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ABSTRACT

WINNING OR LOSING IN INVESTOR-TO-STATE DISPUTE RESOLUTION: THE ROLE OF ARBITRATOR BIAS AND EXPERIENCE*

Julian Donaubauer, Eric Neumayer, Peter Nunnenkamp

When an investor sues a state for alleged breaches of its obligations under an investment treaty or a trade agreement with investment provisions, all that should matter for who wins the case are the merits of the claim itself. Alas, investor-to-state dispute settlement (ISDS) does not take place in a vacuum. Such cases are decided by a tribunal typically consisting of three arbitrators, one each nominated by the two parties while the president is mutually agreed upon. We demonstrate that the kind of involvement of these arbitrators in previous ISDS cases matters for the case under dispute. Specifically, we show that what we label the president's pro-investor bias – the number of times they have previously been nominated by an investor minus the number of times they have represented respondent states – raises the likelihood that an investor wins an ISDS case. An investor can further raise its chances of prevailing by appointing an arbitrator with greater experience, defined as the number of ISDS cases they have previously been involved in. Greater experience of the state-appointed arbitrator has no independent effect but conditions the effect that president bias has. Given the president's crucial role, the main implication of our findings is that presidents should be drawn from among those who have not systematically represented more one side than the other in previous cases.

Keywords: investor-state dispute settlement, international investment agreements, arbitration
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1. INTRODUCTION

The widely perceived legitimacy crisis of investor-state dispute settlement (ISDS) is often attributed to ad-hoc arbitration tribunals established under the auspices of institutions such as the International Centre for Settlement of Investment Disputes (ICSID), which is part of the World Bank in Washington, DC. Public debate, notably in Europe, suggests that these tribunals are dominated by self-interested arbitrators operating under opaque circumstances. As noted by Rogers (2014: 226), "critics hypothesize that investment arbitrators favor their appointing party in a self-interested effort to increase the likelihood of future appointments." More problematically still, the suspicion is that private arbitrators with considerable interest in serving corporate clients favor the claimants and take position against respondent states (Pauwelyn 2015). In other words, ISDS is suspected to systematically favor investors over respondent states. Relatively poor respondent states are expected to be in a particularly weak position when multinational corporations bring alleged breaches of commitments made in international investment treaties to 'private' arbitration (Behn et al. 2017).[1]

However, as stressed by Rogers (2014), such hypotheses have largely remained untested. In order to fill this gap, we make use of rich ISDS-related information collected by UNCTAD for 739 investment disputes (as of end-2016). The database informs not only about tribunal decisions in favor of private investors or respondent states; it also names the arbitrators handling the specific case. We use the case-specific information on the composition of tribunals to test the hypothesis that what we label 'biased' arbitrators, those who systematically served the interests of one particular side in past cases, shape the outcome of ISDS. In particular, we hypothesize that 'biased' presidents of arbitration tribunals increase the probability of investor wins in ISDS. We also hypothesize that the two parties can improve their chances of winning by appointing arbitrators who are more biased toward,

[1] See also the discussion in Gallagher and Shrestha (2011) and Schultz and Dupont (2015). Conflicts of interest, favoring investors, and a lack of transparency are supposed to encourage 'strategic litigation' (Pelc 2017), which aims not only at obtaining financial compensation for alleged breaches of treaty obligations by the respondent state but also at deterring the regulation of business activities by host-country governments. The mere fear of being sued and ending up on the losing side may result in 'regulatory chill', that is, states shying away from regulatory measures and policies for fear of being dragged by foreign investors before a private arbitration tribunal (Neumayer 2001, ch. 4).

respectively, respondent states or investors (have served more in previous cases on the same side as the one who is appointing them now) and by appointing arbitrators who are more experienced (have served on more previous cases, independently on which side).

After summarizing the related literature in Section 2, we derive our hypotheses in Section 3. Section 4 introduces our empirical model to test these hypotheses. Our estimation results are presented in Section 5. We find that the presidents of arbitration tribunals play an important role for ISDS outcomes. The probability of investor wins increases when presidents are 'biased' in the sense of having predominantly served as claimant-appointed arbitrators in previous cases. However, this effect becomes weaker if state-appointed arbitrators have more experience, i.e. have been involved in ISDS frequently before. The probability of investor wins also increases if the arbitrators appointed by claimants are more experienced. Section 6 concludes with a policy implication for rendering ISDS more impartial.

2. RELATED LITERATURE

It has become common that international investment agreements – bilateral investment treaties (BITs) as well as plurilateral trade and cooperation agreements containing investment chapters – include binding provisions on investor-state dispute settlement (ISDS). These provisions allow private foreign investors to evade national courts in the host countries and instead revert directly to international arbitration by ad-hoc tribunals, e.g., established under the auspices of the ICSID, in order to raise claims for financial compensation against host-country governments that have allegedly broken treaty obligations.

ISDS provisions were widely regarded as a 'technical' issue until they first received public attention in the wake of controversial ISDS decisions under the umbrella of the North Atlantic Free Trade Agreement (NAFTA) (Neumayer 2001, ch. 4). A massive surge in public attention followed the heated debate on broad-based cooperation agreements such as the Transatlantic Trade and Investment Partnership (TTIP). In academic research, the major question was whether ISDS provisions could help attract foreign direct investment (FDI) to

host countries in which deficient national institutions appeared to be unable or unwilling to ensure the rule of law. The empirical evidence on whether 'legal delegation' (Allee and Peinhardt 2010) to international arbitration tribunals induces higher FDI inflows has remained ambiguous.[2] At the same time, some recent studies indicate that FDI inflows are negatively affected once the host country faces compensation claims before arbitration tribunals. Allee and Peinhardt (2011: 401) find that "governments suffer notable losses of FDI when they are taken before ICSID." Focusing on differences in the FDI response from BIT-partner and non-partner countries, Aisbett et al. (2016) find that BITs stimulate bilateral FDI flows from partner countries only as long as the host country has not previously had a claim brought against it to arbitration.[3]

According to Allee and Peinhardt (2011), host countries suffer particularly large losses of FDI when international arbitration tribunals consider the compensation claims of private claimants to be justified. Consequently, it is of considerable relevance for respondent states to know what determines the decisions of tribunals in favor of either of the two parties involved in ISDS. However, the empirical literature on the determinants of ISDS outcomes is still in its infancy, predominantly because the number of disputes with sufficient documentation was fairly small until the recent boom of ISDS cases.

Some authors argue that ISDS generally favors private claimants over respondent states. For instance, the analysis of trends in legal interpretation by Van Harten (2012: 214) suggests that arbitrators tend to adopt expansive interpretations of contentious issues of jurisdiction, thereby leaning to the position of private claimants rather than respondent states. However, Van Harten (2012) does not consider actual ISDS outcomes, i.e., tribunal decisions in favor of either of the two parties involved.

As concerns ISDS outcomes, the academic debate has mainly focused on whether respondent states at lower levels of economic development face systematically higher risks of investor wins in ISDS proceedings. According to Franck (2009: 435), the development status of respondent states "does not have a statistically significant relationship with

[2] See, for instance, Berger et al. (2011; 2013) and the literature given there.
[3] According to Wellhausen (2015), the negative effects of disputes are limited to FDI flows from the particular source country where the foreign investor raising the claim is based.

outcome." She concludes that ISDS does not discriminate against lower-income countries.[4] Franck (2014) comes to the same conclusion when controlling for the level of democracy, as an indicator of the quality of governance, in the respondent state. In contrast, Behn et al. (2017) find that poorer host countries of FDI are more likely than richer host countries to lose investment disputes in international arbitration.[5] Likewise, Pelc (2017) finds that richer respondent states fare better in ISDS proceedings and argues that the striking difference to Franck (2014) may be due to the larger sample of ISDS cases.[6]

Previous empirical research has paid limited attention to the role of arbitrators in shaping ISDS outcomes. This represents an important gap since it has been suspected that the defining characteristics of ISDS proceedings, notably the "asymmetrical claims structure and absence of institutional markers of judicial independence create apparent incentives for arbitrators to favour the class of parties (here, investors) that is able to invoke the use of the system" (Van Harten 2012: 219).

Pauwelyn (2015) and Costa (2011) focus on some personal characteristics of ICSID arbitrators, comparing them with WTO panelists. Inter alia, they find that relatively few ICSID arbitrators are from developing countries (see also Waibel and Wu 2011). The private sector or academia represent the professional background of most ICSID arbitrators, while most WTO panelists have a governmental background. Moreover, the share of ICSID arbitrators with legal expertise (and a degree in law) is higher than the corresponding share of WTO panelists. It is also shown that "the pool or network of ICSID arbitrators is clearly more closed and dense, with a much higher repetition rate (…) than that of WTO panelists" (Pauwelyn 2015; see also Costa 2011).

Franck (2009) accounts for the 'development status' of (presiding) arbitrators in order to address concerns that the disproportionate representation of arbitrators from rich Western countries biases ISDS outcomes in favor of claimants who are typically based in similarly rich

[4] See Gallagher and Shrestha (2011) for a critical assessment of Franck's (2009) analysis and conclusions.
[5] See also Schultz and Dupont (2015) for descriptive statistics suggesting that higher-income countries have better chances to fend off compensation claims in ISDS proceedings.
[6] However, the focus of Pelc (2017) is on whether the recent trend toward strategic litigations and so-called indirect expropriations, rather than direct takings, can explain why the win rates of private claimants declined over time.

home states sharing Western legal concepts and norms.[7] She concludes from her analysis of just about 50 concluded cases of ISDS that these concerns tend to be unfounded, considering the statistically insignificant link between the development status of presiding arbitrators and ISDS outcomes.[8] Using information on 131 concluded cases, Kapeliuk (2010) provides evidence on ISDS outcomes by focusing on the decision patterns of so-called elite arbitrators, somewhat arbitrarily defined as having served on at least four ICSID tribunals. Inter alia, the descriptive statistics speak against the hypothesis that arbitrators who have been reappointed repeatedly are biased in favor of private investors.[9]

By accounting for arbitrators and the legal counsel of investors and states in a multiple regression analysis of the determinants of ISDS outcomes, the recent contribution of Franck and Wylie (2015) is more closely related to our empirical analysis below.[10] The analysis of Franck and Wylie provides only weak evidence that arbitrators matter for ISDS outcomes.[11] This may be partly due to the still relatively few observations as Franck and Wylie miss the particularly large number of newly initiated ISDS cases since 2012.[12] More importantly perhaps, the coverage of personal traits of arbitrators focuses on the tribunal's gender composition and 'development status' (as defined above), rather than the experience of arbitrators and whether they have systematically represented more one side than the other

[7] As discussed in more detail in Behn et al. (2017), this reasoning is based on Posner and De Figueredo (2005) who report in the context of the International Court of Justice that judges are more likely to vote for a disputing state that shares a similar level of economic development with the judge's home state. Judges are supposed to be 'sympathetic' with comparable states and/or to consider shared interests of home states with similarly advanced states.

[8] In contrast, Behn et al. (2017) report a significantly positive effect of the GDP per capita of the presiding arbitrator's home state on the probability of investor wins. The sample underlying the ordered logit model of Behn et al. is much larger than that of Franck (2009).

[9] Kapeliuk (2010) also finds no evidence supporting the view that arbitrators render compromise awards, by 'splitting the difference' with regard to claims for financial compensation, in order to maximize their chances of reappointment in future cases of ISDS. It should be noted, however, that the evidence is largely based on just 43 of the 131 concluded cases – namely those with involvement of elite arbitrators (105) having been finally resolved by a publicly known award on the merits.

[10] In addition, Waibel and Wu (2011) perform multiple regressions on the determinants of ISDS outcomes in an unpublished working paper. They account for the personal background of arbitrators as well as repeated appointments by claimants or respondent states. Inter alia, Waibel and Wu (2011) find that arbitrators (notably, the presidents of tribunals) with a career in the private sector and with repeated appointments by claimants are more likely to affirm jurisdiction, i.e. accepting the case for the tribunal to decide on its merits. In contrast to our analysis below, Waibel and Wu do not distinguish between the arbitrators' experience and bias on a case-by-case basis.

[11] In contrast, the investors' identity and the expertise of the parties' lawyers appear to be more important.

[12] Franck and Wylie (2015) include awards that were publicly available by the end of 2011. As a result, the number of observations underlying the reported regressions is about 50-100.

in the past. As we explain in more detail in Section 3, we address this limitation by constructing case-specific measures of the experience and what we call 'bias' of all three arbitrators. In assessing the importance of these measures for ISDS outcomes, we also account for conditional effects, e.g., by interacting the personal traits of different arbitrators involved in a specific case.

3. THE IMPACT OF ARBITRATOR BIAS AND EXPERIENCE ON ISDS OUTCOMES

In this section, we develop hypotheses regarding the effect that the involvement of arbitrators in previous cases has on ISDS outcomes. To explain our reasoning, it is important to introduce readers to the database we draw on, namely UNCTAD's database on ISDS which included 739 cases by the end of 2016 (http://investmentpolicyhub.unctad.org/ISDS). The database provides case-specific information on the private claimant and the respondent state, the economic sector of the dispute, the year when the case was filed for international arbitration, the current status, and the outcome for concluded cases. While some cases of ISDS date back to the early 1990s, it was only in 2003 that the number of new disputes exceeded 30 for the first time. Throughout the period of observation, 471 cases have been concluded; 257 were still pending by end-2016.[13]

Crucially, the database provides information on the arbitrators constituting the ad-hoc tribunals. Typically, three arbitrators are involved in each case: one arbitrator is appointed by the private claimant, another one is appointed by the respondent state, and the third serves as the president on whom both parties have to agree. Ideally, we would thus have 2,217 observations on arbitrators (739 cases x 3 arbitrators). However, 388 observations (17.5%) are missing. A large share of the missing observations (34%) concerns cases that were still pending, most probably because tribunals had not yet been established; 41% of missing observations relate to settled and discontinued cases. Importantly, missing

[13] The current status was unknown for 11 cases; another 11 cases were concluded but the arbitration tribunal's decision was "in neither party's favor", i.e., the tribunal found a liability but awarded no damages.

observations are relatively few for cases decided in favor of either the investor or the respondent state.

Some of the 426 arbitrators named in the database performed all three functions – i.e., as president, as a representative of the claimant, and as a representative of the respondent state – during the period of observation. Arbitrators in this group account for 11% of all arbitrators.[14] However, most arbitrators specialized and performed just one function. About half of all arbitrators were active exclusively as representatives of either claimants or respondent states.

We hypothesize that the presidents of tribunals play a critically important role in deciding on investor-state disputes, based on the presumption that the other two arbitrators tend to serve the interests of the party they are representing. Arguably, presidents are most likely to be impartial when they have not served as the representative of either claimants or respondent states in previous cases. A relatively large number of presidents belong to this group (34% of all presidents; see Figure 1). However, the average number of 1.7 cases over which this type of president presided is considerably smaller than for all other types. The second largest group of 47 presidents has previously represented both claimants and respondent states in other cases. This group presided over 54% of all cases, i.e., each president in this group handled 7.1 cases on average. The remainder consists of those who have previously represented only claimants (27) or respondent states (34). This group handled 32% of all cases, thus presiding on average over 3.2 cases.

Based on the case-specific composition of arbitration tribunals and the history of previous cases, we define two characteristics of each arbitrator in a tribunal, namely what we call (pro-investor) bias and experience. We define bias by the number of previous cases an arbitrator has served as an investor's appointee minus the number of previous cases the same arbitrator has served as a respondent state's appointee, whereas experience is defined as the accumulated number of cases the arbitrator has been involved in, no matter on what side or as president. Our particular focus is on the characteristics of arbitrators that serve as

[14] In a few cases, arbitrators are listed as the "sole arbitrator" in the database. In some other cases, the function of arbitrators is "unknown." Note that these listings count for an arbitrator's experience, i.e., the number of cases being involved in any function (see below).

presidents in a particular case. We hypothesize that presidents who represented more often investors than states in the past (i.e., who are biased toward investors in our definition) are less likely to be impartial and therefore more likely to find the case in dispute in favor of the investor. Similarly, party-appointed arbitrators with stronger bias in favor of claimants should, all other things equal, increase the chances of the claimant winning the dispute.

As for arbitrators' experience, as Ashenfelter (1987: 342) notes, "a key determinant of the parties' preferences for an arbitrator is usually the extent of the arbitrator's 'experience' in deciding related arbitration cases."[15] More specifically, the comparison of ICSID arbitrators and WTO panelists by Pauwelyn (2015) suggests that "experience and track record" are relatively important selection criteria in ISDS, explaining the higher repetition rates of party-appointed ICSID arbitrators. We therefore hypothesize that the more experienced the investor-appointed arbitrator is the more likely is an outcome in favor of the investor in the disputed case. The opposite holds for the experience of the state-appointed arbitrator. By contrast, the president's experience (as opposed to bias) is not expected to have an effect. Moreover, we additionally hypothesize that well experienced state- or investor-appointed arbitrators can mitigate or strengthen the effect that the bias of presidents has on arbitration outcomes. Their accumulated expertise should help them increase the probability that the outcome is in favor of their client despite the president's bias in the direction of the investor or the state. The same goes for greater (pro-investor) bias in party-appointed arbitrators, which should reinforce any effect that president bias has.

In sum, we test the following hypotheses on the effects of the arbitrators' experience and bias on the outcomes of ISDS:

H1 (main hypothesis): The president's bias is hypothesized to be critically important for ISDS outcomes. The decisions of arbitration tribunals are more likely to be in favor of private investors when the president is biased toward claimants, and vice versa.

H2: Similarly, if the party-appointed arbitrators are more biased toward the claimant this also increases the chances of the claimant winning the dispute, and vice versa.

[15] See also Bloom and Cavanagh (1986) for an analysis of arbitrator selection.

H3: Tribunal decisions are more likely to be in favor of private investors if claimant-appointed arbitrators are more experienced and less likely in favor of private investors if state-appointed arbitrators are more experienced.

H4: The experience and bias of party-appointed arbitrators are likely to condition the effect of the president's bias on ISDS outcomes. Specifically, state-appointed arbitrators with more experience and negative pro-investor bias (i.e., stronger bias toward respondent states) are expected to mitigate the impact of the president's bias in favor of private investors. Conversely, claimant-appointed arbitrators with more experience and stronger bias toward investors are expected to exacerbate the impact of the president's bias in favor of private investors.

4. DATA AND ESTIMATION MODEL

As mentioned in the previous section, we have coded our data from UNCTAD's database on ISDS. In some contrast to the impression given in public debate, of the 471 concluded cases, tribunal decisions were more often in favor of respondent states (173 cases) than in favor of private investors (125). Arguably, it was also in the interest of respondent states that 48 cases were discontinued, particularly when tribunals dismissed the case for lack of jurisdiction.[16] The remaining 114 cases have been settled among the parties of the dispute.

To test our hypotheses we code a dependent variable that is set to one for ISDS cases decided in favor of the claimant, i.e., the private investor, and zero for cases decided in favor of the respondent state as well as for discontinued cases. It is typically in the interest of respondent states when arbitration tribunals dismiss the case for lack of jurisdiction or cases are discontinued for other reasons. However, we perform a robustness test in Section 5 by excluding discontinued cases from state wins. Furthermore, we also estimate ordered logit

[16] Jurisdiction may be denied, for instance, when the tribunal finds that the investor's asset does not constitute a 'covered investment', that the claimant is not a 'covered investor', or that the dispute arose before the relevant investment treaty entered into force or falls outside the relevant ISDS provisions (UNCTAD 2016). See also Schultz and Dupont (2015) who define state wins as arbitral decisions that either decline jurisdiction or deny the investor any compensation.

models which consider settled cases as a third outcome category and discontinued cases as a fourth outcome category.

The bias and experience of the three arbitrators handling a specific case represent our explanatory variables of principal interest. Bias and experience are not systematically correlated with each other so we include both characteristics simultaneously in all estimations. To control for the generally rising trend of arbitrators' experience built into our measure and any temporal trend in biases, we include year-specific fixed effects into all estimations.

In addition, we include in some estimations a number of control variables capturing potentially important characteristics of respondent states as well as the home countries of the claimants. On the respondent state side, we account for the country's GDP per capita and population since investor wins may be less likely when claims are raised against rich and large countries. Since arbitration tribunals may be less inclined to decide against respondent states with high quality national institutions, we include a measure of the respondent state's rule of law. As argued by Schultz and Dupont (2015: 1160), one of the "functional effects of investment arbitration is that it serves to make up for deficient rule of law in the host state." The panel analysis of Freeman (2013) suggests that a larger number of ISDS cases are brought against countries with relatively weak domestic institutions that could have ensured property rights and the rule of law.[17] On the part of claimants, private investors may have better chances to win when they are based in rich and large home states, which is why we control for the GDP per capita and population size of the country in which claimants are located. We also include two dummy variables to take into account that investor wins may be more likely when the claimant is based in the European Union or, alternatively, in one of the NAFTA member countries. Investors from these two regions accounted for the largest shares of all ISDS cases throughout the period of observation. Finally, we control for the economic sector in which the claimant operates by sector fixed effects in all estimations. The appendix lists summary variable statistics.

[17] In contrast, Pelc (2017) argues that most disputes no longer result from direct takings by host countries with weak rule of law but from policy regulations (so-called indirect expropriation) in democratic states with relatively strong institutions.

Given the binary nature of our dependent variable (investor wins or not), we employ logit estimation. Subsequently, we augment the estimation model by interaction terms in order to account for the conditional effects predicted by our fourth hypothesis. Since with non-linear estimators like the logit the existence of conditional effects cannot be reliably inferred by assessing the statistical significance of the interaction term (Ai and Norton 2003), we evaluate these models by plotting predicted marginal effects.

5. DESCRIPTIVE STATISTICS AND ESTIMATION RESULTS

Before we present the results from our logit estimations, we discuss some stylized facts that provide a first descriptive overview of arbitrator bias and experience. Table 1 provides period averages for our case-specific measures of arbitrators' experience and bias. The evidence for all cases of ISDS in column (1) indicates that respondent state-appointed arbitrators are slightly more experienced, on average, than claimant-appointed arbitrators and presidents. What is more, state-appointed arbitrators are more strongly biased toward respondent states than claimant-appointed arbitrators are biased toward private investors. This is striking insofar as public debate on ISDS focuses almost exclusively on the partisanship and self-interest of claimant-appointed arbitrators. Compared to the bias of party-appointed arbitrators, the bias of presidents is much weaker on average. This was to be expected, recalling that both parties have to agree on the president. All the same, presidents were biased somewhat in favor of claimants meaning that they have served more often as claimant-appointed arbitrators than state-appointed arbitrators in previous cases.

Figure 2 reveals that strongly biased arbitrators are not a common phenomenon in ISDS proceedings (see also Nunnenkamp 2017). Taken together, all three types of arbitrators are unbiased or just slightly biased in 54% of all cases, defined as the difference between the number of appointments by claimants and the number of appointments by respondent states to be just one or minus one. This share is particularly high for presidents (62%). Nevertheless, it may be problematic for respondent states that the presidents of arbitration tribunals are biased more often in favor of claimants than in favor of states (143 versus 84

cases). Claimants and respondent states were represented by more strongly biased arbitrators in a similarly large number of disputes and, not surprisingly, the bias is in their direction: respondent states tend to appoint arbitrators that more often represented states than claimants in past cases and vice versa for arbitrators appointed by claimants.

Columns (2) and (3) of Table 1 point to some striking differences in terms of arbitrators' experience and bias between cases decided in favor of the claimant and cases decided in favor of the respondent state. First of all, the president's bias toward the claimant appears to be relatively strong for cases decided in favor of the claimant. Second, the experience and bias of arbitrators representing the state are relatively weak in such cases. Third, and most surprisingly perhaps, the experience and bias of arbitrators representing the claimant are slightly weaker, rather than stronger, in cases decided in favor of the claimant.

Baseline estimation results

Descriptive statistics provide first insights but only a multivariate estimation model can test our hypotheses. Table 2 presents results from our baseline model. Model 1 includes the experience and bias measures for all three sets of arbitrators, model 2 additionally includes the respondent state and claimant's home state control variables. In model 1, we find that only the bias of the tribunal's president and the experience of the claimant-appointed arbitrator exert statistically significant effects. They are in the expected direction: the more often presidents had been appointed by claimants in previous cases relative to having been appointed by states, the more likely it is that claimants win the case under observation (and vice versa for greater bias toward respondent states), while claimants can also increase their chances of winning a case by appointing more experienced arbitrators. This provides partial evidence supporting our first and third hypotheses, while neither the bias of party-appointed arbitrators nor the experience of the state-appointed arbitrator have a statistically significant effect.

Including control variables in model 2 confirms the statistically significant effects from model 1. According to the average marginal effect based on column (2) of Table 2, an increase in the bias of the tribunal's president by one standard deviation causes the likelihood of an

investor win, which is on average 39 per cent, to increase by 8.1 percentage points.[18] An increase in the experience of the claimant-appointed arbitrator by one standard deviation leads to an increase in the likelihood of an investor win by 9.7 percentage points. In addition, we now also find that if states appoint arbitrators that have served relatively more often on the side of claimants than respondent states – arbitrators that are more biased toward investors – then this is detrimental to the states' chances to win the case. Since the effect is symmetrical, the opposite holds for appointing arbitrators that are biased toward respondent states: this increases the respondent state's chances of winning. In terms of quantitative impact, an increase of state appointed arbitrators' bias towards investors by one standard deviation increases the chance of an investor win by about 10.6 percentage points.

As concerns the control variables, with one exception we find no statistically significant effects. Most notably, the risk of investor wins in international arbitration of investment disputes does not appear to be higher for respondent states with relatively low GDP per capita. This is in contrast to Behn et al. (2017) who find that poorer states are more likely to lose ISDS cases than richer states. Our results are more in line with Franck (2014) since we do find that the risk of investor wins in international arbitration is lower for respondent states with better national institutions to enforce the rule of law. Most likely, this is because international arbitration tribunals are more inclined to deny jurisdiction and suspect 'frivolous' litigation by private investors for respondent states that adhere to the rule of law domestically.[19]

Conditional effects

To test our fourth hypothesis, we now include interaction terms to account for possible conditional effects. In models 3 and 4, results for which are reported in Table 3, we interact president bias with, respectively, the experience and bias of respondent state-appointed

[18] Average marginal effects are marginal effects estimated for each observation at its observed value and then averaged.

[19] Interestingly, if we exclude the respondent state's rule of law as an explanatory variable, its per capita income becomes statistically significant. Plausibly, therefore, a finding that poorer states are more likely to lose ISDS cases spuriously picks up the effect of weak institutions on ISDS case winning.

arbitrators. As we mentioned before, in non-linear models conditional effects cannot be simply inferred by assessing the sign and statistical significance of interaction term coefficients. We therefore plot predicted marginal effects based on models 3 and 4 in Figure 3. The top left graph in Figure 3 reveals that the marginal effect of president bias on the likelihood of an investor win declines with state-appointed arbitrators having served relatively more often for respondent states than for claimants in past cases – increasingly negative (pro-investor) bias in our coding. However, the 95 per cent confidence intervals around the point estimates typically overlap substantially such that one cannot confidently infer a conditioning effect of state-appointed arbitrator bias on the president's bias. The top right graph in Figure 3 shows that the marginal effect of president bias declines with greater experience of the state-appointed arbitrator and the effect at low levels of experience is statistically significantly different from the effect at high levels of experience.

In models 5 and 6, also reported in Table 3, we interact president bias with, respectively, the experience and bias of claimant-appointed arbitrators. The bottom left graph in Figure 3 shows that, contrary to expectation, the marginal effect of president bias decreases rather than increases with increasing bias of the claimant-appointed arbitrator. However, the marginal effects of president bias are never statistically significantly different across the relevant range of claimant-appointed arbitrator bias. Finally, the bottom right graph in Figure 3 reveals that the experience of the claimant-appointed arbitrator also exerts no conditioning effect on the president's effect.

In sum, we only find partial support for our fourth hypothesis: respondent states can mitigate the detrimental effect of president bias on the likelihood that investors win an arbitration case by appointing more experienced arbitrators. We find no statistically significant evidence for other conditioning effects.

Robustness tests

In this sub-section, we subject our estimation results to a number of robustness tests, results for which are reported in Table 4. Given the limited evidence for conditional effects, we focus on the robustness of our baseline model instead. For ease of comparison, the baseline

model 2 (with other control variables included) from Table 2 is shown again in column (1) of Table 4.

In model r1, we no longer consider the bias and experience separately for each of the three arbitrators. Instead, we use a 'consolidated' measure of bias for the arbitration tribunal as a whole, by summing up the biases of the three individual arbitrators. The modified measure of experience is given by the difference between the claimant-appointed arbitrator's experience and the state-appointed arbitrator's experience.[20] As can be seen, the coefficient on the consolidated bias is statistically significantly positive, if only at the 10% level, consistent with the baseline model in which the biases of the president and the respondent state-appointed arbitrator had positive effects. The modified measure of experience does not reach statistical significance at conventional levels.

In models r2 and r3, we return to the standard measurement of bias and experience for individual arbitrators. However, we exclude cases of ISDS with extraordinarily high and low values of the modified measure of experience (model r2) or the consolidated measure of bias (model r3). Specifically, we exclude cases with the highest and lowest five percent of modified experience or consolidated bias in order to test whether our baseline results were driven by outliers. This does not appear to be the case. The unexpected negative coefficient of the claimant-appointed arbitrator's bias becomes marginally significant at the 10 percent level in model r3.

Next, we exclude cases brought against the richest respondent states. In model r4, all countries classified as high-income by the World Bank for the majority of years in our sample period are dropped. The statistical significance of the claimant-appointed arbitrator's experience weakens somewhat compared to the baseline estimation. Besides, the effect of the bias of the state-appointed arbitrator is no longer statistically significant. Apart from that, our baseline results are hardly affected.

[20] As argued in Section 3, the president's experience should not play a role for tribunal decisions in favor of either party. The baseline results are in line with this reasoning.

The baseline results are robust to excluding ISDS cases initiated prior to 2002, as the results for model r5 show.[21] In model r6 we modify the definition of state wins. We exclude cases that were discontinued and consider only those cases as state wins that were explicitly decided in favor of respondent states by the arbitration tribunals. This modification hardly affects two of our baseline results: the probability of investor wins still increases when presidents are biased in favor of claimants and when claimant-appointed arbitrators are more experienced. In contrast, the effect of the bias of the state-appointed arbitrator is no longer statistically significant. The unexpected negative coefficient of the claimant-appointed arbitrator's bias again becomes marginally significant at the 10 percent level.

We report further robustness tests in Table 5 for models in which we redefine our dependent variable. So far we have used a binary dependent variable of investor wins versus state wins. We now include ISDS cases that were concluded by settlements among the parties as an intermediate outcome category. We create two ordered dependent variables. One consists of three categories and is ordered along the investor win; settlement; and, finally, combined state win plus discontinued cases dimension (model r7); the other one consists of four categories and is ordered along the investor win; settlement; discontinued case; and, finally, state win dimension (model r8). Consequently, we estimate two variants of an ordered logit model suitable for ordered outcome dependent variables. As in the baseline estimation model, we find that the outcomes of international arbitration are more likely to be in favor of private investors and less likely to be in favor of respondent states if the president of the tribunal is biased toward the claimant and if the claimant-appointed arbitrator is more experienced. The statistical significance of the effect of the bias of the state-appointed arbitrator again depends on the categorization of discontinued cases. If subsumed under state wins, then the effect is statistically significant at conventional levels.

[21] Note that our measures of experience and bias take relatively low values by construction in the early periods of our analysis when the number of ISDS was still relatively small.

6. CONCLUSION

If whether investors win or lose in investor-state dispute settlement were dependent merely on the merit of the investor's claim against the respondent state, the composition of the arbitration tribunal would not matter. The prior experience of both of the party-appointed arbitrators and the mutually agreed president as well as whether they have represented in previous cases relatively more the side of the respondent state or the side of the investor would be of no significance. Alas, our analysis demonstrates that this is not the case. Given the president's crucial veto power, we have argued that what we call their 'bias', defined as the number of times they have previously represented an investor in ISDS cases minus the number of times they have represented a respondent state in such cases, should increase the odds that the investor wins its case. Our empirical analysis of all concluded ISDS cases in UNCTAD's database has corroborated this hypothesis across and therefore independent of multiple ways of specifying our estimation model. This suggests that presidents are not as impartial as they should be. Having served more the interests of one party over the other in the past makes them, we submit, on average partial since we see no other reason why this particular prior experience should otherwise impact the outcome of the case in which they now serve as president.

We have also found that, independently of bias, more experienced claimant-appointed arbitrators – those who have served on more prior ISDS cases, independently on which side – help investors win their case. The experience of the respondent state-appointed arbitrator, by contrast, was found not to have any independent effect. However, appointing arbitrators with more experience helps respondent states to mitigate the detrimental impact that a biased president has on their own chances to win the case.

The implications for the two parties are clear. From the investor's perspective, appoint an arbitrator with plenty of experience and seek to agree with the respondent state on a president who has previously represented many more times an investor than a respondent state. From the respondent state's perspective, the opposite holds for the appointment of presidents. Whilst appointing a very experienced arbitrator on their side helps mitigate the impact of a biased president, clearly it is better to avoid a biased president in the first place.

From an outsider's viewpoint, our results would call for avoiding bias in the crucial position of president. A policy implication might therefore be the creation of a pool of potential candidates who can function as presidents drawn from those and only those who have not systematically over-represented investors or respondent states in previous cases.

REFERENCES:

Ai, C. and E.C. Norton (2003). Interaction terms in logit and probit models. *Economics Letters*, 80(1): 123-129.

Aisbett, E., M. Busse and P. Nunnenkamp (2016). Bilateral investment treaties do work; until they don't. Kiel Working Paper 2021. Kiel Institute for the World Economy.

Allee, T. and C. Peinhardt (2010). Delegating differences: Bilateral investment treaties and bargaining over dispute resolution provisions. *International Studies Quarterly* 54(1): 1-26.

Allee, T. and C. Peinhardt (2011). Contingent credibility: The impact of investment treaty violations on foreign direct investment. *International Organization* 65(3): 401-432.

Ashenfelter, O. (1987). Arbitration and the negotiation process: Arbitrator behavior. *American Economic Review* 77(2): 342-346.

Behn, D., M. Langford and T.L. Berge (2017). Poor states or poor governance? Predicting outcomes in investment treaty arbitration. *Review of Law and Economics,* forthcoming.

Berger, A., M. Busse, P. Nunnenkamp and M. Roy (2011). More stringent BITs, less ambiguous effects on FDI? Not a bit! *Economics Letters* 112(3): 270-272.

Berger, A., M. Busse, P. Nunnenkamp and M. Roy (2013). Do trade and investment agreements lead to more FDI? Accounting for key provisions inside the black box. *International Economics and Economic Policy* 10(2): 247-275.

Bloom, D.E. and C.L. Cavanagh (1986). An analysis of the selection of arbitrators. *American Economic Review* 76(3): 408-422.

Costa, J.A.F. (2011). Comparing WTO panelists and ICSID arbitrators: The creation of international legal fields. *Oñati Socio-Legal Series* 1(4): 1-24.

Franck, S.D. (2009). Development and outcomes of investment arbitration. *Harvard International Law Journal* 50(2): 435-489.

Franck, S.D. (2014). Conflating politics and development? Examining investment treaty arbitration outcomes. *Virginia Journal of International Law* 55(1): 13-71.

Franck, S.D. and L.E. Wylie (2015). Predicting outcomes in investment treaty arbitration. *Duke Law Journal* 65(3): 459-526.

Freeman, N.W. (2013). Domestic institutions, capacity limitations, and compliance costs: Host country determinants of investment treaty arbitrations, 1987-2007. *International Interactions* 39(1): 54-78.

Gallagher, K.P. and E. Shrestha (2011). Investment treaty arbitration and developing countries: A re-appraisal. *Journal of World Investment and Trade* 12(6): 919-928.

Kapeliuk, D. (2010). The repeat appointment factor: Exploring decision patterns of elite investment arbitrators. *Cornell Law Review* 96(1): 47-90.

Neumayer, E. (2001). *Greening trade and investment: environmental protection without protectionism*. London: Earthscan.

Nunnenkamp, P. (2017). Investor-state dispute settlement: Are arbitrators biased in favor of claimants? Policy Brief 105. Kiel Institute for the World Economy.

Pauwelyn, J. (2015). The rule of law without the rule of lawyers? Why investment arbitrators are from Mars, trade adjudicators from Venus. *American Journal of International Law* 109(4): 761-805.

Pelc, K.J. (2017). What explains the low success rate of investor-state disputes? *International Organization,* forthcoming.

Posner, E. and M. de Figueredo (2005). Is the International Court of Justice biased? *Journal of Legal Studies* 34(2): 599-630.

Rogers, C.A. (2014). The politics of international investment arbitrators. *Santa Clara Journal of International Law* 12(1): 223-262.

Schultz, T. and C. Dupont (2015). Investment arbitration: Promoting the rule of law or over-empowering investors? A quantitative empirical study. *European Journal of International Law* 25(4): 1147-1168.

UNCTAD (2016). *World Investment Report 2016. Investor Nationality: Policy Challenges*. Geneva and New York: United Nations.

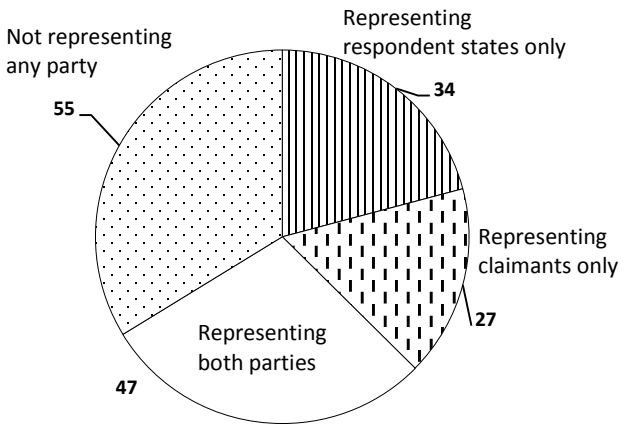
Van Harten, G. (2012). Arbitrator behavior in asymmetrical adjudication: An empirical study of investment treaty arbitration. *Osgoode Hall Law Journal* 50(1): 211-268.

Waibel, M. and Y. Wu (2011). Are arbitrators political? https://www.researchgate.net/publication/256023521_Are_Arbitrators_Political.

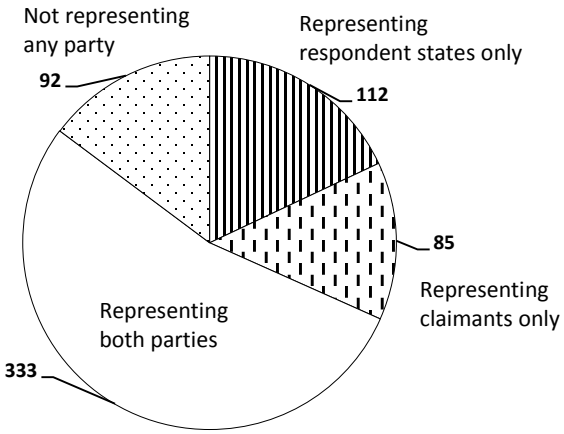
Wellhausen, R.L. (2015). Investor-state disputes: When can governments break contracts? *Journal of Conflict Resolution* 59(2): 239-261.

Figure 1
Number of presidents performing other functions and number of cases they have been involved in as president (based on 162 presidents and 622 cases with information on president)

a) Number of presidents

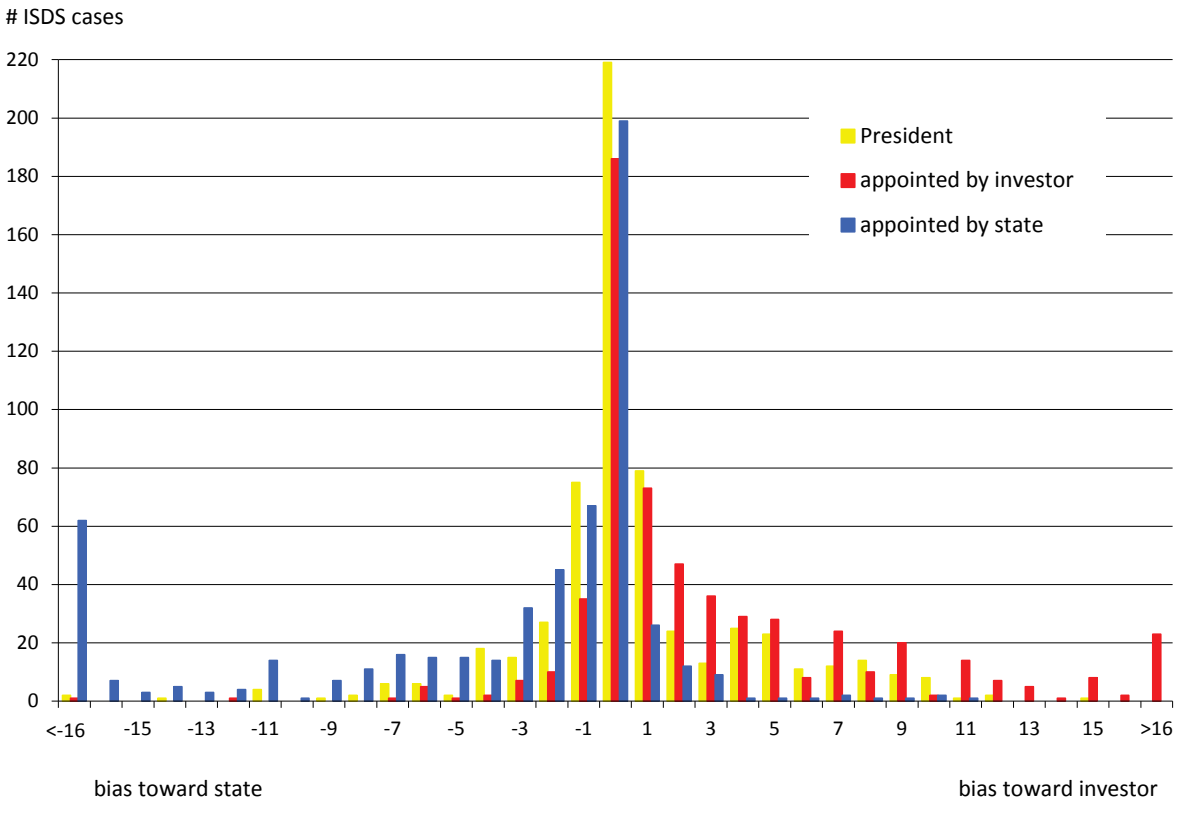


b) Number of cases



***Source*: UNCTAD, ISDS database.**

Figure 2
Distribution of ISDS cases according to bias of arbitrators



Source: UNCTAD, ISDS database.

Figure 3
Predicted effect of president's bias conditioned by bias and experience of party-appointed arbitrators

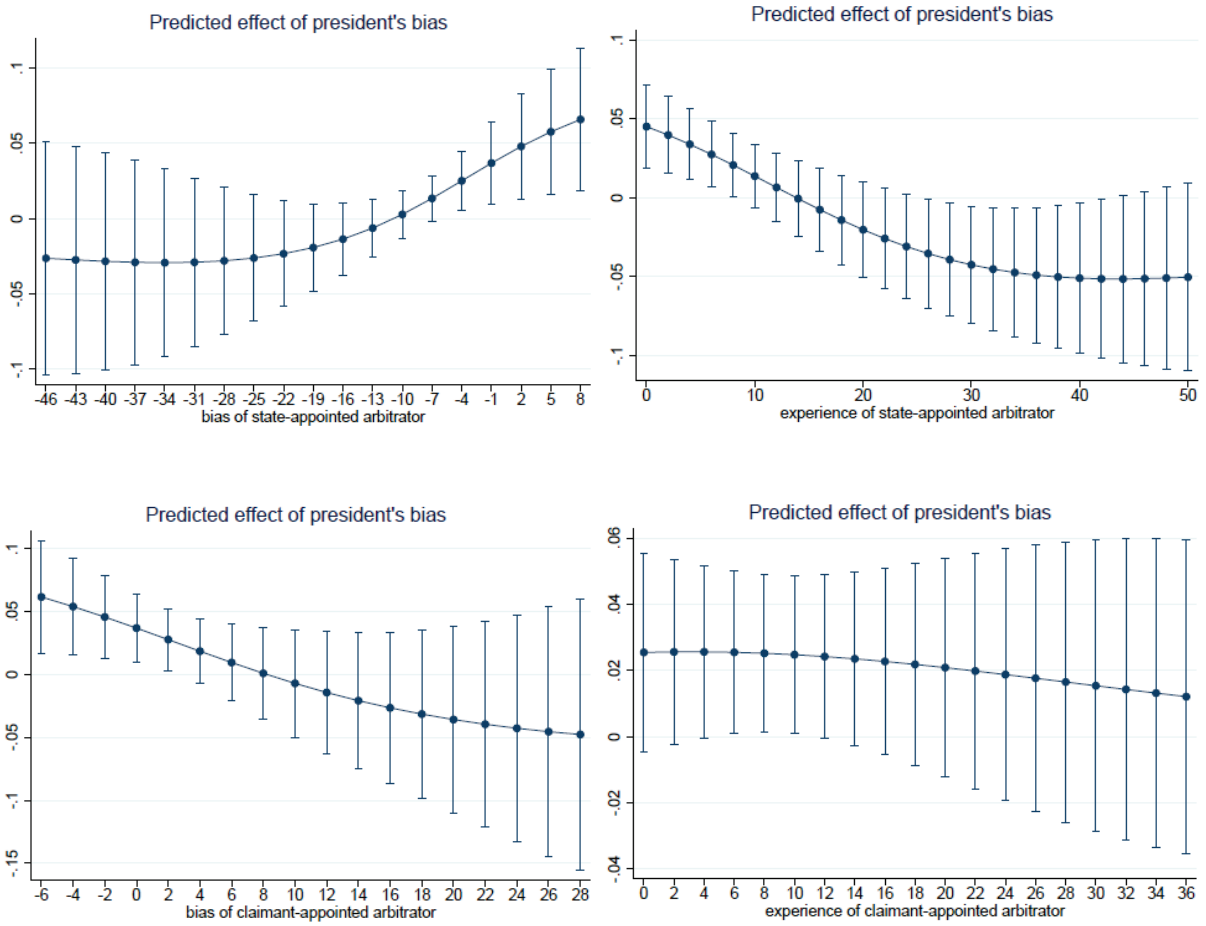


Table 1:
'Experience' and 'Bias' of presidents and party-appointed arbitrators

	(1)	(2)	(3)	(4)
	All cases	Decided in favor of:		Discontinued
		Claimant	Respondent state	
Presidents:				
Bias	0.63	1.15	0.44	-0.38
Experience	7.61	5.37	6.12	5.56
Observations	622	121	160	32
Arbitrators representing claimants:				
Bias	3.15	1.57	2.03	2.53
Experience	7.74	4.86	5.38	6.81
Observations	608	113	147	32
Arbitrators representing states:				
Bias	-5.84	-1.42	-3.82	-4.22
Experience	8.72	4.00	6.09	7.41
Observations	599	113	147	32

Notes: Experience = accumulated number of cases involved in any function up to year t-1; Bias = accumulated number of cases involved by representing claimants minus accumulated number of cases involved by representing respondent states, up to year t-1. Settled and pending cases as well as cases without information on the current status and cases decided in favor of neither party are included in 'All cases.'

Source: UNCTAD, ISDS database.

Table 2:
Baseline results

	Model 1	Model 2
Experience state appointee	0.0219 (0.0357)	0.0447 (0.0364)
Experience claimant appointee	0.0612* (0.0318)	0.0705** (0.0319)
Experience president	-0.00430 (0.0281)	-0.0276 (0.0310)
Bias state appointee	0.0492 (0.0427)	0.0794* (0.0428)
Bias claimant appointee	-0.0721 (0.0466)	-0.0828 (0.0504)
Bias president	0.136** (0.0616)	0.129** (0.0638)
ln GDPpc respondent state		-0.0183 (0.194)
ln population respondent state		-0.104 (0.121)
Rule of law respondent state		-0.877*** (0.262)
ln GDPpc investor home		-0.0474 (0.310)
ln population investor home		0.102 (0.121)
EU investor dummy		-0.0139 (0.480)
NAFTA investor dummy		-0.804 (0.651)
Constant	-1.707 (1.148)	-1.265 (4.997)
Observations	268	263
Time FE	YES	YES
Sector dummies	YES	YES

Notes: Statistical significance at the one, five, and ten percent level is indicated by ***, ** and *, respectively..

Table 3:
Conditioning effects

	Model 3	Model 4	Model 5	Model 6
Experience state appointee	0.0390	0.0788**	0.0411	0.0447
	(0.0394)	(0.0357)	(0.0372)	(0.0365)
Experience claimant appointee	0.0629*	0.0679**	0.0685**	0.0713**
	(0.0328)	(0.0318)	(0.0320)	(0.0319)
Experience president	-0.0368	-0.0289	-0.0380	-0.0294
	(0.0299)	(0.0297)	(0.0328)	(0.0323)
Bias state appointee	0.0668	0.106**	0.0744*	0.0796*
	(0.0459)	(0.0414)	(0.0436)	(0.0430)
Bias claimant appointee	-0.0654	-0.0826	-0.0535	-0.0811
	(0.0523)	(0.0524)	(0.0554)	(0.0510)
Bias president	0.206**	0.256***	0.192**	0.143
	(0.0813)	(0.0820)	(0.0748)	(0.0873)
ln GDPpc respondent state	-0.00852	-0.0254	-0.0176	-0.0188
	(0.190)	(0.194)	(0.194)	(0.195)
ln population respondent state	-0.122	-0.0965	-0.116	-0.107
	(0.122)	(0.119)	(0.124)	(0.122)
Rule of law respondent state	-0.891***	-0.899***	-0.877***	-0.874***
	(0.265)	(0.267)	(0.261)	(0.264)
ln GDPpc investor home	-0.0355	-0.00377	-0.0514	-0.0535
	(0.311)	(0.327)	(0.309)	(0.312)
ln population investor home	0.0986	0.0980	0.0817	0.0997
	(0.121)	(0.120)	(0.117)	(0.119)
EU investor dummy	-0.0313	-0.0340	-0.00823	-0.0216
	(0.477)	(0.492)	(0.480)	(0.482)
NAFTA investor dummy	-0.761	-0.778	-0.731	-0.795
	(0.648)	(0.669)	(0.651)	(0.650)
Bias president * Bias state appointee	0.0190**			
	(0.00940)			
Bias president * Experience state appointee		-0.0185***		
		(0.00696)		
Bias president * Bias claimant appointee			-0.0233	
			(0.0143)	
Bias president * Experience claimant appointee				-0.00145
				(0.00646)
Constant	-1.049	-1.835	-0.699	-1.121
	(5.010)	(5.109)	(5.003)	(5.001)
Observations	263	263	263	263
Time FE	YES	YES	YES	YES
Sector dummies	YES	YES	YES	YES

Notes: Statistical significance at the one, five, and ten percent level is indicated by ***, ** and *, respectively..

Table 4:
Robustness tests 1

	baseline	r1	r2	r3	r4	r5	r6
Experience state appointee	0.0447		0.0276	0.0120	0.0468	0.0507	0.0336
	(0.0364)		(0.0429)	(0.0474)	(0.0406)	(0.0372)	(0.0347)
Experience claimant appointee	0.0705**		0.109**	0.0967**	0.0599*	0.0661**	0.0869**
	(0.0319)		(0.0493)	(0.0377)	(0.0342)	(0.0329)	(0.0346)
Experience president	-0.0276		-0.0203	-0.0157	-0.0305	-0.0253	-0.0257
	(0.0310)		(0.0346)	(0.0359)	(0.0339)	(0.0323)	(0.0305)
Bias state appointee	0.0794*		0.106**	0.148**	0.0772	0.0847*	0.0681
	(0.0428)		(0.0501)	(0.0609)	(0.0469)	(0.0437)	(0.0415)
Bias claimant appointee	-0.0828		-0.0996	-0.181*	-0.0399	-0.0641	-0.0990*
	(0.0504)		(0.0719)	(0.104)	(0.0602)	(0.0519)	(0.0524)
Bias president	0.129**		0.141*	0.178**	0.151**	0.125*	0.106*
	(0.0638)		(0.0745)	(0.0764)	(0.0742)	(0.0648)	(0.0599)
Consolidated experience		-0.00427					
		(0.0211)					
Consolidated bias		0.0367*					
		(0.0218)					
ln GDPpc respondent state	-0.0183	-0.0387	0.0781	0.220	-0.0481	-0.102	0.0238
	(0.194)	(0.177)	(0.190)	(0.200)	(0.204)	(0.212)	(0.205)
ln population resp. state	-0.104	-0.152	-0.115	-0.183	-0.142	-0.181	-0.0944
	(0.121)	(0.112)	(0.126)	(0.131)	(0.136)	(0.135)	(0.120)
Rule of law resp. state	-0.877***	-0.861***	-0.843***	-1.064***	-1.056***	-1.060***	-0.921***
	(0.262)	(0.247)	(0.285)	(0.295)	(0.289)	(0.308)	(0.267)
ln GDPpc investor home	-0.0474	-0.117	-0.0777	-0.179	0.0920	-0.0957	0.0129
	(0.310)	(0.289)	(0.330)	(0.333)	(0.331)	(0.319)	(0.330)
ln population investor home	0.102	0.0775	0.214	0.0829	0.137	0.123	0.0806
	(0.121)	(0.117)	(0.142)	(0.135)	(0.134)	(0.130)	(0.132)
EU investor dummy	-0.0139	0.0593	0.0520	0.150	-0.0577	-0.107	-0.0506
	(0.480)	(0.441)	(0.523)	(0.502)	(0.543)	(0.519)	(0.502)
NAFTA investor dummy	-0.804	-0.585	-0.766	-0.473	-0.916	-0.547	-0.872
	(0.651)	(0.614)	(0.700)	(0.684)	(0.745)	(0.695)	(0.683)
Constant	-1.265	1.137	-4.038	-1.196	-2.400	2.155	-1.717
	(4.997)	(4.673)	(5.511)	(5.750)	(5.318)	(5.082)	(5.469)
Observations	263	263	234	236	218	228	240
Time FE	YES	YES	YES	YES	YES	YES	YES
Sector dummies	YES	YES	YES	YES	YES	YES	YES

Notes: Baseline is Model 2, Table 2. In model r1, consolidated measures for bias and experience are used. In models r2 and r3, cases with the highest and lowest five percent of consolidated experience or bias are excluded. In model r4, high-income respondent states are dropped. Model r5 excludes ISDS cases initiated prior to 2002. In model r6 discontinued cases are no longer considered as state wins. Statistical significance at the one, five, and ten percent level is indicated by ***, ** and *, respectively.

Table 5:
Robustness tests 2 (ordered logit models)

	r7	r8
Experience state appointee	0.0451	0.0503
	(0.0335)	(0.0321)
Experience claimant appointee	0.0305*	0.0284*
	(0.0178)	(0.0159)
Experience president	0.00347	-0.00180
	(0.0207)	(0.0183)
Bias state appointee	0.0534	0.0644*
	(0.0348)	(0.0337)
Bias claimant appointee	-0.0300	-0.0256
	(0.0245)	(0.0217)
Bias president	0.0983**	0.0717*
	(0.0459)	(0.0389)
ln GDPpc respondent state	0.0131	0.0172
	(0.140)	(0.134)
ln population respondent state	-0.0534	-0.0590
	(0.0975)	(0.0964)
Rule of law respondent state	-0.797***	-0.739***
	(0.200)	(0.192)
ln GDPpc investor home	-0.0997	-0.0148
	(0.240)	(0.220)
ln population investor home	0.0706	0.0790
	(0.102)	(0.0919)
EU investor dummy	-0.0970	-0.342
	(0.385)	(0.350)
NAFTA investor dummy	-0.849	-1.028**
	(0.560)	(0.514)
Observations	361	361
Time FE	YES	YES
Sector dummies	YES	YES

Notes: In model r7, the dependent variable consists of three categories and is ordered along the investor win; settlement; and, combined state win plus discontinued cases dimension. In model r8, the dependent variable consists of four categories and is ordered along the investor win; settlement; discontinued case; and, state win dimension. Statistical significance at the one, five, and ten percent level is indicated by ***, ** and *, respectively.

Appendix:
Summary variable statistics

Variable	Mean	Std. Dev.	Min	Max
Investor win (baseline dependent variable)	0.39	0.49	0	1
Experience state appointee	4.92	8.09	0	51
Experience claimant appointee	4.95	7.18	0	35
Experience president	5.62	6.57	0	31
Bias state appointee	-2.37	6.91	-46	10
Bias claimant appointee	1.77	4.20	-6	27
Bias president	0.58	3.24	-27	10
ln GDPpc respondent state	8.74	1.02	5.39	11.00
ln population respondent state	16.92	1.30	11.56	20.93
Rule of law respondent state	-0.27	0.84	-2.08	1.81
ln GDPpc investor home	10.47	0.58	7.99	11.58
ln population investor home	17.59	1.60	12.54	21.00
EU investor dummy	0.48	0.50	0	1
NAFTA investor dummy	0.34	0.48	0	1

Note: N=263.