

# Pre-Analysis Plan: Beyond the capital-labor divide: the material and non-material drivers behind public and elite preferences over FDI

Carolina Moehlecke \*

Matias Spektor<sup>†</sup>

Guilherme Fasolin<sup>‡</sup>

4 June 2021

## Abstract

What explains variation in preferences and attitudes towards FDI? Previous research has shown that much of the dispute occurs across the capital-labor divide (Pandya 2010; Pinto 2013; Owen 2015, 2018), though conflicting results remain. This pre-analysis plan introduces a research design to enquire how preferences towards FDI form across multiple material and non-material attributes. We first field a paired-profile conjoint experiment and apply it to a representative sample of politicians ( $N \approx 200$ ) in Brazil. We then contrast these results with an identical conjoint experiment applied to a nationally representative sample of Brazilian citizens ( $N \approx 2,000$ ), allowing us to examine the possibility of an elite-public gap in preference formation (Kertzer 2020).

**Keywords:** FDI; MNCs; elites

## 1 Background

What explains variation in countries' openness to foreign direct investment (FDI)? Literature based on the Open Economy Politics approach (OEP) argues that this variation is a function of FDI's distributional effects that benefit labor over capital. When democracy spreads and empowers labor constituencies (Pandya 2010, 2014), and when left parties are in office and aim at spurring labor-intensive sectors (Pinto and Pinto 2008; Pinto 2013), fewer restrictions on FDI ensue. While these findings have improved our understanding about the politics of globalization, scholars have questioned these by arguing that the lines that divide domestic winners and losers from FDI are blurrier than what the foundations of OEP themselves suggest (Danzman 2020; Danzman and Slaski 2021; Johns and Wellhausen 2020; Owen 2015).

The argument that preferences over FDI are more complex than what has been traditionally posited finds support on both the material and non-material consequences of foreign capital entry. For instance, it is a fact that MNCs pay higher wages than domestic firms and raise labor productivity

---

\* Assistant Professor, School of International Relations, Fundação Getulio Vargas, Brazil. carolina.moehlecke@fgv.br.

<sup>†</sup> Associate Professor, School of International Relations, Fundação Getulio Vargas, Brazil. matias.spektor@fgv.br

<sup>‡</sup> Research Associate, School of International Relations, Fundação Getulio Vargas, Brazil. guilherme.fasolin@fgv.br

in host countries, which means that labor – and high-skilled labor, in particular – benefit from and should support FDI (Pandya 2010, 2014). It follows that labor constituencies also reward politicians who bring investment to their locations (Owen 2018)<sup>1</sup>. However, there is also evidence of labor opposition to FDI (Owen 2015), given that the greater share of labor in many host countries is composed of low-skilled workers who might suffer from changes in the employment composition that FDI is likely to bring about<sup>2</sup>.

The preferences of domestic capital towards FDI have also been shown to be heterogeneous. On one hand, domestic businesses should oppose FDI as the higher productivity of foreign firms might threaten their own existence. On the other, domestic firms might benefit from the entry of MNCs as they might offer opportunities either downstream or upstream of their supply chains (Markusen and Venables 1999). There is also evidence that domestic firms' support for FDI liberalization is conditional on more structural characteristics of the local economy, such as access to credit (Danzman 2020).

In addition to these intricacies, we must also consider whether FDI complements or substitutes labor (Pinto and Pinto 2008) and whether inward foreign investment is coming to establish a new factory (greenfield investment) or to partially or fully acquire an existing domestic firm (brownfield or M&A investments), as these are also likely to matter for both constituencies and politicians. For example, individuals holding different preferences about managerial and financial control (Li et al. 2017) or casual beliefs about how distinct types of investment affect economic growth might influence their support or opposition toward specific types of FDI.

All these characteristics add layers of complexity to the politics of foreign capital, and yet they only refer to material sources of preferences. The picture gets further complicated when we consider nonmaterial aspects. There is a “longstanding agreement on FDI as a unique source of constraint on host state sovereignty” (Wellhausen 2021, p.14) and yet we know relatively little about how voters and politicians feel about these threats to sovereignty vis-à-vis the economic benefits of MNCs' activities. While important work has been done in investigating how nationalism and ethnocentrism play out when it comes to mass preferences for FDI (Feng et al. 2021; Andrews et al. 2018), to the best of our knowledge, none has investigated how politicians and individuals' more ideological traits influence their decisions on openness to foreign capital versus their incentives to prioritize domestic firms, while also considering material aspects.

Moreover, one of the common criticisms levied against MNCs is that they threaten the sovereignty of their host countries by affecting their domestic regulatory autonomy in areas as diverse as tax, environmental, and labor policies. Recent articles, for instance, take into consideration the possibility that MNCs have different preferences from domestic firms on regulatory policy (Kim and Milner 2019; Moehlecke et al. 2019). Others have shown that MNCs are more likely than national

---

<sup>1</sup>Consistent with the point that labor constituencies like FDI, Jensen finds that politicians offer tax incentives to MNCs to increase their electoral success by signaling to voters that they are committed with spurring economic growth (Jensen et al. 2014), even though these incentives are shown to rarely change MNCs' decisions on where to locate (Jensen and Malesky 2018)

<sup>2</sup>It is possible that preferences for FDI are shaped by its local rather than individual effects, as research on consequences from trade shock indicates (Campello and Urdinez 2021; Iacolla et al. 2020). Our data collection effort will allow for the advancement of this possibility regarding FDI.

companies to surpass the collective action problem and have more resources at their disposal to lobby and influence policymakers (Kim and Osgood 2019; Weymouth 2012). Despite these studies, scholars have still struggled in providing causal evidence for the argument of the out-sized political influence of MNCs because of the limitations of observational data. In this study, we complement these works by exploring in some detail whether and how citizens and their representatives react to the potential power of MNCs to influence domestic policy in various areas.

Ultimately, our goal is to expand the knowledge about the conditions under which MNCs exert influence over host governments by directly surveying the policymakers in a host country. Host governments are often torn between two seemingly irreconcilable goals: on one hand, they are interested in fomenting inward foreign direct investment (FDI) to reap political benefits from the creation of jobs, the attraction of scarce capital, and the potential spillover of new technology and new managerial expertise. This requires the concession of some advantages to MNCs, which can include tax breaks, the flexibilization of certain regulations and the acceptance of the tying hands mechanism that signing investment treaties entails. On the other hand, host governments also need to cater to their domestic constituencies. Of course, domestic constituencies like new jobs, new capital, and technological advancements, which can all be potentially provided by MNCs. But domestic constituencies often demand policies that go against MNCs' interests and, as reviewed, not everyone benefits the same from foreign capital. Furthermore, the entry of MNCs affects politicians' incentives to engage in corrupt behavior in often ambiguous ways (Pinto and Zhu 2016), which also demands more investigation on how politicians consider all the costs and benefits of FDI.

By fielding a conjoint survey experiment with a sample of elected politicians ( $N \approx 200$ ) who have the mandate to regulate the entry of FDI, we expect to expand our understanding about how FDI policy is formed. Adding to explanations centered on citizens' preferences and on the demands from domestic interest groups formed by either labor or capital, we revive the role of elected policymakers and of institutions in shaping countries' variation in openness to the global economy (Kang 1997). Moreover, our proposal to replicate the conjoint experiment with a representative sample of individuals ( $N \approx 2,000$ ) offers an opportunity to assess a potential gap between the preferences of the elites and those of citizens. Crucially, we hope to offer insights on how top-down dynamics (i.e. politicians ability to cue and frame messages for their voters (Hicks et al. 2014)) interact with more well-known bottom-up processes that are traditionally explored by the OEP approach. Finally, we believe our research engages with the "third-generation" OEP research (Owen and Walter 2017) by employing a design that is particularly suitable to investigate how material interests interact with ideas and values to form both individual and elites' preferences.

## 2 Setting

This proposal takes advantage of an opportunity to survey a sample of politicians and one of citizens in Brazil. We argue that Brazil is an appropriate case for this project. Brazil is a large economy, a large democracy and one that has been historically open to FDI – although not nearly as

open as neighboring countries, such as Argentina and Chile<sup>3</sup>. Brazil is also one of the few countries around the world that has not ratified a bilateral investment treaty (BIT) (Campello and Lemos 2015), and so it does not hold any special international legal obligations towards foreign firms. These and other characteristics mean that it is not immediately obvious what benefits and what costs Brazilian voters and politicians derive from foreign capital and whether MNCs would hold greater power over them, relative to domestic firms.

On one hand, Brazil is a large economy but scarce in capital, and so it welcomes MNCs. Evidence showing that the “left loves FDI” (Pinto 2013) is compatible with what we observe in Brazil during the Workers’ Party years (2003-2016), when the country’s effort and capacity to attract FDI were notable. More recently, under the term of right-wing administrations, investor-friendly policies continue to be at the center of economic goals<sup>4</sup>. These developments would indicate that MNCs can hold great leverage over policymakers in the country, and regardless of partisanship. In a nutshell, MNCs bring much needed capital to the country, which can translate into growth and jobs and help politicians get elected (Owen 2018). However, we still have limited evidence of whether there is anything special about FDI relative to domestic investment, from the electoral point of view. Ultimately, domestic investment also generates jobs and revenue and can give politicians an electoral boost (Hong et al. 2016). So, apart from being a source of capital in countries that are scarce in this factor, it is not altogether clear if and how politicians distinguish between the potential benefits brought by foreign firms from the ones brought by domestic ones.

That being said, if we look beyond the economic benefits of foreign capital and focus instead on MNCs’ “foreignness”, we can see reasons why politicians may have incentives to oppose foreign investment and to protect domestic firms. The possibility that MNCs threaten host countries’ sovereignty has been a salient issue in the developing world for decades (Cardoso and Faletto 2021; Moran 1978), but has not always clearly manifested across ideological lines. In Brazil, politicians from both the right and the left have frequently turned to “sovereignty” rhetoric to justify restrictions on foreign investment<sup>5</sup>. Even if we consider that politicians invoke this rhetoric to signal their position to their peers, their frequency is an indicator of the types of arguments that they think will resonate with their voters. More crucially, this rhetoric suggests the normative environment in which the debate about FDI might be embedded in the country and that the incentives to restrict foreign investment may come from the pressure exerted by civil society groups and by the public opinion more broadly.

Adding to the already complex cost-benefit analyses that politicians might make when considering policies that regulate inward FDI, these actors may feel compelled to cater to the interests of domestic businesses, which may or may not be at odds with those of foreign firms (Danzman 2020; Danzman and Slaski 2021). Brazil has historically gone through a process of “dependent

---

<sup>3</sup>According to data on FDI entry restrictions as coded by Pandya (2014).

<sup>4</sup>Among these initiatives is Brazil’s request to join OECD as a member, a movement that brings several implications to both domestic and multinational firms operating in the country. Brazil has formally applied to become an OECD member in May 2017.

<sup>5</sup>We analyzed the debates about FDI legislation in the lower house of the Brazilian Congress and found support for this point. In these discussions, it is quite common to find politicians from the whole ideological spectrum defending restrictions on FDI based on claims that “foreign capital hurts national sovereignty”.

development”, one that entails dependency on foreign capital, but accompanied by domestic capital accumulation and complex differentiation of the industrial structure (Evans 1979). Such a process has been feasible because of the alliances forged between foreign and domestic capital and the state. While foreign firms bring innovation, the domestic ones hold the asset of political and bureaucratic contacts and knowledge. These relationships between the state, foreign firms and domestic businesses in Brazil mean that it is not immediately clear how politicians decide which type of firm to privilege when situations where foreign and domestic businesses have opposing preferences arise<sup>6</sup>. Again, we consider that it might even be that “foreign” versus “domestic” is not the most salient cleavage from a political standpoint. As recent literature points out (Kim and Milner 2019; Wellhausen 2021), it could be that at least part of multinationals’ source of power lies in their size. Bresser-Pereira and Diniz (2009) contend that the foreign versus national cleavage has faded in Brazil after the country’s developmentalist phase (the one prior to the crisis of the 1980s), giving rise to the idea that a “Brazilian firm” is one that invests in the country and generates jobs and revenue, regardless of its nationality.

Therefore, the preferences of Brazilian politicians and voters towards MNCs and FDI are not clear ex ante and not pre-determined by a self-evident characteristic, such as economic size or level of democracy. As in any experiment that focuses on a single case, we acknowledge that we sacrifice external validity for internal validity, but we also argue that Brazil’s characteristics allow results to be generalizable, or at least be used to generate hypotheses about other developing countries.

### 3 Research Design

#### 3.1 Overview, sample and recruitment

We field a conjoint experiment with a sample of Brazilian politicians, and we replicate it with a nationally representative sample of Brazilian citizens. We rely on the assistance of one professional firm to access the sample of politicians and on another survey firm to employ the online panel directed to the nationally representative sample. For the sample of politicians, we aim at 200 respondents. The sample will be composed by lower-house Congress members who are currently in office. We argue that this is the sample of interest because the national legislature is responsible for enacting policy regulating inward FDI. Although state and municipal governments have great leeway in conceding tax incentives and other benefits to locally attract FDI (Owen 2018), rules to either restrict or liberalize foreign capital largely stem from Congress<sup>7</sup>. Thus, we will approach a representative sample of current Congress members in terms of ideology divided in center, right and

<sup>6</sup>One recent development that opposed domestic and foreign firms in the country refers to the soda industry. The Executive branch renewed a tax benefit for foreign manufacturers – most notably, Coca-Cola – because they are in the free economic zone of Manaus. This decision was strongly opposed by domestic producers of soft drinks. For an overview, please refer to the following link, in Portuguese: <https://valor.globo.com/brasil/noticia/2020/10/19/bolsonaro-torna-permanente-beneficio-para-produtores-de-refrigerante.ghtml>

<sup>7</sup>The Executive can also regulate FDI through decrees, but it is obviously not feasible to target a sample of former presidents.



left, following the partisanship classification employed by Zucco and Power (2020)<sup>8</sup>. The sample will also be diverse in terms of respondents' region of origin (North, Northeast, Center-West, Southeast and South).

We set up the conjoint experiment ourselves by embedding a Javascript snippet generated by the Strezhnev et al. (2013)'s tool to Qualtrics. The professional firm (who specializes in political elites surveys) will approach politicians in person during Congress' business hours and will apply the experiment to respondents using either tablets or printed sheets<sup>9</sup>. This procedure attenuates the possibility that staff members are the ones responding to the survey instead of politicians themselves. Furthermore, it allows us to assuage concerns regarding participants' attention. Following the firm's advice, participation in the survey will not exceed 10 minutes.

For the sample of individuals, the population of interest will be the adult (aged 18 or older) population in Brazil. These respondents will be selected based on data from PNAD 2019, the National Household Sample Survey conducted by the Brazilian Institute of Geography and Statistics. The sample of 2,000 individuals will be nationally representative in terms of sex, age, income, education, and region. We will field the experiment with Netquest, a company that maintains a nationally representative online panel in Brazil<sup>10</sup>.

### 3.2 Conjoint experiment: politicians

To uncover the relative salience of multiple firm attributes for decision-makers, we design a paired-profile conjoint experiment and apply it to our sample of Brazilian politicians ( $N \approx 200$ ). To avoid post-treatment bias, we first survey respondents regarding their levels of nationalism, trust and their self-reported place in an ideological scale. Then, each politician is presented with a series of eight randomized and independent combinations of nine firm attributes that entail size, nationality (including domestic)<sup>11</sup>, mode of entry, market orientation, impact on the labor market, impact on the credit market, their sector, and status concerning compliance with anti corruption and ESG norms<sup>12</sup>.

---

<sup>8</sup>Considering that Brazil has currently over 20 parties represented in the National Congress, a purely partisan division is unfeasible and uninformative.

<sup>9</sup>This in-person procedure will respect all COVID-19 protocols in place at the time of the field. Therefore, the data collection will not pose any greater risk to participants rather than the usual risk they will be exposed to by being in their cabinets and in other Congress spaces.

<sup>10</sup>Netquest is a company based in Spain that recruits respondents in 26 countries for survey research conducted by academics and business. Netquest uses an opt-in recruitment method to build its panels of respondents, where they randomly select panel participants for survey invitations, using population quotas to produce nationally representative samples of respondents. Apart from being certified by ISO 26362 standards for online access panels, Netquest has been frequently used as a survey company for academics around the world. For examples of political science studies published using Netquest, see Campello and Urdinez (2021) and Bakaki and Bernauer (2016).

<sup>11</sup>To the best of our knowledge, ours is the first conjoint experiment to explicitly ask respondents to contrast domestic versus foreign investment of various nationalities. Previous work has assessed how respondents' opinions vary depending on the foreign origin of the investment, but they do not include domestic investment among the options (Li et al. 2017; Chilton et al. 2020). We believe that this is important because, as explained in our background section, it is not altogether clear from the literature what is special about FDI, if anything. It might be as well that people and elites value the benefits brought by firms in general and that they can't distinguish between foreign and domestic players. More specifically, MNCs tend to be large, productive businesses and it might be that what we know about MNCs is actually knowledge about big firms, regardless of nationality. This has important implications for how the scholarship assesses potential threats to sovereignty that MNCs are thought to provoke

<sup>12</sup>Again, to the best of our knowledge, ours is the first research design that directly asks respondents on their views about corporate sustainability practices, while forcing them to consider a potential trade-off with other desirable goals,

After examining each set of two different firms that vary across these attributes, politicians answer questions about which firm they would prioritize in terms of investment policy. Finally, respondents provide demographic information such as party, gender, age, and educational level.

Specifically, these are the attributes and options of attributes politicians are presented with<sup>13</sup>:

**Size:** (1) *This is a large company - it is among the 500 largest firms in the world.*; (2) *This is a medium-sized company - it is not among the 500 largest firms in the world.*

**Nationality:** (1) *This is a Brazilian firm*; (2) *This is an American firm*; (3) *This is an European firm*; (4) *This is a Chinese firm*; (5) *This is a Latin-American firm.*

**Mode of entry:**(1) *This company will start from scratch and will build new facilities*; (2) *This firm will partially acquire an existent Brazilian firm*; (3) *This firm will completely acquire an existent Brazilian firm.*

**Market Orientation:** (1) *This firm will operate in Brazil to mainly export to other countries*; (2) *This firm will operate in Brazil to mainly sell in the Brazilian market.*

**Labor market impact:** (1) *This firm will generate a small number of jobs in the region*; (2) *This firm will generate a large number of jobs in the region.*

**Credit market impact:** (1) *This firm will be completely established with capital brought from abroad and it will not take loans from Brazilian banks*; (2) *This company will be partially established with capital brought from abroad, but it will also take some loans from Brazilian banks.*

**Sector:** (1) *Industry (for example, an automaker, a beverage producer, a steel sheet manufacturer)*; (2) *Retail (for instance, a store chain)*; (3) *Services (for example, software development, logistics)*; (4) *Agriculture or Extractive (for instance, mining, oil)*; (5) *Construction*; (6) *Banking/Finance.*

**Compliance with anti corruption norms:** (1) *This firm has recognized good practices regarding compliance with anti corruption norms*; (2) *This firm does not have recognized good practices regarding compliance with anti corruption norms.*

**Compliance with social and environmental norms:** (1) *This firm is part of the United Nations Global Compact, a program that encourages companies to adopt sustainability and corporate social*

---

such as job creation. We do not have strong priors regarding what explains elites' and individuals' preferences for corporate sustainability norms - or even if those are salient at all to these groups when other firm attributes are under consideration. Our goal with the inclusion of these attributes in the conjoint is exploratory, as we hope results will help us to generate hypotheses for future projects. We believe that a theory that explains variation in individuals' and elites' preferences for corporate sustainability norms can have important implications for the study of the distributional (Genovese and Tvinnereim 2019), regulatory (Kolcava et al. 2021; Malhotra et al. 2019) and existential politics (Colgan et al. 2021) driven by climate change.

<sup>13</sup>The whole survey will be conducted in Portuguese.

responsibility policies; (2) This firm is not part of the United Nations Global Compact, a program that encourages companies to adopt sustainability and corporate social responsibility policies.

These yield 5,760 different possible firms ( $2 \times 5 \times 3 \times 2 \times 2 \times 6 \times 2 \times 2$ ). We do not identify the need to exclude any combinations because of illogical groupings. We randomize the order of attributes for all respondents, but we fix the same order for each respondent for the remainder of the experiment. This allows us to mitigate concerns that question order is driving the results while relieving respondents from the burden of adjusting to new attribute orders for every task.

Below are the instructions, the questions and an example of the table of the firm profiles that respondents will see.

*"We are conducting an academic study concerning Brazilian policymakers' and Brazilian citizens' views on foreign direct investment and multinational corporations. If you accept to participate, you will first be asked a few questions on your general political views and demographic information. Then, you will be presented with eight pairs of hypothetical firm profiles that are considering investing in Brazil. These profiles will bring several characteristics of each pair of firms, such as their size, nationality, mode of entry, sector of activities, impact in the labor and credit markets, among others. After looking over and comparing the firms' profiles, you will be asked a few questions about how you rate each of the firms. Your responses will be completely anonymous and confidential and will be used for academic purposes only. They will help us to better understand the factors that shape the investment environment in Brazil.*

*This survey should take approximately 10<sup>14</sup> minutes of your time. Are you interested in participating in this survey? If so, check "Yes".*

*Please respond to these questions relative to some of your political preferences and characteristics. Recall that your answers are anonymous and confidential."*

**[Q.1]** When someone says something bad about the Brazilian people, how strongly do you feel it is as if they said something bad about you?

- Not at all
- Somewhat
- A great deal

**[Q.2]** How much does being a Brazilian have to do with how you feel about yourself?

- Not at all
- Somewhat
- A great deal

---

<sup>14</sup>The survey applied to the sample of individuals will last 15 minutes because we will ask other exploratory questions concerning another project.



[Q.3] How much do you feel that what happens to Brazil in general would be your fate as well?

- Not at all
- Somewhat
- A great deal

[Q.4] Tell us how much you agree with the following sentence: “In Brazil, our people are not perfect, but our culture is superior to others.”

- Strongly Agree
- Agree
- Neither agree or disagree
- Disagree

[Q.5] Tell us how much you agree with the following sentence: “I would rather be a citizen of Brazil than of any other country in the world.”

- Strongly Agree
- Agree
- Neither agree or disagree
- Disagree

[Q.6] Tell us how much you agree with the following sentence: “The world would be a better place if people from other countries were more like Brazilians.”<sup>15</sup>

- Strongly Agree
- Agree
- Neither agree or disagree

---

<sup>15</sup>We purposely employ two sets of three questions each (Q.01 to Q.03 and Q.04 to Q.06) to gauge nationalism. In the set (Q.04 to Q.06), we follow (Mutz and Kim 2017; Mansfield and Mutz 2009; Rho and Tomz 2017; Feng et al. 2021), and others to obtain a metric of national superiority and compatriotism, which “refers to the tendency to favor in-group members strictly because they are citizens of the same country” (Mutz and Kim 2017). While this metric is more often employed in IPE literature because it gets at a competition dynamic, it might be the case that national superiority does not apply well to countries other than the United States. In the case of Brazil, for example, there is a possibility that national superiority measures will misrepresent the actual respondents’ preferences of nationalism given the broad debate in the country that Brazilians themselves have internalized the image of the country as a subaltern in comparison to the rest of the world. For this reason, we follow Herrmann (2017) and include another measure of nationalism that also taps into respondents’ social identity and feeling of attachment to their home country, but does not necessarily include a dimension of superiority to other countries. Given this measure also produces discriminatory bias that favors the home nation, it is reasonable to assume that it might produce the in-group favoritism on FDI preferences that we are seeking to find out with this measure. For a detailed discussion of how national attachment and chauvinism are different attributes of the national identity, see Herrmann et al. (2009).

- Disagree

[Q.7] Generally speaking, would you say that most people can be trusted (1) or that you can't be too careful in dealing with people (0)?

- Most people can be trusted
- You can't be too careful in dealing with people

[Q.8] Generally speaking, would you say that Brazil can trust other nations (1), or that Brazil can't be too careful in dealing with other nations (0)?

- Brazil can trust other nations
- Brazil can't be too careful in dealing with other nations

[Q.9] In a scale ranging from 1 to 9, where 1 is the furthest to left, 9 is the furthest to right and 5 is in the center, where would you place yourself? Scale from 1 to 9.

[Q.10] What is your gender?

- Male
- Female
- I'd rather not answer

[Q.11] What is your age?

[Q.12] What is your state or region of residence?

[Q.13] What is your city of residence?<sup>16</sup>

[Q.14] What is your color/race?

- White
- Black
- Brown
- Yellow
- Indigenous

[Q.15] What is your higher level of education?

- Less than one year of formal instruction
- Some elementary school
- Elementary school diploma

---

<sup>16</sup>We will only ask about respondents' city in the nationally representative sample.

- Some high school
- High school diploma
- Some college
- College diploma
- Some graduate school
- Graduate school diploma

[Q.16] What is your current party? <sup>17</sup>

*Thank you for answering those questions. Now, consider the following hypothetical but plausible situation: there are two firms thinking about investing in the country. They differ across multiple characteristics, which are summarized below. Please read and compare their characteristics carefully and then answer the questions that follow. There is no right answer – different people may place different weights to each of the attributes, which will lead to different preferences.*

**Table 1.** Conjoint study treatments

Dimensions	Firm A	Firm B
Firm size	This is a large company - it is among the 500 largest firms in the world.	This is a medium-sized company - it is not among the 500 largest firms in the world.
Firm Nationality	This is a Brazilian firm	This is an European firm
Firm's mode of entry	This company will start from scratch and will build new facilities	This firm will partially acquire an existent Brazilian firm
Firm's market orientation	This firm will operate in Brazil to mainly export to other countries	This firm will operate in Brazil to mainly sell in the Brazilian market
Firm's impact in the labor market	This firm will generate a small number of jobs in the region	This firm will generate a large number of jobs in the region
Firm's impact in the credit market	This firm will be completely established with capital brought from abroad and it will not take loans from Brazilian banks	This company will be partially established with capital brought from abroad, but it will also take some loans from Brazilian banks
Firm's sector	This firm will operate in the industrial sector (examples of firms in the industrial sector are car manufacturers, beverages manufacturers, steel roll manufacturers, among others)	This firm will operate in the banking/financial sector.
Compliance with anticorruption norms	This firm has recognized good practices regarding compliance with anti corruption norms	This firm does not have good practices regarding compliance with anti corruption norms
Membership in the United Nations Global Compact	This firm is part of the United Nations Global Compact, a program that encourages companies to adopt sustainability and corporate social responsibility policies	This firm is not part of the United Nations Global Compact, a program that encourages companies to adopt sustainability and corporate social responsibility policies

[Q.17] In a scale from 1 to 7, where 1 is less beneficial and 7 is the most beneficial, how beneficial do you believe each of these firms to be for the country?

- Firm A: Scale from 1 to 7

<sup>17</sup>We will only ask about respondents' party in the politicians' sample.

- Firm B: Scale from 1 to 7

[Q.18] In a scale from 1 to 7, where 1 is less beneficial and 7 is the most beneficial, how beneficial do you believe each of these firms to be for you?<sup>18</sup>

- Firm A: Scale from 1 to 7
- Firm B: Scale from 1 to 7

[Q.19] Suppose these two firms have opposing positions over some regulations relative to the Brazilian business environment. In its regulatory decision-making process, whose firm's preferences should the government give more weight to?

- Firm A
- Firm B

[Q.20] Suppose these two firms already operate in the country and they are asking for fiscal incentives to continue to operate. These firms are threatening to end their activities if the incentives are not conceded. Which of these two firms should be prioritized to receive incentives?

- Firm A
- Firm B

### 3.3 Questions asked to Brazilian citizens

We will replicate the same conjoint design outlined above with a nationally representative sample of Brazilian citizens. We will add a few more questions to be asked after the application of the conjoint:

[Q.C1] Did you take any vocational/trade school training?

- Yes, I have a diploma
- Yes, some but I don't have a diploma
- No

[Q.C2] Are you currently working?

- Yes
- No

---

<sup>18</sup>We will only ask this question to the sample of individuals.

[Q.C3] If you answered “yes” to the previous question, what type of employment do you currently have?<sup>19</sup>

- CLT
- PJ
- MEI
- I have my own business and it is not MEI
- Autonomous
- Internship or scholarship
- Informal

[Q.C4] Please select the one that best describes your sector of occupation, regardless of whether you are currently working or not (options):

- Industry (for example, an automaker, a beverage producer, a steel sheet manufacturer)
- Retail (for instance, a store chain)
- Services (for example, software development, logistics)
- Agriculture or Extractive (for instance, mining, oil)
- Construction
- Banking/Finance
- Public Sector

[Q.C5] If you are working, does the firm/business you work for mostly rely on sales to other countries?

- Yes
- No
- Don't Know

[Q.C6] Do you work for a foreign firm or have you ever worked for a foreign firm?

- Yes

---

<sup>19</sup>These categories reflect the possibilities of employment in Brazil. CLT refers to the existence of a formal relationship between the employee and the employer, which offers the highest level of labor protection. PJ refers to a contractual relationship between the employee and the employer, but in the condition of a services provider and with less labor protection. MEI refers to micro entrepreneurs, often people from lower income strata who open a micro business. Informal encompasses people who do not have a registered economic activity of any kind.

- No
- Don't Know

[Q.C7] Does someone in your family work for a foreign firm or has worked for a foreign firm?

- Yes
- No
- Don't Know

[Q.C8] Average estimated income of your household (consider the sum of your income with the income of the people who live with you)?

[Q.C9] Are you or have you ever been affiliated to a union?

We will also resort to the Brazilian Institute of Geography and Statistics (IBGE) databases to collect data on voters' and politicians' states and microregions pertaining indicators of economic activity and education that work as proxies for material drivers of preferences for FDI (Pandya 2010). Specifically:

1. Percentage of the population with no formal instruction/some elementary school/elementary school diploma/some high school/high school diploma/some college/college diploma
2. Percentage of the population with vocational training/trade school training
3. Percentage of the state/microregion economy dependent on manufacturing versus non-manufacturing industries
4. Percentage of the state/microregion economy dependent on exports
5. Percentage of the population employed in the public sector

## 4 Estimation

We will estimate the average marginal component effect (AMCE), the main quantity of interest in conjoint experimental analysis. The AMCE represents the marginal effect of one specific attribute averaged over the joint distribution of the remaining attributes (Hainmueller et al. 2014; Bansak et al. 2021). To assess subgroup effects, we will follow Leeper et al. (2020) and estimate the marginal means of the different target groups. We focus on marginal means rather than AMCEs because the latter can be misleading in subgroup comparisons since they rely on estimation from the same baseline to make comparisons. To test interaction effects, we will adopt a similar approach. We will estimate the average marginal interaction effect (AMIE) (Egami and Imai 2019) rather than the average component interaction effect (ACIE) (Hainmueller et al. 2014) to assuage concerns that the



relative magnitude of interaction effects is sensitive to the choice of the baseline categories when treatments are compared. We will estimate all these quantities of interest in R using the following packages: `cjoint`, `cregg`, and `FindIt`.

## 4.1 Subgroup effects

As indicated in section 3.2, we have four dependent variables for the sample of citizens [Q.17, Q.18, Q.19 and Q.20] and three dependent variables for the elite sample [Q.17, Q.19 and Q.20]. We also ask several questions concerning respondents' ideological, dispositional, and political preferences, as well as demographic information, which allows us to perform subgroup analyses and test a number of hypotheses outlined by the FDI literature. Although a number of such analyses are possible, we will focus on the following<sup>20</sup>:

### 4.1.1 Labor versus capital

We will break down our sample among those formally employed versus those who report to have their own business or are autonomous.. We will then compare the marginal mean of the labor group regarding the nationality attribute in the conjoint (which, we recall, contains an option for domestic investment) with the one of the capital group<sup>21</sup>. This will allow us to either validate or question the foundational results from the OEP tradition that posits that labor should be more supportive of FDI than capital. Additionally, we will be able to explore how labor's and capital's preferences play out in terms of other firm attributes. With few exceptions, the expectations for each of these groups regarding other firm characteristics are less clear in the literature.

### 4.1.2 Formal labor versus informal labor

We will break down our sample among those formally employed versus those informally employed. This will allow us to explore heterogeneity among workers. If labor as a whole perceives the benefits of FDI and of its spillovers, we should not find a difference between formal and informal labor. However, if the benefits of FDI are perceived among those who either directly benefit from working at a MNC or that might credibly be employed by a MNC, then we should find more support for FDI (again, identified in terms of the nationality attribute) among formal workers.

### 4.1.3 Nationalism

We will split respondents at the mean of the responses for nationalism. If nationalism is a relevant factor in shaping attitudes towards FDI, we should find a higher marginal mean of support for domestic firms relative to other nationalities among the group that scores higher in nationalism.

---

<sup>20</sup>These analyses will be equally conducted both in the elite and public samples.

<sup>21</sup>We highlight that existent work on the microfoundations of support for FDI does not directly differentiate between labor and capital. To the best of our knowledge, ours is the first test that allows for a direct distinction between these two groups.

#### 4.1.4 Trust

As trust is a binary measure, we will split respondents into those who “trust other nations” (1) and those that think that their country “can’t be too careful” (0). If trust is a relevant factor in shaping attitudes towards FDI, we should find a higher marginal mean of support for domestic firms relative to other nationalities among the group that scores 1 in the trust measure, that is, in those respondents that trust other nations<sup>22</sup>. Broadly speaking, this measure allows us to estimate the respondent’s level of internationalism.

#### 4.1.5 Ideology

We will split respondents between left, center and right<sup>23</sup>. This will allow us to either validate or question the foundational results from the OEP tradition that posit that the left should be more supportive of FDI than capital. We will compare the marginal means of each of these groups regarding the nationality attribute in the conjoint (which, we recall, contains an option for domestic investment).

#### 4.1.6 Other subgroup effects

We will also analyze other subgroup effects, such as gender, region, sector of employment, education, etc. These estimates seek to test other hypotheses outlined by the FDI literature as well as provide information to help generate new insights for future projects. We anticipate that due to the sample size, however, we will not be able to perform many such tests in the elite sample.

Following the rationale applied to the sample of citizens, we will also analyze how elected politicians perceive firms’ adherence to sustainability norms, including anti corruption. Again, we do not have strong priors regarding what explains elite preferences for sustainability norms - or even if those are salient at all. We hope this empirical effort will lead to the generation of hypotheses that will be more appropriately assessed in future work.

### 4.2 Diagnostics checks

Following the procedures set out by Hainmueller et al. (2014), we will run diagnostic checks for each of the assumptions of conjoint experimental designs. We will conduct a carryover assumption test to determine if the study results do not display over-time effects, a concern in conjoint experiments. Additionally, in order to validate the no profile order effects assumption, we will test whether respondents’ choices would be the same irrespective of the order in which the two companies’ profiles are displayed to respondents in each choice task. To probe whether the order

---

<sup>22</sup>We have evidence that trust is an important microfoundation of preferences for free trade (Nguyen and Bernauer 2019). Given that FDI entails a more long-lasting relationship and one rife with time-inconsistency problems, trust could be even more important in determining preferences for foreign capital than in trade.

<sup>23</sup>In the case of the elite sample, we will follow the partisanship classification employed by Zucco and Power (2020) in the Brazilian Congress as robustness checks. Crucially, we will also compare politicians’ preferences for investment as obtained from the conjoint design with their voting behavior on bills pertaining to FDI over the years. This will allow us to obtain insights on how institutions change politicians’ preferences - specifically, given that conjoint designs are effective in mitigating social desirability biases (Bansak et al. 2018).

in which attributes were presented to respondents did not affect the results, we will also conduct a test for order effects. Finally, we will run a randomization check to confirm that the treatments are well-balanced across respondents' covariates.

## 5 Power Analysis

We use the Power Analysis Tool for Conjoint Experiments designed by Stefanelli and Lukac (2020) to calculate the statistical power of our analysis, i.e., the probability of correctly rejecting the null hypothesis when the null hypothesis is false.

### 5.1 Nationally representative sample

Given a sample of 2000 respondents, completing 8 tasks each and with the highest number of variable/attribute levels being 6, we are able to detect the following effect sizes (AMCE):

- 1 percentage points - 15%
- 2 percentage points - 56%
- 3 percentage points - 85%
- 4 percentage points - 96%
- 5 percentage points - 99%

Studies pursuing research questions in the same field and applied to samples of individuals (non-elites) typically find sizable effects. For instance, Chilton et al. (2020) report results in the range from 1 to 19 percentage points, with most results > 4 percentage points. Li et al. (2017)'s results fall between 10-40 percentage points. Therefore, we do not anticipate any issues with statistical power for this portion of our study.

### 5.2 Politicians

The Power Tool by Stefanelli and Lukac (2020) is limited to consider samples of sizes of at least 500 individuals. Our sample of politicians will be  $N \approx 200$ . Nonetheless, we report the power analysis conducted considering 500 respondents, executing 8 tasks each and with the highest number of variable/attribute levels being 6. We are able to detect the following effect sizes (average marginal component effects or AMCE):

- 5 percentage points - 82%
- 6 percentage points - 93%
- 7 percentage points - 97%
- 8 percentage points - 99%

To the best of our knowledge, ours is one of the first studies to apply a conjoint design to a political elite sample in IPE. Therefore, we lack proper benchmarks for effect sizes in this case. The closest we can get is to Kim et al. (2019), who apply a conjoint design to a sample of Costa Rican firms. Their sample consists of 389 corporations. Each firm performs 5 tasks and the highest number of levels within a given attribute is three. They find results that range from 5 to 25 percentage points. The authors do not explicitly report their statistical power, but simulating their design with a sample of 500 (again, the minimum supported by the Stefanelli and Lukac (2020)' tool), it is possible to detect an effect of 5 percentage points with a statistical power of 88. Thus, although we cannot estimate it with precision, it seems that our effects would have to be relatively (but not unreasonably) large (around 10 percentage points) to be detected by our research design with the elite sample.

## References

- Andrews, S., Leblang, D., and Pandya, S. S. (2018). Ethnocentrism Reduces Foreign Direct Investment. *The Journal of Politics*, 80(2):697–700.
- Bakaki, Z. and Bernauer, T. (2016). Measuring and explaining the willingness to pay for forest conservation: evidence from a survey experiment in Brazil. *Environmental Research Letters*, 11:1–8.
- Bansak, K., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2018). The Number of Choice Tasks and Survey Satisficing in Conjoint Experiments. *Political Analysis*, 26(1):112–119.
- Bansak, K., Hainmueller, J., Hopkins, D. J., Yamamoto, T., Druckman, J. N., and Green, D. P. (2021). Conjoint survey experiments. *Advances in Experimental Political Science*.
- Bresser-Pereira, L. C. and Diniz, E. (2009). Empresariado industrial, democracia e poder político. *Novos estudos CEBRAP*, (84):83–99.
- Campello, D. and Lemos, L. (2015). The non-ratification of bilateral investment treaties in Brazil: a story of conflict in a land of cooperation. *Review of International Political Economy*, 22(5):1055–1086.
- Campello, D. and Urdinez, F. (2021). Voter and Legislator Responses to Localized Trade Shocks from China in Brazil. *Comparative Political Studies*, 54(7):0010414020970233.
- Cardoso, F. H. and Faletto, E. (2021). *Dependency and development in Latin America*. University of California Press.
- Chilton, A. S., Milner, H. V., and Tingley, D. (2020). Reciprocity and Public Opposition to Foreign Direct Investment. *British Journal of Political Science*, 50(1):129–153.
- Colgan, J. D., Green, J. F., and Hale, T. N. (2021). Asset Revaluation and The Existential Politics of Climate Change. *International Organization*, 75(2):586–610.

- Danzman, S. B. (2020). Foreign direct investment policy, domestic firms, and financial constraints. *Business and Politics*, 22(2):279–306.
- Danzman, S. B. and Slaski, A. (2021). Incentivizing embedded investment: Evidence from patterns of foreign direct investment in Latin America. *The Review of International Organizations*, pages 1–25.
- Egami, N. and Imai, K. (2019). Causal Interaction in Factorial Experiments: Application to Conjoint Analysis. *Journal of the American Statistical Association*, 114(526):529–540.
- Evans, P. B. (1979). *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil*. Princeton University Press.
- Feng, Y., Kerner, A., and Sumner, J. L. (2021). Quitting globalization: trade-related job losses, nationalism, and resistance to FDI in the United States. *Political Science Research and Methods*, 9(2):292–311.
- Genovese, F. and Tvinnereim, E. (2019). Who opposes climate regulation? Business preferences for the European emission trading scheme. *The Review of International Organizations*, 14(3):511–542.
- Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2014). Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political analysis*, 22(1):1–30.
- Herrmann, R. K. (2017). How attachments to the nation shape beliefs about the world: A theory of motivated reasoning. *International Organization*, 71(S1):S61–S84.
- Herrmann, R. K., Isernia, P., and Segatti, P. (2009). Attachment to the nation and international relations: Dimensions of identity and their relationship to war and peace. *Political Psychology*, 30(5):721–754.
- Hicks, R., Milner, H. V., and Tingley, D. (2014). Trade Policy, Economic Interests, and Party Politics in a Developing Country: The Political Economy of CAFTA-DR. *International Studies Quarterly*, 58(1):106–117.
- Hong, J. Y., Park, S., et al. (2016). Factories for Votes? How Authoritarian Leaders Gain Popular Support Using Targeted Industrial Policy. *British Journal of Political Science*, 46(3):501–527.
- Iacoella, F., Justino, P., Martorano, B., et al. (2020). *Roots of dissent: Trade liberalization and the rise of populism in Brazil*. UNU-WIDER.
- Jensen, N. M., Malesky, E., Medina, M., and Ozdemir, U. (2014). Pass the Bucks: Credit, Blame, and the Global Competition for Investment. *International Studies Quarterly*, 58(3):433–447.
- Jensen, N. M. and Malesky, E. J. (2018). *Incentives to Pander: How Politicians Use Corporate Welfare for Political Gain*. Cambridge University Press.

- Johns, L. and Wellhausen, R. L. (2020). The price of doing business: Why replaceable foreign firms get worse government treatment. *Economics and Politics*.
- Kang, C. E. (1997). U.S. politics and greater regulation of inward foreign direct investment. *International Organization*, 51(2):301–333.
- Kertzer, J. D. (2020). Re-Assessing Elite-Public Gaps in Political Behavior. *American Journal of Political Science*.
- Kim, I. S. and Milner, H. V. (2019). Multinational Corporations and their Influence Through Lobbying on Foreign Policy. *Multinational Corporations in a Changing Global Economy*.
- Kim, I. S., Milner, H. V., Bernauer, T., Osgood, I., Spilker, G., and Tingley, D. (2019). Firms and Global Value Chains: Identifying Firms’ Multidimensional Trade Preferences. *International Studies Quarterly*, 63(1):153–167.
- Kim, I. S. and Osgood, I. (2019). Firms in Trade and Trade Politics. *Annual Review of Political Science*, 22:399–417.
- Kolcava, D., Rudolph, L., and Bernauer, T. (2021). Citizen preferences on private-public co-regulation in environmental governance: Evidence from Switzerland. *Global Environmental Change*, 68:102226.
- Leeper, T. J., Hobolt, S. B., and Tilley, J. (2020). Measuring Subgroup Preferences in Conjoint Experiments. *Political Analysis*, 28(2):207–221.
- Li, X., Zeng, K., et al. (2017). Individual Preferences for FDI in Developing Countries: Experimental Evidence from China. *Journal of Experimental Political Science*, 4(3):195–205.
- Malhotra, N., Monin, B., and Tomz, M. (2019). Does Private Regulation Preempt Public Regulation? *The American Political Science Review*, 113(1):19–37.
- Mansfield, E. D. and Mutz, D. C. (2009). Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety. *International Organization*, 63(3):425–457.
- Markusen, J. R. and Venables, A. J. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, 43(2):335–356.
- Moehlecke, C., Thrall, C., and Wellhausen, R. L. (2019). Global Value Chains as a Constraint on Sovereignty: Evidence from Investor-State Dispute Settlement.
- Moran, T. H. (1978). Multinational corporations and dependency: a dialogue for dependentistas and non-dependentistas. *International Organization*, 32(1):79–100.
- Mutz, D. C. and Kim, E. (2017). The Impact of In-Group Favoritism on Trade Preferences. *International Organization*, 71(4):827–850.



- Nguyen, Q. and Bernauer, T. (2019). Does Social Trust Affect Public Support for International Trade? Insights from an Experiment in Vietnam. *Political Studies*, 67(2):440–458.
- Owen, E. (2015). The Political Power of Organized Labor and the Politics of Foreign Direct Investment in Developed Democracies. *Comparative Political Studies*, 48(13):1746–1780.
- Owen, E. (2018). Foreign Direct Investment and Elections: The Impact of Greenfield FDI on Incumbent Party Reelection in Brazil. *Comparative Political Studies*, 52(4):613–645.
- Owen, E. and Walter, S. (2017). Open economy politics and Brexit: insights, puzzles, and ways forward. *Review of International Political Economy*, 24(2):179–202.
- Pandya, S. S. (2010). Labor Markets and the Demand for Foreign Direct Investment. *International Organization*, 64(3):389–409.
- Pandya, S. S. (2014). *Trading spaces: Foreign Direct Investment Regulation, 1970–2000*. Cambridge University Press.
- Pinto, P. M. (2013). *Partisan Investment in the Global Economy: Why the Left Loves Foreign Direct Investment and FDI Loves the Left*. Cambridge University Press.
- Pinto, P. M. and Pinto, S. M. (2008). The Politics of Investment Partisanship: And the Sectoral Allocation of Foreign Direct Investment. *Economics & Politics*, 20(2):216–254.
- Pinto, P. M. and Zhu, B. (2016). Fortune or evil? the effect of inward foreign direct investment on corruption. *International Studies Quarterly*, 60(4):693–705.
- Rho, S. and Tomz, M. (2017). Why Don't Trade Preferences Reflect Economic Self-Interest? *International Organization*, 71(S1):S85–S108.
- Stefanelli, A. and Lukac, M. (2020). Subjects, trials, and levels: Statistical power in conjoint experiments.
- Strezhnev, A., Hainmueller, J., Hopkins, D. J., and Yamamoto, T. (2013). Conjoint survey design tool: Software manual. 17:2014.
- Wellhausen, R. L. (2021). Foreign Direct Investment (FDI). In *The Oxford Handbook of International Political Economy*. Oxford University Press.
- Weymouth, S. (2012). Firm lobbying and influence in developing countries: a multilevel approach. *Business and Politics*, 14(4):1–26.
- Zucco, C. and Power, T. J. (2020). Fragmentation without cleavages? endogenous fractionalization in the Brazilian party system. *Comparative Politics*, 53(3):477–500.