




# Be my guest: the effect of foreign policy visits to the USA on FDI

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Accepted: 28 April 2023  
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## Abstract

We examine whether a country leader's diplomatic visit to the USA affects the Foreign Direct Investment inflow. The literature so far has found inconclusive results regarding diplomatic relations' effect on international flows. We use a dynamic Inverse Probability Weighting Regression Adjustment framework to examine this relationship and estimate the causal effect of foreign visits. Our results indicate that a visit to the US increases the country's total FDI inflows by up to one percentage point per annum, with a cumulative effect reaching 2.5 percentage points six years after the visit. However, this is a short-run effect as it disappears in the subsequent years. Furthermore, our first-stage results shed light on the profile of the leaders that visit the US. Our findings are consistent with the view that foreign visits act as signals to investors regarding the country's political risk.

**Keywords** FDI · Foreign visits · Inverse probability weighting

**JEL Classification** F21 · F68 · H8

## 1 Introduction

In 1874, king Kalākaua of Hawaii became the first head of state of any nation to visit the US. During his stay, he concluded the *Reciprocity Treaty* of 1875 between the US and Hawaii, a free trade agreement, which, when ratified by both nations,

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brought considerable profits to planters and businesses (Schweizer, 1991). Similarly, the Phase One Trade Deal between the US and China was signed in 2020 in Washington during the visit of the Vice Premier of China, Liu He. And even though these two examples are very different, with the first visit producing an agreement made during the visit and the latter with the signing of a previously negotiated one, they both show that a foreign leader's visit to the US may generate substantial economic benefits.<sup>1</sup>

Diplomatic visits are a valuable tool for international relations that can have crucial positive side effects on the economy. For example, a visit that involves a meeting with top government officials or the US president might provide valuable signals to potential investors by showing that the country is integrated into the world economic system and has a good relationship with the major player in the political and economic arena. And it is noteworthy that these signals are credible as they are costly and observable to broader audiences; foreign visits require months of preparation and considerable monetary cost on behalf of the visiting diplomatic mission. Moreover, they receive considerable international media exposure through press conferences, formal or informal joint statements, interviews, etc. (Hoshiro, 2020).<sup>2</sup> And simple economic logic suggests that costly and credible signals to investors directly affect investment decisions and, thus, FDI flows.

Even though the above narratives motivate our study, a formal analysis is necessary to examine the idea that foreign visits affect FDI flows. To this end, we use an event-study methodology, as in Jordà and Taylor (2016), Angrist et al. (2018), and Acemoglu et al. (2019), to examine the effect of a leader's visit to the USA on FDI for a total of 143 countries, in the 1970–2019 time period. According to our findings, the effect of a country leader's visit to the US increases FDI for approximately the first six years after the visit. Additionally, formal visits appear to have a higher effect on FDI than informal ones. Moreover, according to our findings, diplomatic visits to the US are more effective after 1989, when the US rose as the main hegemonic political and economic power and FDI flows became more important.

The present paper is related to the vast literature examining diplomacy's effect on economic relations (Lederman et al., 2010; Volpe Martincus et al., 2010; see also the review of Moons & Bergeijk, 2017). More specifically, this literature examines the effect of the number of embassies, consulates-general, trade missions, and export-promoting agencies on trade and FDI flows. The central idea is that diplomacy solves the asymmetric information problem of identifying credible business partners in other countries by providing a network of government-run bureaus, such

<sup>1</sup> Yet, all foreign visits to the US do not always produce direct economic benefits. For example, the first visit of a European leader to the US was by Prince Albert I of Monaco in 1913. Regarding this visit, most sources refer to the hunting trip of the monarch with the famous hunter "Buffalo Bill", rather than to the meeting with President Wilson. However, even in this case, it was considered as a milestone in the diplomatic relationships of the two countries.

<sup>2</sup> Even though, there is no formal evidence about a strategic effect of a diplomatic visit to the US, it is supported by the literature (e.g. Charnock et al., 2009) that US presidents use travels within the US as a re-election strategy that aims at affecting the electoral outcome in larger and more competitive states (i.e. states where the incumbent won or lost with a low margin in his initial election).

as embassies, trade offices, etc. (Harris & Li, 2005).<sup>3</sup> In a similar setting, in the present paper, we argue that visits to the USA act as a signal to all international investors, affecting FDI flows from all countries, not just US FDI.

Our work is also related to the literature that examines the political environment's effect on the country's ability to attract FDI. For instance, Büthe and Milner (2008) argue that membership in an international economic agreement shows commitment to protecting investors' assets, thus spurring foreign investment inflows. More recently, Dreher et al. (2015) examine the effect of membership in International Organizations, demonstrating that it positively affects FDI. Finally, Vadlamannati et al. (2018) examine the impact of UN Human Rights Council condemnations and show that they have a detrimental effect on FDI by signaling the state's outcast or rogue status.

This line of research is also consistent with several papers that examine the effect of political variables on FDI. For example, Adam and Filippaios (2007) and François et al. (2020) explore the impact of the political regime on FDI; Busse and Hefeker (2007) and Harms and Ursprung (2002) examine the effect of political institutions; Garland and Biglaiser (2008) study how electoral rules influence FDI. The present study also complements these papers by adding the foreign policy dimension to the determinants of FDI.

The main empirical challenge for the present study is estimating a causal effect for the underlying relationship when the visits to the US are nonrandom events. In particular, political and economic factors determine the FDI inflows and the visit probability. Similarly, one might expect countries more open to trade and capital flows to have an outward-looking foreign policy and thus engage in more diplomatic visits. To deal with both issues, we use a dynamic *Inverse Probability Weighting Regression Adjustment* (IPWRA) approach, introduced by Jordà and Taylor (2016) and Angrist et al. (2018). This method creates pseudo-randomization by first estimating the propensity of visiting the US and then rebalancing the sample so that observations with higher (lower) propensity receive lower (higher) weighting.

These estimation techniques are relatively new to economics (Acemoglu et al., 2019; Jordà et al., 2016; Kandilov & Renkow, 2020); however, they have a long tradition in medical research (Bang & Robins, 2005; Robins et al., 1994). Specifically, IPWRA methods, under some assumptions, can be considered a substitute for instrumental variables approaches when estimating causal effects.<sup>4</sup> The implementation of the IPWRA requires the specification of two models, one for modeling the probability of receiving treatment, i.e., visiting the US, and one for modeling the outcome variable, i.e., FDI inflows.

This empirical strategy has several advantages compared to alternative methods. First, it allows for non-linearities in the time response of the outcome (i.e., FDI)

<sup>3</sup> Indirectly related to our work is Fuchs & Klann (2013), that find that countries accepting Dalai Lama for an official state visit face a short-run decline in their exports to China. This "Dalai Lama effect", however, is the outcome of threatened sanctions by China, rather than a reputational effect, as our argument posits.

<sup>4</sup> The main assumption that needs to be satisfied is the selection on observables assumption. If this assumption is satisfied, then the IPWRA model estimates a true causal effect (Cerulli, 2015).

to the treatment (i.e., diplomatic visit). Thus, we do not need to impose a specific lag structure in the treatment variable nor a specific time response for the outcome variable. Second, the model allows us to derive short-run and medium-run effects. Third, the IPWRA, by employing a simple *Inverse Probability Weighting* model to estimate the local projections of the FDI inflows model, is more robust to model misspecification (Jordà & Taylor, 2016; Jordà et al., 2016; Kuvshinov & Zimmermann, 2019). In other words, IPWRA estimates are doubly robust to misspecification, as they provide correct estimates for the effect of a visit as long as either one of the two underlying models is correctly specified (Wooldridge, 2010).

We can summarize our findings as follows: A visit to the US increases overall FDI inflows for the first six years after the visit. After that period there are no further increases. Moreover, the estimated effect is quantitatively significant, ranging from 0.3 to 1 percentage points per annum. Then, the cumulative effect on FDI may reach 2.5 percentage points. When we compare across types of visits, we find that formal and working visits have a higher effect than private visits, where the effect is statistically insignificant. Furthermore, countries with a weak institutional environment benefit more from a visit. In contrast, the corresponding effect in countries with a good institutional environment is not statistically significant.

Complementing the above findings, the first stage results formalize the characteristics associated with a US visit. Overall, leaders from larger, richer, more open, democratic countries have a higher probability of visiting the US. Instead, NATO membership, communist ideology, and military expenditures are not robust determinants of the probability of a diplomatic visit to the US.

The rest of the paper is structured as follows: in the next section, we discuss our main argument and the theoretical foundations of the empirical results. Then, in Sect. 3, we discuss the empirical specification and the data employed in the analysis. Next, Sect. 4 presents the results, while Sect. 5 provides robustness tests. Finally, Sect. 6 provides some concluding remarks and discusses the policy implications.

## 2 Theoretical argument

Several contributions have stressed the role of political factors in attracting FDI, an idea derived from the obsolescing bargain model developed by Vernon (1971). According to that view, multinational enterprises have higher relative bargaining power vis-à-vis the host country's government before the investment decision, as they can credibly choose an alternative location. However, the multinational enterprise cannot move its assets to other jurisdictions without incurring a high cost after investing. Thus, it is taken "hostage," and the relative power shifts towards the host country's government (see Eden et al., 2005).

That, of course, is another case of the well-known capital-levy problem (Fischer, 1980). Once an investment is made, the government can change its policy and introduce a new one that reduces the returns to (the now fixed) capital. When facing this possibility, the optimal strategy of an investor (domestic or international) is to invest as little as possible. The solution to this problem is to increase the credibility of the domestic government, i.e., to convince investors that policies that affect capital

returns will not change after investing. In this respect, factors that signal government credibility affect investment decisions and attributes of good governance, e.g., low corruption, sound judicial system, and bureaucratic quality, influence FDI (Busse & Hefeker, 2007; Caprio et al., 2013). Similarly, as long as democratically elected governments can be considered more credible than autocratic ones, FDI in democracies must be higher (Adam & Filippaios, 2007; Harms & Ursprung, 2002; Li et al., 2018).<sup>5</sup>

Like political institutions and the quality of governance, foreign policy is a signal of government credibility and country risk. For example, Dreher and Voigt (2011) show that nation-states increase their credibility and reduce their country's risk ratings by becoming members of international organizations.<sup>6</sup> Also, and directly related to FDI flows, Dreher et al. (2015) find that membership in international economic agreements increases FDI. Essentially, this result is because international economic agreements restrict the government's policy domain by precluding harmful to investors policies.

Foreign diplomatic visits to the US are expected to produce similar effects. Face-to-face diplomacy is integral to international interactions. National leaders' visits to the US and meetings with the US president and government officials receive national (domestic) and international media attention, even when these visits are informal. And, of course, working and formal state visits can produce important policy effects, such as conclusions of an agreement, policy discussions, or confirm the affinity of the two nations. Although the purpose of the trip might vary greatly, the formal meetings between leaders almost always include discussions on economic issues.

Adding to the above considerations, there is an additional reason why visits to the US create credible signals to investors: they involve a substantial cost both for the US and the visiting country. Travel expenses for the leader and the diplomatic mission are non-negligible, at least for low-income countries. And besides the monetary cost of the visit, there is also a non-negligible economic cost. Visit preparations and prior negotiations regarding the terms of the visit use diplomatic and political capital distracted from other uses. Consequently, the high cost of the visit shows the further commitment of the visiting country's government to specific policies. Especially for countries with high political risk, a visit to the US might signal the government's affinity with the economic interests of the US, integration into the world economic system, and commitment to free capital flows and trade. And, if foreign visits act as signals, we must expect that they not only affect the US investors' decisions. Hence, our theoretical reasoning suggests that FDI from all sources, not just the US, must increase after a diplomatic visit. Moreover, according to our priors, any identified effect must pertain only to the short run. After all, government policies are not

<sup>5</sup> In fact the literature acknowledges that dictators are inherently non-credible, if not paranoid (see for example Wintrobe, 1998; Skaperdas, 2003), hence their promises not to enact policies that hurt international investors are not to be taken seriously.

<sup>6</sup> At the same time, it has been shown that a country's foreign relations directly affect the amount of aid they can attract from the IMF and the World Bank (see e.g., Dreher et al., 2009; Kaja & Werker, 2010).

always stable, and a few years after a visit government's stance towards investors may change.

The above arguments imply that a country's official visit to the USA *is expected to increase short-run total inward FDI flows*. Of course, this is a general hypothesis. However, if we expect it to hold, several additional issues must support the main argument. The first refers to the type of visit. Visits that receive higher publicity and have a higher cost should exert a higher effect on FDI. Thus, formal and working visits, which involve meetings with US officials and a formal protocol, should be expected to have a higher impact than informal ones or ones that do not include a meeting with a higher US state official. Similarly, private visits should have a negligible or even zero effect on the outcome variable.

The second issue we should consider is the intensity of diplomatic relationships. Officials from countries with strong diplomatic ties to the US are expected to pay more visits. Then, for this group of countries, the effect of a visit is expected to be less important. As Cukierman and Tommasi (1998) outlined, "non-standard"/unexpected political events provide a stronger signal to investors and hence change their perceptions more than standard ones. The empirical strategy, as we explain in the following section, explicitly takes into account the intensity of diplomatic relationships across countries by placing lower weight on visits that are more likely to occur.

Also, related to the above argument, we must expect that any positive effect of US visits on FDI flows will depend on specific country characteristics. Specifically, visits from non-democratic countries or countries with lower institutional quality and, thus, higher political risk must be more effective in attracting FDI flows. Employing the Cukierman and Tommasi (1998) argument, visits from "unlikely" parties should attract more investor attention. In contrast, visits by democracies or countries with a good institutional environment should not be so effective in affecting FDI flows. After all, there is not much to signal regarding policy in this group of countries. Similarly, and always consistent with our argument, Garriga and Phillips (2014) show that any signaling effect is specific to low-information environments, i.e., countries with low institutional quality.

In what follows, we examine the central argument and the additional insights presented above.

### 3 Data and empirical methodology

The dependent variable in our analysis is the annual share of FDI inflows to GDP, as measured by the World Bank's World Development indicators. Data on foreign leaders' visits to the US are taken from the Office of the Historian of the Department of State.<sup>7</sup> This source provides data on the date each state's official visited the US. Moreover, it includes information on the type of visit (formal, working, private visit), whether there was a meeting with the president or another government official (e.g., vice-president, secretary of state), etc. With this information, we construct a

<sup>7</sup> Available at <https://history.state.gov/departmenthistory/visits> (last accessed on August 1, 2020).

dummy variable, taking the value of one in the year of a visit and zero otherwise. This variable indicates whether there was a treatment.<sup>8</sup>

In Table 1, we present the countries with the most and the fewest visits to the US. The country with the most visits is Israel, which has 103 visits. Most are official and working visits, whereas 27 percent are private visits. Conversely, Palau, Syria, and North Korea have never visited the US.<sup>9</sup>

To estimate the effect of a visit on FDI, we should compare the realized versus the counterfactual path of FDI. If visits were random, we could compare the mean change in FDI flows before and after the visit and between treated and non-treated countries. By simple inspection of the table above, however, it becomes evident that visits to the US are nonrandom events. The countries with the most visits are major economic and political powers in the world system. Furthermore, countries with good foreign policy relationships with the US government tend to pay more visits. Conversely, countries with the fewest visits are poor, have a hostile relationship with the US or can be considered to be politically or economically insignificant (e.g., Liechtenstein).

Given the non-randomness of country visits, simple means comparison will not provide the average effect of a visit. Because random/experimental data are unavailable, we can create pseudo-randomization using the *Inverse Propensity Score Weighted Regression Adjustment* (IPWRA, Angrist et al., 2018; Jordà et al., 2016; Jordà & Taylor, 2016).<sup>10</sup> This model examines the effect of a treatment on the evolution of the outcome variable, i.e., inward FDI, from the treatment year onward, without imposing a functional form on the dynamics. More importantly, it is a two-stage model that uses inverse probability weighting and regression adjustment. As long as one of both stages is correctly specified, the estimated treatment effect is consistent (see Wooldridge, 2010). Finally, as it does not rely on exclusion restrictions, all variables can be considered endogenous in our dataset (Kuvshinov & Zimmermann, 2019).

To be more specific, we assume that the following probit model gives the estimated probability of visiting the US:

$$\widehat{PV}_{i,t} = \Phi\left(FDI_{i,t-1}, FDI_{i,t-2}, FDI_{i,t-3}, X_{i,t}^m, X_{i,t}^l, \lambda_t, \mu_i, \hat{\beta}\right) \quad (1)$$

where  $\widehat{PV}_{i,t}$  is the predicted probability of a visit by country  $i$  at time  $t$ ,  $\Phi$  is the cumulative distribution function of the standard normal distribution,  $FDI_{i,t-j}$  is the  $j$ th lag of FDI,  $X_{i,t}^m$  and  $X_{i,t}^l$  are the set of predictor variables of country characteristics

<sup>8</sup> As a robustness test, we experiment with the various types of visits (i.e., private visits, working visits, or non private visits).

<sup>9</sup> These three countries are not included in our sample, as there are no data available for either the FDI flows or other variables. Our sample, then, consists only of countries with at least one visit to the US.

<sup>10</sup> An alternative approach would have been to employ an Instrumental Variable approach. However, finding valid instruments, i.e., variables that are correlated with the probability of visiting the US, but conditional on the probability of visiting being orthogonal to FDI, is a very difficult task. Moreover, as we argue below, the selection on observables assumption appears to hold here, hence the IPWRA can estimate true causal effects.

**Table 1** Summary of visits to the US

Country	Total visits	Official visits (%)	Private visits (%)	Working visits (%)	Country	Total visits	Official visits (%)	Private visits (%)	Working visits (%)
<b>Top 10 with most visits</b>									
Israel	103	37	27	36	Samoa	1	100	0	0
United Kingdom	73	52	16	32	Liechtenstein	1	0	100	0
Japan	68	62	7	31	Belarus	1	0	100	0
Germany	66	53	11	35	Turkmenistan	1	0	0	100
Jordan	66	35	31	33	Burma	1	0	0	100
Italy	59	54	9	37	East Timor	1	0	0	100
Canada	55	53	16	31	Solomon Islands	1	0	100	0
Ireland	47	33	16	51	Palau	0	0	0	0
Mexico	46	66	11	23	Syria	0	0	0	0
France	42	63	10	28	Korea, North	0	0	0	0
<b>Bottom 10 with less visits</b>									



and leader characteristics, respectively,  $\lambda_t, \mu_i$  are time and country fixed effects, and, finally,  $\hat{\beta}$  is a vector of estimated coefficients.

Then, we can estimate a model of the form

$$\Delta FDI_{i,t+h} = \mu_i + \theta_h V_{i,t} * W_{i,t} + \sum_{j=1}^3 \delta_{jh} FDI_{i,t-j} * W_{i,t} + \gamma_h X_{i,t}^n * W_{i,t} + \varepsilon_{i,t} \quad (2)$$

with  $X_{i,t}^n \subset X_{i,t}^m$ , as in Jordà and Taylor (2016) and Kuvshinov and Zimmermann (2019),  $W_{i,t} = 1/\widehat{PV}_{i,t}$  for “visitors” and  $W_{i,t} = 1/(1 - \widehat{PV}_{i,t})$  for “non-visitors” and  $\mu_i$  is the country fixed effect.<sup>11</sup> We follow Imbens (2004) and truncate the estimated propensity score to 0.1 and 0.9. As all countries in the sample have been subjected to treatment, i.e., visited the US at least once,  $\theta_h$  is the Average Treatment Effect on the Treated (ATT) of  $V_{i,t}$ , under the *IPWRA* estimator. Similarly, under the restriction that  $\gamma_h = 0$ ,  $\theta_h$  gives the ATT under the *Inverse Propensity Score Weighted (IPW)* estimator (Angrist & Kuersteiner, 2011; Angrist et al., 2018; Jordà & Taylor, 2016; Kuvshinov & Zimmermann, 2019). A thing to note is that Eq. (2) is estimated for each time horizon  $h = -2, -1, 0, 1, 2, \dots, 8$ . Thus, we compute the ATT for each year  $h$  before and after the treatment.<sup>12</sup> We calculate the associated standard errors with cluster robust methods as in Jordà and Taylor (2016).

The final dataset we use covers 143 countries over the 1970–2019 period. We restrict the sample to this period, as pre-1970, the data for most countries, especially low-income ones, are missing. The *IPWRA* model corrects country heterogeneity by reweighting the data in such a manner as to produce comparable units. More specifically, countries in years that are expected to visit the US receive a lower weight. In contrast, countries in years in which a visit is not likely, and thus can be considered random, receive a higher weight.<sup>13</sup>

<sup>11</sup> The propensity scores are also augmented by multiplying them by a correction term that takes into account the difference between the observed and the treated outcome for each treatment group. Hence, the estimator employed here is the augmented *IPWRA* estimator, which is doubly robust to misspecification and the augmentation term in the outcome model corrects the estimator in case the treatment model is misspecified.

<sup>12</sup> To estimate the ATT the above model relies on three assumptions: (i) conditional Independence, i.e., after conditioning on the covariates, the outcomes are conditionally independent of potential outcome, (ii) overlap, i.e., each treated observation has a positive probability of being allocated to each treatment level and (iii) i.i.d., which in our setting rules out interactions between countries in each period. For more details on the assumptions, see Imbens and Wooldridge (2009) and Angrist and Pischke (2009). To inspect visually whether the overlap assumption holds in Fig. 2 in the Appendix, we present the smoothed densities of the estimated propensities to visit the US between the two groups (visitors and non-visitors), using a standard Epanechnikov kernel. As the reader can verify, considerable overlap is found among treated and control propensities. What is more important, the control observations cover the support for all treated observations. This evidence provides support for the required overlap assumption and gives suggestive evidence in favor of our empirical strategy.

<sup>13</sup> Even though the countries differ significantly, the common overlap assumption is not violated (see the virtual inspection in the Appendix Fig. 2). This indicates that our results are meaningful and not affected by country heterogeneity. Moreover, as we are interested in estimating the ATT, we should note that the overlap assumption is weaker and requires only that  $\Pr(D = 1|X) < 1$ , where  $D$  is the treatment indicator and  $X$  is the set of controls (Heckman et al., 1997). We use a large set of variables in  $X$ , where the treatment and control groups are different and also truncate the propensity scores to 0.1 and 0.9. Hence, we ensure that the overlap assumption is not violated.

The estimated  $\theta_h$  from Eq. (2) uncovers the causal effect of a visit under the assumption of *the selection on observables*, i.e., after conditioning on observables in Eq. (2), all other variation in the treatment variable is due to randomness. This is a highly restrictive assumption, so we take several measures to ensure it is satisfied. First, we consider the more general model, i.e., the *IPWRA* model, which estimates the true ATT as long as either the first stage probit regression or the model which models inward FDI, i.e., the variables  $FDI_{i,t-j}$  and  $X_{i,t}^n$  are correct in explaining the FDI flows.<sup>14</sup> Second, and most importantly, we include as our main predictor set of variables as many variables as possible.

Table 2 presents the variables used in the first stage probit model. There are two sets of variables. The first set includes the country's macroeconomic indicators, i.e., the population to account for country size, the GDP per capita to account for the level of economic development, the polity score to account for the level of political development, and trade openness to account for the relationship with the rest of the world.

Then, we include a series of variables to control for the intensity of diplomatic relations. More specifically, we introduce a dummy, taking the value one, if a country is a NATO member state and a dummy capturing if the country is communist. We also include a dummy for membership in the UN security council; following Dreher et al. (2009), UN security council members have increased leverage in international decision-making. Therefore, they are more significant players in the international political arena. Additionally, we include a variable that measures the number of previous visits to the US. Finally, we include a variable that measures the amount of trade (imports plus exports over GDP) with the US. Except for the last variable, all variables have a different mean between *visitors* and *non-visitors*, suggesting that they explain the probability of visiting the US.

The second set of variables used in Eq. (1) is a full set of fixed effects. We expect that leader and country characteristics to affect the country's intergovernmental relations and thus should be included as predictors of the probability of treatment. Similarly, we expect US presidents' characteristics and changing US foreign policy over time to affect the probability of a visit. However, the effect of these variables is captured by the fixed-year effects. Along the same lines, country-specific effects (e.g., language, religion, fractionalization, distance to the US, etc.) will capture the rest of the determinants of visiting the US.

Finally, we include lags of FDI to capture any pre-treatment dynamics that might affect the underlying relationship.<sup>15</sup> A visit to the US may be the outcome of large past FDI flows; as a country becomes more integrated into the world economic system, it might build positive political links with several countries, including the US. This creates pre-treatment dynamics that we need to rule out. We have experimented

<sup>14</sup> To show the robustness of our results, we also present the results of the IPW model.

<sup>15</sup> A minimum for the selection on observables assumption to hold is that there are no significant pre-treatment dynamics for years prior to the treatment. The figures and tables in the following section show that the estimator matches the pre-treatment dynamics, as in all cases the effect for  $t = -1$  turns out insignificant, providing evidence that we have excluded any (pre-treatment) dynamics in the dependent variable that may be correlated with the treatment.

**Table 2** Variables and mean differences between visitors and non-visitors

	Visitors	Non- visitors	Difference	T-statistic	Source
Population	16.76	16.11	0.64***	(13.75)	World bank world development indicators
GDP per capita	8.93	8.06	0.87***	(18.04)	World bank world development indicators
Openness	73.50	76.16	-2.66*	(-1.65)	World bank world development indicators
Polity score	5.54	2.34	3.20***	(14.70)	Polity project
Military expenditure to GDP	2.56	2.37	0.18**	(2.34)	World bank world development indicators
Previous visits	12.32	5.65	6.66***	(28.81)	US office of the historian and authors' calculations
Trade with USA	0.13	0.28	-0.16***	(-3.64)	IMS direction of trade statistics
NATO member	0.25	0.11	0.14***	(11.99)	<a href="http://www.nato.int">www.nato.int</a>
Communist country	0.02	0.02	0.00	(0.57)	Wikipedia (Communist state entry)
UN security council member	0.11	0.06	0.05***	(5.21)	Dreher et al. (2009)

The table presents the complete variables employed in the first stage probit regression, explaining the probability of visiting the USA. The second and third columns show the mean values of the variables for visitors and non-visitors, the fourth column the difference in the means, and the fifth column the t-statistic on the null of equality of means between visitors and non-visitors

\* \*\*, \*\*\* denotes rejection of the null of equality of means at the 10%, 5%, and 1% level, respectively

with several lags, but in all cases, they turned out insignificant in all first-stage probit regressions. However, the pre-treatment effect becomes statistically insignificant only when we include three lags. For robustness, we also present the results for a single lag and two lags of FDI. We have also examined the robustness of our results when instead of lags on FDI, we use the total FDI stock (as a percent of GDP).

## 4 Results

Tables 3 and 4 empirically test the above theoretical predictions. First, we estimate the effect of a visit to the USA in our full sample. According to the estimates in the first line of Table 3, a diplomatic visit to the US increases total FDI inflows. More precisely, the effect of a visit by a country's leader to the USA increases FDI, on average, by 0.5 percentage points per annum, for the first five years. This figure corresponds to a cumulative effect close to 2.15 percentage points at the end of the five years. Additionally, there is no statistically significant effect by the sixth year after the visit.

In Table 4, we present the first stage results of the probit model, which models the probability of visiting the US. There are several interesting observations to highlight in these results. Country-specific variables appear to be robust predictors of treatment propensity. More prosperous, populous, and democratic, members of the UN security council, with high military expenditure, and non-NATO countries are more likely to pay a visit to the US. Also, countries that have visited the US are more likely to visit again, a result which is reasonable given that a large number of previous visits indicates a good foreign relationship between the US and the country. On the other hand, there are no differences in the probability of visit between communist and non-communist states, as well as between different levels of military expenditure. Finally, we should note that lagged FDI does not always statistically significantly affect the probability of a visit. In some instances, however, the second or third lag of FDI turn out statistically significant. For this reason, we decided to have as the baseline model the one with the three lags of FDI as moderators. More importantly, the three lags ensure that there are no statistically significant pre-trends- a fact verified in the tables that follow.

In Fig. 1, we plot the estimated annual ATT (left panel) and the cumulative effect (right panel) of a visit on FDI to get a visual idea of the estimated effect. The shaded area represents the 95 and 90 percent confidence intervals. The standard errors of the linear combination of coefficients in the right panel are computed using the delta method. The main results, i.e., a positive effect in the first five years and a cumulative effect that reaches a peak in the fifth year after the visit, are evident in the figure. More importantly, the figure verifies that a visit has only a short to medium-run effect.

In the second and third lines of Table 3, we examine the effect across political regimes. To differentiate between democratic and non-democratic countries, we use the Polity score. Specifically, we opt for a threshold of 7 for the Polity score. Countries with a mean Polity score above or equal to 7 are considered democratic, whereas when the corresponding score is below 7, they are classified as

**Table 3** ATE (IPWRA) of visiting the US on FDI flows

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Observations
	t = -1	t = 1	t = 2	t = 3	t = 4	t = 5	t = 6	t = 7	
Main model	0.000 (0.37)	0.302** (2.08)	0.433** (2.47)	0.002 (0.01)	0.615*** (3.19)	0.898*** (3.93)	0.355 (1.49)	0.080 (0.39)	4166
Democracies	0.000 (0.93)	0.066 (0.25)	0.905* (1.83)	-1.149* (-1.85)	-0.103 (-0.33)	0.327 (0.83)	0.504 (0.92)	0.164 (0.54)	1145
Autocracies	0.000 (0.47)	0.390** (2.25)	0.328* (1.88)	0.238 (1.18)	0.866*** (3.78)	1.111*** (4.06)	0.611** (2.44)	0.186 (0.83)	3021
High risk countries	-0.000 (-0.18)	0.450** (2.16)	0.526** (2.33)	0.440** (1.97)	0.846*** (3.13)	1.110*** (3.33)	0.549* (1.64)	0.601*** (2.68)	2181
Low risk countries	0.000 (0.92)	0.174 (0.81)	0.456 (1.41)	-0.781* (-1.87)	0.200 (0.79)	0.492 (1.58)	0.285 (0.75)	-0.342 (-1.16)	1849
Pre 1989	-0.000 (-0.34)	-0.164** (-1.95)	-0.093 (-1.05)	-0.077 (-0.89)	0.093 (0.54)	0.486 (1.24)	0.189 (1.01)	-0.025 (-0.07)	891
Post 1989	0.000 (1.00)	0.464** (2.31)	0.619*** (2.57)	-0.010 (-0.04)	0.683*** (2.80)	1.066*** (3.63)	0.359 (1.06)	0.074 (0.29)	3053
Only US FDI	-0.000 (-0.11)	-0.000 (-0.55)	0.000 (0.54)	-0.000 (-1.37)	0.000 (0.51)	0.000 (0.28)	0.000 (0.83)	0.000 (0.15)	2655
Working visits	0.000 (0.45)	0.424** (2.34)	0.370* (1.91)	0.285 (1.37)	0.722*** (3.40)	0.525** (2.36)	0.273 (1.03)	0.408** (1.95)	3399
Private visits	0.000*** (3.82)	-0.089 (-0.69)	0.324* (1.89)	-0.198 (-1.08)	0.406* (1.85)	-0.062 (-0.33)	-0.085 (-0.38)	-0.470*** (-2.17)	2274
Excluding private	-0.000 (-0.43)	0.325** (2.29)	0.230 (1.48)	0.125 (0.69)	0.483*** (2.63)	0.859*** (3.67)	0.406* (1.72)	0.245 (1.24)	4143
Excluding private and UN assembly meetings	-0.000 (-1.45)	0.353** (2.46)	0.275* (1.72)	0.227 (1.22)	0.609*** (3.24)	1.029*** (4.28)	0.465* (1.88)	0.271 (1.34)	4136

Each line corresponds to a different model, whereas each column gives the ATT of a visit to the US at time *t* after the visit. Clustered robust, *t*-statistics in parentheses

\*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level of statistical significance, respectively

# denotes that the estimated effects are non-zero but round to zero

Table 4 First stage probit

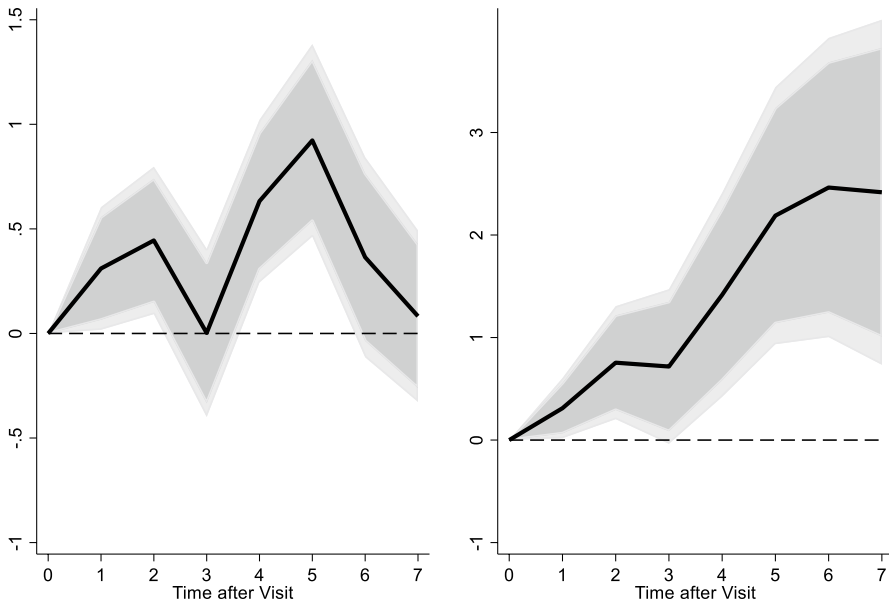
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Full sample	Democra- cies	Non- democracies	High politi- cal risk	Low politi- cal risk	Pre 1989	Post 1989	Working visit	Private visits	Excl. pri- vate visits	Excl. private and meet- ings at UN assembly
FDI (-1)	-0.01 (-1.03)	-0.01 (-0.74)	-0.01 (-0.91)	-0.01 (-0.94)	0.00 (0.07)	-0.04 (-0.80)	-0.01 (-1.11)	-0.01 (-0.98)	-0.01 (-0.70)	-0.01 (-1.09)	-0.01 (-0.98)
FDI (-2)	0.00 (0.83)	0.02** (2.16)	-0.02 (-1.36)	0.01* (1.66)	-0.01 (-0.91)	-0.10** (-2.22)	0.01 (1.03)	0.01 (0.81)	0.01 (0.58)	0.00 (0.56)	0.00 (0.66)
FDI (-3)	0.00 (0.73)	-0.00 (-0.54)	0.02* (1.79)	0.00 (0.35)	0.01 (0.77)	0.06 (1.30)	0.00 (0.64)	-0.00 (-0.20)	0.01 (0.53)	0.00 (0.67)	0.00 (0.69)
Population	1.12*** (4.42)	0.97** (2.26)	0.07 (0.15)	1.60*** (3.26)	1.83*** (4.01)	1.55 (1.23)	1.81*** (4.73)	1.15*** (3.29)	0.86 (1.42)	0.92*** (3.53)	0.75*** (2.86)
GDP per capita	0.30** (2.14)	0.57** (2.10)	-0.09 (-0.44)	0.22 (0.84)	0.45* (1.92)	-0.11 (-0.20)	0.33* (1.66)	0.29 (1.41)	0.09 (0.27)	0.15 (1.04)	0.15 (1.02)
Openness	0.01*** (3.34)	0.00* (1.72)	0.01*** (2.59)	0.00 (1.12)	0.01*** (3.09)	0.01* (1.76)	0.01*** (3.29)	0.00 (0.83)	0.00 (0.80)	0.00*** (2.95)	0.01*** (3.52)
Polity score	0.05*** (6.06)	0.07** (2.43)	0.06*** (4.47)	0.06*** (3.32)	0.05*** (4.55)	0.05** (2.49)	0.05*** (3.65)	0.04*** (3.15)	0.05*** (3.51)	0.04*** (4.42)	0.04*** (4.19)
Military expendi- ture to GDP	0.04 (1.41)	0.09* (1.84)	0.02 (0.53)	0.10** (2.26)	0.03 (0.66)	0.06 (0.84)	0.03 (0.56)	0.01 (0.27)	0.01 (0.19)	0.06** (2.30)	0.05** (2.17)
Previous visits	0.08*** (7.66)	0.10*** (6.78)	0.10*** (5.19)	0.09*** (5.14)	0.08*** (4.87)	0.62*** (8.21)	0.10*** (6.22)	0.10*** (7.59)	0.09*** (3.83)	0.08*** (8.12)	0.07*** (6.74)
Trade with USA	-0.01 (-0.43)	-0.03 (-0.88)	0.14 (1.40)	0.02 (0.40)	-0.01 (-0.22)	-0.03 (-0.56)	0.00(0.09)	-0.03 (-0.47)	-0.05 (-0.80)	-0.01 (-0.29)	-0.03 (-0.87)
NATO member	-0.50** (-2.41)	-0.49** (-2.08)	1.24 (1.54)	-0.70** (-2.08)	-0.34 (-1.11)	-1.19 (-1.55)	-0.34 (-1.48)	-0.15 (-0.62)	-0.51 (-0.99)	-0.44** (-2.11)	-0.48** (-2.29)

Table 4 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Full sample	Democra- cies	Non- democracies	High politi- cal risk	Low politi- cal risk	Pre 1989	Post 1989	Working visit	Private visits	Excl. pri- vate visits	Excl. private and meet- ings at UN assembly
Communist country	-4.10 (-0.03)		-4.03 (-0.02)	-3.03 (-0.03)	-4.10 (-0.03)		-3.58 (-0.04)	-3.58 (-0.01)		-3.90 (-0.03)	-3.96 (-0.03)
UN security council member	0.19** (2.23)	0.05 (0.50)	0.38*** (2.64)	0.23* (1.77)	0.15 (1.27)	0.04 (0.23)	0.20** (2.06)	0.09 (0.91)	0.13 (0.95)	0.14* (1.66)	0.05 (0.52)
Chi-square	1388.06	765.87	594.34	766.79	645.54	334.18	1072.49	801.51	396.21	1138.34	940.70
Pseudo R-squared	0.26	0.26	0.29	0.31	0.24	0.30	0.27	0.25	0.24	0.24	0.21
Observa- tions	4166	2190	1885	1849	2181	891	3053	3399	2277	4143	4136

The table presents the main model's first stage probit results. As independent variables, we use all variables, as in Table 2. Chi-square denotes the chi-square test for the significance of the model. T-statistics in parentheses

\*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level of statistical significance, respectively



**Fig. 1** Estimated ATT for each  $t$ , annual and cumulative effects. *Notes:* The thick line represents the ATT for each  $t$ , as estimated in the first line of Table 3. The graph on the left represents the annual effect, whereas the graph on the right the cumulative effect. The shaded areas correspond to the 5% (dark grey) and the 10% (light grey) clustered robust confidence interval. The standard errors of the right figure are computed using the delta method

non-democratic.<sup>16</sup> The results verify our priors as set out in Sect. 2. The effect for democracies is positive only in  $t=2$  and  $t=3$ , the latter only at the 10% level of statistical significance. However, at  $t=3$ , the associated effect is negative. In contrast, for non-democracies, the estimated ATT is always positive, and greater in magnitude. These results allow us to derive some conclusions regarding the non-significant effect derived for  $t=3$  in the full sample. First, it seems that this non-significant effect is driven by the negative effect in democracies, whereas in autocracies, the estimated coefficient in  $t=3$  is very close to the one obtained for  $t=1$  and  $t=2$ . Second, in democracies the estimated effects for  $t=2$  and  $t=3$  cancel out, suggesting that there is a short-run positive effect, but FDI quickly returns to their pre-treatment level. In this case, we can deduce that in democracies any signaling effect is smaller in magnitude and lasts for less time than in autocracies. This is consistent with our theoretical priors; in the democracies group there are countries with a consolidated democracy- where the signaling effect is expected to be zero- as well as some new democracies- where a positive signaling effect, but less prominent than in autocracies, is expected.

<sup>16</sup> Although the threshold of 7 is rather arbitrary, it is a common threshold adopted by several authors (Bogaards, 2012). In this way, we characterize regimes with incoherent policies, anocracies, and other controversial cases as non-democracies (Rød et al., 2020).



To find further support for our argument, we examine the effect of a visit by splitting the sample according to the level of political risk and respect for property rights. For this exercise, we use the overall International Country Risk Guide index provided by the Quality of the Government project (Teorell et al., 2020). To split the sample, we consider the 7th decile of the index as the threshold that separates high and low-political-risk countries.<sup>17</sup> The results once again verify our priors. The indicated effect of US visits on FDI holds only for countries with high political risk. Both the results for the non-democratic and the high-political risk countries indicate that visits have a more pronounced effect only for those countries that benefit from the visit's signaling effect.

In the following two lines, we examine the effect of a US visit on FDI after and before 1989. After that year, the USA rose as the only superpower with a dominant economic and cultural position. Moreover, the post-1989 period is characterized by a significant increase in the importance of FDI in the world economy. Hence, we expect that after 1989 a visit to the US must have a more pronounced effect on the country's politico-economic profile. And indeed, this is the case. The results suggest that after 1989, the cumulative positive effect of a visit to the US on the FDI to GDP ratio is approximately 2.6 percentage points. In contrast, in the pre-1989 sample, we fail to find any statistically significant result. In fact, for  $t=1$ , we find a moderate and statistically significant negative effect ( $-0.19$  percentage points). Furthermore, a positive effect is obtained after  $t=4$  and it is never statistically significant at the 5% level and half in magnitude compared to the corresponding effect in the post-1989 period. We believe that these results are consistent with our priors.<sup>18</sup>

In the following line of Table 3, we examine the effect of visits on the bilateral FDI from the US to the "visiting" country. The data on bilateral US FDI is taken from the US Bureau of Economic Analysis. The results indicate that a visit has no statistically significant effect on US FDI. That is consistent with our main argument. Before a visit, several other forces have an impact on FDI. For example, according to several papers in the relevant literature, a political alliance might affect FDI flows (e.g., Desbordes, 2010; Desbordes & Vicard, 2009). Similarly, others indicate that the causality runs the other way, as previous FDI flows also increase the likelihood of a political alliance (e.g. Bussmann, 2010; Lee & Mitchell, 2012). Also, it is reasonable to argue that US investors might have better knowledge regarding the external relations of its government before a visit takes place. All these factors are controlled for in our empirical model (i.e., the variables that control for the intensity of diplomatic relations and the lagged FDI variables). So, the results of Table 3 regarding US FDI suggest that, after controlling for all these factors, there is no additional signaling effect for the US investors. In contrast, when it comes to total FDI, there is a positive and statistically significant effect.

<sup>17</sup> We have experimented also with the 5th and 6th decile and our results are robust to the choice of the threshold.

<sup>18</sup> Moreover, we should note that foreign visits before 1989 were a rarer phenomenon: we observe 959 visits between 1878 and 1989, while the corresponding amount after 1989 to be 1388. Of course, over this period the role of the US in the international arena changes. Thus, it is natural to expect a more pronounced effect after 1989.

In the rest of Table 3, we examine our results by considering the type of visit. According to our theoretical reasoning, we do not expect a private visit, e.g., for health reasons, to change the country's outlook in the markets. On the other hand, non-private visits (either official or working visits), especially those involving meetings with highly ranked US officials, are expected to have a pronounced effect. Therefore, we differentiate into four visit categories according to the classification and information provided by the data from the *US History of the State* archive. These are working visits, private visits, all visits excluding private visits, and all visits excluding private and visits to attend the UN Assembly (which we denote as *formal visits*).

As the results show, private visits do not have a positive effect. On the other hand, working visits have a smaller impact. Moreover, *formal visits* produce the greatest ATT.<sup>19</sup> If we also compute the cumulative effect, we find that working visits have a compound effect that is very close to the estimated ATT of the baseline model. In contrast, a private visit has an overall negative effect (− 1.43 percentage points). The highest cumulative effect is estimated when we exclude private visits and UN Assembly visits, a figure around 3 percentage points.

## 5 Robustness

In the following table, we perform a series of robustness tests.<sup>20</sup> As the baseline case, we consider the one with the full sample and any visit as treatment. Thus, all comparisons are made with the first line in Table 3.

In the first line of Table 5, we report the ATT when we do not truncate the estimated propensity score in the second-stage regression.<sup>21</sup> Then, in the second line, we assume that the effect of the exogenous variables and lags of FDI between treated and controlled units is not the same. More precisely, in this model, we allow  $\gamma_h$ ,  $\delta_h$  to vary between visiting and non-visiting countries. Both exercises reveal that these assumptions do not drive our main results.

In the following three lines, we examine the robustness of our results when we use only one or two lags in *FDI* in (1) and (2), and when instead of lags in the *FDI* flows, we use the total *FDI* stock (as a share of *GDP*) to control for the pre-treatment dynamics. Once again, the qualitative nature of our results remains unchanged. The cumulative effect of a state visit on *FDI* for the first eight years reaches approximately 3 percentage points, with the annual effects having the same pattern as in the previous specifications.

<sup>19</sup> If we take our results in face value, maybe it seems that king Kalākaua's visit, highlighted in the introduction, could have had negative effects. Of course, the first visit to the US, even if it was a private visit, was an important event back then. Today, this might not have been the case.

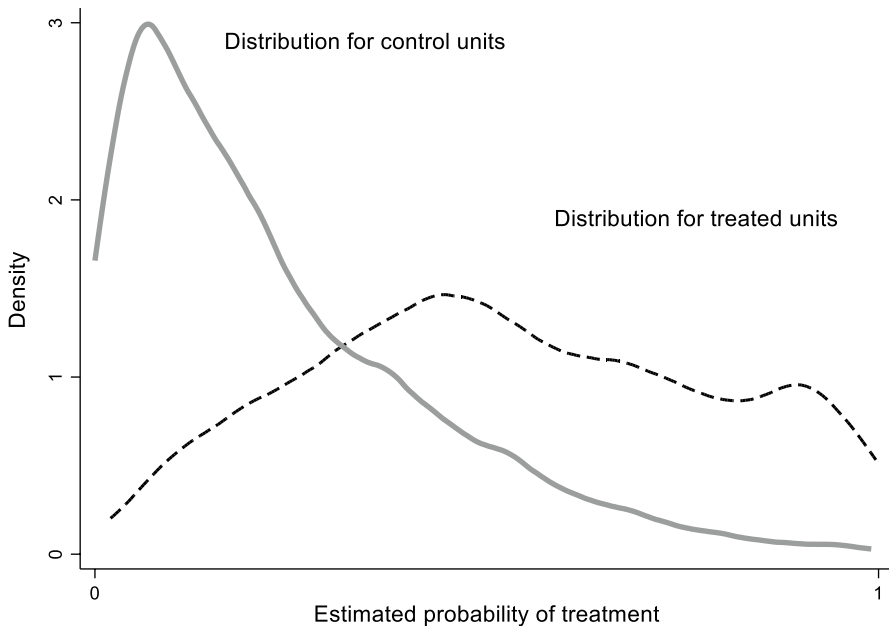
<sup>20</sup> The first stage results for Table 5 are presented in the Appendix (Table 6).

<sup>21</sup> Note that the truncation suggested by Imbens (2004) does not affect the sample size and only sets the maximum and minimum propensity score to be 0.9 and 0.1, respectively. For this reason, the number observations for the non-truncated propensity score case here is exactly equal to the baseline model's observations- line 1 in Table 3.

**Table 5** Robustness

	(1) t = -1	(2) t = 1	(3) t = 2	(4) t = 3	(5) t = 4	(6) t = 5	(7) t = 6	(8) t = 7	Observations
Non truncated	-0.000 (-0.03)	0.271* (1.77)	0.431** (2.11)	-0.138 (-0.46)	0.623*** (2.67)	1.063*** (2.90)	0.531* (1.88)	0.208 (0.86)	4166
Different slopes	-0.000 (-0.21)	0.276* (1.90)	0.400** (2.30)	0.080 (0.41)	0.663*** (3.48)	0.923*** (4.09)	0.441* (1.88)	0.178 (0.88)	4166
1 lag	0.385** (2.16)	0.393*** (2.62)	0.512*** (2.89)	0.064 (0.31)	0.606*** (3.22)	0.973*** (4.33)	0.411* (1.69)	0.154 (0.74)	4277
2 lags	0.000 (0.20)	0.319** (2.19)	0.466*** (2.62)	-0.040 (-0.20)	0.608*** (3.20)	0.895*** (3.99)	0.385 (1.55)	0.149 (0.70)	4251
No fixed effects	-0.000 (-1.16)	0.229 (1.29)	0.439** (2.08)	0.325 (1.36)	0.916*** (3.41)	1.123*** (3.95)	0.863*** (3.22)	0.594** (2.00)	4404
FDI Stock	0.432* (1.90)	0.420** (2.19)	0.525** (2.23)	0.080 (0.29)	0.675** (2.47)	1.024*** (3.17)	0.341 (1.00)	0.040 (0.13)	3606
No NATO	-0.000 (-0.49)	0.287** (2.19)	0.247* (1.67)	0.209 (1.29)	0.664*** (3.38)	0.734*** (3.28)	0.622*** (2.90)	0.462** (2.55)	3533
No communist countries	0.000 (0.99)	0.315** (2.10)	0.447** (2.53)	-0.002 (-0.01)	0.625*** (3.23)	0.924*** (4.00)	0.367 (1.51)	0.118 (0.58)	4094
Excluding visits by kings	0.000 (0.60)	0.313** (2.17)	0.450*** (2.57)	0.030 (0.15)	0.577*** (2.99)	0.872*** (3.84)	0.358 (1.52)	0.051 (0.25)	4166
Excluding visits by presidents	-0.000 (-0.12)	0.327** (2.29)	0.374** (2.07)	-0.057 (-0.27)	0.526*** (2.85)	0.901*** (3.83)	0.349 (1.48)	0.081 (0.38)	4145
Excluding visits by prime ministers	0.000 (0.90)	0.336** (2.28)	0.492*** (2.78)	0.091 (0.45)	0.716*** (3.54)	1.046*** (4.59)	0.484** (2.02)	0.159 (0.78)	4159
Excluding visits by other government officials	0.000 (0.37)	0.302** (2.08)	0.433** (2.47)	0.002 (0.01)	0.615*** (3.19)	0.898*** (3.93)	0.355 (1.49)	0.080 (0.39)	4166

Notes: See Table 3



**Fig. 2** Smoothed density for the propensity to visit the USA. *Notes:* This figure plots the smoothed density of the estimated propensities to visit the US. The black line plots the propensity for the countries that have not visited, whereas the dashed line the density for the countries that have visited the US. The densities are smoothed using an Epanechnikov kernel

Next, we exclude the data on leader characteristics from Eq. (1) and keep the country-specific political and economic variables, lagged FDI, country, and year effects as explanatory variables. Once again, our results appear robust.

As a next step, we examine the sensitivity of our results when we exclude the NATO countries from the sample. NATO country leaders pay more visits to the US than other leaders. At the same time, as they have a formal alliance with the US, they have already signaled that they are “a friend” of the US. Hence, any signaling effect must be present when we exclude visits by NATO country leaders. According to our results, this is the case. Even when excluding NATO members, our results remain qualitatively unchanged. The only difference is that the estimated effect in  $t=2$  loses some statistical significance, and the ATT in  $t=6$  becomes statistically significant at the 1% level.

Then, we exclude countries that were communist states in the given year. These countries are closed to international economic flows and thus are less likely to attract foreign investments (Schneider & Frey, 1985). Furthermore, the risk of expropriation of foreign investments is higher in these countries, resulting in lower investment (Li, 2009). Also, due to ideological differences, the associated country leaders have a lower probability of visiting the USA.<sup>22</sup> Thus, we want to ensure that these

<sup>22</sup> However, the opposite might also hold, i.e., communist leaders might be willing to visit the US, as according to Cukierman & Tommasi (1998), “substantial policy changes are sometimes implemented by unlikely parties”.

Table 6 First stage probit of Table 5

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	1 lag	2 lags	No LEAD data	FDI stock	No NATO	No communist countries	Excluding visits by Kings	Excluding visits by presidents	Excluding visits by prime ministers	Excluding visits by other officials
FDI (-1)	-0.00 (-0.45)	-0.01 (-1.01)	-0.01 (-1.32)		0.00 (0.21)	-0.00 (-0.96)	-0.00 (-0.94)	-0.00 (-0.70)	-0.00 (-0.91)	-0.01 (-1.03)
FDI (-2)		0.01 (1.26)	0.00 (0.62)		-0.01 (-0.81)	0.00 (0.87)	0.00 (0.80)	0.01 (1.38)	0.00 (0.71)	0.00 (0.83)
FDI (-3)			0.00 (0.07)		0.00 (0.62)	0.00 (0.68)	0.00 (0.85)	0.00 (0.32)	0.00 (0.90)	0.00 (0.73)
FDI stock				0.00 (1.39)						
Population	1.16*** (4.74)	1.14*** (4.57)	0.13*** (6.85)	1.11*** (4.04)	1.01*** (3.43)	1.09*** (4.27)	0.97*** (3.88)	1.08*** (4.16)	0.94*** (3.73)	1.12*** (4.42)
GDP per capita	0.27** (2.06)	0.26* (1.95)	0.07*** (3.53)	0.24 (1.59)	0.26* (1.72)	0.20 (1.37)	0.25* (1.79)	0.29** (2.01)	0.21 (1.52)	0.30** (2.14)
Openness	0.01*** (3.67)	0.01*** (3.43)	0.00 (1.09)	0.01*** (3.36)	0.01*** (3.44)	0.00*** (2.73)	0.01*** (3.47)	0.01*** (3.36)	0.01*** (3.31)	0.01*** (3.34)
Polity score	0.05*** (6.20)	0.05*** (6.27)	0.03*** (6.69)	0.05*** (5.11)	0.05*** (5.72)	0.05*** (6.16)	0.05*** (5.78)	0.04*** (4.87)	0.05*** (5.58)	0.05*** (6.06)
Military expenditure to GDP	0.06** (2.48)	0.05** (2.11)	0.06*** (6.26)	0.07*** (2.69)	0.03 (1.33)	0.04 (1.60)	0.05* (1.81)	0.03 (1.14)	0.04* (1.91)	0.04 (1.41)
Visits	0.08*** (7.67)	0.08*** (7.76)	0.05*** (14.56)	0.09*** (7.69)	0.08*** (6.92)	0.08*** (7.71)	0.07*** (7.37)	0.06*** (6.41)	0.07*** (7.16)	0.08*** (7.66)
Trade with USA	-0.01 (-0.46)	-0.01 (-0.36)	-0.01 (-0.37)	-0.03 (-0.85)	-0.01 (-0.52)	-0.01 (-0.40)	-0.01 (-0.50)	-0.03 (-1.06)	-0.01 (-0.26)	-0.01 (-0.43)

Table 6 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	1 lag	2 lags	No LEAD data	FDI stock	No NATO	No communist countries	Excluding visits by Kings	Excluding visits by presidents	Excluding visits by prime ministers	Excluding visits by other officials
NATO member	-0.52*** (-2.68)	-0.44*** (-2.22)	-0.02 (-0.31)	-0.52*** (-2.63)	0.00 (.)	-0.46** (-2.22)	-0.60*** (-2.90)	-0.47** (-2.25)	-0.53*** (-2.55)	-0.50*** (-2.41)
Communist country	-4.05 (-0.03)	-4.07 (-0.03)	0.17 (1.02)	-0.15 (-0.31)	-4.11 (-0.03)		-4.09 (-0.03)	-3.61 (-0.05)	-3.96 (-0.03)	-4.10 (-0.03)
UN security council member	0.17*** (1.99)	0.18*** (2.18)	0.19*** (2.47)	0.16* (1.85)	0.14 (1.50)	0.19*** (2.22)	0.18*** (2.17)	0.09 (1.02)	0.08 (0.97)	0.19*** (2.23)
Chi-Square	1458.04	1421.05	925.15	1230.34	1101.43	1362.03	1337.18	1235.71	1048.41	1388.06
Pseudo R-squared	0.27	0.26	0.17	0.26	0.26	0.26	0.26	0.25	0.21	0.26
Observations	4347	4251	4404	3721	3533	4094	4166	4145	4159	4166

The table presents the first stage probit results for Table 5. See also the notes in Table 4

countries do not drive our results. We can observe that excluding these countries does not affect our estimated effect. All estimated ATTs are very close to the ones of the baseline model.

In the rest of the table, we experiment with the type of official that visited the US. Specifically, we exclude visits by Kings (line 3), Presidents (line 4), Prime Ministers (line 5), and other members of the government (e.g., secretary of state, line 6). This exercise aims to ensure that specific leader characteristics do not drive our results. But, again, our results are robust in general terms.

## 6 Conclusions

International visits are an integral part of diplomacy. As such, they have significant ramifications on the economy. In this paper, we examined the causal effect of a visit of a country's leader to the USA on FDI. Visits to the US are nonrandom events; political and economic factors determine both FDI inflows and the propensity of a visit to the US. For this reason, we created pseudo-randomization by first estimating the propensity of visiting the US, using the determinants of a visit, and then rebalancing the sample so that observations with higher (lower) propensity receive lower (higher weight).

According to our findings, there is a statistically significant and quantitatively important effect, corresponding to an almost 2.5% increase in FDI within six years after the visit. Moreover, we have found that formal visits have a higher impact than private ones. We also find a stronger effect after 1989 and in countries with low-quality political and economic institutions. Our findings, backed by a series of robustness tests, can be explained by the idea that a foreign policy visit signals the government's commitment to specific policy goals, such as creating a hospitable environment for foreign investments.

Our results are also important in terms of policy. Our findings are suggestive of the side effects of foreign policy on the economy. Good relationships in the international political arena may shape economic outcomes. At the same time, political alliances and foreign relations might be equally important to sound economic policies. For the issue we examine, economic integration, as manifested by increasing FDI flows, might also require a high degree of political integration in the international system.

## Appendix

### Country list

Afghanistan, Albania, Algeria, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belgium, Bolivia, Botswana, Brazil, Bulgaria, Burkina Faso, Burma, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chile, China, Colombia, Congo Democratic Republic, Congo Republic, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Republic,

Denmark, Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Finland, France, Gabon, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guinea Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea South, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Swaziland, Sweden, Switzerland, Tajikistan, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Kingdom, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia, Zimbabwe.

**Acknowledgements** We would like to thank Jeffrey M. Wooldridge, Sotiris Papaioannou, Fragkiskos Filippaios, Nikos Mylonidis, Achilleas Vassilopoulos, and Stamatia Ftergioti for their valuable comments and suggestions. We also thank the two anonymous reviewers and the journal editor for their insights that significantly improved the paper. All remaining errors are ours.

**Funding** Open access funding provided by HEAL-Link Greece.

## Declarations

**Conflict of interest** The authors have no conflicts of interest to declare that are relevant to the content of this article.

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