Crafting appropriate dispute settlement processes is challenging for any conflict-management system, particularly for politically sensitive international economic law disputes. As the United States negotiates investment treaties with Asian and European countries, the terms of dispute settlement have become contentious. There is a vigorous debate about whether investment treaty arbitration (ITA) is an appropriate dispute settlement mechanism. While some sing the praises of ITA, others offer a spirited critique. Some critics claim that ITA is biased against states, while others suggest ITA is predictable but unfair due to factors like arbitrator identity or venue. Using data from 159 final cases derived from 272 publicly available ITA awards, this Article examines outcomes of ITA cases to explore those concerns. Key descriptive findings demonstrate that states reliably won a greater proportion of cases than investors; and for the subset of cases investors won, the mean award was US$45.6 million with mean investor success rate of 35%. State success rates were roughly similar to respondent-favorable or state-favorable results in whistleblowing, qui tam, and medical-malpractice litigation in U.S. courts. The Article then explores whether ITA outcomes varied depending upon investor identity, state identity, the presence of repeat-player counsel, arbitrator-related, or venue variables. Models using case-based variables always predicted outcomes whereas arbitrator-venue models did not. The results provide initial evidence that the most critical

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variables for predicting outcomes involved some form of investor identity and the experience of parties’ lawyers. For investor identity, the most robust predictor was whether investors were human beings, with cases brought by people exhibiting greater success than corporations; and when at least one named investor or corporate parent was ranked in the Financial Times 500, investors sometimes secured more favorable outcomes. Following Marc Galanter’s scholarship demonstrating that repeat-player lawyers are critical to litigation outcomes, attorney experience also affected ITA outcomes. Investors with experienced counsel were more likely to obtain a damage award against a state, whereas states retaining experienced counsel were only reliably associated with decreased levels of relative investor success. Although there was variation in outcomes, ultimately, the data did not support a conclusion that ITA was completely unpredictable; rather, the results called into question some critiques of ITA and did not prove that ITA is a wholly unacceptable form of dispute settlement. Instead, the results suggest the vital debate about ITA’s future would be well served by focusing on evidence-based insights and reliance on data rather than nonreplicable intuition.

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INTRODUCTION

Despite experiencing a period of fiscal adjustment, worldwide investment remains a lynchpin of global economic activity and involves trillions of dollars. Governments across the world are now focusing upon how to best use bilateral and multilateral investment treaties as strategic tools to increase their economic prosperity. Given their potential value in promoting economic competitiveness within the global economy, President Obama’s 2015 State of the Union Address focused on international economic treaties. The


United States is negotiating multilateral investment agreements with trading partners across the globe, including the recently signed Trans-Pacific Partnership (TPP), and the European Union–United States Transatlantic Trade and Investment Partnership (TTIP). Meanwhile, President Obama has initiated negotiation of bilateral investment treaties with key trading partners, including India and China.

The existing web of signed international investment agreements (IIAs) exceeds three thousand bilateral and multilateral investment treaties. Those IIAs grant various substantive rights, including the right to compensation for government expropriation and freedom from discrimination, to people or entities investing abroad. In public debates about ITA and the President’s authority to negotiate agreements). The playing field of treaty negotiation will continue to evolve over the coming months and years, as the Trans-Pacific Partnership (TPP) was signed but the text was not released until final revisions to this Article.


10. See infra notes 43–45 (discussing substantive rights in IIAs).
derogation of traditional international law principles where only states can pursue international law remedies,\textsuperscript{11} IIAs contain ex ante promises whereby states guarantee investors a forum to seek direct redress for violations of substantive rights. In combination, the scope of existing investment flows and treaties means a meaningful proportion of international investment is currently protected by at least one IIA and theoretically subject to treaty-based arbitration.\textsuperscript{12} As investors have exercised their new international law rights to redress alleged grievances, theoretical risk has become a reality. The first investment treaty arbitration (ITA) award came in 1990,\textsuperscript{13} and the United Nations Conference on Trade and Development (UNCTAD) estimated that, by 2014, claimants had initiated over five hundred formal disputes.\textsuperscript{14} With increased political, economic, and legal scrutiny on international investment, ITA has become the center of debate in the negotiation of international economic law treaties, particularly for TPP and TTIP,\textsuperscript{15} spawned articles in the \textit{New York Times},\textsuperscript{16}

\begin{itemize}
  \item \textsuperscript{11} See Note, \textit{Mediation of Investor-State Conflicts}, 127 HARV. L. REV. 2543, 2547 (2014) (“[I]nvestor-state arbitration is something of an anomaly in international law because states waive their sovereign immunity and make themselves vulnerable to legal claims by foreign litigants alleging that they violated their international obligations as defined by treaty.”). In the future, it may be worth exploring whether the anomaly, which provides individuals or entities with direct access to arbitration for international law violations causing damage, might extend to other international law wrongs affecting individuals.
  \item \textsuperscript{12} See UNCTAD, \textit{WIR 2013}, supra note 1, at 217.
\end{itemize}
Washington Post, Wall Street Journal and The Economist, and generated a robust congressional debate. Some stakeholders express concerns that ITA is unpredictable, illegitimate, or exhibits a pro-investor bias; yet others disagree and contend that these


“objections that began as ideologically driven polemics have come to be widely, but inaccurately, presumed as truths.”23 These competing perspectives demand reexamination of how investment treaty disputes should be resolved.24 The European Union is engaged in a consultation process exploring the value of ITA,25 and the United States likewise continues to debate ITA.26 Some have proposed alternative or supplementary methods of managing investment treaty conflict,27 whereas others advocate wholesale elimination of ITA.28 In


24. See generally MICHAEL WAIBEL, ASHA KAUSHAL, KYO-HWA CHUNG & CLAIRE BALCHIN, THE BACKLASH AGAINST INVESTMENT ARBITRATION: PERCEPTIONS AND REALITY (2010); Stavros Brekoulakis, Systemic Bias and the Institution of International Arbitration: A New Approach to Arbitral Decision-Making, 5 J. INT’L DISP. SETTLEMENT 553 (2013) (“For arbitration law and practice to effectively respond to criticism about the integrity of arbitration, the focus of our inquiry should include not only apparent bias associated with individual arbitrators, but also implicit and systemic bias.”); Kaushal, supra note 21 (discussing the development of the international investment regime).


response, some states have exited the international investment law regime, while others rely on preexisting paradigms for dispute settlement.\textsuperscript{29}

In the midst of debates about whether to retain, or even increase, the scope of arbitration by renewing existing IIAs or generating new investment treaties,\textsuperscript{30} there is a dearth of empirical research quantitatively analyzing ITA outcomes. Despite some literature focusing on jurisdictional decisions,\textsuperscript{31} little quantitative research has explored final outcomes or otherwise identified variables reliably associated with results.\textsuperscript{32} Identifying these factors, however, is vital to informed debates about the normative design of dispute resolution.

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\textsuperscript{28} See, e.g., infra notes 71–93 and accompanying text (discussing calls for reform related to eliminating ITA or placing disputes into the hands of national court judges).
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\textsuperscript{30} Brower & Blanchard, supra note 3, at 697 (estimating that 1300 IIAs were eligible for renegotiation in 2013).
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This Article first offers an overview of the doctrine and debate surrounding ITA. Second, it explains the data and methodology underlying the analyses. Third, it provides descriptive data of ITA outcomes. It identifies that the mean amounts claimed were approximately US$660 million (US$100 million median), which reflects a nontrivial risk of loss of fiscal resources for both investors and states, particularly for small investors and developing states. Despite the risk of fiscal exposure for states, states won approximately 60% of the cases, and states won reliably more often than investors. Turning to amounts awarded, for the set of all cases that included investor losses, the average amount awarded was US$16.6 million (US$0 median) and the average investor success rate was 18% (2% median). Focusing exclusively on the small subset of cases where investors obtained damages, investors obtained a mean award of US$45.6 million (US$10.9 million median) and an average success rate of 35% (29% median).

Next, given the variation in outcomes, the Article tests different models to predict ITA outcomes. Historically, empirical research has not attempted to test holistic theories of ITA outcomes, and has rather focused on a limited number of variables. As ITA is undertheorized, discussions about factors influencing outcomes are not theoretically cohesive; rather, explanatory narratives generally derive from intuition or conventional wisdom. This perhaps explains why previous research was more limited in scope. One potential

33. See, e.g., Franck, Development, supra note 32, at 444–49 (analyzing only presiding arbitrators, respondents and the interaction effect on ITA outcomes); Franck, ICSID, supra note 32, at 851–94 (conducting separate analyses to analyze the impact of Latin American respondents, presiding arbitrators, and venue but limiting the analyses to roughly three variables in any given model); see also infra text accompanying note 174 (exploring limits in historical research).


35. See generally Brower & Blanchard, supra note 3, at 691–99.

36. Another explanation was, as ITA is a relatively nascent area of law with a smaller caseload, datasets were necessarily smaller and lacked the statistical power to conduct more sophisticated multivariate analyses. See Susan D. Franck, Calvin P. Garvin & Jenna M. Perkins, Through the Looking Glass: Understanding Social Science Norms for Analyzing International
paradigm to explain ITA outcomes focuses on adjudicative factors, namely arbitrators and venue, as the variables vital to outcomes. A second paradigm involves case-related variables like claimant identity, respondent identity, and the expertise of each party’s lawyers. The analyses revealed that, although models focusing on arbitrators and venue were never significant, case-based models always predicted outcomes. The most reliable predictors of outcomes were permutations of investor identity and experience of parties’ lawyers. Regarding investor identity, the most robust predictor was whether the investors were human beings or corporations, with cases brought by people exhibiting greater success than corporations; and there was some evidence that Financial Times 500 (FT500) investors had greater success than others in some, but not all, types of outcomes. Regarding attorneys, investors retaining experienced counsel were generally more likely to obtain favorable results, but for states, retaining experienced counsel was only linked to decreased levels of relative investor success. A hybrid model using any significant predictor from earlier models also reliably predicted case outcomes and exhibited a large effect size. Whether investors were people and the expertise of respondents’ legal team remained significant predictors of relative investor success.

Fifth, the Article identifies limitations of the research related to case selection, external validity, underspecification of models, and statistical power for the non-significant arbitrator-venue models. Sixth, the Article synthesizes and interprets the data. While the descriptive data indicate that investors won some cases, the results disrupt claims that ITA exhibits a “pro-investor” bias; instead, they offer preliminary evidence of a pro-state bias. The regression models

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37. See infra notes 81–83 and accompanying text.
39. Aspects of this research are described in greater detail in SUSAN D. FRANCK, INVESTMENT TREATY ARBITRATION: MYTHS, REALITIES, AND COSTS (forthcoming Oxford University Press 2016).
did not support claims that ITA outcomes were random. Rather, even with variation, investor identity and counsel expertise were the most reliable predictors of ITA outcomes. For investor identity, cases with only human claimants fared better than their corporate counterparts; and in some instances, cases involving at least one FT500 entity achieved more favorable outcomes than those without an FT500 entity. While expertise of investor counsel was critical in models related to outcomes that generated state liability or amounts awarded, the expertise of state counsel predicted lower rates of relative investor success. Variables—like respondent identity (particularly state-development status and democracy levels), the background of the tribunal as a whole, and the presence of repeat arbitrators—might in the future be useful predictors of ITA outcomes.\footnote{It is possible that some variables are co-linear or result in confusion about inferential attribution. See Susan D. Franck, Conflating Politics and Development? Examining Investment Treaty Arbitration Outcomes, 55 Va. J. Int’l L. 13, 14 (2014) [hereinafter Franck, Conflating] (failing to identify, after controlling for state democracy levels, any analyses locating reliable links between outcome and respondent development status).} None of the models identified a reliable link between outcomes and the tribunal’s gender composition or whether the arbitration venue was International Centre for Settlement of Investment Disputes (ICSID). These data call into question conventional characterizations of ITA and undermine derivative policy proposals recommending complete elimination of ITA. Future research should replicate these analyses to explore whether other aspects better explain ITA outcomes. In the interim, the results suggest that debates about the future of ITA should remain robust. Nevertheless, focusing on evidence-based insights, relying on data, and minimizing emotive reactions that induce nonreplicable intuition would best serve the debate.

I. DOCTRINE AND DEBATE ABOUT INVESTMENT TREATY ARBITRATION

ITA is a \textit{sui generis} hybrid of public and private international law; it permits investors to vindicate substantive treaty rights that states granted to investors by directly suing states for government conduct that allegedly breached a treaty and created an adverse effect on a foreign investment.\footnote{\textsc{Jose E. Alvarez, The Public International Law Regime Governing International Investment} 38–39 (2011); \textsc{Krista Nadakavukaren Schefer,}} To understand this relatively recent
international law phenomenon, the next part first explores the doctrine and policy underlying ITA. After describing the mechanics of ITA, it then highlights the derivative debate about ITA.

A. The Doctrine and Policy of ITA

The net objective of an IIA is to entice inbound foreign investment and to protect a state’s own investors abroad while minimizing the risk of state liability. IIAs grant reciprocal investment rights—of a procedural and substantive nature—to foreign investors from the signatory countries. Procedurally, IIAs offer clear dispute resolution rights, including the right to arbitrate treaty disputes. After complying with certain prerequisites, including submitting dispute notices and attempting amicable settlement, IIAs permit investors to initiate arbitration directly against a state. Substantively, IIAs involve state promises that foreign investors will receive certain basic treatment, including the right to freedom from expropriation without proper compensation, the right to freedom from discrimination, and guarantees of fair and equitable treatment. These rights are similar to some, but not all, constitutional rights. Some ITA disputes involve...
public law elements, like Zimbabwe’s expropriation of land belonging to certain white farmers or the imposition of an environmental regulation that has a de facto disparate impact on foreign companies.\textsuperscript{46} Other disputes have a more commercial flavor, like revocation of a banking license, breach of contract, or failure to pay a dividend.\textsuperscript{47} Irrespective of whether they are representative, some ITA disputes have become iconic. For example, investors sued Argentina for its 2001 currency crisis that led to damages deriving from the devaluation of the Argentine peso and Argentina’s imposition of other emergency measures to stabilize its economy,\textsuperscript{48} and Philip Morris sued Australia and Uruguay for plain-packaging cigarette regulations claiming state administrative regulation of cigarette packages constituted unlawful expropriation of intellectual property.\textsuperscript{49}

Historically, there were few options for investors to redress state activity that adversely affected their foreign investments.\textsuperscript{50} Investors’ informal options entailed ignoring the conflict, absorbing the cost, and pricing the investment accordingly. Other options included securing political risk insurance coverage or otherwise asking the investor’s home state to provide diplomatic support. More formal options for resolving international investment disputes included declarations of war, exercises of “gunboat diplomacy,” lobbying the investor’s home state to invoke formal diplomatic relief, or soliciting an investor’s home state to espouse its claim at the International Court of Justice (ICJ).\textsuperscript{51} These options were largely unsatisfactory as

\textsuperscript{46} Franck, Conflating, supra note 41, at 21 n.25.


\textsuperscript{48} See generally ALVAREZ, supra note 42 (compiling cases).


\textsuperscript{50} Stephanie Bijlmakers, Effects of Foreign Direct Investment Arbitration on a State’s Regulatory Autonomy Involving the Public Interest, 23 AM. REV. INT’L ARB. 245, 246–47 (2012); Brower & Blanchard, supra note 3, at 757–79.

\textsuperscript{51} See RUDOLF DOLZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW I–25 (2012) (discussing the history of international investment law); Roberts, supra note 44, at 3, 15–17, 44–45 (discussing gunboat diplomacy, diplomatic protection, other
they generated large fiscal costs, politicized dispute resolution by situating it within the sphere of international relations, prohibited direct access to neutral dispute resolution, or otherwise failed to provide a remedy to a damaged investor.\footnote{See Sergio Puig, \textit{Recasting ICSID’s Legitimacy Debate: Towards a Goal-Based Empirical Agenda}, 36 \textit{Fordham Int’l L.J.} 465, 471–75 (2013) (discussing the origin of investor-state dispute settlement).}

Against this backdrop, states signed IIAs to clarify substantive rights and grant investors the capacity to pursue direct dispute resolution for international investment law violations. ITA provided investors with a direct forum for depoliticized adjudication that is conducted by arbitrators who are required to be independent and impartial and generates an enforceable award.\footnote{Margaret L. Moses, \textit{The Principles and Practice of International Commercial Arbitration} 2 (1st ed. 2008); Chiara Giorgetti, \textit{Who Decides Who Decides in International Investment Arbitration}, 35 \textit{U. Penn. J. Int’l L.} 431, 451–53 (2013); Dominique Hascher, \textit{Independence and Impartiality of Arbitrators: 3 Issues}, 27 \textit{Am. U. Int’l L.} 789, 791–92 (2012).} The objective was for states to avoid deciding whether to espouse an investor’s claim and instead let investors choose, in light of net costs and benefits, whether pursuing a claim was appropriate.\footnote{Andreas F. Lowenfeld, \textit{The ICSID Convention: Origins and Transformation}, 38 \textit{Ga. J. Int’l & Comp. L.} 47, 51–52 (2009).} ITA used a tried and tested process—namely international arbitration—whose historical pedigree offered an opportunity for adjudicative neutrality and an established enforcement regime. In theory, ITA generated a balanced and efficient form of dispute resolution that minimized commercial risk and maximized rule of law.\footnote{Schefter, supra note 42, at 1–10, 509–14.}
B. The Mechanics of ITA

As a matter of mechanics, when an investor asserts that a host state’s conduct violated a treaty’s substantive protections and damaged the investment, IIAs generally permit the affected investor to begin a formal dispute resolution. If the dispute is not otherwise resolved through negotiation or mediation, the investor requires the state to arbitrate in one of the predesignated forums to resolve the dispute. Thereafter, each party can select one arbitrator; then either an arbitral institution or the two co-arbitrators appoint a presiding arbitrator. After signing statements of independence and impartiality, arbitrators resolve investment disputes in accordance with the applicable law, which generally includes the substantive provisions of the IIA and other international law principles. Parties then gather facts and generate legal arguments for different phases of the dispute, namely jurisdiction, merits, quantum, and costs. If investors fail to establish jurisdictional prerequisites, the case


57. In some cases, treaties require investors to initially sue the state within the state’s own courts for a period of time; and should a host state fail to act, investors can then initiate ITA. ANDREW NEWCOMBE & LLUIS PARADELL, LAW AND PRACTICE OF INVESTMENT TREATIES: STANDARDS OF TREATMENT 72 (2009).


59. GARY B. BORN, INTERNATIONAL COMMERCIAL ARBITRATION 57, 1355–56, 1387 (2009); Franck, Legitimacy Crisis, supra note 21, at 1543–44.


63. Using the provisions established by the relevant treaty, investors must establish there is (1) a qualifying investor, (2) a qualifying investment that is (3) brought under an enforceable
terminates and the state is not liable. Otherwise, the dispute continues to the merits where the tribunal assesses if the state violated the treaty’s substantive protections by failing to provide the promised protection. If there is no breach, the case terminates and the state is not liable. Should there be jurisdiction and a breach on the merits, the parties establish the value of the treaty breach at the quantum phase. Cost awards, which allocate fiscal responsibility for lawyer and arbitrator fees, can be made at any point in the proceedings but typically occur at the end. Irrespective of whether tribunals issue multiple awards in a single case, the tribunal ultimately renders a final award that is enforceable worldwide under an international arbitration convention.64

C. The Debate over ITA

The popularity of ITA has ebbed and flowed over time. Initially, many gave ITA “overwhelming praise” for its “unmitigated” success.65 Supportive commentary came from international law luminaries including Judge Stephen M. Schwebel, who praised the benefits of ITA for capital-importing and exporting states.66 The extolment of these virtues may reflect a time of increasing investment flows, increasing volume of treaties, and few treaty disputes. During a period of global economic growth, the benefits seemed tangible and the risks appeared minimal.67 Voluntary compliance with adverse
arbitration awards was also preferable to decades of delay in public international law adjudication. Some continue to praise ITA, suggesting, “[s]tates and investors both stand to benefit from international arbitration.”


71. UNCTAD, *WIR 2012*, supra note 1, at 86–88; see also UNCTAD, *WIR 2013*, supra note 1, at 110–17 (discussing the benefits of international arbitration). Others suggest ITA involves considerable time and costs, and that cases “run, on average, several years and entail large costs for both claimants and respondent States.” Kyla Tienhaara, *Third-Party Participation in Investment-Environment Disputes: Recent Developments*, 16 REV. EUR. COMMUNITY & INT’L ENVTL. L. 230, 240 (2007).

72. Note, supra note 11, at 2548–49.
suggest ITA is a “legal monster” that involves “[p]rofiting from [i]njustice” since “agreeing to arbitration [means] states have accepted to be sued by the devil in hell.” Against this backdrop, debates about ITA in South Korea, a country with over seventy IIAs and no adverse ITA awards at the time, spawned physical fights by parliamentarians in 2011. Academics issued a Public Statement claiming ITA is not a “fair, independent, and balanced method for the resolution of investment disputes and therefore should not be relied on for this purpose.” Others have stated that ITA should be abandoned to “reassert the integrity of our domestic legal processes.” In an effort to critique ITA, protestors have even performed a self-styled “exorcism” of lawyers practicing ITA.

Beyond concerns about unpredictable outcomes or inconsistency, some complain that ITA reflects a reliable pro-


74. EBERHARDT & OLIVET, supra note 22, at 11.
76. Gus Van Harten et al., Public Statement on the International Investment Regime (Aug. 31, 2010), http://www.osgoode.yorku.ca/public-statement-international-investment-regime-31-august-2010 [http://perma.cc/DTA4-E37S]. The signatories stated there “is a strong moral as well as policy case for governments to withdraw from investment treaties and to oppose investor-state arbitration, including by refusal to pay arbitration awards.” Id.
79. See Note, supra note 11, at 2548 (observing that ITA outcomes are “notoriously unpredictable” and parties cannot “predict the outcome or value the dispute”); Daniel S.
investor bias. Under this critique, while ITA outcomes may be predictable, they are influenced by spurious adjudication variables like arbitrator identity or arbitration venue. For example, some commentators suggest that arbitrators themselves are biased in favor of investors and otherwise posit that arbitrator identity is a critical component of outcomes. Likewise, commentators suggest the arbitration venue determines outcomes, and awards rendered at ICSID are biased. Rather than focusing on adjudicative variables, other commentators critique ITA by suggesting that outcomes may depend upon case-specific variables, such as the identity of the investor, the respondent, or their counsel.


80. See supra text accompanying note 21. But see Brower & Blanchard, supra note 3, at 710–11 (identifying but rejecting arguments related to pro-investor bias).

81. Gus Van Harten, Perceived Bias in Investment Treaty Arbitration, in WAIBEL ET AL., supra note 24, at 433–53; Van Harten, supra note 31, at 216–19. But see Maupin, supra note 40, at 386 (expressing reservations as to whether arbitrators are biased towards investors); Meyers, supra note 79, at 78 (disagreeing with claims of arbitrator’s pro-investor bias).


83. See Brower & Blanchard, supra note 3 (describing claims by Venezuelan government officials that ICSID is a biased forum); Franck, ICSID, supra note 32 (exploring claims of bias at ICSID); Leon Trakman, The ICSID Under Siege, 45 CORNELL INT’L L.J. 603, 611 (2012) [hereinafter Trakman, ICSID] (exploring claims of bias at ICSID).

84. See EBERHARDT & OLIVET, supra at 22, at 8 (arguing there is a pro-corporate bias in ITA as “prominent arbitrators . . . [n]early all share businesses’ belief in the paramount importance of protecting private profits”); Bijlmakers, supra note 50, at 263–64 (describing how businesses make arbitrator appointments); infra note 180.
Some states have voted with their feet. Russia has withdrawn from the Energy Charter Treaty after an investor established jurisdiction over disputes related to the dissolution of Yukos Oil, and a July 2014 award subjected Russia to over fifty billion in damages. Russia has withdrawn from the Energy Charter Treaty after an investor established jurisdiction over disputes related to the dissolution of Yukos Oil, and a July 2014 award subjected Russia to over fifty billion in damages.87 Venezuela, Ecuador, and Bolivia have withdrawn from the ICSID Convention.88 The President of Ecuador has rejected ICSID, claiming ICSID “signifies colonialism, slavery with respect to transnationals, with respect to Washington, with respect to the World Bank.”89 In October 2012, Ecuador’s Minister of Foreign Affairs, Trade and Integration similarly called an ICSID award “unjust, illegal, illegitimate and absurd.”90 Other states have encouraged the

85. See Franck, Development, supra note 32, at 438–39 (gathering sources conveying concerns about disparate treatment of states in ITA); see also Brower & Blanchard, supra note 3, at 710 (identifying concerns that ITA is “biased against the developing countries”); Trakman, ICSID, supra note 83, at 611 (noting the perception that institutionalized arbitration protects the interests of developed states).

86. See Eric Gottwald, Leveling the Playing Field: Is It Time For a Legal Assistance Center for Developing Nations in Investment Treaty Arbitration?, 22 AM. U. INT’L L. REV. 237, 252 (2007) (“[A] party’s lawyers’ level of expertise will likely be a decisive factor in the outcome of the dispute. The importance of having access to legal expertise is only magnified in a specialized area of the law like [ITA] with which most lawyers have little familiarity.”); Catherine Rogers, The Arrival of the “Have-Nots” in International Arbitration, 8 NEV. L.J. 341, 358 (2007) (highlighting that some developing nations have gained expertise in investment arbitration and its potential impact); see also Marc Galanter, Why the “Haves” Come Out Ahead: Speculations on the Limits of Legal Change, 9 LAW & SOC’Y REV. 95, 98–102 (1974) (discussing the impact of repeat players in domestic litigation).


89. Trakman, ICSID, supra note 83, at 604.

“reemergence of the ‘toothless’ investment treaty” which, like older treaties of Friendship Navigation and Commerce, provides substantive rights but no forum. Australia stated its intention to reject ITA in future IIAs because of efficiency concerns related to costs, fractious disputes, and treaties’ net value.

Not all states agree and instead have retained ITA. In April 2012, after a contentious consultation process, the United States crafted a model IIA that provided for ITA. China also changed its approach to ITA by broadening the scope of arbitration to permit tribunals to assess both merits and damages. Canada, which has had its investors bring claims, and paid awards after losing cases as a respondent, changed its model IIA while retaining ITA. A trilateral investment treaty among China, Japan, and Korea likewise preserved ITA as a means of dispute settlement. Even Australia, after a


91. Riesenberg, supra note 65, at 980, 987; UNCTAD, WIR 2012, supra note 1, at 139–40; see also Trakman, ICSID, supra note 83, at 658 (noting that Friendship, Navigation, and Commerce treaties provided only diplomatic protection, rather than formal dispute settlement).


national election leading to a change in government, included ITA in a
treaty recently negotiated with South Korea.97 Meanwhile, although
recent commentary in the media reflects varying perspectives on
ITA's value,98 states continue to renegotiate investment treaties, and
ITA appears to be a viable option in TPP99 and TTIP.100

Ultimately, the policy debate about ITA is a live issue with
critical international political and economic ramifications. The
normative and institutional design of dispute settlement will benefit
from information that scientifically identifies variables contributing to
ITA outcomes.

97. Korea-Australia Free Trade Agreement, AUSTL. DEP'T OF FOREIGN AFF. & TRADE,
[http://perma.cc/AUE2-VYQK] (providing the text of the Korean-Australia investment
agreement recently negotiated that provides for ITA in articles 11.15 to 11.28); see Australia
Concludes FTA Negotiations with the Republic of Korea, AUSTL. MINISTER FOR TRADE & INV.
VHP7-892P] (discussing the treaty). But see Korea-Australia Free Trade Agreement,
Foreign_Affairs_Defence_and_Trade/Korea-Australia_Free_Trade_Agreement [http://perma.
cc/TN5B-VUZ4] (indicating the treaty was pending before the Australian Parliament until
August 29, 2014).

98. Compare Elizabeth Warren, Opinion, The Trans-Pacific Partnership Clause Everyone
Should Oppose, WASH. POST (Feb. 25, 2015), https://www.washingtonpost.com/opinions/kill-
the-dispute-settlement-language-in-the-trans-pacific-partnership/2015/02/25/ce7705a2-bd1e-
11e4-b274-e5209a3bc9a9_story.html [http://perma.cc/FXQ6-WQ9X] (“If a final TPP agreement
includes Investor-State Dispute Settlement, the only winners will be multinational
corporations.”), with Editorial, Don’t Buy the Trade Deal Alarmism, WASH. POST (Mar. 11,
trumpet ISDS horror stories, but upon closer inspection they generally turn out not to be so
horrible.”). See also supra notes 16–18, 20.

99. TPP was signed on October 5, 2015, during the final revisions to this Article. See supra
note 5. Before the TPP text was made public, the U.S. Trade Representative indicated ITA is
INVESTOR-STATE DISPUTE SETTLEMENT 1, https://ustr.gov/sites/default/files/TPP-Upgrading-
U]. The full text of TPP is now available. See TPP Full Text, U.S.T.R., https://ustr.gov/trade-
agreements/free-trade-agreements/trans-pacific-partnership/tpp-full-text [http://perma.cc/L22W-
59DJ].

100. EU Draft Text on ISDS Contains Similarities, Differences to U.S. Approach, INSIDE
U.S. TRADE, Apr. 12, 2013, at 22; see also supra notes 4–6, 15, 20 and accompanying text. But
see supra note 25 (identifying that the EU may prefer the creation of a permanent court to
resolve treaty disputes).
II. THE DATA AND METHODOLOGY

This Article examines ITA cases empirically to better understand possible predictors of outcomes from arbitral tribunals. The objective is both to permit states negotiating treaties to formulate dispute resolution strategies and to aid parties in understanding the relative risk of ITA. Given debates about party identity, arbitrators, and outcomes, our analyses included independent variables for the background of investors, states, lawyers, arbitrators, and venue. This section therefore first clarifies the unit of analysis, identifies how the dataset was created, and describes the variables and models used to conduct analyses to predict outcomes.

A. Unit of Analysis

The unit of analysis was ITA awards that were publicly available as of January 1, 2012. This included all public awards involving the resolution of a treaty-based investment dispute, which necessarily included awards rendered in English, Spanish, and French. The method for gathering publicly available awards was the same methodology used in previous research.101 As there is no single agreed repository for ITA awards, the primary source of the public awards was Professor Andrew Newcombe’s website, ITAlaw.com. This was supplemented and checked against other resources including the UNCTAD website, the ICSID website, the ICSID Review, and other sources.102

International arbitration, depending on the applicable international law, varies in the formal doctrinal definition of “award” and distinguishes among types of tribunal activity. Awards—namely elements of cases that resolve dispositive key legal issues—under the

101. See Franck, Empirically Evaluating, supra note 32, at 16–21 (describing the methodology used in previous research on ITA).

102. The UNCTAD Database of Treaty-Based Investor-State Dispute Settlement cases is available at http://unctad.org/en/Pages/DIAE/ISDS.aspx. ICSID awards are searchable at https://icsid.worldbank.org/apps/icsidweb/cases/Pages/AdvancedSearch.aspx. ICSID cases are available in print form, including the AIG v. Kazakhstan case referenced on Prof. Newcombe’s website, ITAlaw.com, but only published in ICSID Reports. Likewise, SCC cases are accessible through its website, http://www.arbitration.sccinstitute.com/swedish-arbitration-portal, or the Stockholm International Arbitration Review. Public awards were cross-checked through subscription websites like the APPLETON-ISR database on Westlaw, the Oxford University Press website Investmentclaims.com, and the Investor-State Law Guide. NAFTAclaims.com was also checked for cases arising under NAFTA.
ICSID Convention,\textsuperscript{103} New York Convention,\textsuperscript{104} or the UNCITRAL Model Law\textsuperscript{105} have specific but slightly different legal meanings.

As this research examined all ITA cases, it adopted a precise definition of “award.” Namely, an “award” was a tribunal decision creating a dispositive and binding determination on a substantive phase, namely decisions on (1) jurisdiction; (2) merits; (3) quantum of damages; (4) allocation of costs; or (5) settlement agreements or other orders indicating a dismissal or discontinuance.\textsuperscript{106} This means that decisions providing information on the dispute—including interim measures, decisions on confidentiality, place of arbitration, arbitrator challenges, tribunals’ interpretive decisions, ad hoc Annulment Committees and subsequent decisions by national courts—were not coded. Disputes with only a dispute notice or arbitration request were omitted.\textsuperscript{107}

Three selection effects limit the inferential value of the unit of analysis. First, the dataset is a time-bounded population of ITA disputes that were derived from public awards. It necessarily means that it is possible that the population has continued to evolve and the external validity of this research is arguably limited. For example, awards rendered after January 2012 have continued to add variance to the population. While replication is required, multiple elements of the research demonstrate that key elements of ITA have been stable over time. Even with the temporal limitation, the analyses provide a baseline for future consideration.

\begin{footnotesize}


\textsuperscript{106} For outcomes, only the final award was analyzed. The methodology was similar to research analyzing ICSID awards on jurisdiction, merits, settlements, or orders for discontinuances. \textit{See} Kapeliuk, \textit{Games}, supra note 32, at 302 (describing the methodology for studying ICSID disputes).

\textsuperscript{107} Cases with dispute notices or arbitration requests were omitted because the limited information prevented reliable coding of outcomes.
\end{footnotesize}
Second, private awards could differ meaningfully from public awards, thereby limiting the value of inferences. The dataset reflects that, of the small subset of initially confidential cases in 2006, many have entered the public domain.\footnote{There did not appear to be any meaningful difference between awards that were initially private but became public and those that were historically public, and there was rough parity in the identity of parties, arbitrators and outcomes.} Case selection bias may be limited, however. Irrespective of whether investors or states are successful, both types of parties have incentives to disclose awards. Investors, for example, may disclose awards because shareholders may positively view information that the investor has won a claim and created greater commercial certainty. Likewise, states may believe that notifying the public that they have won a case may restore confidence in the government or have another political use.

Third, other investment-related conflicts were not coded. These types of conflicts either relate to formalized investment treaty disputes or conflicts that never crystalized into formal disputes.\footnote{Two categories of formalized disputes were not analyzed. First, ITA disputes with a dispute notice—like those listed on the ICSID website—were in progress but there was unreliable public information. Even listing a case at ICSID does not guarantee the case involves ITA, as ICSID also has jurisdiction over domestic contract law or domestic investment law disputes. Second, there could be latent, non-formalized investment disputes. Investment-related problems arise every day. We are unaware of datasets measuring the latent scope of investment treaty conflict. States may implement programs to prevent or minimize conflicts leading to formal dispute notices; or parties may use alternative dispute resolution strategies to address conflicts prior to an investor submitting a formal dispute notice. Client counseling and cost-benefit assessments may also impact dispute settlement as (1) an investor might abandon its claim or seek alternative commercial redress or (2) a state may address a disputed measure or otherwise redress state activity. See generally United Nations Conference on Trade and Development, Investor-State Disputes: Prevention and Alternatives to Arbitration II, U.N. Doc. UNCTAD/WEB/DIAE/IA/2010/8 (2011), http://unctad.org/en/Docs/webdiaeia20108_en.pdf [http://perma.cc/3EBA-7ETZ] (exploring the ISDS system holistically, existing processes of addressing treaty conflict, and alternative means for ISDS). The full range of unreported and informal disputes is likely larger but unknowable.} As Professor Reisman explains, given the “very large” scope of international investment, the 80,000 multinational enterprises and their 100,000 affiliates, and the possibility of claims under 3,000 treaties, “then the number of actual disputes going to arbitration seems to be a miniscule fraction of the universe” of investment and investment conflict.\footnote{W. Michael Reisman, International Investment Arbitration and ADR: Married but Best Living Apart, 24 ICSID REV.—FOREIGN INV. L.J. 185, 186 (2009).} This necessarily means that—by focusing on public arbitration awards—the research omits larger questions of
investment conflict.\textsuperscript{111} Narrowing the field of inquiry generates contained analysis based on available information.

\textbf{B. Generation of the Dataset}

The current dataset grew from earlier research (Generation 1 or G1 research). The five additional years of data expanded the number of publicly available awards by approximately 250\% and increased the number of cases by 300\%.\textsuperscript{112} Multiple coders coded raw data from awards with an initial 94.7\% rate of intercoder agreement; and all divergences were later resolved.

\textbf{C. Variables Analyzed and Modeling}

Part III provides descriptive analyses exploring both the starting point and the final result of ITA. First, we descriptively examined amounts claimed, which measures the amount of damages claimed by investors in a common currency of U.S. dollars\textsuperscript{113} adjusted for inflation.\textsuperscript{114}

Defining a “win” in ITA is complex, as subjective definitions of a “win” create confusion, inject variance, and impede consistent

\textsuperscript{111}. International trade research has analyzed World Trade Organization settlements that involve “negotiations in the ‘shadow of the law.’” Marc L. Busch & Eric Reinhardt, Developing Countries and General Agreement on Tariffs and Trade/World Trade Organization Dispute Settlement, 37 J. WORLD TRADE 719, 720 (2003). Future research might usefully explore these aspects of investment treaty conflict. Research offering information about how the legal shadow of ITA operates—either reliably or randomly—offers a baseline for understanding how, when and why pre-arbitration negotiations may be effective.

\textsuperscript{112}. Coding occurred in three time periods. G1 data was collected from the beginning of ITA until June 1, 2006. Generation 2 (G2) data was collected from public awards between June 1, 2006 and June 1, 2009. Generation 3 (G3) data was collected from awards in the public domain between June 1, 2009 and January 1, 2012. Cases unavailable before January 2012 were not coded. G2 and G3 data collection identified awards that, although once private, became public. All coders received extensive coding training for approximately four weeks prior to coding raw data.

\textsuperscript{113}. Values were recorded in original U.S. Dollar amounts. If the original currency was not in U.S. Dollars, the currency was converted into U.S. Dollars as at the date of the award. When possible, the currency conversion was based upon figures from the FX Converter available at http://www.oanda.com/convert/classic using the interbank rate.

\textsuperscript{114}. Adjusted for inflation using the Consumer Price Index (CPI) provided by the Minneapolis U.S. Federal Reserve, using the website originally located at http://www.minneapolisfed.org, which now appears to be located at https://www.minneapolisfed.org/community/teaching-aids/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913 [http://perma.cc/FTZ3-YYZ4]. The date of the award and January 1, 2011 were used for the conversion to adjust for inflation using US$ values in 2011.
measurement across cases. This research therefore used three different, objective, fiscally derived variables. Using a final award’s dispositive, which identifies the award’s core decisions, the research assessed when tribunals identified a compensable treaty breach or derivative damages. A first measure of outcome was operationalized using a binary categorical variable. Results were classified according to whether (1) the tribunal awarded an investor at least US$1, namely an “investor win,” or (2) the tribunal failed to award an investor damages (i.e. an award of US$0), namely a “respondent win.” A second measure assessed amounts awarded using a continuous measure of the fiscal amount a respondent was obligated to pay an investor in inflation-adjusted U.S. dollars. This second measure included awards reflecting settlements or discontinuances. A third measure examined investors’ relative success rate, or the percentage awarded to investors relative to their asserted claim; higher values reflect higher levels of relative investor success.

To explore a multiple regression approach for analyzing ITA outcomes for amounts awarded and relative investor success, Part IV

115. Some investors obtaining ITA compensation nevertheless subjectively viewed the outcome as a “loss.” See Jack J. Coe, Jr., Toward a Complementary Use of Conciliation in Investor-State Disputes—A Preliminary Sketch, 12 U.C. DAVIS J. INT’L L. & POL’Y 7, 8–9 & n.3 (2005) (referring to remarks by Grant Kesler, former CEO of Metalclad who successfully recovered over US$16 million from Mexico). Others suggest, even if a state is not liable, the mere existence of a dispute is a “loss.” See SARAH ANDERSON & SARA GRUSKY, CHALLENGING CORPORATE INVESTOR RULE: HOW THE WORLD BANK’S INVESTMENT COURT, FREE TRADE AGREEMENTS AND BILATERAL INVESTMENT TREATIES HAVE UNLEASHED A NEW ERA OF CORPORATE POWER AND WHAT TO DO ABOUT IT, at ix, 4 (2007) (describing how Argentina settled an ITA dispute with an investor); Nathalie Bernasconi-Osterwalder, Who Wins and Who Loses in Investment Arbitration? Are Investors and Host States on a Level Playing Field?, 6 J. WORLD INV. & TRADE 69, 69 (2005) (arguing that the host State never wins because it has no rights, only obligations and cannot bring claims). Still others suggest settlement is a “loss”—even where parties agree on the outcome—because settlement involves some deviation from an original position). See EBERHARDT & OLIVET, supra note 22, at 9, 13, 22, 30, 58.

116. ATA Construction v. Jordan, ICSID Case No. ARB/08/2, Award (May 18, 2010), http://www.italaw.com/sites/default/files/case-documents/ita0043.pdf [http://perma.cc/94DK-VFV2], was the only case where the tribunal awarded specific performance in lieu of damages; this was coded as an investor win as specific performance was a substitute for damages.

117. As arbitration costs and interest were coded separately, this variable only pertained to fiscal liability for treaty breach.

118. But see Thomas Schultz & Cédric Dupont, Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study, 25 EUR. J. INT’L L. 1147, 1157–58 (2015) (identifying that defining “wins” in ITA has limitations, using one variable to identify an investor “win” when there was some measure of damage awarded and also measuring a state “win” when investors were awarded less than 25% of claimed damage).
includes analyses examining two different theories of arbitration outcomes: whether (1) case-related or (2) arbitrator-and-venue-related factors contributed to outcomes. For the case-based paradigm,\textsuperscript{119} variables reflected investor identity, respondent identity, and experience of parties’ legal counsel. For the arbitrator-venue based paradigm,\textsuperscript{120} variables included panels’ gender composition,\textsuperscript{121} panel’s composite-development status, whether the chair was a repeat player with multiple appointments, and venue. Although our analyses were primarily concerned with extralegal factors,\textsuperscript{122} the claim’s legal merits or other variables could contribute to outcomes.\textsuperscript{123} The challenge in ITA is that the absence of de jure precedent or an appellate body creating legal coherence makes it difficult, if not impossible, to identify legally correct outcomes ex ante. Given these constraints, “it is impossible to control for the most essential variable,” namely, “the ‘correct’ legal outcome in a particular case.”\textsuperscript{124} Rather than abandon efforts to offer empirical insights, we prefer to acknowledge the difficulty. We also identify the constraints as a reason to prefer models analyzing relative investor success, as that variable uses a common scale to evaluate all cases and offers some

\begin{footnotes}
\item[119.] See supra notes 38–39, 84–86 and accompanying text.
\item[120.] See supra notes 81–83 and accompanying text.
\item[121.] We are unaware of published literature suggesting gender affects ITA outcomes. But see Waibel & Wu, supra note 82, at 34–35, 37 (providing unpublished analysis suggesting women decide some ITA issues differently). In other contexts, adjudicator gender influences outcome. See Jennifer L. Peresie, Note, Female Judges Matter: Gender and Collegial Decisionmaking in the Federal Appellate Courts, 114 YALE L.J. 1759, 1761, 1776–79 (2005) (identifying the presence of at least one female judge on panels reviewing sexual harassment and discrimination cases affects outcome). There are concerns about the lack of women in ITA. Franck, Empirically Evaluating, supra note 32, at 81–83 (noting less than 10% of ITA arbitrators are women); Susan D. Franck, James Freda, Kellen Lavin, Tobias A. Lehmann & Anne van Aaken, The Diversity Challenge: Exploring the “Invisible College” of International Arbitration, 53 COLUM. J. TRANSNAT’L L., 429, 434, 451–55, 467–69, 480–82, 489–90, 492–93 (2015) (identifying gender diversity concerns in international arbitration). We thus believed it prudent to explore whether gender influenced outcomes.
\item[123.] See infra notes 179, 194, 233–35 and accompanying text (discussing other potential variables, noting cases with energy disputes did not reliably predict outcome, and identifying derivative limitations).
\item[124.] Catherine A. Rogers, The Politics of International Investment Arbitrators, 12 SANTA CLARA J. INT’L L. 223, 234 (2013); see also infra note 194 (discussing difficulty of identifying legal correctness).
\end{footnotes}
control for the merits by creating a uniform measure reflecting amounts in dispute.\textsuperscript{125}

III. DESCRIPTIVE ARBITRATION OUTCOMES

Given the relatively limited information on ITA, some of the most interesting questions relate to basic descriptive outcomes. Knowing the mean and median ITA outcomes helps develop a general portrait of how ITA operates overall. While treaties do not necessarily permit national courts to resolve investment treaty disputes against states, it may aid future comparisons with national court litigation\textsuperscript{126} and arbitration.\textsuperscript{127} This section therefore explores descriptive questions related to amounts claimed, binary outcomes (that is, whether an investor won or lost), and relative outcomes, including a focus on both amounts claimed and relative investor success.

A. Amounts Claimed

Although a nascent literature exists,\textsuperscript{128} there has been a dearth of scientific analysis of potential fiscal exposure in ITA. Without systematic analysis, some suggest that “several pending cases involve claims for billions of dollars,”\textsuperscript{129} while others contend “[c]laims for several hundred million pounds are by no means unusual.”\textsuperscript{130} The Organisation for Economic Co-operation and Development (OECD)

\textsuperscript{125} See Rogers, supra note 124, at 234 (arguing “the relative strength of a particular party’s case” serves as a control for correct outcomes).


\textsuperscript{128} See supra notes 31–32 (identifying the existing literature).

\textsuperscript{129} Simmons, supra note 69, at 196.

similarly stated that ITA “cases frequently involve huge claims.”\textsuperscript{131}\nStill others suggest the economic stakes of ITA have “skyrocketed” and warn, “‘[b]ringing a billion-dollar claim is no longer enough to stand out.’”\textsuperscript{132}\nThe key question is whether the commentary withstands systematic inquiry.

Out of the 202 cases coded, 117 contained either partial or full quantification of investors’ claimed damage. For cases with multiple awards articulating amounts claimed, the most recent award with a fully particularized amount claimed was coded.\textsuperscript{133}\nAmounts were converted to a common currency (U.S. dollars) and adjusted for inflation.

The mean inflation-adjusted amount claimed was US$622,633,418 and the median was US$100,426,693 \((n=117; SD=2331828846)\). The lowest amount claimed was US$41,620.60 (MDL 525,834.58) in \textit{Yury Bogdanov v. Moldova},\textsuperscript{134}\nand the highest amount claimed was US$19 billion in \textit{Saba Fakes v. Turkey}.\textsuperscript{135}\nThese large mean claims were nearly twice the size of earlier research where the mean claims were US$340–370 million (median of roughly US$60 million).\textsuperscript{136}\nThe eight largest cases, with inflation-adjusted claims exceeding US$1 billion, skewed the mean. Excluding these eight outliers, the mean amount claimed was US$158,938,054 (median US$86,277,549; \(n=109; SD=182183541\)). Amounts claimed in the lowest quartile were under US$23.7 million, the second lowest quartile ranged from US$23.7 to US$86.3 million, the second highest


\textsuperscript{132} EBERHARDT & OLIVET, supra note 22, at 14; see also Michael D. Goldhaber, \textit{Arbitration Scorecard 2011: The Biggest Cases You Never Heard Of}, AM. LAW. DAILY (July 6, 2011, 6:00 AM), http://amlawdaily.typepad.com/amlawdaily/2011/07/arbscorecard2011.html [http://perma.cc/4X37-96FS] (“Nor is it enough to win a measly $100 million . . . . What it takes to distinguish yourself these days is a $350 million award, minimum.”).

\textsuperscript{133} We chose this time period as we anticipated that later values in time more accurately reflected the amount at risk. Although sometimes claims decreased, other times, claims increased.


\textsuperscript{135} Saba Fakes v. Turkey, ICSID Case No. ARB/07/20, Award, at 3 (July 14, 2010), http://www.italaw.com/documents/Fakes_v_Turkey_Award.pdf [http://perma.cc/WJ22-8WPM].

quartile ranged from US$86.3 to US$237.8 million, and the highest quartile contained claims over US$237.8 million.

The results suggest that ITA involved nontrivial fiscal risk. The data did not indicate that it takes a billion-dollar claim “to stand out.” Rather, as the caseload increased, the number of both small and large claims increased. Nevertheless, facial trends suggest potential increases in amounts claimed, which warrants ongoing assessment. In the interim, investors may discover that bringing a billion-dollar claim could generate infamy rather than remuneration. The data reflected that, for the eight largest claims, only one case was successful; and the vast majority of investors bringing billion-dollar claims obtained nothing. In those circumstances, states may be skeptical about the ultimate value of one billion-dollar claims, and investors may wish to take care to carefully substantiate their claims.

B. Binary Win Rates

Potential risk, however, is not realized risk. One of the most basic questions in arbitration, particularly ITA, is who wins. Earlier research, limited to pre-2007 data analyzing fifty final awards (excluding settlements and discontinuances), indicated that investors won 40% of the cases and respondents won 60%. Jose Alvarez wrote, these “numbers pour cold water on unexamined assertions by many critics of the [ITA] regime” that ITA exhibits a pro-investor bias. The original historical snapshot analyzed fewer than sixty final awards, and the results could have changed over time.

Backed by a nearly 300% increase in cases analyzed, the current research replicated the proportions identified in earlier research. For

137. See Libananco Holdings Co. v. Turkey, ICSID Case No. ARB/06/8, Award (Sep. 2, 2011); Saba Fakes v. Turkey, ICSID Case No. ARB/07/20; Cementownia “Nowa Huta” S.A. v. Turkey, ICSID Case No. ARB(AF)/06/2, Award (Sep. 17, 2009); Europe Cement v. Turkey, ICSID Case No. ARB(AF)/07/2, Award (Aug. 13, 2009); Occidental v. Ecuador, ICSID Case No. ARB/06/11, Decision on Jurisdiction (Sep. 9, 2008); Generation Ukr. v. Ukraine, ICSID Case No. ARB/00/9, Award (Sep. 16, 2003); Methanex Corp. v. United States, NAFTA, Final Award (Aug. 3, 2005), 44 I.L.M. 1345 (2005). The only exception was Total S.A. v. Argentina, where the amount in controversy was over US$1.2 billion, and after a finding of state liability, an unpublished quantum award in 2013 awarded the investor damages. Total S.A. v. Argentine Republic, ICSID Case No. ARB/04/01, Decision on Liability, ¶¶ 31, 485 (Dec. 27, 2010), http://www.italaw.com/sites/default/files/case-documents/ita0868.pdf [http://perma.cc/4MWE-W5P4]; Total S.A. v. The Argentine Republic, ICSID Case No. ARB/04/01, ITALAW, http://www.italaw.com/cases/1105 [http://perma.cc/929G-Q54M] (noting that the arbitration award is not public).

138. Franck, Empirically Evaluating, supra note 32, at 49–50, 58 n.254 (2007). This excluded two cases involving settlements. Id.

139. ALVAREZ, supra note 42, at 391.
the 144 awards finally resolving treaty disputes,\textsuperscript{140} fifty-seven cases (39.6\%) were investor wins. By contrast, there were eighty-seven cases (60.4\%) where respondents won with no state liability. See Figure 1. Chi-square analyses comparing the expected frequencies to obtained frequencies demonstrated a statistical difference ($\chi^2 (1) = 6.25; p<.05$). Cohen’s conventions,\textsuperscript{141} the difference exhibited a small-to-medium effect ($r = .21$). The rough pattern was that, for every two cases where investors won, states won three cases.\textsuperscript{142}

\textit{Figure 1. Percentage of ultimate winners and losers in ITA (n=144)}

\begin{figure}[h]
\centering
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\end{figure}

140. These figures exclude settlements or discontinuances. Of those fifteen cases, eight were awards embodied by settlement agreements, three discontinuances involved investors abandoning claims, three discontinuances involved respondents paying investors damages, and one discontinuance involved a respondent paying nothing to settle the claim.

141. According to Cohen, effect sizes ($r$) up to .10 are “small,” .11 to .30 are “medium,” and .31 to .50 are “large.” Jacob Cohen, \textit{Statistical Power Analysis for the Behavioral Sciences} 79–80 (2d ed. 1988).

142. This is roughly analogous to recently published research. Daniel Behn, \textit{Legitimacy, Evolution, and Growth in Investment Treaty Arbitration: Empirically Evaluating the State-of-the-Art}, 46 Geo. J. Int’l L. 363, 370–72 (2015) (analyzing decisions between 2011–14 to ascertain that states won roughly 60\% of cases and specifically stating “twenty-five awards declining jurisdiction (33\%), eighteen awards dismissing on the merits (24\%), and thirty-four awards upholding claims on the merits (43\%)”); Schultz & Dupont, \textit{supra} note 118, at 15–17 (identifying that, using a dataset of investor-state awards that included non-ITA cases, investors won 46\% of cases as compared with states by observing “investors have in fact won fewer cases (eighty-seven in the 1972–2010 period) than host states (102 in the same period)”\textsuperscript{142}. Three independent groups of researchers—analyzing somewhat similar datasets but with different temporal periods, different scopes of ITA-related cases, and different measures—identified similar outcome patterns, which lends credibility to the hypothesis that a “pro-investor bias” in ITA outcomes is empirically unverifiable as a population parameter.
This excludes cases involving settlements or discontinuances and categorizes ultimate outcomes by (1) cases where the tribunal awarded any damages (more than US$0) or an equivalent remedy; (2) cases where tribunal rendered an award in the state’s favor with US$0 liability.

The stability in proportionate outcomes over time was noteworthy. Both governments and investors were successful in ITA, although states won in slightly larger proportions. This stability and replication suggests earlier historical research was robust.

Those results have implications. First, the results suggest that claims of a pro-investor bias are overstated or, at least, inaccurate in the context of final outcomes. If such a bias existed, the data should have revealed that investors won more than states. Instead, the results were reversed and states won slightly more. Unlike the antidefendant bias facially observable in the International Trade Commission’s treatment of patent cases or Clermont and Eisenberg’s research suggesting foreign plaintiffs experienced high win rates in U.S. courts, ITA did not exhibit an antirespondent bias. Rather, overall results tended to favor respondents. This is similar to UNCTAD’s research finding that states won proportionately more cases than investors.

143. See Colleen V. Chien, Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission, 50 WM. & MARY L. REV. 63, 63–64 (2008) (identifying that in ITC claims, plaintiffs won 58% of cases as compared to 35% in U.S. District Court); Robert W. Hahn & Hal J. Singer, Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions, 21 HARV. J.L. & TECH. 457, 462 (2008) (reporting “[b]etween 1975 and 1988, the complainant prevailed . . . in 65% of patent cases brought to the ITC, compared with a 40% to 45% win rate for patent plaintiffs in federal district courts,” and more recently “the ITC has decided 54 percent of contested cases in favor of the patent holder”). But see MARK A. LEMLEY, THE FRACTIONING OF PATENT LAW, INTELLECTUAL PROPERTY AND THE COMMON LAW 504, 506 n.14 (Shyamkrishna Balganesh ed., 2013) (arguing the Priest-Klein model does not apply to patent litigation as “every empirical study of patent law . . . shows systematic variation from a 50% win rate”).

144. Kevin M. Clermont & Theodore Eisenberg, Xenophilia in American Courts, 109 HARV. L. REV. 1120, 1127–30 (1996) [hereinafter Clermont & Eisenberg, Xenophilia] (identifying foreign plaintiffs won between 67–83% of the cases brought in U.S. courts between 1986 and 1994); Kevin M. Clermont & Theodore Eisenberg, Xenophilia or Xenophobia in U.S. Courts? Before and After 9/11, 4 J. EMPIRICAL LEGAL STUD. 441, 456–59 (2007) [hereinafter Clermont & Eisenberg, After 9/11] (suggesting earlier research reflected a case selection effect, arguing globalization decreased the reluctance of foreigners to litigate in U.S. courts and stating “more standard win rates are now reasserting themselves” as foreigners were more likely to bring less meritorious cases).

Second, for states considering whether to include arbitration in treaties, the data suggest that ITA did not disfavor states. This is perhaps unsurprising, as Eisenberg and Farber identified that claimants tended to win at lower rates when suing states. As the similarity suggests that states may have a natural advantage when they create and participate in dispute resolution, whether in a national or international context, states may wish to explore whether arbitration is a viable dispute resolution option. For investors, although they may wish to carefully assess whether to initiate claims, the data suggest investors sometimes won.

Third, the results suggest that the Priest-Klein model of litigation, which predicts plaintiffs generally win 50% of cases irrespective of the applicable legal standards, may not apply to ITA. The Priest-Klein model is derived from U.S. court litigation and is based on assumptions including the application of U.S. domestic law, clear and available precedent, and only “close” cases going to trial. By contrast, treaties do not necessarily permit national courts to resolve treaty disputes, ITA precedent is not always available, and

Library/wir2014_en.pdf [http://perma.cc/HN3D-BXTC] (“Of [274 known completed cases], approximately 43 per cent were decided in favour of the State and 31 per cent in favour of the investor. Approximately 26 per cent of cases were settled.”); see also supra note 142 (identifying similar findings of state-dominant success in new research).


148. This could, for example, derive from concerns about whether state courts resolving disputes against the states would intentionally or unintentionally exhibit a self-serving bias. It may also implicate (rightly or wrongly) perceived capacity to provide impartial justice. There may also be concerns related to capacity to resolve complex international law disputes.

149. While there is a wealth of publicly available precedent, not all cases are public and they may have only de facto rather than de jure effect. See, e.g., Jeffery P. Commission, Precedent in Investment Treaty Arbitration: A Citation Analysis of a Developing Jurisprudence, 24 J. INT’L ARB. 129 (2007) (discussing precedent and empirically analyzing citations in ITA awards); Susan D. Franck, The Nature and Enforcement of Investor Rights Under Investment Treaties: Do Investment Treaties Have a Bright Future?, 2 U.C. DAVIS. J. INT’L L. & POL’Y 47, 68–69 (2005)
the application of precedent can be unclear. This suggests the Priest-Klein model may not be an appropriate baseline for evaluating the \textit{sui generis} dispute settlement of international investment law.

Rather, ITA appears akin to other types of adjudication where the process favors respondents generally or states in particular. In those cases, the 50/50 baseline was inapposite where there were large amounts in dispute, gaps in access to information, or where settlement costs were high relative to litigation costs. Given high claims, high arbitration costs, and information asymmetries, ITA seems akin to adjudication where parties should expect respondents to have a relative advantage. A better analogy for ITA might therefore be success rates in whistleblower lawsuits.

(describing aspects of \textit{de jure} and \textit{de facto} precedent in ITA); Nick Gallus, \textit{Protection of Non-Governmental Organizations in Egypt Under the Egypt-U.S. Bilateral Investment Treaty}, 14 INT'L. J. NOT-FOR-PROFIT L. 62, 67 (2012) (“[D]ecisions are certainly not always consistent and a decision on the interpretation of a provision is far from a guarantee that a similar provision, or even the same provision, will be interpreted the same way by another tribunal.”); see also Raj Bhala, \textit{The Power of the Past: Towards De Jure Stare Decisis in WTO Adjudication (Part Three Of A Trilogy)}, 33 GEO. WASH. INT'L L. REV. 873, 950 (2001) (discussing lack of \textit{de jure} precedent in WTO litigation).

150. Franck, \textit{Legitimacy Crisis}, supra note 21, at 1522.


153. Developing countries may lack access to specialized counsel with inside information related to the law of ITA or arbitration strategy. See Gottwald, supra note 86, at 250–51. Small investors who are not repeat players may experience similar information gaps.

litigation, 156 Bivens lawsuits against government officials for violations of citizens’ U.S. constitutional rights, 157 citizen complaints against agency action, 158 civil- or prisoner-rights cases, 159 or medical-malpractice litigation. 160 These cases share other similarities with ITA, as they involve claims by individuals, claims against a state, claims related to improper regulatory activity, or claims seeking fiscal compensation.

C. Amounts Awarded and Relative Investor Success

As a binary metric masks nuance, ITA outcomes should also be assessed using more sensitive measures. When considering amounts awarded or relative investor success, investors experienced some success, but states obtained relatively more success.

Including settlements, there were 159 cases where ITA tribunals made awards that resulted in a damage determination. There were 101 cases where investors were awarded nothing at the conclusion of the dispute, whether by virtue of a tribunal damage award, settlement agreement or discontinuance. 161 For the remaining 58 cases, awards reflected a damage award or respondent’s agreement to pay damages


157. Alexander A. Reinert, Measuring the Success of Bivens Litigation and Its Consequences for the Individual Liability Model, 62 STAN. L. REV. 809, 827–30, 839–46 (2010) (observing that 30% of Bivens claims succeeded through settlement or merits disposition, disproving assertions that those claims typically lack merit and burden the federal judiciary, and arguing that normative approaches based upon faulty empirical assessments are improper).

158. See Michael A. Carrier & Daryl Wander, Citizen Petitions: An Empirical Study, 34 CARDOZO L. REV. 249, 249 (2012) (identifying that citizen petitions to the U.S. Food and Drug Administration to take action on drug safety were successful only 19% of the time); William N. Eskridge, Jr. & Lauren E. Baer, The Continuum of Deference: Supreme Court Treatment of Agency Statutory Interpretations from Chevron to Hamdan, 96 GEO. L.J. 1084, 1099 (2008) (identifying agency win-rates were generally over 70%).

159. See Eisenberg, supra note 146, at 1578–80 (identifying success rates of civil rights, employment discrimination, and prisoner civil-rights litigation cases were far below reported trial success rates for other litigation and typically below 50%).


161. This included discontinuances and settlements that did not create fiscal liability.
through settlement and/or discontinuance.\textsuperscript{162} Put simply, even including known settlements, investors obtained damages in less than half the cases.

For all cases, investors obtained a mean award of US$16.6 million and a median award of US$0. Investors’ relative success in final cases reflected a mean success rate of 18\%, but a median 2\% success rate. See Table 1. Both measures of central tendency demonstrate that investors obtained awards of 2–18¢ for each dollar claimed. The results may reflect large standard deviations, outliers, and variation in the ITA caseload.

Focusing on the subset cases where investors obtained an award minimizes variance. Table 1 reflects the mean amount awarded was US$45.6 million and the median was US$10.9 million. The amount claimed for cases involving claimant success was not as extreme as the overall sample, and the mean amounts claimed decreased by approximately one-third.\textsuperscript{163} As tribunals weeded out unmeritorious or inflated claims, investors obtaining damage awards fared better. Relative to their requests, Table 1 reflects that successful investors obtained a mean of 35\% and a median of 27\% of requested damages. For the roughly 40\% of investors obtaining damages, they secured roughly 30\% of their claimed damage.

\textit{Table 1: Outcomes as a Function of Inflation-Adjusted Amounts Awarded (in U.S. Dollars) and Relative Investor Success Comparing Amounts Claimed to Amounts Awarded}

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Awarded (All Cases)</td>
<td>16,623,986</td>
<td>0</td>
<td>16,623,986</td>
<td>159</td>
</tr>
<tr>
<td>Relative Investor Success (All Cases)</td>
<td>18.00%</td>
<td>1.86%</td>
<td>26.04</td>
<td>103</td>
</tr>
<tr>
<td>Amount Awarded – Subset of Investor Wins</td>
<td>45,572,651</td>
<td>10,866,790</td>
<td>68,283,499</td>
<td>58</td>
</tr>
<tr>
<td>Relative Investor Success – Subset of Investor Wins</td>
<td>34.98%</td>
<td>28.69%</td>
<td>26.92</td>
<td>53</td>
</tr>
</tbody>
</table>

\textsuperscript{162} Only two cases created a settlement or discontinuance requiring a payment: \textit{Goetz v. Burundi I}, ICSID Case No. ARB/95/3, Award (Feb. 10, 1999) (reflecting agreement to pay US$2,989,636), and \textit{Impregilo v. Pakistan}, ICSID Case No. ARB/03/3, Order of Discontinuance of the Proceeding (Sept. 25, 2005) (reflecting agreement to pay US$98,000,000).

\textsuperscript{163} For the subset, investors claimed an average amount of US$171,326,467 and a median amount of US$87,156,098 (n=53; SD=191,861,066).
The results are facially disparate from amounts awarded, for example, in employment arbitration or medical malpractice litigation, where claimants were generally awarded less than one million dollars on average. Those results may reflect the relative value of claims involving individuals applying established legal principles rather than multinational investments operating under complex regulatory regimes in multiple languages with unsettled legal principles.

A better analogy for understanding outcomes in ITA involves amounts awarded and relative success of foreign claimants litigating in domestic courts. One might posit that domestic courts privilege domestic entities and penalize foreigners; and thus, ITA provides an alternative to promote the neutral application of legal principles. At least historically, however, foreigners were not disenfranchised by litigating in U.S. courts. Initially, Clermont and Eisenberg identified that foreigners suing domestic entities in U.S. courts did well; and for those cases, the median award exceeded the median demand. This was not the pattern for ITA outcomes. Rather, outcomes were facially akin to those of U.S. plaintiffs suing foreign defendants in U.S. courts. In those cases, domestic entities typically recovered half


165. Hyman & Silver, supra note 160, at 1110 (stating mean medical malpractice payments were approximately US$300,000 and, while the number of US$1 million claims increased, mean payment sizes over US$1 million did not increase over time); Darius N. Lakdawalla & Seth A. Seabury, The Welfare Effects of Medical Malpractice Liability, 32 INT’L REV. L. & ECON. 356, 369 (2012) (indicating average verdicts for non-economic damages in medical malpractice cases was US$142,000 and US$328,000 for economic damages); Catherine M. Sharkey, Unintended Consequences of Medical Malpractice Damages Caps, 80 N.Y.U. L. REV. 391, 451–52 (2005) (identifying, over time, that medical malpractice awards averaged from roughly US$250,000 to 530,000 and plaintiff success rates ranged roughly from 23–27%).

166. See Clermont & Eisenberg, Xenophilia, supra note 144, at 1141–42 (identifying that the median demand was US$73,155 but the median award was US$1,061,064 for foreigners suing domestic entities, and also identifying that the mean demand was US$913,198 and the mean award was US$1,061,064).
of their demand,\textsuperscript{167} as “cases against foreigners are characterized by big demands, but not big awards. This pattern suggests a blustering plaintiff with a lower chance of winning.”\textsuperscript{166} In any event, foreign plaintiffs’ success in U.S. courts has changed over time. As globalization decreased concerns of xenophobia, Clermont and Eisenberg’s post-9/11 research indicates that, more recently, foreigners have brought marginally weaker cases and their success levels have also decreased.\textsuperscript{169} If ITA follows this pattern, case selection effects could lead to investor success levels decreasing over time as ITA diffuses, the docket expands, and the risk of pursuing claims decreases.\textsuperscript{170}

Overall, ITA outcomes reflected wide variation but a general pattern. The pattern exhibited less investor success than some commentators suggest and minimal evidence of pro-investor bias. Instead, the data provided initial evidence of a pro-state bias that was similar to cases in U.S. litigation involving claims against state entities. The results also may reflect a case selection effect where possibly the most meritorious cases are resolved before initiating ITA or nonmeritorious claims are not pursued. Given variation in the results, it is constructive to explore variables affecting case disposition and its use as a “shadow” for negotiating alternative outcomes.

IV. MODELING OUTCOMES: REGRESSION ANALYSES

The descriptive baseline of amounts claimed and outcomes provides a starting point for understanding ITA. Yet, it does not explain the variation in outcomes. Scholarship has not yet identified meaningful links between ITA outcomes and respondent state-development status,\textsuperscript{171} presiding arbitrator background,\textsuperscript{172} whether an

\textsuperscript{167}Id. (observing that domestic entities suing foreigners exhibited less success with a median demand of US$223,494 and median award of US$129,267 and observing that the mean demand was US$2,045,194 and the mean award was US$1,398,520).

\textsuperscript{168}Id. at 1141.

\textsuperscript{169}Clermont & Eisenberg, After 9/11, supra note 144, at 451, 453, 463–64.

\textsuperscript{170}The opposite might also occur. Should investors become more risk averse at bringing claims given low levels of success and/or third-party funders make it difficult to obtain funding to pursue the expensive ITA process, it is possible that only the most serious claims with the best chance of success would be pursued. Should that occur, investors’ success could increase as less meritorious claims never become formalized.

\textsuperscript{171}Franck, Development, supra note 32, at 439–40.

\textsuperscript{172}Id. Compare Waibel & Wu, supra note 82, at 23, 32 (suggesting the political preferences and repeat appointments of arbitrators are linked to ITA including “[a]rbitrators from developing countries are less likely to hold the host country liable because they are more
energy dispute was involved, the presence of a Latin American state, or whether ITA occurs at ICSID or elsewhere. Existing research has also not explored the effects of over two independent variables simultaneously. This may reflect ITA’s historically small caseload that makes multiple regression analyses challenging and the lack of a theoretical framework.

This section therefore expands upon existing research by exploring how additional variables and different models affect ITA outcomes. It does so by first identifying the type of modeling used. Next, we tested two paradigms—namely a case-based and arbitrator-venue based model—as explanations of ITA outcomes. We tested both paradigms using amounts awarded (which used a zero-inflated two-part model to test for differences between those cases with and without a US$0 award) and relative investor success. Finally, we combined the significant predictors from earlier models to create a third hybrid model, which was able to reliably predict ITA outcomes using relative investor success.

First, methodologically, we estimated separate regression models with SAS PROC GLIMMIX using maximum likelihood estimation for each dependent variable. Continuous variables were centered at their mean. For categorical variables with multiple levels, we familiar with the economic and social conditions in developing countries and host countries the more likely source of future arbitral appointments”), with Kapeliuk, Repeat Appointment, supra note 32, at 80–85 (exploring ITA outcomes as a function of the decisions of “elite” arbitrators and finding a lack of relationship). See also Kapeliuk, Games, supra note 32, at 296, 311 (exploring repeat appointments and panel experience on ITA outcomes).

173. Franck, ICSID, supra note 32, at 833.
174. See supra note 33 and accompanying text (identifying that research historically focused on two independent variables and the interaction effect); supra note 41 and accompanying text (providing more sophisticated analysis by controlling for Polity IV). But see Waibel & Wu, supra note 82, at 26–40 (providing preliminary unpublished results on various models affecting net outcomes but focusing on arbitrator identity).
175. See supra notes 36, 42 and accompanying text; Rogers, supra note 124, at 228.
176. SAS is a statistical software package, and the SAS PROC GLIMMIX is the statistical software procedure that fits models to non-normal data using a generalized linear mixed model. Maximum Likelihood (ML) estimation is appropriate for data that are non-continuous (that is, binary outcomes) and residuals that are not normally distributed (that is, many zero outcomes and skewness). ML uses the normal distribution to estimate parameters (using a series of iterations to find the most likely mean that produced the data), whereas Ordinary Least Squares (OLS) estimation finds the best fitting line by minimizing the squared residuals to find parameter estimates.
177. Continuous variables were centered at their mean: Polity IV score (M=5.27); Claimant’s legal team (M=2.05); Respondent’s legal team (M=3.36); and the Chair’s weighted experience as a repeat player (M=2.23).
dummy coded using the first variable listed serving as the reference group. Parameter estimates for each of the separate models are presented in Tables 2 to 6.

Next, given our interest in exploring alternative paradigms and extralegal factors, we initially examined two groups of variables. Under one paradigm, ITA outcomes are a function of the case itself, which could reflect a case selection effect influencing disputes pursued through ITA and ultimate results. Under this model, party identity is crucial. Given claims of pro-investor bias, examining

178. Because of sample size and degrees of freedom, we examined variables in two different paradigms. This permitted examination of more independent variables while testing competing ideas of what predicts outcomes (that is, case-related or tribunal-related variables).

179. There may be other case-related variables, like sector involved or type of government activity generating the dispute, which could influence outcomes. Jeremy Caddel and Nathan Jensen’s preliminary research distinguishing among state actors generating disputes—namely executive branch, legislatures, subnational activity, state-owned firms, other agencies or courts—relies upon a sui generis classification system. Since their research identified that most disputes involved executive branch conduct, it is unclear whether this variable would contribute meaningful variance. See Jeremy Caddel & Nathan M. Jensen, Which Host Country Government Actors Are Most Involved With Disputes With Foreign Investors?, COLUM. FDI PERSP., No. 120 (Apr. 28, 2014), http://cspi.columbia.edu/files/2013/10/No-120-Caddel-and-Jensen-FINAL-WEBSITE-version.pdf [http://perma.cc/KSA4-H3R3]. There is large variance in industries involved in ITA. Franck, Empirically Evaluating, supra note 32, at 41–43. Hypothesizing energy disputes generate a core proportion of ITA disputes and involve large claims, we explored whether there was a reliable difference between energy and non-energy disputes. We were unable to identify reliable differences in outcomes related to energy disputes when analyzing (1) whether investors won or lost and using a Chi-Square Test ($\chi^2(1)=0.843$, $p=.36$, $r=.08$, $n=144$), (2) inflation-adjusted amounts awarded in all disputes using an Mann-Whitney two-sample U-test ($U=2120.0$, $Z=-1.513$, $p=.13$, $n=144$), (3) relative investor success in all disputes using a t-test ($t(101)=-1.528$, $p=.13$, $r=.15$, $n=103$), or (4) relative investor success in the subset of cases where investors won using a t-test ($t(51)=-0.35$, $p=.73$, $r=.05$, $n=53$). Only a Mann-Whitney U-test of inflation-adjusted amounts awarded using the subset of cases where investors won identified a meaningful difference between amounts awarded for energy and non-energy disputes ($U=1183.5$, $Z=-2.034$, $p=.04$, $r=.12$, $n=58$). The median energy dispute involved higher amounts (US$41,780,026; IQR=6,438,771-113,451,356) than the median non-energy dispute (US$8,000,918; IQR=2,961,702-26,540,200). Although fiscal amounts were visually stark, the effect size was statistically small when using Cohen’s threshold for interpreting effect sizes. The non-significant results replicated earlier research providing initial evidence that could not distinguish between outcomes for energy and non-energy cases. Franck, ICSID, supra note 32, at 863–66. As analyses involving energy disputes generated non-significant variance and small effect sizes, we did not use this variable. With the lack of statistical power, as the population of ITA awards expands, a latent effect could become observable. Whenever we added the energy variable to case-based models, all models became non-significant. This suggests caution for using energy as an explanatory variable.

180. Martha F. Davis, Participation, Equality, and the Civil Right to Counsel: Lessons from Domestic and International Law, 122 YALE L.J. 2260, 2264–65 (2013); Simmons, supra note 69, at 198; Thomas W. Wälde, Procedural Challenges in Investment Arbitration Under the Shadow of the Dual Role of the State: Asymmetries and Tribunals’ Duty to Ensure, Pro-actively,
investor identity is necessary. The case-based model therefore examines two different measures of investor identity. One variable identified whether the named claimants in the case were all humans, all corporate entities, or some combination thereof. A second variable explored whether the Financial Times ranked any of the named investors as an elite multinational in its top five hundred global companies (i.e. a FT500 corporation).

The case-based model also examined the background of states involved in ITA. As concerns of unfair treatment of developing states are arguably conflated with a host state’s democracy levels, the model explored three types of respondent-related identity variables. One variable used the World Bank’s four-category classification of state’s development status to identify what level of development the state exhibited. A second variable identified a state’s democracy levels using the Polity IV index. Finally, as a core proportion of the


182. As this measure of investor identity involves a three-category variable, two dummy variables analyzed group differences with cases only involving human beings as the reference group. For the subset of final awards; 14.5% (n=23) of cases involved claims only by human beings; 78.6% (n=125) involved claims brought exclusively by corporate entities; and 6.9% (n=11) of cases involved claims brought by a combination of investors who were people and corporate entities.

183. For final awards, 7.5% (n=12) involved cases where at least one of the named investors was a FT500 entity whereas 92.5% (n=147) of cases did not involve even one FT500 entity. 184. See, e.g., Franck, Conflating, supra note 41, at 55–64, 68–69.

185. The four categories were high income, upper-middle income, lower-middle income, and low income. Dummy variables analyzed differences across categories with high income as the reference group.

186. Recognizing classifications could change over time, state development status and Polity IV were coded using the award date. Polity IV is designed to identify the political regime of a state. Polity contains information on countries with a population of more than 500,000 people. The index places states on a scale in which states with more authoritarian and autocratic regimes have lower Polity scores, and states with more democratic regimes have higher scores. See Polity IV Project: Polity IV Individual Country Regime Trends, 1946-2013, CTR. FOR SYSTEMIC PEACE & INTEGRATED NETWORK FOR SOCIETAL CONFLICT RESEARCH, http://www.systemicpeace.org/polity/polity4.htm [http://perma.cc/6U5B-PVD4] (last updated June 6, 2014); The Polity Project: About Polity, CTR. FOR SYSTEMIC PEACE & INTEGRATED NETWORK FOR SOCIETAL CONFLICT RESEARCH, http://www.systemicpeace.org/polityproject.html [http://perma.cc/U2BC-SVWY] (last updated 2014). Coding in this Article used 2012 scores prior to the release of the 2013 Polity IV data.
caseload derived from Argentina’s 2001 currency crisis, we used a variable identifying whether Argentina was the respondent to assess a potential “Argentina effect.” The objective was to understand the generalizability of inferences about one key state’s experiences.

Building on Marc Galanter’s classic scholarship that repeat players (RPs) have strategic advantages in dispute resolution and suggestions that the effects of RPs may be acute in international arbitration, the case-based model evaluated the expertise of parties’ counsel. After coding all counsel of record in every award, irrespective of whether counsel were in-house or external and irrespective of which side counsel represented, we identified 420 different legal entities involved in representing parties in ITA. As approximately 75% of the known legal entities involved in representing parties in ITA were only involved in a single case, we generated a variable reflecting each legal entity’s relative expertise to indicate whether they were a one-shot player or RP with varying levels of sophistication. Then, as parties often had multiple teams of

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188. Franck, Alvarez Review, supra note 136, at 896.

189. Galanter, supra note 86, at 97; see also Marc Galanter, Planet of the APs: Reflections on the Scale of Law and its Users, 64 BUFF. L. REV. 1369, 1387–89 (2006) (providing an overview of potential advantages held by RPs).


191. Given varieties in tribunals’ procedures for identifying counsel, legal entities were the unit of analysis. Legal entities were external law firms, barristers’ chambers, business units, and government departments. Individuals, like Judge Stephen M. Schwebel, were only coded as distinct legal entities when s/he had no other formal affiliation. Counsel were primarily identified using the award cover page or descriptions as to who appeared in hearings. This creates a risk the coding did not fully reflect lawyers who silently assist or ghost-write. As law firms have incentives to serve as counsel of record, control proceedings, and participate in hearings, this risk could be small.

192. RPs were identified using entities named in awards as parties’ counsel of record.

193. The underlying assumption was, where firms have a larger number of cases, they will have a higher level of sophistication and expertise in ITA, and therefore they deserved a higher ranking to reflect a greater relative expertise. We used the distribution of legal entities within the data itself to generate break-points. For those legal entities with a single appointment, they were ranked as “0” to reflect their status as one-shot players. The distribution indicated that, at the 90th percentile, a legal entity had an average of 3.9 cases. For that reason, RPs involved in two to four cases were ranked as “1.” The next clear break occurred at the 95th percentile, where attorneys’ average number of cases was 6.95 with a meaningful cluster of entities having
lawyers, for each team representing the investor, we generated a composite variable reflecting the net legal sophistication of all entities representing the investor. We repeated this exercise for states to identify the net relative expertise of their legal counsel.

Should the case-based model be significant, it could purely reflect a case selection effect whereby investors and their counsel choose to pursue particularly meritorious (or unmeritorious) claims. The results can also illuminate the variables that may be causally proximate, or serve as proxies, for reliably predicting ITA outcomes. In either event, knowing whether the case-based model contributes to outcomes provides information stakeholders can use to assess whether ITA outcomes were random or if certain variables contributed to arbitration risk that states may wish to minimize.

Under a second paradigm, ITA outcomes derive from characteristics of the arbitrators, tribunal composition, and the venue of the dispute. Irrespective of whether ITA arbitrators are viewed as part of the problem or part of the solution, arbitrator identity is frequently used to explain ITA outcomes.

Drawing on literature
about ideological affiliations of U.S. judges,\(^{197}\) some commentators focus on the influence of arbitrators’ personal characteristics on outcome.\(^{198}\) Related variables include arbitrator gender,\(^{199}\) the number of appointments,\(^{200}\) and attributes of tribunal chairs who serve as potential swing votes.\(^{201}\) The tribunal-based model therefore explored several tribunal-focused variables. First, as it was rare for ITA tribunals to have two or more women,\(^{202}\) gender was a binary variable that solely differentiated between tribunals with at least one female member and all-male tribunals. Second, another variable differentiated between arbitrators’ development status on the basis of how the World Bank classified the development level of the state of

197. See generally JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL (1993); CASS R. SUNSTEIN, DAVID SCHKADE, LISA M. ELLMAN & ANDRES SAWICKI, ARE JUDGES POLITICAL?: AN EMPIRICAL ANALYSIS OF THE FEDERAL JUDICIARY (2006). In ITA, ideological divides do not involve traditional liberal-conservative divides, as it is not a uniform transnational concept (i.e. UK conservatives could be liberals in the USA); rather, ideological dynamics involve “pro-state” preference for state sovereignty or “pro-investor” preference for protecting property rights. Giorgetti, supra note 196, at 268; Rogers, supra note 124, at 238–39; Waibel & Wu, supra note 82, at 21–22.

198. See George Kahale III, Is Investor-State Arbitration Broken?, 9 TRANSNAT’L DISP. MGMT., no. 7, Dec. 2012, at 3 (“[E]xperienced practitioners too often can predict the outcome of [ITA] based upon the composition of the tribunal.”); Waibel & Wu, supra note 82, at 6–7, 9–11, 35–37 (exploring extralegal factors effecting ITA decisions and identifying that developing world arbitrators were more likely to confirm jurisdiction than developed world arbitrators). Waibel and Wu offered a granular analysis of arbitrator background, including legal system of origin (including common and civil law), graduation from “elite” law schools (defined as training only from Harvard, Yale, Stanford, Oxford or Cambridge), and experience as practitioners, government officials, or judges. Id. at 27–28.

199. See Giorgetti, supra note 196, at 265–66 n.7, 270–71 (reviewing research identifying the lack of women in ITA); Waibel & Wu, supra note 82, at 34 (identifying female arbitrators were more likely to affirm jurisdiction decisions but were unrelated to ultimate outcomes); id. at 38 (failing to find a significant relationship with chair gender and jurisdiction or liability).

200. Kapeliuk, Repeat Appointment, supra note 32, at 68, 79–89; Waibel & Wu, supra note 82, at 22.

201. See generally Franck, Development, supra note 32 (discussing factors affecting tribunal outcomes); Waibel & Wu, supra note 82, at 31–32 (focusing on the political preferences and repeat appointments of arbitrators to predict ITA outcomes). See also Kahale, supra note 198, at 4–6 (suggesting party appointments drive outcomes); Maupin, supra note 40, at 386 (“[C]ritics contend that a systemic bias extends to presiding arbitrators as well—the crucial swing vote . . . . [B]ecause all three arbitrators are paid by the disputing parties, and only investors (not states) can initiate arbitration proceedings, presiding arbitrators who wish to safeguard the possibility of future investor-state arbitration appointments have an incentive to ensure that investors win.”). As both parties can appoint one arbitrator and all arbitrators must be impartial, legal regulation theoretically decreases risk of bias.

202. Out of the 247 arbitrators, only nine arbitrators were women. As female arbitrators had repeat appointments, for final awards, 15.7% (\(n=25\)) of tribunals included at least one woman. The remaining 84.3% (\(n=134\)) of tribunals contained only men. See also supra note 121.
their nationality. Third, a variable distinguished between chairs’ relative expertise and explored how often chairs had repeat appointments. Finally, given claims that ICSID is a biased forum, the model explored arbitration venue and looked for differences between cases administered at ICSID and those administered elsewhere (that is, cases at the Stockholm Chamber of Commerce or ad hoc arbitrations).

To assess the two models of explaining ITA outcomes, the research analyzed the dependent variables of amounts awarded and relative success. In light of the number of predictors of interest and the sample size, testing the two models separately permitted assessment of a greater number of potential predictors. We also used a hybrid model, combining significant case-based and tribunal-venue-based variables, to assess whether case-based variables remained predictive.

A. Amounts Awarded

We estimated a zero-inflated two-part model based on adaptive quadrature to examine whether our hypothesized variables predicted amounts awarded. This procedure allows estimation of dependent variables with semicontinuous data that contain multiple zeros and right-skewed distribution of positive values, including amounts awarded where many cases had a US$0 award and the remainder of the awards exhibited positive skewing. The first part of the model...
values zeros (US$0 awards) using a binary logit distribution and the second part models positive continuous data with a lognormal distribution. Although the models have separate regression weights, the models are estimated simultaneously.\textsuperscript{207} Functionally, the initial zero-model is roughly equivalent to a predictive model for a binary win/loss dependent variable as it seeks to predict whether an investor secured any fiscal award, irrespective of the actual amount. In contrast, the continuous model focuses more upon the absolute degree of remuneration.

Table 2 reflects the results for the regression model for the case-based approach. Both regression models, namely the zero model \[ \chi^2(10,182)=2.55, \ p<.01, \ n=94 \] and the continuous model \[ \chi^2(10,182)=4.71, \ p<.001, \ n=55 \], significantly predicted amounts awarded in ITA disputes. There was a medium effect size \((r =.34)\)\textsuperscript{208} accounting for 12\% of the variance.

Within the zero model, the identity of an investor and the claimant’s legal team’s prior experience significantly predicted whether there was an amount awarded. The role of investor identity, however, was complicated. The zero-model suggested that, when the claimant was a corporation (as opposed to a human being), then amounts awarded were more likely to be a zero (that is, a non-award and determination of no state liability); in contrast, human beings were more likely to be awarded some dollar amount. If none of the named investors in a case were classified as a \textit{FT500} corporation, outcomes were more likely to be a non-award; but, when at least one of the named investors was a \textit{FT500} entity, then the case was more likely to result in state liability.\textsuperscript{209} When viewing ITA from the


\textsuperscript{208} Because \(r\)-values are not readily available using two-part models, \(r\) was calculated for both models simultaneously by estimating the correlation of the predicted outcomes and the expected outcomes.

\textsuperscript{209} We looked further into named investors’ corporate chain to explore whether investors’ direct parent companies were \textit{FT500} entities. Where any of the named investors or a direct parent was listed on the \textit{FT500}, this was coded as the case involving a \textit{FT500} entity; all other cases were coded as non-\textit{FT500} cases. For the subset of final awards, 8.8\% \((n=14)\) of cases involved a case where at least one investor (or a parent) was listed on the \textit{FT500}; and for the remaining 91.2\% \((n=145)\) cases, none of the named investors or their immediate corporate
perspective of human beings initiating claims, people fared relatively well; but viewing investor identity from the perspective of whether they were large multinational investors, large investors fared relatively well. These dual perspectives are not necessarily inconsistent as they reflect different systemic experiences of investors. Both variables reflected that investor identity contributed meaningfully to ITA outcomes, albeit in different ways. In addition, only for the claimant’s legal team, the less experienced the claimant’s legal team, the more likely the amounts awarded were a non-award. The more experienced the claimant’s legal team, the more likely the investor would obtain some form of recovery.

Within the continuous model, there were two significant predictors. The experience of claimant’s legal team continued to be a critical variable of amounts awarded. Once again, where an investor’s legal team exhibited more experience, the amount awarded to the investor also increased. In addition, although it was the only time our models indicated a state’s development status was a significant predictor of outcome, the continuous model identified a link with a

210. We observe that both groups were relatively small. When focusing on investor identity, cases involving only people were less than 16% of final awards, whereas cases involving at least one FT500 investor were less than 8% of final awards. See supra notes 182–83 and accompanying text.

211. We created another binary variable for identifying whether attorneys were RPs. As identified in text accompanying footnotes 192–93, 75% of all legal entities in ITA were one-shot players and coded as “0” to reflect their failure to act as RPs. Those legal entities involved in multiple ITA cases were coded as “1,” irrespective of how many cases they were involved with and whether the representation had involved the investor, state or both. Using those raw binary codes, we then created a composite variable for each party to generate the total sum of RPs on each party’s legal team. For both the zero and continuous models, changing the definition of RP counsel to a binary, instead of a weighted, measure did not change the results. The case-based models remained significant; and while the expertise of claimant’s counsel was a significant predictor for both the zero and continuous models (zero model: \( B=-0.77, SE=0.29, t=-2.62, p<0.01 \); continuous model: \( B=0.63, SE=0.27, t=2.34, p<0.05 \)), the expertise of respondent’s counsel was not a significant predictor for either model (zero model: \( B=0.04, SE=0.09, t=0.43, p=0.67 \); continuous model: \( B=0.08, SE=0.08, t=0.96, p=0.34 \)). The predictive ability of the models also did not change (zero model: \( F(10,182)=4.97, p<0.001; r=0.33 \)); we examined two additional measures of respondent development status: how the United Nations Development Programme (UNDP) scored the respondent state’s Human
state’s World Bank status and amounts awarded: upper-middle income states (as compared to high-income states) experienced higher amounts awarded. No other variables were significant predictors of amounts awarded in ITA for either the zero or continuous model.

Development Index (HDI) and whether the state was a member of the OECD. When the model substituted HDI and OECD for the World Bank classification, neither significantly predicted outcome nor otherwise altered model parameters. This was true for both the HDI measure (zero model: $B=1.76, SE=2.07, t=0.85, p=0.40$; continuous model: $B=0.77, SE=2.42, t=0.32, p=0.75$) and the OECD measure (zero model: $B=0.06, SE=0.49, t=-0.12, p=0.91$; continuous model: $B=-0.23, SE=0.02, t=-0.42, p=0.67$). For HDI, the predictive ability of the models also did not change (zero model: $F(8,184)=3.00, p<.01$; continuous model: $F(8,184)=4.95, p<.001$; $r=.33$). For OECD, the predictive ability of the models also did not change (zero model: $F(8,186)=2.98, p<.01$; continuous model: $F(8,186)=4.96, p<.001$; $r=.33$).

Recent research demonstrated a meaningful difference in amounts awarded, where upper-middle income states experienced larger amounts awarded when compared with high income states. Franck, Conflating, supra note 41, at 48 fig.2 (demonstrating broader variance in amounts awarded against upper-middle income states, but smaller variance in awards against high-income, lower-middle and low income states). No other models, using either HDI or OECD scores, revealed a meaningful difference in amounts awarded; and once a respondent state’s internal democracy scores were controlled for, all models analyzed could not generate a meaningful link to a respondent’s development status. Id. at 57–58 tbls. 8 & 9. The World Bank always classified Argentina as an upper-middle state; and, for the zero model, the presence of Argentina was close to significant ($p=10$).

Some variables in the zero-model were approaching significance. For states, World Bank classification (high income versus mid-high income; and high income versus low income), had a $p$-value of .09 and .07, respectively. The presence of Argentina was also potentially linked to amounts awarded. See supra note 213 and accompanying text. None of the other variables in the continuous models approached significance.
### Table 2: Case-related Two Part Regression Model Predicting Amounts Awarded

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.01</td>
<td>0.77</td>
<td>1.32</td>
<td>0.19</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation)</td>
<td>1.08</td>
<td>0.54</td>
<td>2.01</td>
<td>0.05*</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation and human being)</td>
<td>1.55</td>
<td>1.97</td>
<td>1.29</td>
<td>0.20</td>
</tr>
<tr>
<td>FT500 Corporation (0 = Investor(s) not FT500 corporation, 1 = Investor(s) was FT500 corporation)</td>
<td>-2.43</td>
<td>0.93</td>
<td>-2.60</td>
<td>&lt;0.01**</td>
</tr>
<tr>
<td>Claimant Attorney Experience</td>
<td>-0.31</td>
<td>0.11</td>
<td>-2.91</td>
<td>&lt;0.01**</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent upper-middle income state)</td>
<td>-1.18</td>
<td>0.69</td>
<td>-1.71</td>
<td>0.09</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent lower-middle income state)</td>
<td>-1.13</td>
<td>0.73</td>
<td>-1.54</td>
<td>0.13</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent low income state)</td>
<td>-1.77</td>
<td>0.95</td>
<td>-1.85</td>
<td>0.07</td>
</tr>
<tr>
<td>Respondent Polity IV Score</td>
<td>0.03</td>
<td>0.03</td>
<td>1.08</td>
<td>0.28</td>
</tr>
<tr>
<td>Argentina (0 = Respondent was not Argentina, 1 = Respondent was Argentina)</td>
<td>-1.21</td>
<td>0.73</td>
<td>-1.65</td>
<td>0.10</td>
</tr>
<tr>
<td>Respondent Attorney Experience</td>
<td>0.04</td>
<td>0.09</td>
<td>0.45</td>
<td>0.65</td>
</tr>
<tr>
<td><strong>Continuous Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>13.93</td>
<td>0.85</td>
<td>16.39</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation)</td>
<td>0.73</td>
<td>0.57</td>
<td>1.28</td>
<td>0.20</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation and human being)</td>
<td>1.09</td>
<td>1.53</td>
<td>0.71</td>
<td>0.48</td>
</tr>
<tr>
<td>FT500 Corporation (0 = Investor(s) not FT500 corporation, 1 = Investor(s) was FT500 corporation)</td>
<td>0.63</td>
<td>0.55</td>
<td>1.15</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Zero model, \( F(10,182)=2.55, p<.01, n=94 \); Continuous model \( F(10,182)=4.71, p<.001, n=55 \). For both models, \( r=.34 \) accounted for 12% of the variance. Continuous variables were centered at their mean. Zero model was analyzed using a binary distribution, and continuous model was analyzed using a lognormal distribution. Estimates for zero model are reported as log odds values and estimates for the continuous model are reported as logged values. * \( p \leq .05 \), ** \( p < .01 \), *** \( p < .001 \).

Next, we examined the tribunal-venue model. Table 3 reflects the results of the regression models for the tribunal-venue-based approach. Neither the zero model \( F(5,204)=2.04, p=.07, n=100 \) nor the continuous model \( F(5,204)=1.34, p=.24, n=58 \) significantly predicted amounts awarded. There was still a medium effect size \( (r=.30) \) accounting for 9% of the variance, possibly because the zero model approached significance.\(^{215}\)

Despite both models lacking predictive ability, the development status of arbitrators was linked to outcomes only in the tribunal-venue zero-model. One dummy variable related to the tribunal World Bank development status individually predicted whether there would be an award (versus a non-award). If all arbitrators on the tribunal were nationals of states the World Bank classified as high income, as compared to tribunals with two high-income arbitrators (and one

\(^{215}\) Because \( r \)-values are not available using two-part models, \( r \) was calculated for both models simultaneously by estimating the correlation of predicted and expected outcomes.
non-high income, developing-world arbitrator), then the award was more likely to be zero (that is, no finding of state liability). There were no other significant predictors of amounts awarded for either the zero or continuous models using the tribunal-venue paradigm.

216. Similarly, we observe that the second dummy variable for the tribunals’ development status was on the cusp of significance ($p=.07$). The direction was such that, when comparing tribunals completely comprised of high-income arbitrators with tribunals containing two non-high-income (i.e. developing world) arbitrators, the awards rendered by high-income arbitrators were more likely to be a zero (i.e. no finding of state liability).

217. Although it was non-significant (the parameter estimate was $p=.07$), there was a facial trend with RP chairs and outcomes. Where a chair had more experience as arbitrator, the case seemed to be more likely to result in an award (i.e. some form of state liability). As indicated in footnote 204, for the 248 different arbitrators, 58.9% were involved in a single case. We generated a binary variable that indicated whether each arbitrator—including the chair—in an award arbitrated either a single case (i.e. a one-shot player, coded as “0”) or multiple cases (i.e. a RP coded as “1”). In addition to the weighted chair repeat variable, we examined the chair’s RP status using a second variable. For the set of 202 cases in the dataset, 13.4% ($n=27$) had a chair that was a one-shot player; in slight contrast, for the set of 159 final awards, 15.1% ($n=24$) had a chair that was a one-shot player. Using the binary variable to reflect a chair’s status as an RP, instead of the weighted variable, changed the significance test for a repeat chair in the zero-model, but not the continuous model (zero model: $B=0.98$, $SE=0.48$, $t=2.02$, $p<0.05$; continuous model: $B=1.09$, $SE=0.72$, $t=1.72$, $p=0.13$). The non-significant patterns mirrored Waibel and Wu’s tentative results. For ultimate liability in ICSID cases, they failed to identify that RP chairs made different liability findings based on earlier appointments. For jurisdiction, where investors previously appointed the arbitrator, chairs were more likely to find jurisdiction; but chairs previously appointed by states were less likely to find jurisdiction; but there was no relationship with jurisdiction decisions for chairs who had previously served as chairs. Waibel & Wu, supra note 82, at 37–38.
**Table 3: Tribunal-Venue-related Two Part Regression Models Predicting Amounts Awarded**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.09</td>
<td>0.32</td>
<td>3.50</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td><strong>Tribunal Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = all male, 1 = at least 1 woman)</td>
<td>-0.19</td>
<td>0.48</td>
<td>-0.40</td>
<td>0.69</td>
</tr>
<tr>
<td><strong>Arbitrators’ World Bank Classification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two high income arbitrators)</td>
<td>-0.85</td>
<td>0.38</td>
<td>-2.27</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two non-high income, developing world arbitrators)</td>
<td>-0.99</td>
<td>0.55</td>
<td>-1.81</td>
<td>0.07</td>
</tr>
<tr>
<td><strong>Chair’s Status as Repeat Player</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.22</td>
<td>0.12</td>
<td>1.80</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td><strong>ICSID Venue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = ICSID is the venue, 1 = ICSID is not the venue)</td>
<td>-0.13</td>
<td>0.39</td>
<td>-0.32</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Continuous Model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>16.65</td>
<td>0.67</td>
<td>29.70</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td><strong>Tribunal Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = all male, 1 = at least 1 woman)</td>
<td>-0.21</td>
<td>0.74</td>
<td>-0.28</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>Arbitrators’ World Bank Classification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two high income, developing world arbitrators)</td>
<td>-0.47</td>
<td>0.62</td>
<td>-0.76</td>
<td>0.45</td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two non-high income, developing world arbitrators)</td>
<td>0.72</td>
<td>0.81</td>
<td>0.90</td>
<td>0.37</td>
</tr>
<tr>
<td><strong>Chair’s Status as Repeat Player</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.12</td>
<td>0.18</td>
<td>0.63</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td><strong>ICSID Venue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 = ICSID is the venue, 1 = ICSID is not the venue)</td>
<td>-0.78</td>
<td>0.66</td>
<td>-1.19</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Zero model $F(5,204)=1.90, p=.09, n=100$; Continuous model $F(5,204)=0.93, p=.46, n=58$. For both models, $r=.30$, accounting for 9% of the variance. Continuous variables were centered at their mean. Zero model was analyzed using a binary distribution and continuous model was analyzed using a lognormal distribution. Estimates for zero model are reported as log odds values and estimates for the continuous model are reported as logged values. * $p \leq .05$, ** $p < .01$, *** $p < .001$. 
B. Relative Investor Success

Earlier models reflected amounts awarded, without reference to investor’s relative success. Although examining amounts awarded is a constructive way of understanding ITA outcomes, it nevertheless fails to reflect the variance between claimants’ initial demand and the ultimate result. To address this gap, and offer perspective of relative outcomes, we tested the investors’ relative success variable using the variables from the case-based and tribunal-venue-based models.

As with earlier analyses, relative success was the continuous proportion outcome restricted by the interval (0, 1). As predictions for relative success uses a proportion, this analysis excludes cases with zero values; therefore, these models used regression with a beta distribution and a logit link. Our aim was to estimate a model of relative claimant success rate based on both the case-model and the tribunal-venue models.

Table 4 reflects the results for the regression model of claimant’s relative success using the case-based approach. Several aspects of the case-based paradigm were replicated using investors’ relative success as the method of understanding outcomes.

First, the regression model testing the case-based paradigm significantly predicted claimant relative success \( F(10, 40)=1.80, p=.05, n=51 \). The effect size was large \( (r=.56) \) and accounted for 31% of the variance. Second, as with the zero-model exploring raw state liability, investor identity significantly predicted investors’ relative success rate, but this time, the only reliable predictor of investor-identity was whether investors were humans. The nature of the

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218. See supra Part IV.C.
220. Although it was non-significant (parameter estimate was \( p=.11 \)), a similar phenomenon was present when comparing cases brought by people and those brought by a combination of people and corporations. The relationship was that, facially, human beings had higher relative success than cases initiated by a combined group.
221. Investor success rate models excluded cases where states won (that is, investor success rate of 0%). This decreases \( n \) as compared to earlier models. When including success rates of 0%, the case-based model was non-predictive \( F(10,89)=1.07, p=.38, n=100 \).
222. The FT500 variable was close to predicting relative investor success \( (p=.08) \). But see infra note 224 (suggesting respondent democracy levels were also close to significance for predicting outcomes). Using the broader conception of investor identity to consider the FT500 corporate chain, supra note 209, investors’ corporate chain was not a significant predictor of ITA outcomes \( [B=0.62, SE=0.36, t=1.73, p=.09] \). See also infra note 227 (indicating the original FT500 variable, focusing only on the named investors, approached significance). Using the
relationship was that cases with only people had higher relative success rates than cases involving purely corporate entities.

Third, the expertise of counsel also significantly contributed to ITA outcomes for relative investor success. Unlike the earlier amounts awarded models, however, the important variable was not that the investor’s counsel experience generated the significant link. Rather, the experience that provided a meaningful predictor of outcome was the expertise of respondent’s counsel. Specifically, a less experienced state legal team resulted in greater relative investor success; and a more experienced state legal team resulted in lower relative investor success. No other variables were significant predictors of investors’ relative success in ITA.

As a final matter, although states’ democracy levels trended in the direction of predicting investors’ relative success, the dummy variables for respondent World Bank classification and the presence of Argentina were not significant.

A broader definition of investors’ FT500 status, the model was no longer significant at the p=.05 level \([F(10,40)=1.76, p=.06, r=.56]\). The experience of claimants’ legal team was non-significant \((p=.11)\). To assess robustness of the models and measures, we substituted the expertise of investors’ legal team and respondents’ legal team to use the blunt composite binary variable described in note 211. Substituting the binary variables of parties’ legal expertise in Table 4 for the weighted variables of parties’ legal expertise rendered the model non-significant \([F(10,40)=1.45, p=.15, n=51, r=.53]\). The expertise of respondents’ legal team no longer significantly predicted investors’ relative success \([B=-0.28, SE=0.16, t=-1.76, p=.09]\); claimants’ legal team was still a non-predictor \([B=0.34, SE=0.18, t=1.90, p=.06]\).

For Polity IV \((p=.06)\), the greater a state’s democracy levels, the lower the investor’s relative success; conversely, the lower a state’s democracy levels, the higher the investor’s relative success. Unlike the zero-model, neither respondent’s World Bank classification nor presence of Argentina was close to significance; and unlike the continuous model, respondent’s World Bank classification was far from significant.

We again substituted both respondent HDI and OECD variables for World Bank to assess model robustness. The case-based model of relative investor substituting HDI remained significant \([F(8,42)=2.19, p<.05, r=.56]\); and, like the World Bank definition of development status, HDI remained a non-significant predictor \([B=1.74, SE=1.53, t=1.14, p=.26]\). Likewise, when using a state’s OECD membership as an alternative proxy for development status, the case-based model remained significant \([F(8,42)=2.50, p<.05, r=.56]\). Although a state’s OECD membership remained a non-significant predictor \([B=0.71, SE=0.39, t=1.85, p=.07]\), there were two other variations where variables became significant predictors. First, investors’ FT500 status became a significant predictor \([B=0.91, SE=0.40, t=2.28, p<0.05]\). Where the case involved at least one FT500 company, investors had higher levels of relative success, but cases without any FT500 entity experienced lower levels of relative success. Second, Polity IV became a significant predictor when substituting OECD status \([B=-0.02, SE=0.01, t=-2.02, p=0.05]\). The pattern was states with higher democracy levels had lower relative liability, whereas states with lower levels of democracy experienced greater liability.
Table 4: Case-related Regression Party/Attorney Regression Model Predicting Claimant Relative Success Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.17</td>
<td>0.65</td>
<td>0.26</td>
<td>0.80</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation)</td>
<td>-0.86</td>
<td>0.39</td>
<td>-2.23</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>Investor Type (0 = human being, 1 = corporation and human being)</td>
<td>-1.78</td>
<td>1.08</td>
<td>-1.64</td>
<td>0.11</td>
</tr>
<tr>
<td>FT500 Corporation (0 = Investor(s) not FT500 corporation, 1 = Investor(s) was FT500 corporation)</td>
<td>0.69</td>
<td>0.37</td>
<td>1.53</td>
<td>0.08</td>
</tr>
<tr>
<td>Claimant Attorney Experience</td>
<td>0.11</td>
<td>0.07</td>
<td>1.62</td>
<td>0.11</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent upper-middle income state)</td>
<td>-0.50</td>
<td>0.60</td>
<td>-0.83</td>
<td>0.41</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent lower-middle income state)</td>
<td>-0.47</td>
<td>0.62</td>
<td>-0.76</td>
<td>0.45</td>
</tr>
<tr>
<td>Respondent World Bank Classification (0 = Respondent high income state, 1 = Respondent low income state)</td>
<td>-0.87</td>
<td>0.69</td>
<td>-1.26</td>
<td>0.21</td>
</tr>
<tr>
<td>Respondent Polity IV Score</td>
<td>-0.02</td>
<td>0.01</td>
<td>-1.91</td>
<td>0.06</td>
</tr>
<tr>
<td>Argentina (0 = Respondent was not Argentina, 1 = Respondent was Argentina)</td>
<td>0.32</td>
<td>0.40</td>
<td>0.78</td>
<td>0.44</td>
</tr>
<tr>
<td>Respondent Attorney Experience</td>
<td>-0.21</td>
<td>0.07</td>
<td>-2.95</td>
<td>&lt;0.01**</td>
</tr>
</tbody>
</table>

$F(10,40)=1.80, p=.05, r=.56$ (accounting for 32% of the variance). Continuous variables were centered at their mean. Model was analyzed using a beta distribution. Estimates are reported as log odds values. * $p \leq .05$, ** $p < .01$, *** $p < .001$.

Table 5 reflects the results for the regression model of claimant’s relative success using the tribunal-venue-based paradigm. Changing the dependent variable to relative success replicated several aspects of the earlier findings of the tribunal-venue model. First, the model testing the tribunal-case-based paradigm also failed to predict relative investor success [$F(5,46)=0.63, p=.67, n=52$]. The model had a small effect size ($r=.07$) and accounted for less than 1% of the variance.
Replicating earlier results for amounts awarded for both the zero and continuous models, none of the individual variables significantly predicted relative investor success. The only other variation from the earlier model was that, unlike the zero-based model, the tribunal’s composite development status did not significantly predict relative investor success.

Table 5: Tribunal-Venue-Related Regression Model Predicting Claimant Relative Success Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.69</td>
<td>0.30</td>
<td>-2.33</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>Tribunal Gender</td>
<td>-0.01</td>
<td>0.41</td>
<td>-0.02</td>
<td>0.98</td>
</tr>
<tr>
<td>(0 = all male, 1 = at least 1 woman)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrators’ World Bank Classification</td>
<td>-0.24</td>
<td>0.33</td>
<td>-0.73</td>
<td>0.47</td>
</tr>
<tr>
<td>(0 = all high income arbitrators, 1 = two high income arbitrators)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrators’ World Bank Classification</td>
<td>0.34</td>
<td>0.41</td>
<td>0.83</td>
<td>0.41</td>
</tr>
<tr>
<td>(0 = all high income arbitrators, 1 = two non-high income, developing world arbitrators)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair’s Status as Repeat Player</td>
<td>-0.02</td>
<td>0.10</td>
<td>-0.15</td>
<td>0.88</td>
</tr>
<tr>
<td>ICSID Venue</td>
<td>0.25</td>
<td>0.37</td>
<td>0.70</td>
<td>0.49</td>
</tr>
<tr>
<td>(0 = ICSID is the venue, 1 = ICSID is not the venue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$F(5, 46)=0.63, \ p=.67, \ r=.07$ (accounted for less than 1% of the variance). Continuous variables were centered at their mean. Model was analyzed using a beta distribution. Estimates are reported as log odds values. *$p≤.05$, **$p<.01$, ***$p<.001$.

C. A Combined Approach

As a final effort to explore relationships of variables from both models, we generated a third hybrid model. The hybrid model used investor success rate as our dependent variable and included variables from both the case-based and arbitrator-venue-based models. To estimate the relative contribution of the significant case-based variables and significant arbitration-venue variables, we only included variables that were significant in any of the earlier models. Results for

226. As with the zero and continuous models, see supra notes 204 and 217, we tested the chair’s RP status using an alternative definition of previous appointments. The substitution neither changed the significance of the tribunal-venue model [$F(5, 46)=0.63, \ p=.68, \ r=.08$] nor transformed a chair’s RP status to a significant predictor [$B=-0.02, \ SE=0.36, \ t=-0.05, \ p=.96$].
the combined relative success rate regression model are presented in Table 6. The combined model revealed that the model still predicted investors’ relative success \((F(8,40)=2.03, p<.05, n=51)\). There was also a large effect size \((r=.52)\) accounting for 27% of the variance.

The results provide evidence of the robustness of the variables in the case-based model. The variables related to investor identity remained significant. Where cases involved only human beings bringing claims, investors were likely to achieve higher levels of relative success than cases brought solely by corporations; yet, simultaneously, FT500 entities were also more likely to experience higher levels of success as compared to non-FT500 entities.\(^{227}\) Similarly, the experience of respondents’ legal teams continued to predict relative investor success. When states had experienced legal teams, investors had lower levels of relative success. The relative success of investors’ legal teams was, however, on the cusp of significance \((p=.07)\), but the direction remained consistent with earlier tests whereby when investors had experienced teams, investors had higher levels of relative success.\(^{228}\)

Other variables remained non-significant in the combined model. The model was unable to identify any meaningful predictive value for tribunal gender composition, composite tribunal development status,\(^{229}\) chair experience, and whether ICSID was the venue. In a slight variation, respondents’ Polity IV score no longer approached significance for investor success.

\(^{227}\) FT500 resulted in a \(p=.05\) significance test. Expanding FT500 to look at the corporate chain altered the results \((B=0.59, SE=0.36, t=1.63, p=0.11)\). The predictive ability of the model went below the \(p<.05\) threshold \([F(8,40)=1.82, p=.07, r=.51]\), but the effect size remained large.

\(^{228}\) Substituting the weighted expertise of parties’ counsel to the binary variables of RP counsel for both investors and states changed the results. The combined model was no longer significant \([F(8,40)=1.81, p=.07, r=.48]\). Furthermore, neither claimants’ legal expertise \([B=0.33, SE=0.17, t=1.90, p=.06]\), nor respondents’ legal expertise was significant \([B=-0.27, SE=0.16, t=-1.71, p=.09]\) using the blunt binary definition.

\(^{229}\) We substituted HDI and OECD measures as proxies for states’ development status. The HDI model remained significant \([F(8,42)=2.03, p<.05, r=.52]\), and HDI was a non-significant predictor of investor success \([B=0.03, SE=1.14, t=0.03, p=.98]\). All other variables retained similar levels when substituting HDI. Substituting states’ OECD membership likewise changed nothing. The hybrid model remained significant \([F(8,42)=2.23, p<.05, r=.51]\), but OECD status was a non-significant predictor \([B=0.41, SE=0.35, t=1.20, p=.24]\).
Table 6: Combined Model Predicting Claimant Relative Success Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.29</td>
<td>0.50</td>
<td>0.58</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>Investor Type</td>
<td>-0.97</td>
<td>0.40</td>
<td>-2.31</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>(0 = human being, 1 = corporation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investor Type</td>
<td>-1.85</td>
<td>1.09</td>
<td>-1.70</td>
<td>0.10</td>
</tr>
<tr>
<td>(0 = human being, 1 = corporation and human being)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FT500 Corporation</td>
<td>1.07</td>
<td>0.43</td>
<td>2.47</td>
<td>0.05*</td>
</tr>
<tr>
<td>(0 = Investor(s) not FT500 corporation, 1 = Investor(s) was FT500 corporation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claimant Attorney Experience</td>
<td>0.12</td>
<td>0.07</td>
<td>2.87</td>
<td>0.07</td>
</tr>
<tr>
<td>Respondent Attorney Experience</td>
<td>-0.20</td>
<td>0.08</td>
<td>-2.55</td>
<td>&lt;0.05*</td>
</tr>
<tr>
<td>Respondent World Bank Classification</td>
<td>-0.44</td>
<td>0.61</td>
<td>-0.72</td>
<td>0.48</td>
</tr>
<tr>
<td>(0 = Respondent high income state, 1 = Respondent upper-middle income state)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent World Bank Classification</td>
<td>-0.40</td>
<td>0.64</td>
<td>-0.62</td>
<td>0.54</td>
</tr>
<tr>
<td>(0 = Respondent high income state, 1 = Respondent lower-middle income state)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent World Bank Classification</td>
<td>-0.60</td>
<td>0.68</td>
<td>-0.88</td>
<td>0.39</td>
</tr>
<tr>
<td>(0 = Respondent high income state, 1 = Respondent low income state)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrators’ World Bank Classification</td>
<td>-0.06</td>
<td>0.34</td>
<td>-0.17</td>
<td>0.87</td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two high income arbitrators)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrators’ World Bank Classification</td>
<td>0.67</td>
<td>0.39</td>
<td>1.71</td>
<td>0.10</td>
</tr>
<tr>
<td>(0= all high income arbitrators, 1 = two non-high income, developing world arbitrators)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$F(8,40)=2.03, \ p<.05, r=.52$ (accounting for 27% of the variance). Continuous variables were centered at their mean. Model was analyzed using a beta distribution. Estimates are reported as log odds values. * \( p \leq .05 \), ** \( p < .01 \), *** \( p < .001 \).

The results suggest that the two most robust predictors of ITA outcomes involved investor identity and the experience of parties’ lawyers. One might hypothesize that these variables may be entangled and counsel provide a screening function to identify quality
claims and defenses. Specifically, sophisticated counsel with an appreciation of the likely merits of a claim may be unwilling to take a case if they believe it will generate a loss or undermine their firm reputation; sophisticated counsel may also actively pursue meritorious cases. Likewise, unsophisticated counsel eager to break into the ITA marketplace, and who may not fully appreciate the complexities of securing favorable outcomes, may represent clients in less meritorious cases. As the data reflected differences in how counsel’s expertise affected outcomes—with expert investor counsel predicting liability and amounts awarded but expert respondent counsel predicting relative investor success—it is possible that any screening function operates differently for investors and states. It is also theoretically possible that, irrespective of a screening function, quality lawyers may be more adept at selecting arbitrators, making procedural decisions, selecting legal arguments that are more likely to be favorable to their clients, or some interaction of those variables. Ultimately, future research should explore legal expertise to understand its impact on the market for legal services and the impact on ITA outcomes.

VI. LIMITATIONS

It is important to understand the results within their proper context as it restrains the strength of derivative inferences. Part III identified limitations of case selection bias. For non-significant results, Part V identified limitations related to statistical power. This section reinforces those concerns and identifies other limitations.

First, there may be limitations to the strength of the inferences, as they may not reflect population parameters. Inferences should be made cautiously, particularly considering the representativeness of subsets. Replication with additional data is necessary to avoid

230. In medical malpractice, there is evidence that plaintiffs’ attorneys carefully screen cases, weed out less meritorious claims, and thereby contribute to a case selection effect. Hyman & Silver, supra note 160, at 1086–88, 1101–03, 1117–22; see also Engstrom, supra note 156, at 1263–64, 1301 (discussing the speculation that more experienced firms selectively cherry pick the most meritorious cases to pursue or defend).

231. Experienced investor counsel may be adept at distinguishing between promising and unmeritorious claims. By contrast, experienced state counsel may be adept at identifying cases suitable for a compelling damages witness, conducting effective cross-examination of expert damages witnesses, or using experience to reduce damages. It is possible that experienced respondent counsel affected outcomes in more subtle ways, like evaluating the merits of claims, the risks of ITA, and encouraging settlements prior to a public award.
establishing parameters that could reflect random chance. Second, it is always possible that there was an insufficient sample size to predict non-significant outcomes. In models that significantly predicted outcomes, effect sizes were small to medium, suggesting sufficient power. In models that were non-significant, effect sizes were small to nonexistent, again suggesting that power was not problematic. However, it would be prudent to establish a broader pool of data, based on an *a priori* power analysis, to confirm, contradict, or supplement these findings.

Third, there may be issues related to external validity since the results come from data based on publicly available awards. It is possible that publicly available awards do not represent the broader population of both public and private awards. The data used for the analyses was coded from awards that were publicly available as of January 1, 2012. Since there is now additional data, future research should replicate the analysis. There could be case selection bias. Although anecdotal comments suggest the data is representative, this has not been empirically confirmed. Further research should consider the effect of case selection bias.

Fourth, it is possible that the models were underspecified. Although the case-based variables reliably predicted ITA outcomes in the case-based and hybrid models, other case-related variables could influence outcome. These might involve the presence of third-party funding, the type of government activity at issue, the underlying cause of action, or the industrial sector involved in the dispute. Although we were unable to isolate any reliable differences when comparing energy disputes with others, we nevertheless recognize that other factors may contribute meaningfully to a case outcome. Likewise, as the tribunal-venue model never reliably predicted ITA outcomes, it is possible that introducing more granular information about arbitrator identity could predict outcomes. In theory, different types of arbitrator experience—such as common and/or civil law training, service as counsel or arbitrator in a commercial law dispute, involvement in adjudicating public international law disputes, service as a government official, background as an academic, or arbitrator age—could generate reliable variance. As those factors were not

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232. *See supra* note 179 and accompanying text.

233. *See supra* notes 32, 179 and accompanying text.

identifiable in the publicly available arbitration awards, they were beyond the scope of this research but could prove fruitful in future analyses. Similarly, the venue-related variables might be expanded to also explore specific variation in arbitration venues and the applicable law at the venue, including whether the enforcement regime involves the New York or ICSID Convention.

As a result of these cautionary considerations, more research is required to create the sufficient power, stability, statistical control, and enhanced validity necessary to reach more definitive conclusions. It will likely take years—if not decades—before there is a sufficient pool of awards available to run the requisite analysis. While it makes future research challenging, it does not diminish that this research confirms, and expand, upon existing analyses. Nevertheless, it is necessary to respect the limitations of statistical power and other risks of error.

VII. DISCUSSION

These data elucidate ITA and shed some light on whether ITA is a predictable form of dispute settlement. The first point is that additional research should be done to expand the knowledge base. Collecting additional data, conducting balanced and methodologically sound research on investors, states, lawyers, amounts claimed, and outcomes could provide a more nuanced picture of the state of ITA.

Secondly, the data call into question conventional characterizations that ITA outcomes exhibit pro-investor bias. Although nontrivial amounts were involved in investor claims, the descriptive data either reflected a state-favorable or rough balance in outcomes. For the subset of cases where investors won, investors

(2014) (exploring variables related to arbitrator background in FINRA arbitration that influence outcomes); Waibel & Wu, supra note 82, at 26–29, 31–38 (exploring variables related to arbitrator identity and outcomes).

235. We also explored, using the tribunal-venue model, whether the model varied if we switched the ICSID venue variable to look for differences between those awards rendered under the ICSID Convention or under the New York Convention. None of those analyses indicated that a change in the variable generated a deviation in either the non-significance of the model or the predictive utility of individual variables.

236. See Reinert, supra note 157, at 846 (making similar suggestions for Bivens litigation).

237. Concerns of “pro-investor” bias in ITA should be distinguished from concerns about the substantive international law rights granted in treaties. The distinction permits disentanglement of claims of “bias” relating to dispute settlement and other concerns about systemic balance deriving from a state’s creation of a treaty that affirmatively grants foreign investors broad unilateral substantive rights.
generally only obtained roughly one-third of their claimed compensation. These results were akin to limited plaintiff success in whistleblower, *qui tam, Bivens*, or medical-malpractice litigation, which experienced respondent-favorable outcomes. Other empirical research on U.S. domestic litigation suggests that success rates in ITA were similar to respondent-favorable or state-favorable outcomes.

Finally, despite concerns about the lack of consistency and predictability in ITA, case-related and hybrid models demonstrated that ITA outcomes exhibited a degree of predictability, and the results were not completely random. The variables most likely to predict outcomes were arguably case selection effects, including investor identity and the presence of experienced counsel.

For investor identity, two variables pointed in somewhat different directions and produce a challenging question about which investors should benefit from ITA.

For cases involving people, investors fared relatively well, which suggests that ITA provided a critical service for human beings. In those circumstances, ITA prevented small, less powerful investors from being marginalized because of limited economic and political leverage; and it offered small investors an opportunity to obtain legal redress for arguable government misconduct. Although human beings bringing cases experienced relatively high success rates, these cases need not be threatening to states. For example, those cases may have involved small investments and small amounts claimed, particularly as compared to larger multinationals. Likewise, with cases involving small constituencies or closely held corporations, it may be possible to generate targeted settlements prior to initiating arbitration that more closely align with the individual interests.

For cases involving larger multinational entities, specifically *FT500* entities, ITA provided comparatively better relief for large investors even though a relatively privileged economic position may have provided other ways to redress arguably problematic government conduct. Nevertheless, *FT500* entities may also have experienced economic consequences so severe that their privileged

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238. See generally Irene M. Ten Cate, *The Costs of Consistency: Precedent in Investment Treaty Arbitration*, 51 COLUM. J. TRANSNAT'L L. 418 (2013) (arguing that the fragmented sources of law for investment treaty arbitration make for inherently inconsistent results). See also Roberts, supra note 44, at 55 (identifying doctrinal inconsistency in ITA cases); supra note 149 and accompanying text (discussing the limits of using only publically available data).

239. See Note, supra note 11, at 2548.
positions were insufficient to redress potential harm. An alternative way of understanding the results of investor identity is that some investors appreciated the value of their claims, had a firm appreciation for the merits of their claims, or had nothing to lose by initiating ITA. For individuals, ITA perhaps involved “bet the company” disputes where they were aware of the value of their investment and had no desire to pursue further investments within a host state; and, in those circumstances, ITA perhaps provided the only viable method for obtaining meaningful relief. Large corporations, meanwhile, may have appreciated that, by suing a state, they risked their other commercial interests within the state and potentially jeopardized their worldwide reputation. As such, they may have been cautious in initiating ITA; and they may have only pursued the most meritorious claims or those claims affecting the company’s ongoing fiscal viability.\(^{240}\) As these are not the only explanatory narratives,\(^ {241}\) investor identity remains a critical but complex variable.

For attorneys, similar to the research of Marc Galanter, the results demonstrated that counsel experience predicted outcomes. Although experienced counsel affected outcomes for all parties, the effect was different for investors and states.

For investors, having experienced counsel was only linked to two types of outcomes, namely whether the state was ever liable (using the zero-model) or the amount awarded (using the continuous model). This may suggest that sophisticated investors’ counsel was adept at distinguishing among cases that were “winners” or might generate large awards, and therefore experienced counsel provided a critical screening function for investors. But the results may also reflect that insider experience in selecting the forum, selecting arbitrators, generating claims, and advocacy were critical to outcomes.

For states, having experienced counsel was linked only with investors’ relative success, whereby states represented by more

\(^{240}\) Theoretically, when claimants teeter on bankruptcy, bankruptcy trustees might need to pursue claims where a finding of liability is a company’s core asset. Some cases involved investors who were in liquidation or bankruptcy. \textit{See} GEA Group Aktiengesellschaft v. Ukraine, ICSID Case No. ARB/08/16, Award, ¶ 68 (Mar. 31, 2011); Siag & Vecchi v. Egypt, ICSID Case No. ARB/05/15, Award, ¶ 117 (June 1, 2009); Loewen Group v. United States, ICSID Case No. ARB(AF)/98/3, Award, ¶ 29 (June 26, 2003).

\(^{241}\) Other explanations might be that tribunals are sympathetic to cases involving vulnerable individuals, tribunals are sympathetic to large corporations in difficult political situations, the legal merits affected determinations, or some other variable(s).
experienced legal teams were associated with outcomes where investors did relatively worse. This may suggest that state counsel were adept in decreasing investors’ claimed damages by virtue of their skill in appointing quality experts, cross-examining the damage experts of the investor, or otherwise making an effective case. It could also mean, however, that arbitrators were persuadable by experienced counsel, that arbitrators were sympathetic to the arguments of states, or that tribunals were skilled at identifying nonmeritorious damages and reducing liability accordingly. Should states negotiating treaties wish to address attorney experience, there are two potential options. First, they might attempt to directly regulate the legal profession involved in investment dispute settlement; this, however, would be a novel tactic. Second, faced with a claim, states can actively explore who to retain as defense counsel; and data suggested states were best served by counsel with ITA experience—but that relationship is not necessarily causal. The expertise could derive from developing in-house capacity or strategically securing external counsel.

These observations have policy ramifications. Claims about ITA, and derivative normative solutions, should be assessed in light of properly gathered and analyzed data. Offering base rate information about ITA outcomes aids stakeholders in minimizing the risk of cognitive illusions influencing information gathering and decision making. For states considering excluding ITA from treaties on the premise that ITA disfavors them, they may wish to reevaluate that proposition as a basis for eliminating ITA. They may also view ITA as a way to vindicate appropriate state policy choices. For investors hoping to secure relief from ITA, they should appreciate the risks of pursuing ITA and the low degree of relative investor success. Stakeholders may wish to consider the analyses carefully and respect the limitations when engaging in policy debates. By considering evidence in context, stakeholders are better positioned to create evidence-based normative solutions that redress real, rather than imagined, problems.

Although ITA is not perfect, the data cast doubt on the assumption that eradication of ITA is the only solution to perceived

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problems. Likewise, the data cast doubt on a triumphalist narrative about the value of ITA. Rather, the data suggested ITA outcomes are complex. Strategic adaptations to a complex problem are more normatively appropriate. We propose that, where states choose to provide investors with substantive rights, the question should be how best to provide dispute resolution. Recognizing that resolution in national courts might, fairly or unfairly, generate concerns related to perceived bias and any national-court judgment will face substantial doctrinal enforcement challenges, the objective should be to improve dispute settlement by making it as efficacious and fair as possible. We therefore recommend three structural safeguards.

First, stakeholders may wish to explore creating an appellate body to articulate clear rules, to harmonize inconsistent applications of law, and to redress substantive inconsistency. Post award clarity could generate prospective predictability allowing investors and states to organize their conduct in accordance with those determinations. The enhanced predictability, determinacy and consistency of outcomes could enhance ITA legitimacy. Moreover, having clear interpretive rules from an appellate body facilitates future quantitative modeling that reliably controls for a claim’s legal merits. The creation of a reliable legal baseline for analyzing investment disputes also promotes complimentary dispute settlement mechanisms, such as negotiation and mediation, that depend upon clear rules and adjudicative integrity to “bargain in the shadow of the law.”

Second, should stakeholders be dissatisfied by the degree of predictability from the models or otherwise discontent with their

243. Although there is a convention on enforcement of foreign court judgments, the treaty is both of limited scope and not in force and effect. By contrast, international arbitration has a robust enforcement regime. Yuliya Zeynalova, The Law on Recognition and Enforcement of Foreign Court Judgments: Is It Broken and How Do We Fix It?, 31 BERKELEY J. INT’L L. 150, 150–51 (2013).

244. For ICSID Convention disputes, the annulment process provides for limited procedural grounds for annulling all or part of the award. For New York Convention disputes, there is likewise no appeal; but grounds for challenging or setting aside awards are governed by the seat of arbitration’s law and limited grounds under the New York Convention.

245. Franck, Legitimacy Crisis, supra note 21, at 1524, 1584–87.

ability to effectively influence predictors, they may wish to pursue other forms of dispute settlement. Negotiation or mediation, for example, could compliment, support, or replace ITA. Predispute conflict management, negotiation or mediation could eliminate formal disputes. Likewise, even after a dispute has crystallized, mediation may minimize the scope of the dispute or address conflicts that arise during arbitration. Use of these forms of dispute settlement could save time and costs. For investors interested in ongoing investments within a state, these processes could preserve relationships. Mediation also means states need not outsource dispute settlement to arbitrators; and parties can retain control over the outcome by generating solutions that need not purely involve fiscal remuneration. Several treaties recommend “amicable settlement” of investment disputes. Yet, the broad and undefined reference generates confusion, particularly within states, about how settlement discussions occur, the procedural ground rules for the discussions, who will serve as a mediator (if any), and a myriad of other procedural concerns. When negotiating treaties, states may therefore wish to provide clear guidelines about how, when, and where to use alternative forms of dispute settlement. States may wish to consider incorporation of the recent Rules for Investor-State Mediation or create a separate annex providing detail on mediation protocols.

Third, given the value of providing access to justice for smaller entities and people, stakeholders may wish to explore the possibility of creating a small-claims facility or other body to provide redress to investors that may lack economic and political advantages. For human beings who might wish to access dispute settlement, a small claims facility could provide immediate, efficient and cost-effective access to justice. This solution reflects the success that people

247. Franck, DSD, supra note 27, at 191–93; see also Note, supra note 11, at 2545 (noting that not all treaties provide for amicable settlement of disputes).
248. See supra note 27 (identifying sources discussing practices related to amicable settlement, negotiation, mediation, and the derivative challenges).
experienced, but captures states’ risk by creating a single facility for streamlined dispute settlement of small-value claims.

Ultimately, these recommendations will require assessment and adaptation based upon data and the experience of stakeholders. Although the results demonstrated ITA was not completely unpredictable, states should pursue normative solutions designed to improve ITA and dispute settlement. Should states choose to grant substantive rights but fail to provide an effective forum for dispute settlement, there may be negative externalities that will minimize the potential joint gains derived from treaties promoting economic integration. In any event, the results of the data necessitate that debates about the future of ITA remain both robust and professional. Nevertheless, the debate will benefit from evidence-based insights, relying on data, and minimizing the influence of nonreplicable intuition that may create normative solutions that—while emotively satisfying—are suboptimal.

CONCLUSION

Without a careful analysis of ITA outcomes, it is not possible to generate proper normative reforms. The analyses in this Article neither suggested that ITA exhibited a pro-investor bias nor otherwise demonstrated that ITA was wholly unpredictable. While concern is understandable given the stakes for the international political economy, care must be taken to avoid generating dispute resolution systems that could generate suboptimal outcomes or normative solutions that either redresses the wrong problem or fails to address a subsisting harm.

ITA outcomes were a complicated, multivariate phenomenon, and proposals for reform must be tested against data, lest a hasty transition harm the economic and political interests of international trade and investment agreements. Ultimately, international investment law may be best served by designing dispute resolution systems tailored to generate meaningful solutions to demonstrable problems. By focusing on variables reliably linked to ITA outcomes, rather than variables with an intuitive appeal that do not withstand empirical scrutiny, stakeholders can properly assess ITA’s value in a time of international economic transition.