fixed effects. Models 2 and 4 adjust for the covariate *Mayor Ideology*, which can lead to efficiency gains, though its point estimate has no substantive meaning ([Calonico et al. 2019](#)). *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

D.4 Alternative Bandwidths

When choosing a bandwidth, the challenge is to minimize bias while controlling for variance. The bandwidth should be narrow enough to provide precise estimates (as observations that are too far from the cutoff might not reflect the local treatment effect around the cutoff), but not so narrow that the estimates are sensitive to noise (because they rely on few observations).

The main model uses the bandwidth that minimizes the MSE, which is the default optimal bandwidth selection process employed by *rdrobust* to balance bias and variance. Tables D.3 and D.4 present the results with bandwidths selected using alternative procedures. In each table, Models 1 to 5 use MSE-based bandwidth selectors, whereas Models 6 to 10 use selectors that minimize the Coverage Error Rate (CER). [Calonico et al. \(2019\)](#) describe these selection procedures in more detail. Our results are robust to all MSE-based selectors, but not to CER-based selectors. We attribute this to the fact that CER-based selectors produce much narrower bandwidths that are underpowered: there are just not enough observations to detect an effect.

Table D.3: The Effect of Political Alignment on All FDI Transactions, Alternative Bandwidths

| | FDI Transaction Count | | | | |
|-----------------------------|-----------------------|------------------|------------------|-----------------|------------------|
| | (1) mserd | (2) mse2 | (3) mesum | (4) msecomb1 | (5) msecomb2 |
| Political Alignment | 0.08* (0.09) | 0.12** (0.02) | 0.14** (0.01) | 0.08* (0.09) | 0.14** (0.01) |
| Mayor Ideology (Pt. Estim.) | 0.01 | -0.02 | 0.00 | 0.01 | 0.00 |
| Bandwidth (MSE) | 3.32 | 5.35 | 3.77 | 3.32 | 3.77 |
| Eff. Observations (Left) | 1534 | 2354 | 1712 | 1534 | 1712 |
| Eff. Observations (Right) | 1654 | 2819 | 1857 | 1654 | 1857 |

| | FDI Transaction Count | | | | |
|-----------------------------|-----------------------|---------------|----------------|-----------------|------------------|
| | (6) cerrd | (7) certwo | (8) cersum | (9) cercomb1 | (10) cercomb2 |
| Political Alignment | -0.01 (0.87) | 0.08 (0.1) | 0.01 (0.88) | -0.01 (0.87) | 0.01 (0.89) |
| Mayor Ideology (Pt. Estim.) | -0.02 | 0.01 | -0.01 | -0.02 | -0.01 |
| Bandwidth (MSE) | 2.07 | 3.34 | 2.35 | 2.07 | 2.35 |
| Eff. Observations (Left) | 930 | 1540 | 1092 | 930 | 1092 |
| Eff. Observations (Right) | 1047 | 1856 | 1168 | 1047 | 1168 |

This table presents the results of 10 regression discontinuity models with robust p-values. All models cluster standard errors by municipality and election cycle. All models adjust for the covariate *Mayor Ideology*, which can lead to efficiency gains, though its point estimate has no substantive meaning ([Calonico et al. 2019](#)). Model 1 is the default bandwidth used in the main text. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table D.4: The Effect of Political Alignment on FDI Transactions in Goods and Services, Alternative Bandwidths

| | FDI Transaction Count | | | | |
|-----------------------------|-----------------------|-----------------|------------------|------------------|------------------|
| | (1) mserd | (2) mse2 | (3) msesum | (4) msecomb1 | (5) msecomb2 |
| Political Alignment | 0.08** (0.03) | 0.08* (0.06) | 0.10** (0.01) | 0.10** (0.01) | 0.09** (0.03) |
| Mayor Ideology (Pt. Estim.) | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 |
| Bandwidth (MSE) | 5.60 | 5.92 | 4.62 | 4.62 | 5.60 |
| Eff. Observations (Left) | 2463 | 2595 | 2074 | 2074 | 2463 |
| Eff. Observations (Right) | 2648 | 2484 | 2205 | 2205 | 2484 |

| | FDI Transaction Count | | | | |
|-----------------------------|-----------------------|----------------|----------------|-----------------|------------------|
| | (6) cerrd | (7) certwo | (8) cersum | (9) cercomb1 | (10) cercomb2 |
| Political Alignment | 0.05 (0.15) | 0.04 (0.26) | 0.03 (0.53) | 0.03 (0.53) | 0.04 (0.24) |
| Mayor Ideology (Pt. Estim.) | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Bandwidth (MSE) | 3.49 | 3.69 | 2.88 | 2.88 | 3.49 |
| Eff. Observations (Left) | 1593 | 1670 | 1310 | 1310 | 1593 |
| Eff. Observations (Right) | 1745 | 1615 | 1413 | 1413 | 1615 |

This table presents the results of 10 regression discontinuity models with robust p-values. All models cluster standard errors by municipality and election cycle. All models adjust for the covariate *Mayor Ideology*, which can lead to efficiency gains, though its point estimate has no substantive meaning (Calonico et al. 2019). Model 1 is the default bandwidth used in the main text. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

E Why Alignment Attracts FDI: Robustness Checks

In E.1, Model 1 examines the effect of *Discretionary Transfers* while excluding *Political Alignment*. Model 2 replaces *Discretionary Transfers* with a narrower type of discretionary transfer used by Brollo and Nannicini (2012): capital transfers, mostly related to the infrastructure sector. These models confirm that the effect of political alignment on FDI is not mediated by discretionary transfers — not even discretionary capital transfers.

Table E.1: The Effect of Discretionary Transfers on FDI Transactions (Excluding Political Alignment or Focusing on Discretionary Capital Transfers)

| | FDI Transaction Count | | | |
|-------------------------------------|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| | All Transactions, All Municipalities | All Transactions, All Municipalities | Goods and Services, All Municipalities | Goods and Services, All Municipalities |
| Discret. Transf. (Log), t-1 | -0.02 (0.01) | -0.01 (0.01) | | |
| Discret. Capital Transf. (Log), t-1 | | | -0.04*** (0.01) | -0.04*** (0.01) |
| Political Alignment, t-1 | | | 0.23*** (0.08) | 0.22** (0.09) |
| FDI Transaction Count, t-1 | 0.00*** (0.00) | 0.01*** (0.00) | 0.00*** (0.00) | 0.01*** (0.00) |
| Mayor Ideology, t-1 | 0.03 (0.05) | 0.06 (0.06) | 0.00 (0.05) | 0.04 (0.06) |
| Mayoral Election, t-1 | -0.18 (0.15) | -0.25 (0.19) | -0.21 (0.16) | -0.28 (0.19) |
| Mayor Second Term, t-1 | 0.06 (0.05) | 0.09 (0.06) | 0.07 (0.05) | 0.10* (0.06) |
| GDP (Log), t-1 | 0.59*** (0.03) | 0.58*** (0.03) | 0.59*** (0.03) | 0.57*** (0.03) |
| Population Density (Log), t-1 | 0.15*** (0.02) | 0.09*** (0.02) | 0.14*** (0.02) | 0.09*** (0.02) |
| STEM Workers, % (Log), t-1 | 0.24*** (0.03) | 0.20*** (0.03) | 0.24*** (0.03) | 0.20*** (0.03) |
| Manufacturing Workers, % (Log), t-1 | -0.38*** (0.02) | -0.34*** (0.03) | -0.37*** (0.02) | -0.34*** (0.03) |
| Homicides per 100k (Log), t-1 | -0.04 (0.03) | -0.06** (0.03) | -0.04 (0.03) | -0.05* (0.03) |
| Airport | -0.01 (0.05) | -0.05 (0.05) | -0.02 (0.05) | -0.05 (0.05) |
| Port | 0.18** (0.08) | 0.11 (0.08) | 0.17** (0.08) | 0.10 (0.08) |
| Intercept | -8.28*** (0.39) | -8.11*** (0.42) | -8.39*** (0.39) | -8.21*** (0.42) |
| AIC | 27109.41 | 23015.71 | 27099.18 | 23008.28 |
| Log Likelihood | -13523.70 | -11476.86 | -13516.59 | -11471.14 |
| Observations | 51691 | 51691 | 51691 | 51691 |
| Number of States | 26 | 26 | 26 | 26 |
| Number of Years | 10 | 10 | 10 | 10 |
| Variance: States (Intercept) | 0.70 | 0.69 | 0.69 | 0.69 |
| Variance: Years (Intercept) | 0.06 | 0.10 | 0.07 | 0.10 |

This table presents the results of four multilevel zero-inflated negative binomial models. All models include random intercepts for state and year. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

F Data Sources

All data sources below were last accessed on October 8, 2024.

Airport. Agência Nacional de Aviação Civil.

Discretionary Transfers. Sistema de Informações Contábeis e Fiscais do Setor Público Brasileiro (SICONFI), via [Base dos Dados](#). The analysis aggregates all transfers under the category Transferências de Convênios da União e de suas Entidades, including current as well as capital transfers (which begin with 1 or 2, respectively).

FDI Transaction Count. Calculated using investment records, RDE–IED (Registro Declaratório Eletrônico – Investimento Estrangeiro Direto), [Banco Central](#), and the nationwide registry of corporations, Quadros Societários CNPJ, via [Base dos Dados](#).

Fiscal Management. Índice Firjan de Gestão Fiscal, [Firjan](#).

GDP. Instituto Brasileiro de Geografia e Estatística (IBGE), via [Base dos Dados](#).

Homicides per 100k. Sistema de Informações sobre Mortalidade (SIM), DATASUS, via [Base dos Dados](#). We consider that the cause of death is a homicide when it falls under the following ICD10 categories: X85–Y09, Y87.1, Y35, and Y89.0 ([Cícero et al. 2024](#)).

Investment Incentives. [Receita Federal](#). The analysis aggregates all incentives listed under Anexo I – Portaria RFB nº 319/2023.

Manufacturing Workers. Relação Anual de Informações Sociais (RAIS), via [Base dos Dados](#). In the Brazilian classification of sectors, Classificação Nacional de Atividades Econômicas (CNAE), this corresponds to sector C.

Margin of Victory. Calculated using election results, Tribunal Superior Eleitoral, via [Base dos Dados](#).

Mayor Party Ideology. [Brazilian Legislative Surveys](#) (see also [Zucco and Power 2024](#)).

Mayor Second Term. Calculated using election results, Tribunal Superior Eleitoral, via [Base dos Dados](#).

Mayoral Election. This variable takes the value of 1 for all municipalities in 2012, 2016, and 2020, and for all municipalities and years listed under [Eleições Suplementares](#), Tribunal Superior Eleitoral.

Non-Discretionary Transfers. Fundo de Participação dos Municípios (FPM), [Tesouro Nacional](#).

Political Alignment. Calculated using voting patterns and party leadership recommendations, Dados Abertos da Câmara dos Deputados, via [Base dos Dados](#); party membership records (Filiação Partidária), Tribunal Superior Eleitoral, via [Base dos Dados](#); and election results, Tribunal Superior Eleitoral, via [Base dos Dados](#).

Population Density. Calculated using data total population data, Instituto Brasileiro de Geografia e Estatística (IBGE), via [Base dos Dados](#), as well as total area data retrieved directly from IBGE.

Port. [Receita Federal](#).

STEM Workers. Relação Anual de Informações Sociais (RAIS), via [Base dos Dados](#). These are jobs with the following codes in the official Brazilian job classification (Classificação Brasileira de Ocupações, CBO): 2345, 203, 214, 1237, 1426, 211, 212, 213, and 221. They are also called “pessoal ocupado técnico-científico (POTec).”

Time to Register a Business. Estatísticas CNPJ, REDESIM, [Receita Federal](#). We consider only the first step of registering a business (*Pesquisa Prévia de Viabilidade*), as it is the only step

to happen at the municipal level.

G References

- Alberti, C., Díaz-Rioseco, D., and Visconti, G. (2022). Can Political Alignment Reduce Crime? Evidence From Chile. *Political Science Research and Methods*, 11(2):223–236.
- Brollo, F. and Nannicini, T. (2012). Tying Your Enemy’s Hands in Close Races: The Politics of Federal Transfers in Brazil. *American Political Science Review*, 106(4):742–761.
- Calonico, S., Cattaneo, M. D., Farrell, M. H., and Titiunik, R. (2019). Regression Discontinuity Designs Using Covariates. *The Review of Economics and Statistics*, 101(3):442–451.
- Calonico, S., Cattaneo, M. D., and Titiunik, R. (2015). rdrobust: An R Package for Robust Non-parametric Inference in Regression-Discontinuity Designs. *R Journal*, 7(1):38–51.
- Cícero, V. C., Corrêa Dias, L. C., and Zahran, S. (2024). Trade Liberalization and Mortality Rates: Evidence of Pro-Cyclical Mortality from Brazil. *Health Economics*, Forthcoming.
- McCrary, J. (2008). Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test. *Journal of Econometrics*, 142(2):698–714.
- Toral, G. (2024). Turnover: How Lame-Duck Governments Disrupt the Bureaucracy and Service Delivery Before Leaving Office. *The Journal of Politics*, 86(4):1348–1367.
- Zucco, C. and Power, T. J. (2024). The Ideology of Brazilian Parties and Presidents: A Research Note on Coalitional Presidentialism Under Stress. *Latin American Politics and Society*, 66(1):178–188.