Preferential Trade Agreements and Leaders' Business Experience

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Abstract

Many theories attempt to explain the determinants of Preferential Trade Agreements (PTAs) and their design. Existing accounts, however, focus almost exclusively on structural or domestic factors and ignore individual leaders. In this paper, I develop and test novel theoretical claims regarding executive leaders' prior career in private business and their trade cooperation policy once in office. I construct a new dataset on the Heads of the Executive's business managerial experience in the private, tradeable sector and test my main claims in a time-series-cross-sectional setting covering 185 countries from 1948 to 2009. To establish causality, I rely on an Instrumental variable strategy and leverage exogenous transitions due to sudden deaths in office. The results show that businesspersons-turned-politicians are more likely to enter PTAs and are more likely to sign deeper PTAs. The relationship is further mediated by a country's factor endowment as suggested by the Stolper-Samuelson trade model. The substantive effect of business experience is comparable to that of established factors in the literature, such as regime type.

On November 16th, 2000, US President Clinton was scheduled to attend the APEC state dinner in Brunei, Singapore, with the executive leaders of other twenty countries.[1] That evening, Singapore Prime minister Goh Chok Tong approached Clinton to propose a late-night round of golf after the official state banquet. A well-known avid golfer, the US President readily accepted. As a storm rolled across the capital, Goh and his staff anxiously watched their window of opportunity narrowing down. Just after midnight, the storm lifted and the two headed to the course. At around 2:00 a.m. the two leaders took a coffee break. Prime Minister Goh - a former business manager with extensive experience in the shipping industry - took the opportunity and made his case for a US-Singapore Free Trade Agreement (USSFTA). Goh's case was convincing and, even if only two months remained until his successor took office, Clinton readily agreed. To the surprise of the US Secretary of State Madeleine Albright and National Security Advisor Sandy Berger, the morning after Goh and Clinton made the decision public. Likely having in mind the relatively narrow US-Jordan FTA to be signed a few weeks later, President Clinton seemed convinced that two months would have sufficed. As it turned out, though, the Singaporean Ambassador-at-large Tommy Koh and his government had a far larger and more comprehensive deal in mind. Tommy Koh - a US-educated law professor, familiar with the ways of Washington - also realized that a deeper proposal would have been viewed more favorably by the next administration, eager to distinguish itself from the trade deals reached during the 90s. On January 21st, 2001, G.W. Bush - also a former businessman with experiences in the oil and gas industry - was sworn as President. On May 6, 2003, Prime Minister Goh Chok Tong and President Bush formally signed a deeper trade agreement that most had expected.

Undoubtedly, structural economic as well as geopolitical factors certainly played an important role in the successful negotiation of the bilateral treaty between Singapore and the US. Nevertheless, this example nicely captures a further element that has been so far overlooked in the literature, i.e. the role of individual leaders' agency in structuring the patterns of international trade cooperation. This oversight is surprising, considering the consequential role of a country's executive in

[1] This paragraph is based on Green and Sebenius (2014) and Crump (2006)

international economic cooperation (Milner and Rosendorff, 1996). Moreover, the US-Singapore case shows how the leaders' occupational background - in particular, a professional experience in the business world - may affect their economic policy preferences. While the role of business lobbying has been extensively studied in the literature (e.g. Chase 2003), there is little research linking leaders' background experience in the private sector to international trade policy. Indeed, trade-related preferences at the executive level have been rarely explained, with the partial exception of ideology (Mansfield and Milner, 2012; Raess et al., 2018).

This paper is a first attempt to fill these gaps. I draw from various strands of the literature in political science, sociology, social psychology, and economics, to suggest that one specific type of leader's occupational experience - namely, business experience - is an important factor in explaining a country's propensity to engage in international trade cooperation. To test my claims, I complement and extend previous datasets (Ellis et al., 2015; Fuhrmann, 2020) on executive leaders' occupational backgrounds to cover 185 countries between 1948 and 2009.[2] The empirical results show that countries whose Head of the Executive has prior managerial experience at a firm in the tradeable sector tend to sign *more* and *deeper* PTAs than their non-business counterparts. Moreover, consistent with classic trade models, the effect is conditional on the country's factor endowments. In particular, the effect of business experience is stronger for those leaders who spent their formative professional years in capital abundant economies, which comports with the basic predictions of the Stolper-Samuelson model of international trade. I probe for causal plausibility using an Instrumental Variable (IV) approach and leveraging as-if random transitions in office due to sudden natural death or serious illnesses of the previous leader.

1 What explains the proliferation of PTAs?

Unsurprisingly, economic determinants are key determinants of PTAs (Baccini, 2019). In a seminal paper in economics, Baier and Bergstrand show how economic size, economic development,

[2] Although 2004 is the last year for which I have complete biographical information for all countries.

transportation costs and openness correctly predict more than 80% of in force PTAs (Baier and Bergstrand, 2004). Transactional economic gains are not the only reason to sign trade agreements, though. Other scholars have argued that governments may opt for international trade agreements to lock-in unpopular domestic economic reforms (Fernandez and Portes, 1998) or to curb the demands for protection from interest groups (Maggi and Rodriguez-Clare, 1998). More recent work using fine-grained firm-level data has emphasized the role of firms' lobbying to address export discrimination (Dür, 2007) or to demand investment protection (Manger, 2009). Beyond country-specific factors, the most common theoretical explanation in economics for the surge of trade agreements relies on the concept of "slow multilateralism", i.e. the observation that bilateral and regional agreements have been spreading as a response to stalls in multilateral talks (Bhagwati, 2008).

While economic factors are paramount, politics clearly plays a role as well. A first wave of scholarship in political science attributed the remaining variation in trade economic cooperation to features of the global system (Milner, 1992). Building on the insights of hegemonic stability theory, Masnfield shows how hegemony - the degree of power concentration in the system - affects the rate at which countries form PTAs (Mansfield, 1998). Similarly, others provide empirical support for the "slow multilateralism" argument from a political angle arguing that countries engage in PTA negotiation to increase their multilateral bargaining power (Mansfield and Reinhardt, 2003).

Clearly, while systemic political-economic factors promise to explain the overall surge in PTAs, they can hardly account for country-level variation. A second wave of scholarship has focused on the domestic sources of economic cooperation. In this vein, Mansfield, Milner and Rosendorff show how democratic countries are more likely to form PTAs than autocracies (Mansfield et al., 2002; Mansfield and Milner, 2012). Likewise, Mansfield, Milner and Pevehouse have shown how the number of veto players affects whether a country enters a PTA (Mansfield et al., 2007). Other prominent arguments stress the importance of partisanship, electoral concerns, bureaucratic interests, foreign direct investments, and the distribution of alliances (Mansfield and Milner, 2012; Hollyer and Rosendorff, 2012; Maggi and Rodriguez-Clare, 2007; Gowa and Mansfield, 1993).

Finally, as many authors have pointed out, international economic agreements tend to be interdependent and PTAs are no exception. Indeed, plenty of empirical studies have documented the importance of PTAs interdependence (Baccini and Dür, 2012; Dür, 2007; Manger, 2005).

While impressive, the sheer increase in the number of PTAs is not the most defining feature of the international trade regime. An equally relevant change in the past few decades has concerned the breadth of their provisions. Over time, PTAs have come to include investment, intellectual property rights, competition policy, government procurement, and many other aspects (Baccini, 2019). Indeed, the most recent wave of scholarship has developed and tested arguments to explain the great variation in the characteristic features of PTAs, such as depth (Dür et al., 2014), type (Mansfield et al., 2008), credibility (Hicks and Kim, 2012), and flexibility (Baccini et al., 2015a).

As it turns out, many of the factors affecting PTA formation are also relevant in explaining their design. Building on the above-mentioned theoretical and empirical work on the linkage between regime type and PTA formation, Mansfield and Milner find that democracy also positively correlates with the depth of proposed integration (Mansfield and Milner, 2012). Likewise, countries with more veto players are more likely to sign PTAs that contain fewer liberalization commitments (Allee and Elsig, 2017). Moreover, recent studies have also confirmed the role of interest groups in the design of PTAs (Raess et al., 2018). Finally, not unlike PTAs diffusion more generally, several studies find that specific design choices diffuse from one PTA to another (Baccini et al., 2015b; Kim and Manger, 2017; Allee et al., 2017).

While there is no shortage of explanations for PTA formation and PTA design, one potentially important factor has so far not been explored, i.e. the role of individual leaders' biographical characteristics. Indeed, notwithstanding the importance of structural and institutional factors, the common arguments in the literature tend to obscure the role of individual agency in policy-making. This neglect is puzzling considering that, even in the most constrained environments, leaders clearly enjoy some degree of autonomy. With a reference to the classics in International Relation theory, it seems evident that the literature on international economic cooperation has

stressed the systemic and domestic level, while overlooking the first level of analysis.[3]

2 Leaders' Characteristics and Public Policy

Why should individual-level characteristics matter for policy outcomes? After all, according to standard Downsian models, individual-level traits should not matter at all as candidates respond to the median voter's preferences in order to maximize their chances of remaining in power (Downs et al., 1957). Indeed, this is the premise of most domestic level explanations of PTA formation. For example, the theoretical underpinning behind the nexus between democracy and PTA rests on the assumption that voters are moderately in favor of free trade and that policy-makers want to signal their commitment to liberalization in order to maximize their chances of remaining in office (Mansfield and Milner, 2012). As such, leaders are implicitly modeled as having no independent stance towards free trade or protectionism, but only a (strong) preference for remaining in power.

Nevertheless, alternative models are not so restrictive. By relaxing the assumption of politicians as simply driven by vote-maximization, these models allow for the possibility that policy-makers would enact their personally preferred policies (Besley and Coate, 1997). Empirically, a growing literature has been connecting leaders' personal characteristics - either ascriptive (e.g. race) or acquired (e.g. education) - to the public policies they enact (or fail to enact) once in office (Krcmaric et al., 2020).

Among the acquired characteristics, a previous experience in the business sector has attracted considerable attention among scholars. A few studies have focused on business experience and legislative behavior. For example, Witko and Friedman (2008) suggest that Congress members with previous experience in business have closer relationship with business interests. Beside legislative production, several studies explore whether businesspersons-turned-politicians lead to systematically different economic policy and outcomes, albeit mostly in single-country contexts and/or at

[3]Consider the most recent review of the literature on PTAs from a political science perspective (Baccini, 2019). While the word "leader(s)" appears 31 times, none of the study reviewed is concerned with leaders' characteristics.

the sub-national level. The empirical results have been by and large mixed. Leveraging the quasi-randomness nature of close elections, Beach and Jones (2016) find no evidence that the election of business-candidates has an impact on city expenditures, revenues, public budgets or unemployment rate. Likewise, Jochimsen and Thomasius (2014) also explore the role of business background on public deficits and find no effect of leaders' (non-finance) business sector experience. By contrast, Neumeier (2018) shows that US governors with prior business experience perform better, on average, on a battery of economic outcomes. Szakonyi (2020) finds more pernicious effects in the case of Russian sub-national governments where businesspersons prioritize policies that bring immediate benefits to the private sector.

On the whole, scholarly interests in leaders' biographical features - and business experience in particular - has been on the rise in a variety of social science disciplines and in relation to several different topics. Surprisingly, international economic cooperation - and trade policy in particular - have received scant attention. I know of only one paper that focuses on the executive level and from a cross-national perspective (Dreher et al., 2009). In one of the most comprehensive attempts at explaining market liberalizing reforms as a function of leaders' characteristics, Dreher and coauthors find that former businesspeople are indeed more likely to reform. Nevertheless, once the authors break down the content of the reforms, they do not find any effect on trade liberalization. The lack of attention to executive leaders in the literature is particularly surprising given the relevance of the government in setting the pace for and type of trade liberalization (Milner and Rosendorff, 1997; Raess et al., 2018). Moreover, much of the literature on biographical characteristics has failed to properly account for leaders' self-selection into both professional experience and politically relevant positions, thus casting doubts on the causal nature of their findings.

3 Theoretical expectations

Why should a former businessperson have systematically different trade preferences relative to their non business counterpart? In a nutshell, I propose two main channels: first, socialization

effects from working in the business sector will positively affect the individual's beliefs regarding the benefits of freer trade; second, shared material interests with their previous professional network are likely to predispose these leaders to favor a pro-business stance on trade matters. While it is not possible to disentangle these effects at the country level, they do provide a useful analytical framework (Krcmaric et al., 2020). For the two mechanisms to be at play three conditions must be met. First, the (future) political leader must have held a managerial and/or executive position to fully appreciate the benefits of free trade and to develop a business network. Second, they must have worked at a firm in the tradable sector to be exposed to the benefits (and costs) of international trade. Third, they must have worked at a private (rather than public) firm, thus being sensitive to the usual market incentives towards efficiency and profit maximization.

3.1 Socialization

A vast body of research in social psychology has shown how individual beliefs spread through inter-group and inter-personal relations (Pettigrew, 1998). In particular, it has long been observed that the workplace affects one's own attitudes and behaviors even after accounting for self-selection, a phenomenon known as "workplace socialization" in sociology (Peterson, 1992). As Skazonyi suggests, such formative experiences are unlikely to be forgotten once an individual enter politics (Szakonyi, 2020). It is not just a matter of factual knowledge acquired in the workplace. Any kind of (non-trivial) occupational experience implies the internalization of the fundamental values that occupation is based on (Mikosch and Somogyi, 2009).

These beliefs come to constitute individuals' cultural imprints and worldviews and, either consciously or unconsciously, inform their preferences once in a position of (political) power. In other words, during their life, individuals acquire a set of dispositions, which partly reflects their cumulative life experiences (Hayo and Neumeier, 2016). Not unlike education, occupational experiences serve as a template for understanding and acting in the social world; experiencing a similar set of incentives, conditions, and ideational exposure will have an homogenizing effect on preferences within the same (occupational) class. In particular, working at a firm is likely to heighten an in-

dividual's perception regarding the benefits of freer trade, a policy that would result in a wider range of possible customers for firms as well as an increase in aggregate economic efficiency for the country as a whole. The socialization channel is best summarized in former US President G.W Bush Jr's memoir: "My experiences in business school, China, and the oil business were converging into a set of convictions: The free market provided the fairest way to allocate resources [...] Eliminating barriers to trade created new export markets for American producers more choice for our consumers." (Bush, 2011, p.38). While anecdotal in nature, Bush's own words are highly suggestive of the socialization channel. In other words, politicians with business experience are likely to exhibit a distinctive social "habitus" towards trade liberalization and economic efficiency (Dreher et al., 2009; Szakonyi, 2020).

3.2 Material interests

Moreover, a growing literature in political science examines the role of personal connections in shaping various political outcomes (e.g. Witko and Friedman, 2008). The red thread in this line of research is that politicians are more likely to favor policies that benefit, or at least do not harm, their former industry. Indeed, it seems clear that businesspersons-turned-politicians bring with them into office connections, allegiances to previous employers and employees, and, more broadly, material (and ideational) preferences in line with those of the professional social network they had been part of.

While self-interest drives political behavior among any kind of politician, empirical research has shown how businesspersons may be even more prone to maximize the expected wealth and profits of their own sector (Szakonyi, 2020). Research on urban politics in the US context has long investigated the links between politicians' experience in the private sector and pro-business public policy. This literature underlines how former entrepreneurs tend to coordinate to shape government policy to create "growth machines" that would disproportionately benefit the business sector (Molotch and Logan, 1984). For example, Stone (1998) shows how businesspersons joined municipal governing coalitions in the Atlanta area and implemented a set of business-friendly policies.

More recently, Szakonyi (2020) has shown similar evidence in the case of Russian regions.

In theory, the socialization effect should be particularly strong for those individuals who experienced the gains from free trade, i.e. the "winners". Nevertheless, all former businesspersons may be sensitive to *aggregate* efficiency gain. By contrast, the material interest channel differs from the previous two as it should have divergent effects. Trade policy has distributional economic effects, thus inducing a cleavage between the "winners" and "losers" of liberalization. Three sets of trade model help identify where the cleavage might lie. According to "new new trade theory" the cleavage lies at the firm level (Melitz, 2003). Unproductive firms stand to lose from trade liberalization. As such, we would expect that a leader who worked at a relatively inefficient firm would have a material interest in restricting rather than liberalizing trade. An alternative set of models (often referred to as Ricardo-Viner models) situates the cleavage at the industry-level. In these models the returns to specific factors (capital and labor) are closely tied to the fortunes or misfortunes of the industry they are employed in. The basic prediction of the models is that all factors of production employed in export-oriented industries will receive an increase in returns from trade, whereas both capital and labor employed in import-competing industry will lose in real terms.

Unfortunately, it is not possible to collect fine-grained information about the firms' productivity for such a long period of time and an heterogeneous group of countries. Coding a leader as having experience in an export-oriented or import-competing industry is an equally daunting task. Export/import data at the industry level for most countries in the world since the 50s simply does not exist. At any rate in the data collection process I try to minimize concerns about the possible effect of working at a low-productivity firm and/or in the import-competing sector. I do so by excluding small (e.g. family-owned) businesses from the analysis. Notice that the possible inclusion of leaders who worked at unproductive firms and/or in an import-competing industry would have an attenuating effect on the estimated coefficient for business experience. Hence, the empirical results can be interpreted as the lower bound effects of a specific kind of business experience, i.e. that in a productive firm and/or in an export-oriented industry.

To explore effect heterogeneity, I then turn to an older class of models based on the Stolper-

Samuelson theorem. According to the theorem, trade increases real returns for owners of the factor of production in which the economy is relatively abundant, while it reduces real returns for owners of the scarce factor of production. The implication is that all owners of the same factor share the same preferences with respect to trade policy. Capital owners in capital abundant countries will tend to favor an open trade policy, while they will seek trade protectionism in labor abundant countries. Hence, we can expect individuals with a business career in a capital abundant environment to be more strongly in favor of trade liberalization.

To sum it up, the connection between business experience and trade policy seems intuitive, considering the potential for shared frames of reference, common backgrounds, experiences, and interests among former businesspersons. Former businesspersons are likely to view a freer trade policy more favorably and to have a material interest in engaging in a open trade policy. As such, I propose four hypotheses:

Hypothesis 1: *Countries led by leaders with prior business experience are more likely to sign PTAs than their counterparts led by leaders without business experience.*

Hypothesis 1a: *Leaders with business experience in a capital-abundant country are more likely to sign PTAs than their counterpart in a labor-abundant country.*

Hypothesis 2: *Countries led by leaders with prior business experience sign deeper PTAs than their counterparts led by leaders without business experience.*

Hypothesis 2a: *Leaders with business experience in a capital-abundant country sign deeper PTAs than their counterpart in a labor-abundant country.*

4 Research Design

4.1 Unit of Analysis

Many studies of PTA formation have opted for dyads as their units of analysis (e.g. Mansfield et al., 2002). Nevertheless, there is nothing specific in my theory to favor the use of dyads (directed or otherwise). The theory is meant to explain why a government/leader signs an agreement at time *t*, rather than why they sign an agreement at time *t* with country *j*. Hence, I report results using a monadic (country-year) design to test the first hypothesis, a choice consistent with previous studies in the literature (Gray and Kucik, 2017). The results using different research designs are in the Appendix. Instead of simply transforming the dataset and repeating the analysis, I replicate two prominent studies in the literature. First, I replicate Mansfield (1998) study on PTAs proliferation.[4] In that study, the unit of analysis is the year and the main variables of interest are systemic in nature (e.g. hegemony). I augment the original specification by adding the proportion of business leaders in the system. Second, I replicate the models in Mansfield and Milner (2018), where the unit of analysis is the dyad.[5]

Regarding hypothesis 2, there are two alternatives. First, following other studies on the content of agreements, we may organize the dataset at the PTA level (Postnikov and Bastiaens, 2020). Unfortunately, though, the set of government that signs a PTA might be systematically different from those that do not sign PTAs, thus biasing the results. Instead, I rely on a standard country-year dataset and use the average of trade depth across PTAs for those country-year observations when more than one PTA was signed.

4.2 Business Experience

The main independent variable is a leader's previous experience in business. As a starting point, I rely on the LEAD dataset, which provides biographical information on executive leaders from the

[4] More precisely, I replicate the chapter in Mansfield and Milner (2012) that extends the original article.

[5] This study is the latest in the ongoing production of Mansfield, Milner and coauthors, and is based on the insights developed in several previous articles.

19th century to 2004 (Ellis et al., 2015). Unfortunately, the LEAD dataset does not provide the most appropriate coding of business experience for the purpose of the present study. For example, some leaders who taught economics or business-related subjects at Business and/or Technical schools, but for whom we have no evidence of professional business experience, are coded as having business experience. This is the case of, among others, former Bulgarian prime minister Ivan Kostov.

In order to capture the most appropriate aspects of business experience, I restrict the sample to the post World War II period, I extend the dataset for leaders who remained in power after 2004 up to 2009, and I re-code business at a more fine-grained level. To do so, I rely on the original sources consulted by Ellis, Horowitz and Stam.[6] Where I could not find the information needed, I complemented the search with additional primary as well as secondary sources (sources are listed in the Appendix with a brief description of the business activity). I utilized academic books and articles, newspaper articles, obituaries, libraries, online encyclopedias, and various other sources (e.g. national government websites). For NATO countries, I rely also on a recent study's dataset (Fuhrmann, 2020). I code each dimension in the dataset only when two sources agree on the biographical facts.

I code the following dimensions: 1) whether the (future) leader held an executive/managerial position or not; 2) whether the firm was involved in non-tradable or tradable activities; 3) whether it was of small size (e.g. family owned) or not; and 4) whether it was state-owned or private. Finally, I construct a binary indicator to capture business experience as a manager/executive at a private firm involved in the treadeable sector after excluding small firms. Below, I detail the rationale for my coding scheme and measure.

First, the (future) political leader must have held an executive position to fully appreciate the benefits of free trade and to develop a business network. Non-executive business experience is insufficient to meet the criterion. The coding of individuals with managerial/executive positions is one of the major differences relative to the LEAD dataset, although consistent with the coding

[6] I thank Michael Horowitz and colleagues for sharing the bibliographical sources.

in other studies (Fuhrmann, 2020). For example, I code Ruiz Cortines - President of Mexico in the 50s who worked as an accountant at a trading house - as not holding an executive/managerial position.

Second, they must have worked at a firm in the tradeable sector in order to experience international trade. Since there is no way of knowing the firms' actual exposure, I focus on whether their products and/or services could be feasibly traded. The classification of tradable/nontradable for such a long period of time and for so many countries is not straightforward. As a starting point, I rely on the 2016 OECD regional outlook. Tradable sectors are defined as agriculture (A), industry (BCDE), information and communication services (J), financial and insurance activities (K), and other services (RSTU). Non-tradable sectors are composed of construction, distributive trade, repairs, transport, accommodation, food services activities (GHI), real estate activities (L), business services (MN), and public administration (OPQ). Since the above classification does not clarify the status of tourism, I follow the AMECO classification and I classify it as tradable. In a few cases, I elected to deviate from the coding scheme detailed above. I do so only when there is consistent, reliable, and clear evidence. For example, former Irish Prime Minister, Garrett Fitzgerald, founded a consultancy firm. While consultancy falls under the nontradable sector, there is consistent evidence that the firm had strong international ties. In particular, Fitzgerald's independent business consultancy partnered and eventually merged with the British Economist Intelligence Unit, of which he remained the managing director until the 70s.

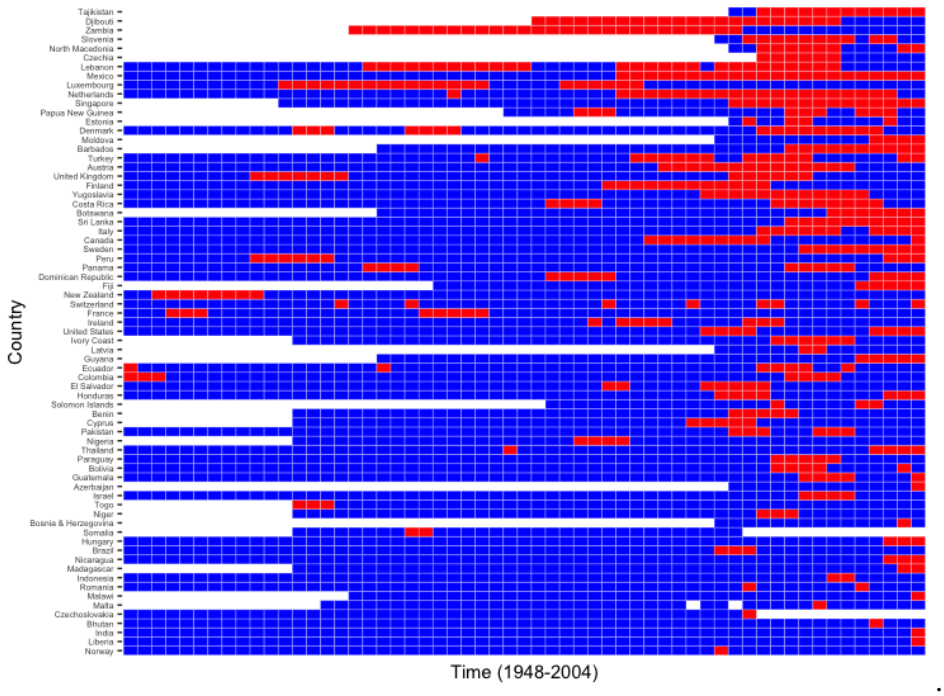
Third, I also code the likely size of the firm. While exact data on firm size is unavailable, it is easier to code whether the firm was small. This is the case of former US President Carter, who managed the family-owned local peanut farm and a small-town store. The business activity was carried out on a small scale, thus unlikely to be involved in international trade. Hence, the leader is coded as having experience in the tradeable sector, but at a small firm.

Fourth, (future) leaders must have worked at a private (rather than public) firm, thus being sensitive to the usual market incentives towards profit maximization. As the standard property rights theory of the firms suggests, public enterprises tend to perform less efficiently and less

profitably. It seems reasonable to expect that they also differ in terms of goals, business approach, and, consequently, socialization processes.

As a final step, I code a leader as having business experience with a binary indicator that takes the value of 1 if the leader held a managerial/executive position at a private, non-small firm involved in the tradeable sector. If any of the four conditions is not met, the variables is coded as 0. Figure 1 below shows the final result of the data-collection phase (countries that never had a business leader are excluded). Each square represents a country-year observation. Red squares indicate the presence of a leader with business experience (white squares indicate missing values).

Figure 1: Business Experience



4.3 Variable Selection

I rely on the Design of Trade Agreement Dataset (DESTA) (Dür et al., 2014). Ideally, one would use information about the timing of all stages of trade negotiation - beginning of negotiation, signature, ratification, and entry into force. The DESTA dataset provides ”signature” dates and ”entry into force” date, i.e. (usually) right after the last country in the agreement ratified it. I use

both dates, although I leave the results using the latter to the Appendix. As a further robustness check, I also use the year when negotiations started for a subset of trade agreements. The data comes from Mölders (2016) who coded the beginning of negotiation of 123 trade agreements signed since 1980.

In order to test hypotheses 1 and 1a, I operationalize the dependent variable in two ways: a count variable indicating the number of agreements signed in a given year; a dichotomous variable indicating whether at least one PTA was signed in a given year. To test the second set of hypotheses, I rely on two measures of depth directly available in the DESTA dataset. The first measurement of depth is continuous and was constructed through latent trait analysis on 48 items that theoretically relate to liberalisation. It ranges from -1.43 to 2.17 The second one is an additive index (0-8) that captures the degree of tariffs reduction as well as liberalizing provisions regarding services, investments, standards, public procurement, competition and intellectual property rights. In both cases, higher values are associated with deeper agreements and lower values with shallower ones. The two measures of depth include 0 as a possible value, thus raising an econometric issue. Including them directly in a panel model would conflate cases when no agreement was signed with cases when a country joined an agreement whose content is coded as having 0 depth. To avoid that while preserving the variables' distribution, I employ a simple linear transformation. To the first measure, I simply add its minimum value +0.01. Similarly, I add +1 to the second index. This way, the country-year observation with no treaty have a value of 0 while the country-year observations with the shallowest treaty have a a value of 0.01 or 1 in the first and second measure, respectively.

The empirical analsysis needs to account for factors that may affect a country's propensity to sign trade agreements as well as the likelihood of having a political leader with business experience. First, I account for the country's market size by including its GDP (in logarithmic scale), its level of development (GDP per capita) and the business cycle (GDP growth). These variables are obtained from the *Penn World Table 9.1*. (Feenstra et al., 2015). Mansfield and Milner document a tendency for countries to sign trade agreements during "hard times" (Mansfield and Milner, 2018). As such, I follow past conventions and I include a dummy variable (*recession*) that takes the value

of 1 if a country's GDP declines by at least 1% in a given year. Then, I control for trade openness measured by the sum of exports and imports divided by GDP (*World Bank*). Third, I include a count variable to capture the leader's experience in office (measured by the number of years). On the one side, as any leader gains experience in office it might become easier to implement their preferred policy. On the other side, leaders with business experience may have different "quality" than their non-business counterparts, which might affect the likelihood that they would remain in office (Beach and Jones, 2016). Fourth, I include the most relevant domestic institutional variables. To begin with, a country's regime type is regarded as a major determinant of the likelihood of signing preferential trade agreements (Mansfield et al., 2002). It is also possible that the selection process leading former businesspeople to positions of power differs across regime types. For example, while reminiscing about his decision to run for office in a 1998 interview, former President of El Salvador Alfredo Cristani - a businessman dedicated to coffee production and export - explicitly stated: "It wasn't very normal for people involved in business in El Salvador to get involved because of the military dictatorships that we had for so long".[7] Therefore, I control for regime type using the Polity2 score from the Polity dataset (Marshall et al., 2010). As a robustness check, I also use the two dichotomous democracy-autocracy indexes from Boix et al. (2013) and Cheibub et al. (2010). To capture the number of veto players in a country, I use the most recent version of the veto player measure from Henisz (2000). Finally, I control for global conditions regarding the economy as well as the international trade regime. More specifically, I control for world economic growth (*Maddison Project Dataset 2016*), the total number of PTAs signed per year, and the number of countries signing at least one PTA per year (Mansfield and Milner, 2018). I also include two dummy variables to account for the occurrence of a GATT/WTO round and for the post Cold War period. All control variables are lagged to ease concerns about reverse causation.

In order to test hypotheses 1a and 2a, we need a measure of capital abundance. Ideally, one would use a measure of capital intensity that can be compared across time and space, such as the capital-to-labor ration. Unfortunately, though, consistent estimates of the K/L ratio are available

[7] https://livinghistory.sanford.duke.edu/interviews/alfredo-cristiani/

only for OECD countries. Moreover, an important aspect of the proposed theory pertains the timing of the leaders experience in the business sector. What matters is the country's factor endowment at the time when the (future) leader entered the job market, rather than at the time when their government signed a trade agreement. In the dataset, 172 leaders were born in the 19th century. To the best of my knowledge, no measure of capital endowment covers such an extensive period of time for more than a handful countries. As an alternative measure, one could use a crude distinction such as North vs South or OECD vs non-OECD countries to proxy for capital abundance. Beside not solving the problem mentioned above, any geographical or institutional categorization would be either fixed or too slowly moving over. Hence, it would be meaningless to investigate the (future) leader's business experience at the time when they entered the job market.

Instead, I rely on a country's GDP per capita as a proxy of a capital-abundant environment at the time when the (future) leader likely entered the job marke for the first time. In particular, I employ the GDP per capita measure collected by the *Maddison Project* (Bolt and Van Zanden, 2014). Using the GDP per capita to proxy for a country's capital abundance offers three distinctive advantages. First of all, relative endowments - one of which we would like to measure, i.e. capital - are arguably the most important explanatory factors in income levels differentials across countries, thus making them highly correlated with economic development (Spilimbergo et al., 1999). For this reason, it is common to proxy factor endowments with the level of GDP per capita when more precise measures are not available (Gourdon et al., 2008). Second, unlike other more specific measures of capital abundance, the Maddison Project extensive historical data on country's GDP stretches back to the 19th century. Hence, we can cover all the periods when (future) leaders entered the business sector. Third, there is enough cross-sectional data at any point in time to compare a country's capital endowment to that of the rest of the world. For example, estimates of GDP per capita in 1900 already cover 46 countries, almost one third of all countries in the dataset. This is particularly important since factor endowments is a relative concept. Indeed, whatever proxy for factor endowment is used, it is common in the empirical literature to relate a country's endowment to the world endowment (Spilimbergo et al., 1999; Gourdon et al., 2008).

To code whether a leader's business experience took place in a capital abundant country I proceed in the following way. First, I assume that the (future) leaders entered the job market for the first time at some point in their twenties. For all consecutive years starting from the year the leader turned twenty up to the year when they turned thirty, I code whether their country was in the top 10 percentile in terms of GDP per capita. Then, I consider a leader as having business experience in a capital abundant country if their country was in the top 10 percentile for most of their twenties (i.e. at least 6 years).

5 Main Empirical Results

To test Hypothesis 1, I rely on two main sets of empirical models. I estimate both Poisson and logit fixed-effects models, depending on the nature of the dependent variable.[8] Standard errors are clustered at the country-level. I exclude all EU countries from the main analysis since trade policy is under the purview of the European Commission. Table 1 shows the estimates derived from fixed-effects Poisson models. To ease concerns about suppression effects of the main variable of interests due to the inclusion of control variables, I include the covariates sequentially. Model 1 shows the simple bivariate relationship, Model 2 includes the leader's years of experience in office (individual-level control), Model 3 adds regime type and veto players (domestic-level institutional controls), Model 4 further controls for the remaining domestic-level economic variables. Model 5 and Model 6 include the full set of controls with country and two-way fixed effects. These will be the specifications for all subsequent models unless otherwise specified.

[8]FE Poisson regression is preferred since it is consistent under very mild conditions, unlike other count data estimators). I also estimated random-effect negative binomial models (see Appendix).

Table 1: Poisson Fixed Effect Models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.268***	2.211***	1.883***	1.394**	1.335**	1.302*
	(0.311)	(0.305)	(0.253)	(0.206)	(0.193)	(0.192)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7705	7528	6932	4439	4324	4324
χ^2	35.748	34.338	61.063	134.253	240.908	22692.166
Log Likelihood	-4787.342	-4721.227	-4367.346	-3114.629	-2956.647	-2760.873

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

As we can see, business experience has a positive and statistically significant effect on the number of PTAs signed. The effect size and significance decreases as we move from the bivariate model to the full model, but the results hold across specifications. Based on Model 5, as a country switches from an Executive leader without business experience to one with business experiences, the rate at which it signs a trade agreement in a given year increases by 34%.

Following the same procedure described above, I estimated logit fixed effects models. To account for temporal dependence, I include the cubic polynomial approximation of spell-time (Carter and Signorino, 2010). To get a better sense of the magnitude of the effect in a more familiar scale, Table 2 shows the marginal effect of regime type and business experience based on the fully specified logit model. To facilitate comparison with the binary business variable, I dichotomize regime type at the 6-point score cut-off (the other measures of democracy are already dichotomous). As we can see, holding the covariates at their observed value, the substantive effect of having a leader with business experience is almost 75% as large as that of democracy (measured by the polity score). In the other two cases, the marginal effect of business experience even surpasses that of democracy.

Overall, multivariate analysis confirms Hypothesis 1. At the same time, though, the average effect of business experience on trade policy may mask the heterogeneity of business experiences.

Table 2: Marginal Effects of Democracy and Business

Measure of democracy	Business Marginal	Democracy
Polity	5.8%	7.9%
Boix et al. (2013)	6.3%	4.7%
Cheibub et al. (2010)	5.7%	2.2%

Consistent with the Stolper-Samuelson theorem, I suggested that one potential cleavage may lie in the relative factor endowments of the leaders' country at the time when they entered the job market. To test hypothesis 1a, I augment the full model (Model 6) interacting the business experience indicator with the capital abundance dummy. I run the models on the full sample including the EU countries as well. European countries are among the most capital abundant economies at any point in time. Excluding them would result in such a small sample size for the latter group to make precise estimation impossible. The inclusion of EU states might seem problematic since the EU commission negotiates trade agreements for the whole bloc. I justify my choice on two grounds.

To begin with, while trade policy is formally delegated to the EU, the literature has repeatedly stressed how nation states and governments maintain a certain degree of political control de facto (Dür, 2007; Damro, 2007; Meunier, 2022). This should come as no surprise considering that the Council (i.e. the member states' executives) must authorize the Commission to open negotiations. In doing so, the Council's decision also includes negotiating directives to indicate its preferred outcomes. Consistent with this view, in her book-length study of EU's trade policy, Meunier argues that Member States "retain full political control through the granting of a mandate to begin negotiations and an agreement to approve the results" (Meunier (2022), p. 34). Likewise, Damro compares the delegation of authority to the EU in trade and competition policy and concludes that "the instruments of political control in trade policy [...] appear much more direct and comprehensive than the ones found in competition negotiations." (Damro (2007), p. 898).

Second, while the EU negotiates on the behalf of all its members, the process is completed only after each member states' ratification of the treaty. While the ratification stage is under the purview of each national legislative body, governments can still exercise direct and indirect control

for a variety of reasons (Dür, 2006). Indeed, the Executive takes the legislature's preferences into account from the start of the process in order to avoid a costly ratification failure (Milner and Rosendorff, 1997). Under this perspective, the governments should have already incorporated the legislature's trade preferences in their decision and negotiating directives upon authorizing the Commission to open negotiations. Moreover, governments must be supported by a parliamentary majority which, in turn, is invested in the Executive's successes. As a result, governments can and do exercise political pressures to support the government line. This is particularly true of parliamentary systems - the democratic institutions most common in the EU - where governing parties tend to suffer fewer losses due to disunity (Carey, 2007). Finally, it should be noticed that European national parliaments have historically shown little interest in trade policy. Indeed, trade policy has become much more contested in the EU, and of greater interest to national legislatures, only recently. For example, Roederer-Rynning and Kallestrup (2017) points at the the negotiation for the Transatlantic Trade and Investment Partnership (TTIP) as the tipping point in the "new contentiousness of trade". This lack of interest at the legislative level is likely to empower the Executive.

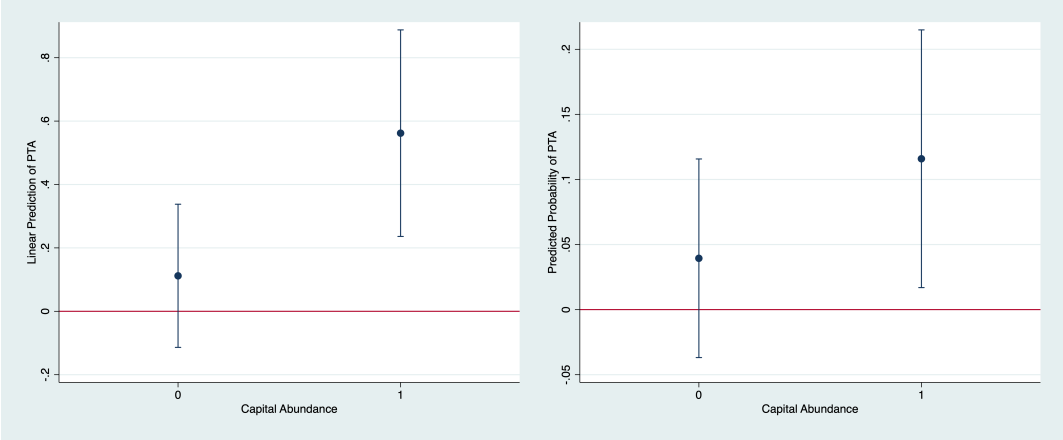
For all the above reasons, EU-PTAs tend to be ratified quickly after the official signature. For the period under consideration, the median duration between the signature and the entry into force of EU trade treaties is only one year. Since the full ratification stage must have been completed before then, it seems safe to conclude that, on most occasions, the signature date well approximates the ratification date. As shown in the Appendix I, using the entry into force date leads to the same results.

To test hypothesis 1a, I interact the capital abundance indicator with the business experience variable in the fully specified models. For ease of exposition, I present the results graphically. Figure 2 shows the marginal effect of business experience on the number of PTAs (left) and the predicted probability of signing a PTA as a function of business experience (right) conditional on the relative factor endowment of the country.[9] As both panels show, when a leader with business

[9]The inclusion of an interaction term in a two-way fixed-effects Poisson model leads to convergence issues in some models due to the low number of capital abundant economies. As a second best approach, I use a linear two-way fixed

experience in a capital scarce country becomes the Head of the Executive, the marginal effect of business experience is positive but insignificant. By contrast, as a business leader who entered the job market in a capital abundant economy becomes the country's government leader, that country will sign more PTAs. Looking at the right panel, the probability that the country will sign at least one PTA, on average, increases by 12 percentage points (right panel). Clearly, the previous models (Table 1 and 2) masked considerable heterogeneity across business experiences.

Figure 2: The Effect of Business Experience Conditional on Capital Abundance - Number of PTAs (left) and Binary (right)



To test Hypothesis 2 and 2a, I rely on OLS fixed-effects regressions.[10] The control variables are the same as in previous models except for the exclusion of the total number of PTAs signed per year and the number of countries signing at least one PTA in a given year. There is little theoretical reason to suggest that these factors should affect the design of trade agreements. Indeed, they do not feature in previous studies on PTA design (Allee and Elsig, 2017; Mansfield et al., 2008). I present the results using the additive index of depth in the standard country-year format (see Appendix for the results using the Rasch Index). As we can see from Table 3, business experience consistently exhibits a positive and statistically significant effect on PTA depth.

effects model, which still guarantees the best linear approximation of the conditional expectation function.

[10] I opt for OLS models so that one can more easily compare the results using the two depth indicators.

Table 3: OLS Models - Additive Index

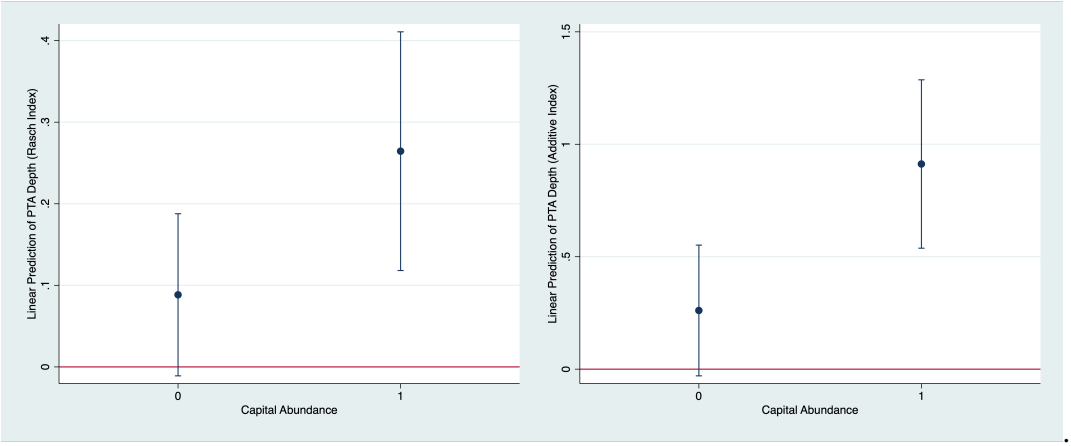
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	0.613***	0.612***	0.566***	0.448***	0.417***	0.416***
	(0.111)	(0.112)	(0.108)	(0.129)	(0.128)	(0.128)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7915	7731	7157	4469	4469	4469
R^2	0.071	0.073	0.083	0.117	0.125	0.194
adj. R^2	0.049	0.051	0.061	0.087	0.094	0.157

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Based on Model 5, as a country moves from a non-business leader to one with business experience, the depth of PTA measured by the additive index increases by 0.416 points, on average, controlling for the covariates. The magnitude of the effect of business experience on the additive index of depth is in between a half and a third of a standard deviation (SD = 1.06).

Once again, I interact the business variable with the capital abundance indicator to explore effect heterogeneity. As Fig. 3 shows, the marginal effect of business experience on PTA depth is positive in both labor- and capital-abundant countries, but larger and statistically significant only for the latter. Leaders with business experience in capital abundant economies sign deeper PTAs than their business colleagues who participated in the job market in a capital scarce economy. The substantive effect is in the neighborhood of 85% of a standard deviation for the additive index of depth.

Figure 3: The Effect of Business Experience Conditional on Capital Abundance - Rasch Index (left) and Additive Index (right)



6 Endogeneity concerns

While the correlation between business experience and PTA formation and PTA depth is robust, an alternative explanation may lead to observationally equivalent outcomes. Neither leaders' selection into their occupation (business) nor their selection into office happen in a vacuum. As in any study on leader-level characteristics, three specific endogeneity concerns arise (Krcmaric et al., 2020). To begin with, individuals choose their own career path. One may suspect that leadership abilities explain not only why certain people become successful managers, but also why they gain political power and then undertake successful international economic cooperation policies. Hence, an unobservable trait - leadership ability - might confound the observable correlation between business leaders and trade policy. Second, the timing of leadership transitions is not random. If business leaders are more likely to gain or remain in office when partially unobservable factors, such as the state of the economy or the consolidation of democratic norms, favor international trade cooperation, then the country's underlying conditions would be the true cause of both leaders' standing in office and the signing of PTAs. In other words, the fundamental source of underlying preferences over trade policy might lie within a country's selectorate rather than its leaders. A related issue concerns the leader selection process proper. As leaders come to power through a

competitive process influenced by a multitude of powerful actors, the process through which the next leader is selected is not random, even if the timing of the transition is. hence, we face three methodological challenges, which can be grouped under two headings - selection into business experience and selection into office.

6.1 Self-selection into occupation

Clearly, (future) leaders typically self-select into occupational background experiences. This makes it difficult to determine whether the observed relationship is driven by the individuals' actual experiences or whether individuals simply select into occupations that reflect their prior characteristics (Krcmaric et al., 2020). If the latter, professional experiences might be helpful to predict behavior, but they are not the true source of causality. While this problem is pervasive in leaders' studies, it is often only briefly acknowledged and then assumed away suggesting that both self-selection and socialization are at work (e.g. Fuhrmann, 2020). Indeed, to the best of my knowledge, the only published paper in the political science literature which explicitly tackles this issue, albeit from a qualitative perspective, is that of Gift and Krcmaric (2017).

In a nutshell, the specific problem at hand can be restated as follows. Leadership ability (or other unobservable personal traits) may affect the probability of: first, becoming a businessperson; second, becoming the Head of the Executive; and, third, of engaging in successful international cooperation. A possible solution is to rely on a plausibly exogenous source of variation that affects a (future) leader's decision to start a business career without directly affecting a country's trade policy when the former businessperson actually becomes the the Head of the Executive. This is, essentially, the realm of instrumental variable estimation. To find suitable instruments for individual leaders' business experience, I rely on a number of family background variables in the original LEAD dataset. The idea underlying such identification strategy is directly borrowed from a vast literature in labor economics concerned with estimating the income return to schooling (Uusitalo, 1999; Hou et al., 2020). The goal in such studies is to correct for endogeneity by including exogenous variables that affect schooling, but not earnings. To do so, scholars often rely on mother and

father's educational background. Mutatis mutandis, I would need to find a set of instruments that affect the probability of becoming a businessperson but are not directly related with a country's trade policy decades later. I propose to utilize the following variables: the leaders' fathers' business experience, their mothers' occupation status, their royalty status, their family's wealth level when they grew up, and their family parental stability (i.e. whether their parents were married or not). Each variable is binary. While the original dataset does not provide an explicit variable for the father's business experience, it contains a short description of the father's occupation. As such, I construct the father's business experience dummy by coding those occupation descriptions that contain the word "business".[11] This thus-constructed variable is plausibly exogenous to the individual country's structural PTA equation, yet it is likely to be correlated with a leader's business experience in the reduced-form equation. An important aspect is that these variables capture socio-economic dimensions of the leader's family *at the time when he or she grew up*. Hence, their realizations materialized prior to their decision to venture into the business world and much prior to their decision to run for office.

Table 4 shows the results from IV-2SLS estimation. In the Appendix I show the results using the bivariate probit for the binary dependnet variable. Since using multiple instruments can improve precision, I instrument a leader's business experience with all the variables mentioned above when possible. Unfortunately, though, the Sargan test of over-identification yields a statistically significant *p-value* in the first three models.[12] As such, in Model 1-3 I instrument the endogenous regressor only with the father's business experience, arguably the most relevant instrument.

As we can see, the F statistic is above 10, thus satisfying the Staiger and James (1997)'s rule of thumb value for one endogenous regressor and one instrument. For the case with multiple instruments, instead, we have to rely on the critical value for one regressor and five instruments in Stock and Yogo (2002). The Kleibergen-Paap F statistics (which is equivalent to the standard F statistics

[11] More specifically, the father's business variables takes the value of 1 if any of the following is coded under father's occupation: "business" "Business" "Business Owner" "Business; landowner" "Business/Journalist" "businessman" "Businessman" "Businessman; Landowner" "Bussiness" "Businessman (boating)".

[12] This is not surprising considering that a rejection of the null hypothesis indicates one of two problems: either some of the instruments are invalid or the model is misspecified. Since the first three models contain fewer variables than the fully specified model, they are by construction somehow misspecified .

in the case of one instrument) across all specifications is decidedly above 10.83, thus rejecting the null that the worst-case (maximum) relative bias of the 2SLS estimator is greater than 10% (with respect to the OLS bias). The Hansen J statistics further suggest the over-identifying restrictions to be valid. As a robustness check, I re-estimate the models using Limited Information Maximum Likelihood (LIML) which is more robust to weak instruments (Stock and Yogo, 2002). The business experience variable remains substantively and statistically significant across all specification. As it is usually the case in the labor economics literature on the return to schooling the 2SLS estimates are larger than the comparable OLS estimates. Reassuringly, the confidence intervals for the instrumented models contain the OLS estimates, thus suggesting that the larger IV estimates are due to imprecise estimation rather than misspecification.[13]

Table 4: Instrumental Variable Regression - PTA Count

	IV	IV	IV	2SLS	2SLS	2SLS
Business	1.897***	1.954**	1.672**	1.699*	1.800*	1.898**
	(0.399)	(0.610)	(0.373)	(0.547)	(0.603)	(0.617)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	101.68	97.01	17.87	16.20	16.47
Sargan's test (p-value)				0.59	0.52	0.40
N	7915	7729	7157	4468	4355	4355

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 18.37, 10.83, 6.77, 5.25.

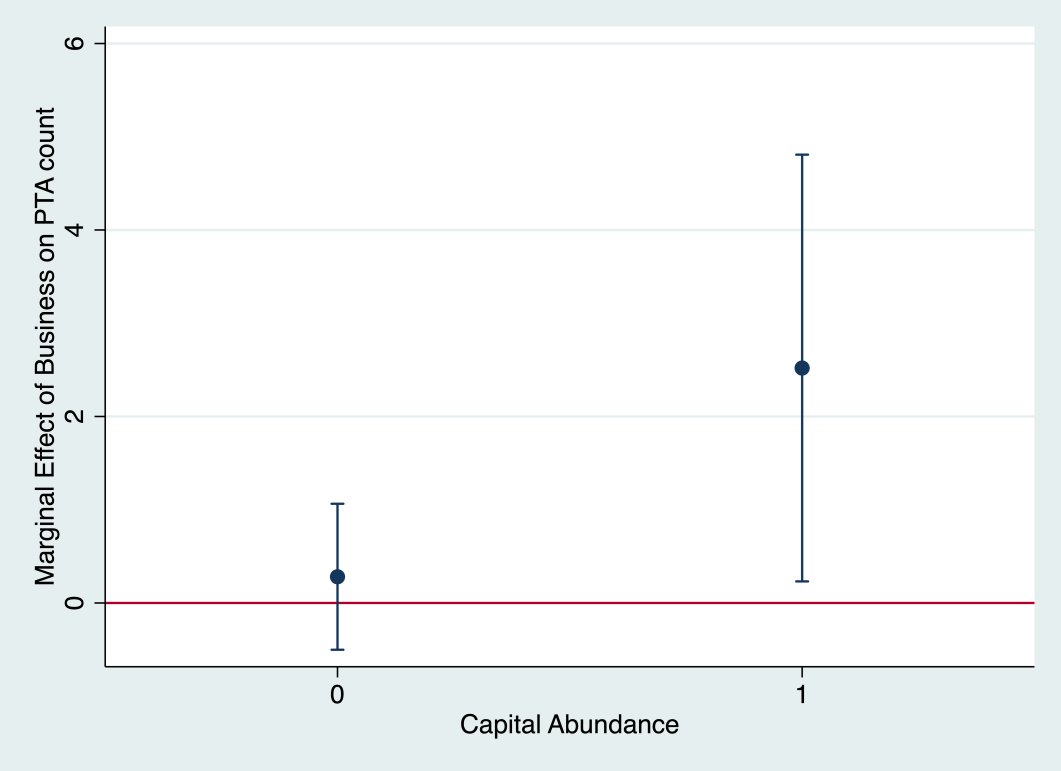
To test hypothesis 1a in an instrumental variable framework, I re-estimate Model 6 on the full sample (including EU countries) and interact business experience with the capital abundance indicator.[14] Fig. 4 presents the results graphically. Once again, the coefficient for business experience

[13] I re-estimated all models with OLS to compare the coefficients.

[14] The full bivariate probit model with instrumental variables and interaction does not converge. Hence, I present the graphical results only for the interactive 2SLS model.

is positive in both cases. Nevertheless, it is larger and statistically significant only for leaders who entered the job market in a capital abundant country. Those leaders are associated with an additional 2.5 PTAs per year, on average.

Figure 4: The Effect of Business Experience Conditional on Capital Abundance - Number of PTAs



I follow the same instrumental variable approach to test hypotheses 2 and 2a. As before, the diagnostic statistics do not detect any major issue in the statistical model. The coefficient for business experience is larger than in the OLS models and statistically significant across all specifications. Finally, Fig. 5 shows graphically the results for the conditional hypothesis using the full model and including the EU countries. After accounting for endogeneity, the exogenous part of business experience is still associated with an increase in the average depth of PTAs signed, mostly due to businesspersons in capital abundant economies.

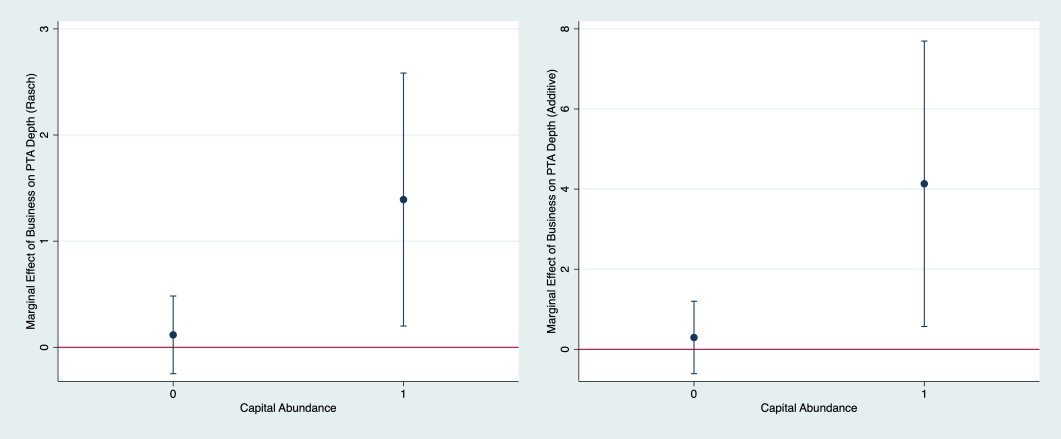
Table 5: Instrumental Variables - PTA Depth (Additive)

	IV	IV	IV	2SLS	2SLS	2SLS
Business	2.396***	2.881***	1.875*	2.213*	2.246*	2.519**
	(0.785)	(1.067)	(0.649)	(1.039)	(1.042)	(1.137)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	95.78	97.01	17.87	18.18	18.25
Sargan's test (p-value)				0.60	0.65	0.39
N	7915	8278	7157	4468	4468	4468

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 18.37, 10.83, 6.77, 5.25.

Figure 5: The Effect of Business Experience Conditional on Capital Abundance - Rasch Index (left) and Additive Index (right)



While an instrumental variable approach combined with the appropriate covariates and/or fixed effects should increase our confidence in the causal nature of the relationship, such strategy is not without drawbacks. To begin with, while the instruments are plausibly exogenous, it is possible to argue otherwise. For example, a country's characteristics may be related to the probability that any individual will be born in a family with the characteristics captured by the instruments. In turn, given historical path-dependency, those characteristics affects a country's trade policy. As such,

the instruments would not be uncorrelated with the error term in the first-stage equation and the final results would be biased. A second issue is that the family background characteristics captured by the instruments may be directly related to the outcome of interest by, for example, affecting the (future) leaders' opinion towards free trade, thus also violating the exogeneity assumption. Finally, we should bear in mind that 2SLS yields only a weighted-average local causal effects (LATE) across all instrument-specific compliant sub-populations. Loosely speaking, then, the results in Table 5 refer to specific groups of business leaders in the dataset, i.e. those individuals who chose a business career because of their family characteristics (or, in the first three models, their father's occupation) and who would have chosen a different career path had those family characteristics been different. Bearing these limitations in mind, such approach is superior to ignoring the issue of self-selection into occupational experience.

6.1.1 Self-selection into office

Beside professional self-selection, the possibility that preexisting political and economic circumstances may influence leadership transitions is arguably the most pressing endogeneity concern. Indeed, at least in developing countries at the sub-national level, there is empirical evidence that businesspersons run for office in a strategic fashion (Li et al., 2006; Gehlbach et al., 2010). While to the best of my knowledge we lack empirical cross-sectional evidence showing a similar behavior at the national level, one can plausibly expect a businessperson's decision to run for office to be affected by political and economic conditions. In particular, during a period of perceived economic uncertainty the selectorate might opt for business candidates because of their perceived ability to run the country "like a business", while at the same time not being "career politicians". Alternatively, it is possible that candidates with business experience strategically wait for overall good economic conditions to reap the benefits once in office. In any case, endogeneity concerns loom large. As a result, the business experience variable might be capturing the effect of (partially) unobservable dynamics that are orthogonal to the effect of the individual leader's trade preferences. Moreover, even if the timing ("when" a leaders becomes the head of the executive) is exogenous,

the selection of the next leader (the "who" becomes the Head of the executive) is endogenous to the political process (Gift and Krcmaric, 2017).

I deal with endogenous selection as follows. To address the timing of leadership transitions, I adopt a technique that relies on plausibly exogenous leadership transitions due to the previous leaders' natural death or serious illness while in office (Jones and Olken, 2005; Besley et al., 2011; Gift and Krcmaric, 2017; Barceló, 2020). In practice, I subset the sample to include only leaders who assumed power immediately after their predecessors suddenly stepped down due to natural illness or died of natural causes. In such cases, the timing of the power transfer from one leader to the next should be uncorrelated with the underlying economic and political conditions. Moreover, in order to ease concerns about the selection process being endogenous to political and economic conditions, I follow Gift and Krcmaric (2017) and further subset the dataset to those transitions that took place via "regular" means, as defined in the Archigos dataset (Goemans et al., 2009). Hence, I am excluding those leaders who come into power as a result of an "irregular" (e.g. coup) or "foreign-imposed" processes, which are likely to be related to political-economic developments. In particular, I rely on the datasets constructed by Jones and Olken (2005) and Besley et al. (2011). The thus-constructed sample includes 88 as-if random transitions for which I have biographical data on the successor, after excluding two transitions in EU members. Since it is the timing of the leadership transition, rather than transition itself, to be as-if random I utilize only the first two years after the transition takes place. In the Appendix, I show that the results remain are robust to different time horizons.

The small number of cases does not allows us to test the conditional hypotheses. Moreover, given the characteristics and small size of the new sample, I have to make a few modifications to tests hypotheses 1 and 2. First, I cannot include country fixed-effects anymore since the independent variable is rarely changing. As a second-best option, then, I include random effects. Second, I also exclude trade openness since it is missing for more than 50% of leaders' transitions. Third, I do not include year fixed effects since very few as-if random transitions temporally overlap, thus limiting the time dimension to a few data points. Finally, given the small sample size, the more

fully specified logit models are also non-converging. Again, as a second best option I rely on a linear probability model (see Appendix).

Overall, leveraging as-if random regular transitions should increase our confidence in the causal nature of the relationship by minimizing concerns that leaders are being selected because of their professional background. Nevertheless, we should be explicit about some potential drawbacks. First of all, it is not the transition to be exogenous, but its timing. In other words, the occupational prior experience of the successor may not be random. Second, such strategy rests on the assumption that the general political and economic environment does not change as a result of the leadership transition in and of itself. Finally, the exogeneity of the timing of the transition with respect to the determinants of PTA formation would be called into question if economic and political circumstances were affecting the probability of natural death or serious illness. Given these limitations, we should interpret the empirical results with caution. Table 6 and 7 show the results for the number and depth of PTAs. As we can see, business experience remains statistically and substantively significant across all specifications, and larger in size than in the original models.

Table 6: Poisson Random Effect Models - As-if Random Transitions (2 Years)

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	4.130***	3.944***	4.032***	3.015***	3.809***
	(1.943)	(1.837)	(1.822)	(1.189)	(1.806)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	176	170	169	138	138
χ^2	53.789	56.341	66.195	76.428	264.761
Log Likelihood	-98.605	-97.604	-95.135	-82.859	-75.277

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: OLS Models - Additive Index - As-if Random Transitions (2 Years)

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	0.602**	0.613**	0.608**	0.551**	0.560**
	(0.247)	(0.250)	(0.251)	(0.250)	(0.263)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	176	170	169	138	138
χ^2	5347.639	685.169	1775.444	162.691	483.570
Log Likelihood	-210.980	-204.445	-201.799	-169.511	-167.196

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

7 Robustness checks

Notwithstanding the strength of the results, it is important to investigate the implications of different modeling strategies and choices. In Appendix A, I replicate two extant studies - Mansfield and Milner (2012, 2018) - of PTA formation, which use different units of analysis. In Appendix B, I show the regression results underlying all tables and figures in the paper. In Appendix C, I show the results for all the robustness checks cited, but not shown, throughout the paper. The results are in the order in which they were referenced in the main text and/or footnotes. In Appendix D, I run some placebo tests. First, I test the main hypotheses using business experience in the *public* (e.g. state owned) sector. I repeat the placebo exercise in the two replication studies in Appendix A as well. As expected, such experience is not positively correlated with neither PTA formation nor PTA design across most models. Second, I use the year of signature of Human Rights treaties collected from UNHR treaty bodies website. There is no specific reason to expect leaders with business experience to be more likely to sign non-economic agreements. Indeed, I do not find any systematic relationship between the two variables.

8 Conclusion

This study has sought to explore a neglected aspect of international economic cooperation by examining the effect of Heads of the Executive's professional experience on trade policy. The findings demonstrates that one of the most widely researched phenomenon in international political economy is influenced by a factor overlooked in previous formal and empirical research: the professional business experience of political leaders. I underlined and suggested two channels through which business experience can affect a (future) leader's attitude towards trade liberalization - socialization effects and shared material interests with one's professional network. The empirical findings provide systematic support for a basic intuition often suggested by practitioners and observers alike, but rarely acknowledged among scholars of IPE: individuals make economic policy, and it matters who these individuals are and the web of experiences, beliefs, interests and perceptions that they bring with them.

References

Allee, T. and Elsig, M. (2017). Veto players and the design of preferential trade agreements. *Review of International Political Economy*, 24(3):538–567.

Allee, T., Elsig, M., and Lugg, A. (2017). Is the european union trade deal with canada new or recycled? a text-as-data approach. *Global Policy*, 8(2):246–252.

Baccini, L. (2019). The economics and politics of preferential trade agreements. *Annual Review of Political Science*, 22:75–92.

Baccini, L. and Dür, A. (2012). The new regionalism and policy interdependence. *British Journal of Political Science*, 42(1):57–79.

Baccini, L., Dür, A., and Elsig, M. (2015a). The politics of trade agreement design: Revisiting the depth–flexibility nexus. *International Studies Quarterly*, 59(4):765–775.

Baccini, L., Dür, A., and Haftel, Y. Z. (2015b). Imitation and innovation in international governance: The diffusion of trade agreement design. *Trade cooperation: The purpose, design and effects of preferential trade agreements*, pages 167–94.

Baier, S. L. and Bergstrand, J. H. (2004). Economic determinants of free trade agreements. *Journal of international Economics*, 64(1):29–63.

Barceló, J. (2020). Are western-educated leaders less prone to initiate militarized disputes? *British Journal of Political Science*, 50(2):535–566.

Beach, B. and Jones, D. B. (2016). Business as usual: Politicians with business experience, government finances, and policy outcomes. *Journal of Economic Behavior & Organization*, 131:292–307.

Besley, T. and Coate, S. (1997). An economic model of representative democracy. *The quarterly journal of economics*, 112(1):85–114.

Besley, T., Montalvo, J. G., and Reynal-Querol, M. (2011). Do educated leaders matter? *The Economic Journal*, 121(554):F205–227.

Bhagwati, J. (2008). *Termites in the trading system: How preferential agreements undermine free trade*. Oxford University Press.

Boix, C., Miller, M., and Rosato, S. (2013). A complete data set of political regimes, 1800–2007. *Comparative political studies*, 46(12):1523–1554.

Bolt, J. and Van Zanden, J. L. (2014). The maddison project: collaborative research on historical national accounts. *The Economic history review*, 67(3):627–651.

Bush, G. W. (2011). *Decision points*. Broadway Books.

Carey, J. M. (2007). Competing principals, political institutions, and party unity in legislative voting. *American Journal of Political Science*, 51(1):92–107.

Carter, D. B. and Signorino, C. S. (2010). Back to the future: Modeling time dependence in binary data. *Political Analysis*, 18(3):271–292.

Chase, K. A. (2003). Economic interests and regional trading arrangements: The case of nafta. *International Organization*, 57(1):137–174.

Cheibub, J. A., Gandhi, J., and Vreeland, J. R. (2010). Democracy and dictatorship revisited. *Public choice*, 143(1):67–101.

Crump, L. (2006). Global trade policy development in a two-track system. *Journal of International Economic Law*, 9(2):487–510.

Damro, C. (2007). Eu delegation and agency in international trade negotiations: a cautionary comparison. *JCMS: Journal of Common Market Studies*, 45(4):883–903.

Downs, A. et al. (1957). An economic theory of democracy.

Dreher, A., Lamla, M. J., Lein, S. M., and Somogyi, F. (2009). The impact of political leaders' profession and education on reforms. *Journal of comparative economics*, 37(1):169–193.

Dür, A. (2006). Assessing the eu's role in international trade negotiations. *european political science*, 5(4):362–376.

Dür, A. (2007). Eu trade policy as protection for exporters: The agreements with mexico and chile. *JCMS: Journal of Common Market Studies*, 45(4):833–855.

Dür, A., Baccini, L., and Elsig, M. (2014). The design of international trade agreements: Introducing a new dataset. *The Review of International Organizations*, 9(3):353–375.

Ellis, C. M., Horowitz, M. C., and Stam, A. C. (2015). Introducing the lead data set. *International Interactions*, 41(4):718–741.

Feenstra, R. C., Inklaar, R., and Timmer, M. P. (2015). The next generation of the penn world table. *American economic review*, 105(10):3150–82.

Fernandez, R. and Portes, J. (1998). Returns to regionalism: An analysis of nontraditional gains from regional trade agreements. *The World Bank Economic Review*, 12(2):197–220.

Fuhrmann, M. (2020). When do leaders free-ride? business experience and contributions to collective defense. *American Journal of Political Science*, 64(2):416–431.

Gehlbach, S., Sonin, K., and Zhuravskaya, E. (2010). Businessman candidates. *American Journal of Political Science*, 54(3):718–736.

Gift, T. and Krcmaric, D. (2017). Who democratizes? western-educated leaders and regime transitions. *Journal of Conflict Resolution*, 61(3):671–701.

Goemans, H. E., Gleditsch, K. S., and Chiozza, G. (2009). Introducing archigos: A dataset of political leaders. *Journal of Peace research*, 46(2):269–283.

Gourdon, J., Maystre, N., and De Melo, J. (2008). Openness, inequality and poverty: Endowments matter. *Journal of International Trade and Economic Development*, 17(3):343–378.

Gowa, J. and Mansfield, E. D. (1993). Power politics and international trade. *American political science review*, 87(2):408–420.

Gray, J. and Kucik, J. (2017). Leadership turnover and the durability of international trade commitments. *Comparative Political Studies*, 50(14):1941–1972.

Green, L. and Sebenius, J. K. (2014). Tommy koh and the us-singapore free trade agreement: A multi-front'negotiation campaign'. *Harvard Business School NOM Unit Working Paper*, (15-053).

Hayo, B. and Neumeier, F. (2016). Political leaders' socioeconomic background and public budget deficits: Evidence from oecd countries. *Economics & Politics*, 28(1):55–78.

Henisz, W. J. (2000). The institutional environment for economic growth. *Economics & Politics*, 12(1):1–31.

Hicks, R. and Kim, S. Y. (2012). Reciprocal trade agreements in asia: credible commitment to trade liberalization or paper tigers? *Journal of East Asian Studies*, 12(1):1–29.

Hollyer, J. R. and Rosendorff, B. P. (2012). Leadership survival, regime type, policy uncertainty and pta accession. *International Studies Quarterly*, 56(4):748–764.

Hou, C., Tian, X., and Wang, S. (2020). A bayesian analysis of parental education as instruments in estimating the return to schooling. *Applied Economics Letters*, 27(2):113–117.

Jochimsen, B. and Thomasius, S. (2014). The perfect finance minister: Whom to appoint as finance minister to balance the budget. *European Journal of Political Economy*, 34:390–408.

Jones, B. F. and Olken, B. A. (2005). Do leaders matter? national leadership and growth since world war ii. *The Quarterly Journal of Economics*, 120(3):835–864.

Kim, S. Y. and Manger, M. S. (2017). Hubs of governance: path dependence and higher-order effects of preferential trade agreement formation. *Political Science Research and Methods*, 5(3):467–488.

Krcmaric, D., Nelson, S. C., and Roberts, A. (2020). Studying leaders and elites: the personal biography approach. *Annual Review of Political Science*, 23:133–151.

Li, H., Meng, L., and Zhang, J. (2006). Why do entrepreneurs enter politics? evidence from china. *Economic Inquiry*, 44(3):559–578.

Maggi, G. and Rodriguez-Clare, A. (1998). The value of trade agreements in the presence of political pressures. *Journal of Political Economy*, 106(3):574–601.

Maggi, G. and Rodriguez-Clare, A. (2007). A political-economy theory of trade agreements. *American Economic Review*, 97(4):1374–1406.

Manger, M. (2005). Competition and bilateralism in trade policy: the case of japan's free trade agreements. *Review of International Political Economy*, 12(5):804–828.

Manger, M. S. (2009). *Investing in protection: The politics of preferential trade agreements between north and south*. Cambridge University Press.

Mansfield, E., Milner, H. V., and Pevehouse, J. C. (2007). Vetoing co-operation: The impact of veto players on preferential trading arrangements. *British Journal of Political Science*, 37(3):403.

Mansfield, E. D. (1998). The proliferation of preferential trading arrangements. *Journal of Conflict resolution*, 42(5):523–543.

Mansfield, E. D. and Milner, H. V. (2012). *Votes, vetoes, and the political economy of international trade agreements*. Princeton University Press.

Mansfield, E. D. and Milner, H. V. (2018). The domestic politics of preferential trade agreements in hard times. *World trade review*, 17(3):371–403.

Mansfield, E. D., Milner, H. V., and Pevehouse, J. C. (2008). Democracy, veto players and the depth of regional integration. *World Economy*, 31(1):67–96.

Mansfield, E. D., Milner, H. V., and Rosendorff, B. P. (2002). Why democracies cooperate more: Electoral control and international trade agreements. *International Organization*, 56(3):477–513.

Mansfield, E. D. and Reinhardt, E. (2003). Multilateral determinants of regionalism: The effects of gatt/wto on the formation of preferential trading arrangements. *International organization*, 57(4):829–862.

Marshall, M. G., Jaggers, K., and Gurr, T. R. (2010). Polity iv project: Political regime characteristics and transitions, 1800–2010.

Melitz, M. (2003). The impact of trade on aggregate industry productivity and intra-industry reallocations. *Econometrica*, 71(6):1695–1725.

Meunier, S. (2022). Trading voices. In *Trading Voices*. Princeton University Press.

Mikosch, H. F. and Somogyi, F. (2009). Personality and policy: the impact of political leaders' education and profession on public finance. *Zurich: KOF Swiss Economic Institute*.

Milner, H. (1992). International theories of cooperation among nations: Strengths and weaknesses. *World politics*, 44(3):466–496.

Milner, H. V. and Rosendorff, B. P. (1996). Trade negotiations, information and domestic politics: The role of domestic groups. *Economics & Politics*, 8(2):145–189.

Milner, H. V. and Rosendorff, B. P. (1997). Democratic politics and international trade negotiations: Elections and divided government as constraints on trade liberalization. *Journal of Conflict resolution*, 41(1):117–146.

Mölders, F. (2016). On the path to trade liberalisation: Political regimes in trade negotiations. *The World Economy*, 39(7):890–924.

Molotch, H. and Logan, J. (1984). Tensions in the growth machine: Overcoming resistance to value-free development. *Social problems*, 31(5):483–499.

Neumeier, F. (2018). Do businessmen make good governors? *Economic Inquiry*, 56(4):2116–2136.

Peterson, S. A. (1992). Workplace politicization and its political spillovers: A research note. *Economic and Industrial Democracy*, 13(4):511–524.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual review of psychology*, 49(1):65–85.

Postnikov, E. and Bastiaens, I. (2020). Social protectionist bias: The domestic politics of north–south trade agreements. *The British Journal of Politics and International Relations*, 22(2):347–366.

Raess, D., Dür, A., and Sari, D. (2018). Protecting labor rights in preferential trade agreements: The role of trade unions, left governments, and skilled labor. *The review of international organizations*, 13(2):143–162.

Roederer-Rynning, C. and Kallestrup, M. (2017). National parliaments and the new contentiousness of trade. *Journal of European Integration*, 39(7):811–825.

Spilimbergo, A., Londoño, J. L., and Székely, M. (1999). Income distribution, factor endowments, and trade openness. *Journal of development Economics*, 59(1):77–101.

Staiger, D. and James, H. (1997). Stock. 1997."instrumental variables with weak instruments.". *Econometrica*, 65(3):557–86.

Stock, J. H. and Yogo, M. (2002). Testing for weak instruments in linear iv regression.

Stone, C. N. (1998). Regime analysis and the study of urban politics, a rejoinder. *Journal of Urban Affairs*, 20(3):249–260.

Szakonyi, D. (2020). *Politics for profit: business, elections, and policymaking in Russia*. Cambridge University Press.

Uusitalo, R. (1999). Return to education in finland. *Labour Economics*, 6(4):569–580.

Witko, C. and Friedman, S. (2008). Business backgrounds and congressional behavior. In *Congress & the Presidency: A Journal of Capital Studies*, volume 35, pages 71–86. Taylor & Francis.

Online Appendix

September 22, 2022

1 Appendix A: Replication Studies

1.1 Mansfield and Milner 2012 Chapter 3 - Based on Mansfield 1998

The unit of analysis is the year and the dependent variable is the total number of PTAs signed. I extend the dataset to 2009 following as close as possible the operationalizations in the original article. I augment the specification with the proportion of leader with business experience in the system. For the sake of space, I do not show the remaining coefficients. I report the replication for the main models of the study (Table 3.2, p. 84) Model 1 and 2 show the results for the proportion of leaders with business experience. As a placebo test, Model 3 and 4 show the results for the proportion of leaders with business experience in the public sector.

Table 1: Replication of Table 3.2 (Mansfield and Milner, 2012)

	Model 1	Model 2	Model 3	Model 4
Business	5.940*	6.011**		
	(3.196)	(2.797)		
Business (Public)			-15.370*	-5.355
			(8.810)	(8.198)
All controls	✓	✓	✓	✓
N	56	56	56	56
Log Likelihood	-107.387	-105.381	-107.703	-106.466
χ^2	280.333	348.276	260.713	298.894

Negative binomial regression estimates.

1.1.1 Mansfield and Milner 2018

The original dataset already covers the period under study, hence I make no modification. I show the replication results of the models using directed dyads (Table 1 in the original article). The results using undirected dyads are very similar and available upon request. Given the (directed) dyadic structure of the dataset, I test the main argument using two different versions of the independent variable. In the first case, the business experience variable takes the value of 1 if both countries' leaders have business experience. In the second case, business experience is coded as 1 if a business leader is the Head of government in either one of the two countries. As before, I

repeat the analysis using business experience in the public sector as a placebo. To economize on space, I do not show the remaining coefficients.

Table 2: Replication of Table 1 - Both countries with business leaders

	(1) Demo (20 cutoff) RegionA FE	(2) Demo (20 cutoff) Country FE	(3) Demo (16 cutoff) RegionA FE	(4) Demo (20 cutoff) Country FE
Business Experience in both	0.307***	0.434***	0.328***	0.449***
	(0.085)	(0.087)	(0.084)	(0.087)
All controls	✓	✓	✓	✓
Clusters	29394.000	28598.000	29394.000	28598.000
Log Likelihood	-43172.117	-40350.556	-43277.210	-40425.547
JointSig	0.000	0.000	0.000	0.000
N	1032434	1020183	1032434	1020183

Entries are logistic regression coefficients. Dyads-clustered standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 3: Replication of Table 1 - At least one country with business leader

	(1) Demo (20 cutoff) RegionA FE	(2) Demo (20 cutoff) Country FE	(3) Demo (16 cutoff) RegionA FE	(4) Demo (16 cutoff) Country FE
Business Experience in at least 1	0.084***	0.134***	0.087***	0.141***
	(0.031)	(0.032)	(0.031)	(0.032)
All controls	✓	✓	✓	✓
Clusters	29394.000	28598.000	29394.000	28598.000
LogLikelihood	-43173.643	-40352.796	-43279.151	-40427.735
JointSig	0.000	0.000	0.000	0.000
N	1032434	1020183	1032434	1020183

Entries are logistic regression coefficients. Dyads-clustered standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 4: Replication of Table 1 - Both countries with business (public) leaders

	(1) Demo (20 cutoff) RegionA FE	(2) Demo (20 cutoff) Country FE	(3) Demo (16 cutoff) RegionA FE	(4) Demo (16 cutoff) Country FE
Business Experience (public) in both	0.496	0.072	0.435	0.094
	(0.417)	(0.434)	(0.423)	(0.430)
All controls	✓	✓	✓	✓
Clusters	29394.000	28598.000	29394.000	28598.000
LogLikelihood	-43177.084	-40360.477	-43283.062	-40436.099
JointSig	0.000	0.000	0.000	0.000
N	1032434	1020183	1032434	1020183

Entries are logistic regression coefficients. Dyads-clustered standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 5: Replication of Table 1 - At least one country with business (public) leader

	(1) Demo (20 cutoff) RegionAFE	(2) Demo (20 cutoff) CountryFE	(3) Demo (16 cutoff) RegionAFE	(4) Demo (16 cutoff) CountryFE
Business Experience (public) in at least 1	0.181***	-0.029	0.167***	-0.007
	(0.051)	(0.060)	(0.051)	(0.060)
All controls	✓	✓	✓	✓
Clusters	29394.000	28598.000	29394.000	28598.000
LogLikelihood	-43172.198	-40360.382	-43278.871	-40436.116
JointSig	0.000	0.000	0.000	0.000
N	1032434	1020183	1032434	1020183

Entries are logistic regression coefficients. Dyads-clustered standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

2 Appendix B: Regression results underlying all tables and figures in the paper

Table 6: Logit Fixed Effect Models (Table 2)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.383***	2.277***	2.025***	1.473**	1.472**	1.505**
	(0.332)	(0.317)	(0.288)	(0.249)	(0.253)	(0.279)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
t, t^2, t^3	✓	✓	✓	✓	✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7705	7526	6932	4439	4324	4249
Log Likelihood	-3687.872	-3626.083	-3360.624	-2359.103	-2243.081	-2012.511
AIC	7387.743	7266.166	6737.249	4742.207	4520.162	4139.023

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Interaction Fixed Effect Models (Fig. 2)

	Count	Binary
Business	1.118	1.271
	(0.129)	(0.295)
Capital Abundance	0.719	0.531
	(0.154)	(0.221)
Business * Capital Abundance	1.568**	1.695
	(0.320)	(0.626)
All controls	✓	✓
Country + Year FE	✓	✓
N	3403	3244
AIC	9220.375	3250.802
Log Likelihood	-4553.187	-1568.401

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Interaction Fixed Effect Models (Fig. 3)

	Rasch	Additive
Business	1.092*	1.298*
	(0.055)	(0.191)
Capital Abundance	1.135	0.990
	(0.100)	(0.152)
Business * Capital Abundance	1.193**	1.918***
	(0.102)	(0.447)
All controls	✓	✓
Country + Year FE	✓	✓
N	3512	3512
R^2	0.289	0.302
adj. R^2	0.250	0.264

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Interaction IV Fixed Effect Models (Fig. 4)

	Model 1
Business	0.264
	(0.387)
Business * Capital Abundance	2.027*
	(1.184)
Capital Abundance	-0.715**
	(0.323)
All controls	✓
Country + Year FE	✓
Instruments	All
Kleibergen-Paap F (first stage)	15.15
Sargan's test (p-value)	0.06
N	3402

Robust Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Interaction IV Fixed Effect Models - Depth (Fig. 5)

	Model 1	Model 2
Business	0.117	0.296
	(0.190)	(0.470)
Business * Capital Abundance	1.275**	3.837**
	(0.630)	(1.866)
Capital Abundance	-0.162	-0.745
	(0.167)	(0.491)
All controls	✓	✓
Country + Year FE	✓	✓
Instruments	All	All
Kleibergen-Paap F (first stage)	7.52	7.53
Sargan's test (p-value)	0.37	0.07
N	3402	3402

Robust Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

3 Appendix C: Robustness checks as mentioned in the paper

Table 11: Negative Binomial Random Effects - PTA Count

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.091***	2.055***	1.806***	1.556***	1.373***	1.349***
	(0.146)	(0.144)	(0.127)	(0.117)	(0.107)	(0.102)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	8465	8278	7701	4971	4842	4842
χ^2	111.751	105.883	182.162	177.521	360.180	631.416
Log Likelihood	-6232.763	-6167.237	-5775.615	-4410.983	-4142.036	-3907.739

Exponentiated coefficients. Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 12: Poisson Fixed Effect Models (Replicating Table 1 with Entry into force date)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.471***	2.400***	1.953***	1.441***	1.329**	1.341**
	(0.318)	(0.311)	(0.242)	(0.193)	(0.170)	(0.181)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7705	7528	6932	4413	4302	4302
χ^2	49.423	46.350	77.891	134.647	264.832	32612.640
Log Likelihood	-4064.206	-4011.056	-3688.177	-2714.644	-2565.849	-2370.153

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 1: The Effect of Business Experience Conditional on Capital Abundance - Number of PTAs (Replicating Fig 2 with Entry into force date)

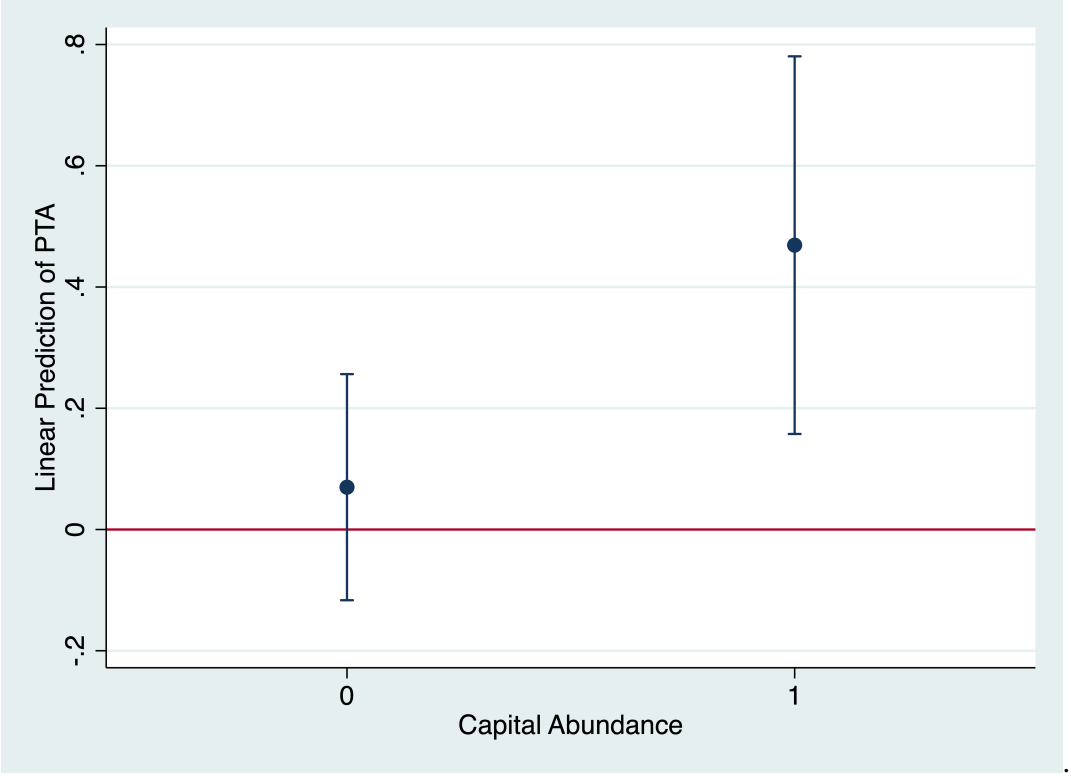


Table 13: OLS Models - Additive Index (Replicating Table 3 with Entry into force date

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	0.541***	0.537***	0.476***	0.347**	0.308**	0.306**
	(0.120)	(0.121)	(0.116)	(0.142)	(0.139)	(0.136)
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7915	7731	7157	4469	4469	4469
R^2	0.076	0.077	0.091	0.122	0.136	0.217
Adj. R^2	0.054	0.055	0.069	0.092	0.105	0.181

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 2: The Effect of Business Experience Conditional on Capital Abundance - Additive Index (Replicating Fig 3 with Entry into force date)

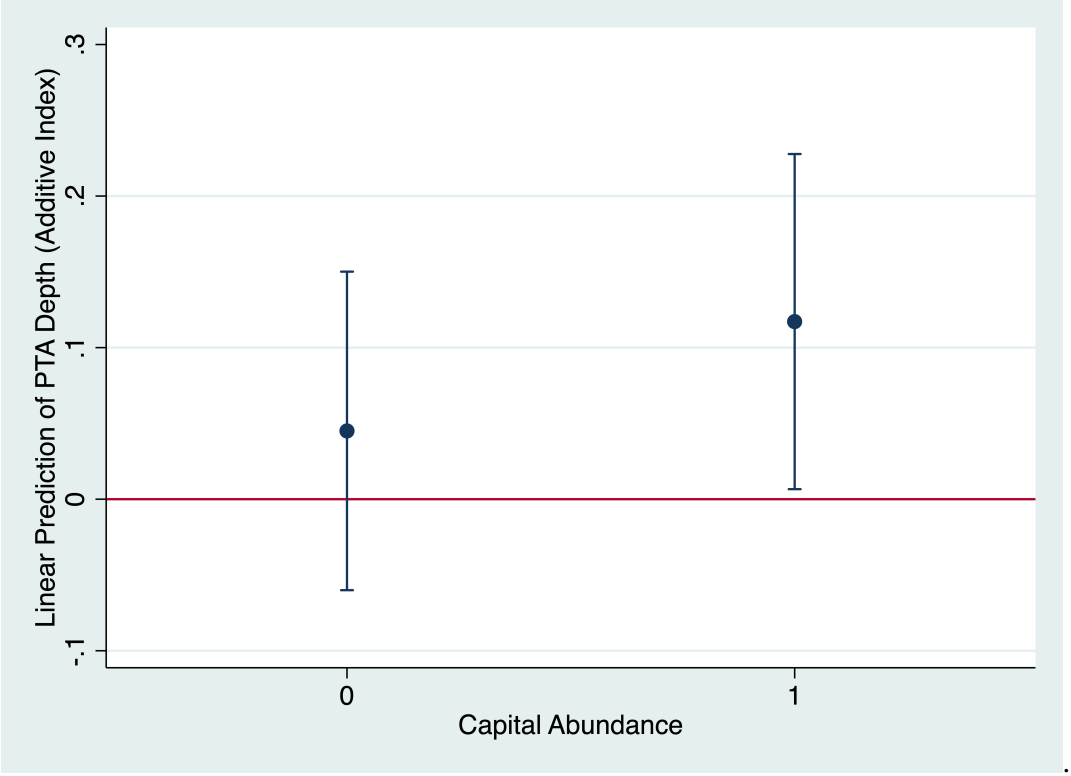


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Table 14: Poisson Fixed Effects Models - Beginning of Negotiation Year (Mölders, 2016)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	1.388***	1.394***	1.150***	0.485	0.620	0.739**
	(0.374)	(0.364)	(0.368)	(0.466)	(0.394)	(0.373)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	1083	1080	1054	1029	1005	1005
χ^2	13.803	14.760	18.621	93.666	6663.980	17817.217
Log Likelihood	-352.235	-352.001	-334.813	-264.792	-238.269	-214.211

Exponentiated coefficients. Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 15: OLS Models - Rasch Index (Replicating Table 3 with Rasch Index)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	0.157***	0.158***	0.138***	0.134***	0.131***	0.144***
	(0.040)	(0.041)	(0.040)	(0.048)	(0.046)	(0.045)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7915	7731	7157	4469	4469	4469
R^2	0.052	0.053	0.059	0.087	0.106	0.228
adj. R^2	0.030	0.030	0.036	0.055	0.075	0.193

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 16: Instrumental Variables - PTA Depth (Replicating Table 5 with Rasch Index)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	1.262*	1.365**	1.126	2.213*	1.372*	1.413**
	(0.151)	(0.178)	(0.145)	(1.039)	(0.251)	(0.237)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	95.78	97.01	17.87	18.18	18.25
Sargan's test (p-value)				0.60	0.00	0.00
N	7915	8278	7157	4468	4468	4468

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 18.37, 10.83, 6.77, 5.25.

Table 17: Bivariate Probit with Endogenous Regressor - PTA Dummy

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.025*	2.111*	1.834*	2.030**	2.638***	2.796***
	(0.764)	(0.812)	(0.620)	(0.690)	(0.922)	(1.048)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
N	7915	7729	7157	4469	4357	4357
Log Likelihood	-4825.754	-4747.953	-4346.881	-2917.689	-2777.692	-2513.221
AIC	9943.508	9795.907	8957.762	6061.377	5803.385	5306.442
Rho	-0.097	-0.131	-0.100	-0.354	-0.559	-0.617

Clustered Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 18: Instrumental Variables - PTA Count - Limited Information Maximum Likelihood (LIML)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	1.897***	1.954***	1.672**	1.710	1.816*	1.918*
	(0.399)	(0.427)	(0.373)	(0.561)	(0.622)	(0.638)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	101.68	97.01	17.87	16.20	16.47
Sargan's test (p-value)				0.59	0.52	0.40
N	7915	7729	7157	4468	4355	4355

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 4.84, 3.56, 3.05, 2.77.

Table 19: Instrumental Variable Regression - PTA Count

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	1.897***	1.954**	1.672**	1.699*	1.800*	1.898**
	(0.399)	(0.610)	(0.373)	(0.547)	(0.603)	(0.617)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	101.68	97.01	17.87	16.20	16.47
Sargan's test (p-value)				0.59	0.52	0.40
N	7915	7729	7157	4468	4355	4355

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 18.37, 10.83, 6.77, 5.25.

Table 20: Instrumental Variables - Depth (Additive) - Limited Information Maximum Likelihood (LIML)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Business	2.396***	2.481***	1.875*	2.222*	2.255*	2.534**
	(0.785)	(0.843)	(0.649)	(1.054)	(1.055)	(1.157)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
Instruments	Father	Father	Father	All	All	All
Kleibergen-Paap F (first stage)	105.46	95.78	97.01	17.87	18.18	18.25
Sargan's test (p-value)				0.60	0.65	0.39
N	7915	7729	7157	4468	4468	4468

Robust Standard Errors in parenthesis * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The Kleibergen-Paap rk Wald F statistic measures weak instruments, with the following critical values for a relative bias of 0.05, 0.10, 0.20, and 0.30: 4.84, 3.56, 3.05, 2.77.

Table 21: Poisson Random Effect Models - 1 Year after transition

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	2.219***	2.390***	2.718***	2.443***	11.507***
	(0.461)	(0.447)	(0.493)	(0.555)	(0.833)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	96	91	90	74	74
χ^2	281.305	162.826	681.689	1015.484	2190.883
Log Likelihood	-36.885	-35.892	-32.402	-27.649	-25.199

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 22: Poisson Random Effect Models - 3 Years after Transition

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	3.532**	3.253**	3.292**	2.562*	2.240
	(2.053)	(1.714)	(1.766)	(1.251)	(1.183)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	254	247	246	200	200
χ^2	38.343	37.642	52.700	62.040	142.871
Log Likelihood	-146.224	-145.289	-143.110	-126.730	-118.056

Exponentiated coefficients. Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 23: OLS Models - Additive Index - 1 Year after Transition

	Model 1	Model 2	Model 3	Model 4
Business	1.767*	1.818*	1.845*	1.824*
	(0.946)	(0.946)	(0.953)	(0.946)
Domestic (institutional)			✓	✓
Domestic (economic)				✓
Country RE	✓	✓	✓	✓
N	96	91	90	74
χ^2	3.491	5.432	6.383	9.379
Log Likelihood				

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Model 5 could not be estimated.

Table 24: OLS Models - Additive Index - 3 Years after Transition

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	1.553**	1.552**	1.556**	1.475*	1.470*
	(0.310)	(0.320)	(0.321)	(0.311)	(0.299)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	254	247	246	200	200
χ^2	565.043	2322.364	957.975	1385.610	908.180
Log Likelihood	-298.682	-291.255	-288.753	-240.553	-237.860

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 25: Linear Probability Random Effect Models - As-if Random Transitions (2 Years) - PTA Binary

	Model 1	Model 2	Model 3	Model 4	Model 5
Business	1.137***	1.104***	1.210***	0.942**	1.138**
	(0.421)	(0.416)	(0.408)	(0.426)	(0.572)
Individual controls		✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓
Domestic (economic)				✓	✓
Systemic					✓
Country RE	✓	✓	✓	✓	✓
N	176	170	169	138	138
R^2	0.032	0.028	0.031	0.051	0.111

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4 Appendix D: Further Robustness checks

Table 26: PTA Count and Binary - Public Sector Business Experience Placebo

	Poisson	Poisson	Poisson	Logit	Logit	Logit
Business Public	1.386	1.266	1.170	1.444	1.349	1.254
	(0.333)	(0.298)	(0.282)	(0.462)	(0.440)	(0.452)
Individual controls	✓	✓	✓	✓	✓	✓
Domestic (institutional)	✓	✓	✓	✓	✓	✓
Domestic (economic)	✓	✓	✓	✓	✓	✓
Systemic		✓	✓		✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE			✓			✓
N	4439	4324	4324	4439	4324	4249
χ^2	120.083	222.108	23317.383			
Log Likelihood	-3118.745	-2960.343	-2764.324	-2361.381	-2245.631	-2015.390
AIC	6255.490	5948.686	5638.648	4746.762	4525.262	4144.781

Exponentiated coefficients; Clustered Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 27: PTA Depth (Additive and Rasch) - Public Sector Business Experience Placebo

	Additive	Additive	Additive	Rasch	Rasch	Rasch
Business Public	0.239	0.225	0.220	-0.003	0.008	0.037
	(0.189)	(0.184)	(0.182)	(0.062)	(0.059)	(0.056)
Individual controls	✓	✓	✓	✓	✓	✓
Domestic (institutional)	✓	✓	✓	✓	✓	✓
Domestic (economic)	✓	✓	✓	✓	✓	✓
Systemic		✓	✓		✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE			✓			✓
N	4469	4469	4469	4469	4469	4469
R^2	0.109	0.118	0.188	0.082	0.102	0.223
adj. R^2	0.079	0.088	0.151	0.051	0.070	0.188

Clustered Standard Errors in parenthesis.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 28: Logit Fixed Effect Models - Human Right Treaties Signature Date

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
UNHR treaty signature						
Business	1.302*	1.180	0.834	0.814	0.876	1.185
	(0.198)	(0.188)	(0.137)	(0.133)	(0.171)	(0.286)
Individual controls		✓	✓	✓	✓	✓
Domestic (institutional)			✓	✓	✓	✓
Domestic (economic)				✓	✓	✓
Systemic					✓	✓
t, t^2, t^3	✓	✓	✓	✓	✓	✓
Country FE	✓	✓	✓	✓	✓	✓
Year FE						✓
N	7969	7244	4802	4802	4557	3858
Log Likelihood	-2251.409	-2075.083	-1581.010	-1608.155	-1308.324	-899.749
AIC	4510.817	4164.167	3188.020	3240.309	2652.647	1897.497

Exponentiated coefficients; Clustered Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$