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Article

## The ICSID Effect? Considering Potential Variations in Arbitration Awards

*Susan D. Franck*

# The ICSID Effect? Considering Potential Variations in Arbitration Awards

SUSAN D. FRANCK\*

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*The legitimacy of the World Bank's dispute resolution body — the International Centre for the Settlement of Investment Disputes (ICSID) — is a matter of heated debate. Some states have alleged that ICSID is biased, withdrawn from the ICSID Convention, and advocated creating alternative arbitration systems. Using pre-2007 archival data of the population of then-known arbitration awards, this Article quantitatively assesses whether ICSID arbitration awards were substantially different from arbitration awards rendered in other forums. The Article examines variation in the amounts claimed and outcomes reached to evaluate indicators of bias. The results indicated that there was no reliable statistical relationship between ICSID arbitrations and either amounts claimed or ultimate outcomes. The results generally did not show a statistical difference when controlling for (1) the presence of an Energy dispute, (2) the presence of a Latin American respondent, or (3) the respondent's Development Status. Nevertheless, although outcomes were not statistically different for Latin American and non-Latin American respondents, amounts claimed against Latin American states were higher — but only for non-ICSID arbitration. While the arguably higher initial arbitration risk may contribute to*

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*concerns related to perception of bias, the results provide initial evidence that those criticisms may have been misattributed to ICSID. Results suggested, on the whole, that ICSID arbitration awards were not statistically different from other arbitral processes, which is preliminary evidence that ICSID arbitration was not necessarily biased or that investment arbitration operated in reasonably equivalent ways across forums. Caution about this finding is appropriate given the size of the pre-2007 population and as one analysis suggested that for the subset comprised only of ICSID Convention awards as compared to all other awards (including ICSID Additional Facility awards), awards against Low Income respondents were statistically higher than awards against High Income respondents. Qualitative commonalities in that small subset of awards revealed the presence of certain types of law firms (or the lack thereof) or recent civil war in African states. In light of the initial quantitative findings for a pre-2007 population of arbitration awards, but recognizing the need for replication and methods to facilitate qualitative and normative assessments of ICSID, this Article concludes by suggesting that there may be value in implementing tailored reforms and structural safeguards to address arguable concerns of bias, improve the management of international economic conflict, and minimize a potential backlash to the international investment system.*

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## INTRODUCTION

International institutions, such as the World Bank and its International Centre for the Settlement of Investment Disputes (ICSID), are critical actors in the international economic order. ICSID tribunals have addressed the fallout of major international economic disruptions, such as the 2002 Argentine financial crisis<sup>1</sup> and the Yukos oil bankruptcy, which may create over US\$100 billion in liability for the Russian Federation.<sup>2</sup> With global supply chains,<sup>3</sup> massive investment

1. Luke Eric Peterson, *Round-Up: Where Things Stand with Argentina and Its Many Investment Treaty Arbitrations*, INVESTMENT ARB. REP., Dec. 17, 2008, item 5, para. 1, <http://www.iareporter.com/Archive/IAR-12-17-08.pdf>.

2. Chris Johnson, *Over a Barrel*, 201 LEGAL BUS. 24, 24–25, Feb. 2010; Michael Peel & Jane Croft, *Arbitration: Case Closed*, FIN. TIMES, (Apr. 15, 2010, 7:00 PM GMT), <http://tinyurl.com/6jxa3l7>; see also Matteo M. Winkler, *Arbitration Without Privity and Russian Oil: The Yukos Case Before the Houston Court*, 27 U. PA. J. INT'L ECON. L. 115 (2006).

3. See generally Anupam Chander, *Trade 2.0*, 34 YALE J. INT'L L. 281, 305 (2009) (describing the “legal infrastructure” that supports international commerce and the global

flows,<sup>4</sup> and a network of over 2600 treaties<sup>5</sup> — many of which contain *ex ante* agreements channeling disputes towards ICSID arbitration<sup>6</sup> — there is a possibility that ICSID-administered international arbitration tribunals could resolve investment disputes related to the global financial crisis.<sup>7</sup>

With ICSID's growing importance to the international political economy, a debate has erupted about whether ICSID is an appropriate and fair forum for resolving investment treaty disputes. Some critics attack ICSID's institutional legitimacy and suggest that ICSID is biased, while others decry such accusations as unfounded. These criticisms have gone so far as to say that “the system is rigged,” and “ICSID represents the inequities of an international system biased against the developing countries.”<sup>8</sup> One head of state has expressed that he has “no confidence” in ICSID,<sup>9</sup> and a recent document suggested that investment arbitration is not a “fair, independent, and balanced method for the resolution of investment disputes and therefore should not be relied on . . . .”<sup>10</sup> The vibrant debate encapsulates two core issues: (1) Whether ICSID is a biased venue for the resolution of international

production of goods); Li-Wen Lin, *Legal Transplants Through Private Contracting: Codes of Vendor Conduct in Global Supply Chains as an Example*, 57 AM. J. COMP. L. 711, 730–41 (2009) (discussing the global supply chain, particularly with respect to China); Michael P. Vandenberg, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 UCLA L. REV. 913, 916–17, 926–41 (2007) (discussing the creation of private environmental obligations in contracts within the global supply chain).

4. See U.N. Conference on Trade & Dev. [UNCTAD], *Assessing the Impact of the Current Financial and Economic Crisis on Global FDI Flows*, UNCTAD Doc. UNCTAD/DIAE/IA/2009/3 (Apr. 1, 2009) [hereinafter UNCTAD, *Assessing the Impact*] (discussing foreign investment flows).

5. UNCTAD, *IIA Monitor No. 3 (2009): Recent Developments in International Investment Agreements (2008–June 2009)*, at 2, UNCTAD Doc. UNCTAD/WEB/DIAE/IA/2009/8 (June 3, 2009) [hereinafter *IIA Monitor No. 3 (2009)*].

6. Todd Allee & Clint Peinhardt, *Delegating Differences: Bilateral Investment Treaties and Bargaining over Dispute Resolution Provisions*, 54 INT'L STUD. Q. 1 (2010) (analyzing different dispute resolution delegations in investment treaties).

7. Luke Eric Peterson, *Whither the New Financial Crisis Claims?*, KLUWER ARB. BLOG (Feb. 5, 2009), <http://tinyurl.com/4lgbner> (“[I]t is entirely possible that the cataclysmic events of the [global financial crisis] — including the sometimes haphazard crisis-management by governments — might give rise to treaty-claims against states.”); see also Michael Davison, Letter to the Editor, *Downturn Could Boost Arbitration*, FIN. TIMES, Apr. 21, 2010, at 10 (“Far from sounding the death knell of arbitration, the economic downturn may well prove to be its coming of age.”). At the height of the financial downturn, the British Institute of International and Comparative Law sponsored an “open roundtable” on the global financial crisis’ impact on investment arbitration. *Open Roundtable of the Investment Treaty Forum ‘Global Financial Crisis: Implications for Investment Arbitration,’* BRIT. INST. INT’L & COMP. L., <http://tinyurl.com/4qth3ne> (last visited Mar. 22, 2011).

8. See *infra* notes 83–84 and accompanying text.

9. See *infra* text accompanying note 89.

10. Gus Van Harten et al., Public Statement on the International Investment Regime, Aug. 31, 2010, ¶ 8, <http://tinyurl.com/37b2ktl> [hereinafter Public Statement].

investment disputes, and (2) Given that assessment, what are the implications for the future of international economic dispute resolution. This Article will address both issues by offering a quantitative empirical lens to evaluate the currently available data and consider the normative implications for the future.

Part I will provide a background on investment treaty arbitration. Part II will explore ICSID's unique role in the resolution of investment treaty disputes and the debate as to its legitimacy. Part III will then provide the methodology designed to begin consideration of whether ICSID arbitration awards exhibited substantial differences on key aspects of the adjudicative process. Later in this Part, the research hypotheses and results will be presented. Overall, based upon the data, variables, and models, the initial results of the research did not provide evidence to support the proposition that ICSID arbitration awards were substantially different from other arbitral forums. As a general matter, the tests did not demonstrate that ICSID and non-ICSID awards were statistically different and offered initial evidence that awards could be functionally equivalent in amounts claimed and ultimate outcomes. Further analyses revealed similar results when controlling for the presence of an Energy dispute, Latin American respondent, and respondent's Development Status (whether defined as membership in the Organisation for Economic Co-operation and Development (OECD) or the World Bank's development classification).<sup>11</sup>

First, irrespective of whether the dispute involved an Energy or a non-Energy sector dispute, there was no statistically significant difference among amounts claimed and outcomes in either ICSID or non-ICSID arbitrations. Second, despite concerns of a potential bias against Latin American respondents, there was no statistically significant difference in outcomes, regardless of whether the dispute was resolved at ICSID or some other variable. The existence of a statistically higher amount claimed against Latin American respondents in non-ICSID venues in a small subset of awards, however, might contribute to perceived concerns about bias that may be misattributed to ICSID. Third, there were generally no statistically significant relationships between the existence of ICSID arbitration and the respondent's Development Status upon the dependent variables of amounts claimed or dispute outcome.

Interestingly, in models that failed to reveal a statistically significant effect at the macro level, follow-up analyses comparing individual cell means revealed two effects. One effect did not offer preliminary

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11. These terms are defined *infra* note 170 (Energy dispute), note 185 (Latin American respondent), and note 130 (Development Status).

evidence suggestive of bias against the developing world, but the second effect arguably might. Regarding the former, for non-ICSID arbitrations only, there was a reliable relationship whereby the amounts claimed against OECD members were larger than amounts claimed against non-OECD respondents; there were no such differences in amounts claimed for ICSID arbitrations. To the extent that there was a difference in non-ICSID arbitrations, it worked in favor of non-OECD states, and there were no statistically significant differences in outcome. As regards the latter, while there was no reliable difference in amounts claimed as a function of a respondent's World Bank classification in an ICSID arbitration, comparison of a small subset of cell means reflected a difference in outcome. When comparing ICSID Convention awards alone<sup>12</sup> against all awards rendered under the New York Convention (including non-ICSID and ICSID Additional Facility awards), Low Income Respondents experienced a higher mean amount awarded than their High Income counterparts for ICSID Convention arbitrations and experienced larger awards rendered against them in ICSID Convention cases than those cases arising under the New York Convention. A closer look at the small number of awards contributing to those results demonstrated that High Income respondents were generally represented by sophisticated multinational law firms and that Low Income respondents were all central African states against whom investment disputes arose after civil wars in the 1990s. Recognizing the preliminary nature of the results for inferential purposes, the data from the pre-2007 population suggested that concerns of bias were not necessarily attributable to Latin American states, but there was some initial evidence of a closer link to African respondents. These results, however, were not replicated in models that analyzed all ICSID awards (that is, ICSID Convention and ICSID Additional Facility awards) and compared them to awards rendered in alternative venues. While the failure to replicate these results with other models suggests that these initial findings about the pre-2007 population of awards must be treated cautiously and replicated with additional data, they nevertheless suggest that, to the extent that there was a specific issue with Low Income

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12. ICSID has jurisdiction to arbitrate claims (1) arising under and pursuant to the ICSID Convention and (2) arising under the New York Convention pursuant to the ICSID Additional Facility Rules. *See infra* notes 38, 40–41, 47, 59–60 and accompanying text. This Article will use this doctrinal distinction to compare ICSID and non-ICSID cases in two different ways. *See infra* notes 123–24 and accompanying text (describing how the variable of “ICSID Status” was defined). The majority of the analyses in the primary text will consider ICSID Status as a function of awards administered at ICSID (whether under the ICSID or New York Conventions). The analyses comparing ICSID Convention awards to all other awards (i.e., New York Convention awards, whether rendered at ICSID or elsewhere) are typically described in the footnotes. *See infra* Part III.

countries in post-conflict situations in Africa, this could warrant targeted reforms.

Taking into account the inevitable limitations of the data, measures, and models, the analyses suggested that, as a general matter, investment treaty arbitration operated in reasonably equivalent ways across arbitral forums. The results suggested that it was not possible to ascertain evidence of bias at ICSID in the pre-2007 population of investment treaty awards. Certain results suggested that allegations of bias related to amounts claimed may create a basis for concern, but would be improperly attributed to ICSID in the pre-2007 population. Respecting the limitations of empirical scholarship and care needed to extrapolate the findings beyond the dataset studied — but presuming that systematic data analysis is preferable to making normative choices on the basis of potentially unrepresentative experiences, instinct, or random chance — inferences from these general results offer initial evidence that weakens the proposition that wholesale abandonment of ICSID arbitration is necessary.

Part IV will describe the limitations of the research, given the unit of analysis,<sup>13</sup> the temporal nature of the data,<sup>14</sup> and the size of the dataset — which was the entirety of a then-known population that has since experienced growth.<sup>15</sup> In light of those limitations, the resulting

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13. The unit of analysis was publicly available arbitration awards. Annulment committees were not analyzed. *See infra* notes 92, 133. There has been such a renewed interest in the annulment process at ICSID that there was a panel on the subject at the American Society of International Law's 105th Annual Meeting in March 2011. *Program of ASIL 105th Annual Meeting: Harmony & Dissonance in International Law*, AM. SOC'Y INT'L L., <http://www.asil.org/am11/program-details.cfm> (last visited Mar. 22, 2011). Future research might explore post-award elements like annulment to provide a more holistic assessment of ICSID.

14. Although the data originate before 2007, there is recent independent research replicating key findings from the dataset used in this Article. *See, e.g.*, Susan D. Franck, *Rationalizing Costs in Investment Treaty Arbitration*, 88 WASH. U. L. REV. 769, 805–38 (2011) (providing data on costs in investment arbitration using the dataset from this Article); David Smith, Note, *Shifting Sands: Cost-and-Fee Allocation in International Investment Arbitration*, 51 VA. J. INT'L L. 751, 752–54 (2011) (replicating aspects of Franck's findings on cost with independently gathered, coded, and analyzed data from the years after 2007). Other research, using different methods and data, has replicated other key elements of research based upon this dataset. *See infra* note 128 and accompanying text. Moreover, the author is in the process of expanding the dataset to continue assessment of the historical baselines identified in this research.

15. The dataset encapsulated the entire then-known population of publicly available investment treaty awards as of June 1, 2006. *See* Susan D. Franck, *Empirically Evaluating Claims About Investment Treaty Arbitration*, 86 N.C. L. REV. 1, 16–18 (2007). Statistical inferences are not technically necessary to make conclusions about the pre-2007 population. Making inferences about the current population is appropriate, provided that limitations are expressed. *See* GARY KING ET AL., *DESIGNING SOCIAL INQUIRY: SCIENTIFIC INFERENCE IN QUALITATIVE RESEARCH* 6 (1994) (“[N]othing in our set of rules implies that we must . . . collect all relevant data before we can make valid social scientific inferences. An important topic is worth studying even if very little information is available. The result of applying any research design in this situation will be relatively uncertain conclusions, but so long as we honestly report our uncertainty, this kind of

low statistical power of some models and the need for further research to assess the ongoing validity of this initial historical snapshot, Part V will then analyze the results and suggest that for the dataset studied, the evidence contradicts the theory that ICSID tribunals rendered arbitral awards that were meaningfully different and arguably biased. Given the pockets of potential concern and the sensitivity of international investment, ICSID should consider the value in identifying areas for targeted, incremental reform based upon data and normative aspirations for fairness and efficiency. Reforms might reasonably include a requirement for investors to particularize amounts claimed with an evidentiary foundation or some other pleading rule to promote realistic claims. To support the rule of law, ICSID and other organizations might consider providing technical assistance or other capacity-building efforts to redress effects arguably linked to the availability of quality counsel and gaps in infrastructure. This might, for example, take the form of structured training courses or the development of a legal assistance center. Finally, ICSID and other organizations could promote Alternative Dispute Resolution (ADR)<sup>16</sup> to ensure that arbitration is used effectively in appropriate cases. Such proactive measures would be advantageous in promoting ICSID as a key institution for the resolution of investment treaty disputes and would provide another venue for access to justice. The introduction of targeted structural safeguards will offer opportunities for incremental reform that may prevent the destabilization of the international investment and arbitration system. If ICSID is to retain its institutional integrity and aid Bretton Woods<sup>17</sup>

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study can be very useful. Limited information is often a necessary feature of social inquiry.”). Even with a relatively small dataset, this Article identifies a statistically significant main effect. While *post hoc* power analyses identify the strength of the sample and identify low power, the lack of large effects may suggest that possible hidden effects may be of less importance. In any event, systematic social science research, which offers a probabilistic approach to assessing reality, is normatively preferable to chance alone, unrepresentative experience, or unfounded intuition. See ROBERT S. PINDYCK & DANIEL L. RUBINFELD, *ECONOMETRIC MODELS AND ECONOMIC FORECASTS*, at xiv–xv (4th ed. 1998) (“[E]ven an intuitive forecaster constructs some type of model, perhaps without being aware of doing so. . . . [T]here are several advantages to working with models explicitly. Model building forces the individual to think clearly about, and account for, all of the important interrelationships involved in a problem. The reliance on intuition can be dangerous at times because of the possibility that important relationships will be ignored or improperly used.”).

16. This Article defines “Alternative Dispute Resolution” (ADR) as processes other than exclusive adjudicative, rules-based dispute resolution through arbitration. ADR might involve interest-based dispute resolution like mediation, a combination of adjudicative or interest-based modalities, or conflict management systems to prevent the crystallization of formal disputes.

17. The “Bretton Woods system” generally refers to the international monetary regime established to create the International Monetary Fund and the World Bank. While the 1944 Bretton Woods conference focused upon the need to recognize the rights of foreign investors and to move beyond diplomatic protection for foreign investment, it took two decades to establish ICSID to address these concerns. SAM LUTTRELL, *BIAS CHALLENGES IN INTERNATIONAL*

objectives of providing dispute resolution that aids—rather than disrupts—international investment flows intended to eliminate poverty,<sup>18</sup> it must prove worthy of trust and provide effective and independent dispute resolution services. While further research that considers other units of analysis (including annulments) or uses additional data and refined models is necessary, the Article will conclude that ICSID should target reforms to address highlighted areas of potential concern so as to better provide dispute resolution that fosters fairness, efficiency, and institutional integrity.

### I. FOUNDATIONS OF INVESTMENT TREATY ARBITRATION

Investment treaty arbitration (ITA) is a unique creature of international law. When public international law rights are at stake, private individuals affected by host state action generally petition their home states to act on their behalf. States, not private actors, typically pursue international economic law rights,<sup>19</sup> whether through diplomacy, espousal of international law rights before the International Court of Justice,<sup>20</sup> or in pursuit of international trade law rights pursuant to the World Trade Organization's Dispute Settlement Understanding.<sup>21</sup>

ITA was largely an effort to both judicialize<sup>22</sup> and depoliticize<sup>23</sup> the process of resolving international investment disputes, namely problems

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COMMERCIAL ARBITRATION 215–16 (2009); EDWARD S. MASON & ROBERT E. ASHER, *THE WORLD BANK SINCE BRETTON WOODS* 11–13, 336–41 (1973).

18. See IBRAHIM F.I. SHIHATA, *LEGAL TREATMENT OF FOREIGN INVESTMENT: THE WORLD BANK GUIDELINES* 97 n.68 (1993) (“The World Bank sponsored the establishment of ICSID in the belief that the availability of a dispute settlement machinery of this kind could help to promote increased flows of international investment.”); Scott A. Hipsher, *Creating Market Size: Regional Strategies for Use in the Least Developed Areas of the World*, in *INNOVATIVE APPROACHES TO REDUCING GLOBAL POVERTY* 153, 154–57 (James A.F. Stoner & Charles Wankel eds., 2007) (exploring links between international investment and poverty reduction).

19. See Atsuko Okubo, *Environmental Labeling Programs and the GATT/WTO Regime*, 11 *GEO. INT'L ENVTL. L. REV.* 599, 630–31 (1999) (gathering authorities to suggest that private action “will fall outside the scope of the GATT/WTO regimes”); Michael P. Vandenberg, *Climate Change: The China Problem*, 81 *S. CAL. L. REV.* 905, 942–43 (2008) (suggesting that WTO litigation risk increases when government-mandated schemes are involved). *But see* Santiago M. Villalpando, *Attribution of Conduct to the State: How the Rules of State Responsibility May Be Applied Within the WTO Dispute Settlement System*, 5 *J. INT'L ECON. L.* 383, 408–09 (2002) (“[I]n some cases, the conduct of a ‘private party’ could be directly attributed to the State, thereby entailing the latter’s responsibility under the WTO agreements.”).

20. Statute of the International Court of Justice art. 34(1), June 26, 1946, 59 *Stat.* 1055, 8 *U.N.T.S.* 993 (“Only state[s] may be parties in cases before the [International] Court [of Justice].”); see also JOHN COLLIER & VAUGHAN LOWE, *THE SETTLEMENT OF DISPUTES IN INTERNATIONAL LAW* 132–69 (1999) (describing the nature and scope of ICJ jurisdiction).

21. Understanding on Rules and Procedures Governing the Settlement of Disputes, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 1869 *U.N.T.S.* 401 [hereinafter *Marrakesh Agreement*].

22. Judith Goldstein et al., *Introduction: Legalization and World Politics*, 54 *INT'L ORG.* 385,

that private investors experience when state measures arguably damage the foreign investment.<sup>24</sup> Providing private investors with a direct route to neutral dispute resolution would then presumably lower commercial risk, facilitate confidence in the international investment system, and avoid the political sensitivities encumbering state-to-state adjudication.<sup>25</sup> ITA has the purported benefit of avoiding arguable bias by national courts, which render decisions against co-equal branches of their own national governments.<sup>26</sup> ITA also has the virtue of preventing blanket claims of immunity from suit — whether by virtue of sovereign immunity or political question doctrines — that might otherwise prevent investors from bringing their claims in national courts.<sup>27</sup> In retrospect, the goal of depoliticization is perhaps ironic. Despite desires to offer a neutral, legitimate forum where states can consent to resolve disputes

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389 (2000); Alec Stone Sweet, *Investor-State Arbitration: Proportionality's New Frontier*, 4 LAW & ETHICS HUM. RTS. 47, 57–61 (2010); see also Kenneth W. Abbott et al., *The Concept of Legalization*, 54 INT'L ORG. 401 (2000).

23. Charles N. Brower & Lee A. Steven, *Who Then Should Judge?: Developing the International Rule of Law Under NAFTA Chapter 11*, 2 CHI. J. INT'L L. 193, 196 (2001); Susan D. Franck, *Development and Outcomes of Investment Treaty Arbitration*, 50 HARV. INT'L L.J. 435, 437–38 (2009); Catherine A. Rogers, *The Arrival of the "Have-Nots" in International Arbitration*, 8 NEV. L.J. 341, 356–57 (2007).

24. Brower & Steven, *supra* note 23, at 196; Franck, *supra* note 23, at 437–38; Rogers, *supra* note 23, at 356–57; Sweet, *supra* note 22, at 57–61.

25. Tom Ginsburg, *International Substitutes for Domestic Institutions: Bilateral Investment Treaties and Governance*, 25 INT'L REV. L. & ECON. 107, 107–08 (2005); see also Guy De Vel, *Foreword to EUR. BANK OF RECONSTRUCTION & DEV., LAW IN TRANSITION: COURTS AND JUDGES 3* (2005), available at <http://tinyurl.com/48waze6> (“[I]ndependence and efficiency of the judiciary is a *conditio sine qua non* for the success and sustainability of institutional reforms. Only countries that can guarantee enforceability of contracts and protection of property rights are able to attract substantial investment and secure economic growth over the longer term.”); Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 115 YALE L.J. 814, 821–22, 856–57 (2006) (suggesting contract design can be improved by anticipating the effect of litigation); Guanghua Yu & Hao Zhang, *Adaptive Efficiency and Financial Development in China: The Role of Contracts and Contractual Enforcement*, 11 J. INT'L ECON. L. 459 (2008) (arguing that stable dispute resolution and investment frameworks facilitate efficient contracting).

26. ARBITRATION UNDER INTERNATIONAL INVESTMENT AGREEMENTS: A GUIDE TO THE KEY ISSUES, at xxi (Katia Yannaca-Small ed., 2010) (“[R]esolution does not rely on standards of the host state and the domestic courts, which may have a local bias or be subject to the influence of the host government.”).

27. Elihu Lauterpacht, *Foreword to CHRISTOPH H. SCHREUER ET AL., THE ICSID CONVENTION: A COMMENTARY*, at ix–x (2d ed. 2009); Ibrahim F.I. Shihata, *Towards a Greater Depoliticization of Investment Disputes: The Roles of ICSID and MIGA*, 1 ICSID REV. FOREIGN INVESTMENT L.J. 1 (1986); see also W. Michael Reisman, *The Breakdown of the Control Mechanism in ICSID Arbitration*, 1989 DUKE L.J. 739, 750–51 (1989) (describing aspects of depoliticizing investment disputes by reference to entities such as ICSID); Christopher M. Ryan, *Discerning the Compliance Calculus: Why States Comply with International Investment Law*, 38 GA. J. INT'L & COMP. L. 63, 67–74 (2009) (outlining the history of depoliticization of investment disputes); Kate M. Supnik, Note, *Making Amends: Amending the ICSID Convention to Reconcile Competing Interests in International Investment Law*, 59 DUKE L.J. 343, 351–52 (2009) (describing various reasons for the creation of ICSID and investor-state dispute settlement).

without allegations of bias, ITA has nevertheless fallen prey to claims that it is politicized and biased, including cases at ICSID.<sup>28</sup>

ITA is a doctrinal by-product of an International Investment Agreement (IIA).<sup>29</sup> 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 when foreign investors are granted unilateral international economic rights.<sup>30</sup> IIAs typically involve a pair or group of countries that sign a treaty, such as the Dominican Republic-Central American Free Trade Agreement (CAFTA-DR),<sup>31</sup> that promises to protect international investment within the territory of the host state. IIAs grant reciprocal investment rights, both procedural and substantive, to private investors from the signatory countries.

Substantively, governments guarantee investors certain treatment, such as freedom from unlawful expropriation, freedom from discrimination, and the right to fair and equitable treatment.<sup>32</sup> Some substantive disputes might involve public law elements, such as those related to displaced Zimbabwe farmers or beef restrictions due to Mad Cow Disease.<sup>33</sup> Other disputes have a more commercial flavor, such as

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28. See, e.g., Ibironke T. Odumosu, *The Law and Politics of Engaging Resistance in Investment Dispute Settlement*, 26 PENN ST. INT'L L. REV. 251, 254, 257 (suggesting ITA was intended to depoliticize the investment dispute resolution process but expressing skepticism that it does so properly).

29. An IIA is a treaty made between two or more governments that safeguards investments made by qualifying investors in the territory of other signatories. Susan D. Franck, *Integrating Investment Treaty Conflict and Dispute Systems Design*, 92 MINN. L. REV. 161, 171 (2007).

30. Jeswald W. Salacuse & Nicholas P. Sullivan, *Do BITs Really Work?: An Evaluation of Bilateral Investment Treaties and Their Grand Bargain*, 46 HARV. INT'L L.J. 67, 75–79 (2005). There is, however, a debate about whether IIAs achieve their objective of facilitating investment and development objectives. See generally THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES & INVESTMENT FLOWS (Karl P. Sauvant & Lisa E. Sachs eds., 2009); Susan D. Franck, *Empiricism and International Law: Insights for Investment Treaty Dispute Resolution*, 48 VA. J. INT'L L. 767, 793 n.116 (2008) (gathering sources debating the benefits of investment treaties).

31. Multilateral agreements, like the North American Free Trade Agreement (NAFTA) and the Dominican Republic–Central American Free Trade Agreement (CAFTA-DR), provide investment protection on a multilateral basis, and perhaps in conjunction with other international economic law rights. Free Trade Agreement, U.S.–Cent. Am.–Dom. Rep., art. 10, Aug. 5, 2004, Hein's No. KAV 7157, available at <http://tinyurl.com/3dr9zln>; North American Free Trade Agreement, U.S.–Can.–Mex., pt. 4, ch. 11, Dec. 17, 1992, 32 I.L.M. 289, 613 (1993); Antonio R. Parra, *Provisions on the Settlement of Investment Disputes in Modern Investment Laws, Bilateral Investment Treaties and Multilateral Instruments on Investment*, 12 ICSID REV. FOREIGN INVESTMENT L.J. 287 (1997).

32. UNCTAD, INVESTOR-STATE DISPUTES ARISING FROM INVESTMENT TREATIES: A REVIEW, at 31–47, UNCTAD Doc. UNCTAD/ITE/IIT/2005/4, U.N. Sales No. E.06.II.D.1 (2005); Franck, *supra* note 29, at 172.

33. See, e.g., *Funnekotter v. Republic of Zimbabwe (Neth. v. Zim.)*, ICSID Case No. ARB/05/6, Award (Apr. 22, 2009), <http://tinyurl.com/nyho6x> (deciding claim against Zimbabwe for repossession of land from white farmers); *Canadian Cattlemen for Fair Trade v. United States, (NAFTA/UNCITRAL)*, Award on Jurisdiction, ¶ 232 (Jan. 28, 2008), <http://tinyurl.com/27twg3a>

the revocation of a banking license or breach of contract.<sup>34</sup> Procedurally, if an investor believes a host state measure has violated its substantive treaty rights, IIAs permit direct redress against the host state through the treaty's dispute resolution mechanism. This is the genesis of ITA, as many IIAs permit investors to resolve their disputes through arbitration.<sup>35</sup> While it varies by treaty, states typically grant investors the right to elect arbitration before one or more of the following: (1) an *ad hoc* tribunal organized under the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules, (2) the Stockholm Chamber of Commerce (SCC), or (3) a tribunal organized through the World Bank's ICSID.<sup>36</sup>

Presuming jurisdictional prerequisites are met, investors initiate arbitration by submitting a request for arbitration at their selected forum.<sup>37</sup> Thereafter, a tribunal is selected<sup>38</sup> to adjudicate the dispute in an impartial manner<sup>39</sup> according to the applicable law. Parties then

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(deciding whether Canadian ranchers could sue the United States for restrictions put in place related to concerns about bovine spongiform encephalopathy (BSE or Mad Cow Disease)).

34. Franck, *supra* note 29, at 185–86 (describing commercial investment treaty claims); Franck, *supra* note 15, at 10.

35. A cause of action under an IIA involves (1) a foreign investor asserting that the host state has violated the treaty and damaged its investment, and (2) if the dispute is not otherwise resolved, the investor seeking redress by requiring the state to arbitrate. Franck, *supra* note 14, at 781.

36. See Parra, *supra* note 31, at 288, 358 (remarking that investors' options may vary based on rights enumerated in the applicable treaty, which could provide a range of options including adjudication in national courts, *ad hoc* arbitration under the UNCITRAL Rules, or arbitration before the ICSID, International Chamber of Commerce (ICC), or SCC). Other treaties have limited mechanisms for resolving disputes. See, e.g., Agreement Concerning the Encouragement and Reciprocal Protection of Investments, P.R.C.–Ghana, art. 10, Oct. 12, 1989, <http://tinyurl.com/4kuvxt2> (providing that certain investment disputes are subject to *ad hoc* arbitration, SCC is the default appointing authority, and the tribunal can use either SCC or ICSID rules “as guidance”).

37. Franck, *supra* note 29, at 193. But see Christoph Schreuer, *Traveling the BIT Route: Of Waiting Periods, Umbrella Clauses and Forks in the Road*, 5 J. WORLD INVESTMENT & TRADE 231, 232–39 (2004) (suggesting that, irrespective of whether the substantive prerequisites are established, investors may proceed with arbitration).

38. Typically, investors select an arbitrator and the government selects another. Under the ICSID Convention, parties can agree on the appointment of the president of the tribunal. International Convention on the Settlement of Investment Disputes Between States and Nationals of Other States art. 37(2)(b), Mar. 18, 1965, 17 U.S.T. 1270, 575 U.N.T.S. 159 [hereinafter ICSID Convention]. By contrast, under *ad hoc* UNCITRAL arbitration, party-appointed arbitrators agree on the chair. UNCITRAL Arbitration Rules art. 7(1), G.A. Res. 31/98, U.N. Commission on International Trade Law, 31st Sess., Supp. No. 17 at Ch. V, Sec. C, U.N. Doc. A/31/17 (Apr. 28, 1976), reprinted in 15 I.L.M. 701, 705 (1976). Where there is an appointment problem with the process, an arbitral institution or other appointing authority will step in to make the requisite appointments. *Id.* art. 7(2)(b); see also RUDOLF DOLZER & MARGRETE STEVENS, BILATERAL INVESTMENT TREATIES 124 (1995).

39. Toby Landau, *Composition and Establishment of the Tribunal: Articles 14 to 36*, 9 AM. REV. INT'L ARB. 45, 52–53 (1998); see also Andreas F. Lowenfeld, *The Party-Appointed Arbitrator in International Controversies: Some Reflections*, 30 TEX. INT'L L.J. 59, 65 (1995).

marshal their facts and legal arguments, and ultimately the tribunal renders an award. Although there are slight differences depending upon whether enforcement authority is derived from the ICSID Convention<sup>40</sup> or the New York Convention,<sup>41</sup> as a general matter, the award will be enforceable worldwide.<sup>42</sup>

## II. THE DEBATE OVER ICSID

ICSID is a linchpin of the current ITA system. Nevertheless, it is also a subject of intense discussion. This Part explores ICSID's origins, its special features, and the debate about its role in the international economic order.

### A. *The Origins of ICSID*

During a time of intense debate about the meaning of international investment law and the scope of substantive protection for expropriation, Aron Broches shifted the discussion by focusing on the procedural mechanisms to resolve investment disputes. As General Counsel of the World Bank, Broches advocated for the creation of an impartial and stable forum, governed by a set of procedures, to settle investment disputes.<sup>43</sup> In 1965, the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention) established ICSID as a branch of the World Bank to resolve investment disputes between foreign investors and host countries.<sup>44</sup> Currently, 146 states have ratified the ICSID Convention.<sup>45</sup>

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40. ICSID Convention, *supra* note 38. For ICSID Convention awards, parties seek “annulment” for limited grounds, usually procedural, under the ICSID Convention. Otherwise, ICSID Convention awards are immediately enforceable, as if they were a national court judgment from the respondent state. ICSID Convention, *supra* note 38, arts. 51–54; Susan D. Franck, *The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law Through Inconsistent Decisions*, 73 *FORDHAM L. REV.* 1521, 1547–48 (2005).

41. For New York Convention awards, including those that derive from ICSID's Additional Facility, parties can attack awards in accordance with national law at the seat of arbitration or under the national law of the place where enforcement is sought; grounds for denying recognition and enforcement typically relate to procedural irregularities. Convention of 1958 on the Recognition and Enforcement of Foreign Arbitral Awards, June 10, 1958, 21 *U.S.T.* 2517, 330 *U.N.T.S.* 38; *see also* Franck, *supra* note 40, at 1549–55. Awards rendered pursuant to the Panama Convention are similar. Inter-American Convention on International Commercial Arbitration art. 5, Jan. 30, 1975, *S. TREATY DOC. NO. 97-12* (1981), 1438 *U.N.T.S.* 248.

42. Franck, *supra* note 29, at 194.

43. SCHREUER ET AL., *supra* note 27, at 2–5; Andreas F. Lowenfeld, *ICSID Convention: Origins and Transformation*, 38 *GA. J. INT'L & COMP. L.* 47, 51–52 (2009); *see also* Odumusu, *supra* note 28, at 354–56 (describing the politically charged atmosphere during which ICSID was founded).

44. LUCY REED ET AL., *GUIDE TO ICSID ARBITRATION* 1–4 (2004); *see also* INT'L CTR. FOR THE SETTLEMENT OF INV. DISPUTES [ICSID], *HISTORY OF THE ICSID CONVENTION: DOCUMENTS CONCERNING THE ORIGIN AND THE FORMULATION OF THE CONVENTION ON THE*

Although originally envisioned as an entity providing dispute resolution services for investment disputes arising out of international commercial agreements between investors from Convention signatories and state signatories, ICSID's role has evolved.<sup>46</sup> Three critical events occurred to move ICSID into the frontline of ITA.

First, in 1978, the ICSID Administrative Council created Additional Facility Rules.<sup>47</sup> The Additional Facility Rules expanded the scope of dispute resolution services to provide fact-finding and an additional ground for securing recourse to ICSID arbitration for those cases where one of the parties to the dispute may be a Convention signatory or an investor from a signatory state.<sup>48</sup> This last aspect was fundamental, as it expanded the number of possible ICSID-based arbitrations. Although "Additional Facility" arbitrations would not be ICSID Convention awards for enforcement purposes, they could nevertheless benefit from nearly identical Arbitration Rules at ICSID and the administrative support and processes offered by ICSID.

Second, in the 1990s, there was a spike in the number of IIAs.<sup>49</sup> There are now approximately 2676 IIAs,<sup>50</sup> and as research suggests, ICSID jurisdiction is offered in approximately 80% of IIAs. Thus, this increase in the number of IIAs dramatically expands the potential scope of ICSID jurisdiction.<sup>51</sup>

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SETTLEMENT OF INVESTMENT DISPUTES BETWEEN STATES AND NATIONALS OF OTHER STATES (photo. reprint 2001) (1968) (reviewing the formulation of the ICSID Convention); Julian Davis Mortenson, *The Meaning of "Investment": ICSID's Travaux and the Domain of International Investment Law*, 51 HARV. INT'L L.J. 257, 263–64, 281–96 (2010) (analyzing the history of the ICSID and providing a history of the drafting of the ICSID Convention).

45. ICSID, *List of Contracting States and Other Signatories of the Convention*, ICSID Doc. ICSID/3 (Dec. 10, 2010).

46. See Lowenfeld, *supra* note 43, at 55–59; see also Kathleen S. McArthur & Pablo A. Ormachea, *International Investor-State Arbitration: An Empirical Analysis of ICSID Decisions on Jurisdiction*, 28 REV. LITIG. 559, 572 (2009) (describing a historical shift in the basis of ICSID consent and suggesting that, in contrast to the first twenty-one years at ICSID, "BIT-based claims have outnumbered contract-based claims six to one").

47. ICSID, *ICSID Additional Facility Rules*, ICSID Doc. ICSID/11 (Apr. 2006) [hereinafter *ICSID Additional Facility Rules*]; see also Antonio R. Parra, *The Development of the Regulations and Rules of the International Centre for Settlement of Investment Disputes*, 41 INT'L LAW. 47, 52 (2007).

48. See *ICSID Additional Facility Rules*, *supra* note 47, sched. A, sched. C. ICSID also expanded conciliation services originally offered in the ICSID Convention. *Id.* sched. B.

49. UNCTAD, *Bilateral Investment Treaties 1959–1999*, at iii, UNCTAD Doc. UNCTAD/ITE/IIA/2 (2000) ("The 1990s saw a rapid increase in the number of bilateral investment treaties . . . rising from 385 at the end of the 1980s to 1,857 at the end of the 1990s.").

50. *IIA Monitor No. 3 (2009)*, *supra* note 5, at 2.

51. See Allee & Peinhardt, *supra* note 6, at 5 (discussing how, in a sample of 1473 IIAs, 81% include consent to ICSID jurisdiction); see also McArthur & Ormachea, *supra* note 46, at 560 (describing the rise of ICSID and observing the influence of the number of IIAs).

Third, in 1995, Jan Paulsson published his seminal article, *Arbitration Without Privity*, which articulated the doctrinal and policy justification for IIAs to form the basis of ICSID jurisdiction.<sup>52</sup> The *ex ante* consent to ICSID arbitration in IIAs and the Additional Facility Rules constituted raw ingredients, and Paulsson's article offered the intellectual architecture for creative lawyers to pave the way towards ICSID arbitration.

Given the interaction of these variables with the surge in foreign investment,<sup>53</sup> ICSID's docket of cases quickly grew beyond international commercial contracts governed by national law. The staple of ICSID's caseload is now arbitrations that originate under IIAs due to arguably inappropriate government measures that detrimentally affect foreign investment, even if the government is not a party to an underlying commercial activity. Statistics from ICSID suggest that nearly 75% of its caseload follows this paradigm.<sup>54</sup> It is perhaps little wonder that some observers suggest that "the scope of [ICSID]'s authority is unrivalled in its domain of activity" and in certain respects could "be considered constitutional."<sup>55</sup>

### B. ICSID's Unique Functions

ICSID provides a series of unique dispute resolution services, including fact-finding and conciliation.<sup>56</sup> The fact-finding proceedings have never been used.<sup>57</sup> While there have only been six conciliation

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52. Jan Paulsson, *Arbitration Without Privity*, 10 ICSID REV. FOREIGN INVESTMENT L.J. 232 (1995).

53. UNCTAD, *World Investment Report 2006*, at xvii, UNCTAD Doc. UNCTAD/WIR/2006, U.N. Sales No. E.06.II.D.11 (2006) (suggesting that the level of Foreign Direct Investment (FDI) in 2005 was US\$916 billion, but noting that the peak in 2000 was US\$1.4 trillion). *But see* UNCTAD, *Assessing the Impact*, *supra* note 4, at 3 (discussing the 15% fall in FDI as a result of the financial crisis in 2008 alone).

54. *See* ICSID, *The ICSID Caseload—Statistics*, Issue 2011-1, at 10 (Jan. 21, 2011), <http://tinyurl.com/4jj3v6a> [hereinafter ICSID, *Statistics 2011*] (indicating that 22% of cases at ICSID were related to investment contracts and 6% were related to investment laws, but the remainder of the basis for jurisdiction was related to IIAs such as NAFTA, CAFTA-DR, the Energy Charter Treaty (ECT), and other IIAs); ICSID, *The ICSID Caseload—Statistics*, Issue 2010-1, 10 (Feb. 3, 2010), <http://tinyurl.com/ykqdtpl> (noting that 22% of cases at ICSID related to investment contracts and 5% related to investment laws and other IIAs); ICSID, *The ICSID Caseload—Statistics*, Issue 2010-2, 10 (Aug. 25, 2010), <http://tinyurl.com/ykqdtpl> (same).

55. Sweet, *supra* note 22, at 58.

56. *See* ICSID *Additional Facility Rules*, *supra* note 47. ICSID also provides other support, including administrative support for non-ICSID dispute settlement in state-to-state or certain investor-state disputes, such as acting as an appointing authority and deciding upon arbitrator challenges. ICSID, *Statistics 2011*, *supra* note 54, at 9; *see also* David Collins, *Reliance Remedies at the International Center for the Settlement of Investment Disputes*, 29 NW. J. INT'L L. & BUS. 195, 196–98 (2009) (providing an overview of ICSID).

57. Franck, *supra* note 29, at 210–11.

cases registered at ICSID, it is unclear whether any of these are disputes arising under IIAs.<sup>58</sup>

The bulk of ICSID's docket consists of two types of disputes, namely: (1) arbitrations under the ICSID Convention, and (2) arbitrations under the ICSID Facility Rules. Recent statistics from ICSID state that, since its inception, there have been 296 ICSID Convention arbitrations and twenty-nine Additional Facility arbitrations.<sup>59</sup> In 2009, ICSID registered twenty-five ICSID Convention arbitrations and one Additional Facility arbitration.<sup>60</sup> In other words, the scope of ICSID's caseload is not irrelevant.<sup>61</sup> ICSID describes the vitality of the arbitration services that it provides:

As evidenced by its large membership, considerable caseload, and by the numerous references to its arbitration facilities in investment treaties and laws, ICSID plays an important role in the field of international investment and economic development.

Today, ICSID is considered to be the leading international arbitration institution devoted to investor-State dispute settlement.<sup>62</sup>

Data from other sources support this perspective. One study of publicly available arbitration awards reported that nearly 75% of ITA disputes are resolved at ICSID, either pursuant to the ICSID Convention or Additional Facility Rules.<sup>63</sup> Similarly, a 2009 United Nations Conference on Trade and Development (UNCTAD) publication reported that close to 65% of cases are resolved at ICSID.<sup>64</sup> These

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58. See ICSID, *Statistics, 2011*, *supra* note 54, at 8 (reflecting six total conciliation cases). Based upon publicly available information in ICSID's searchable database, *Search ICSID Cases*, ICSID, <http://tinyurl.com/4n8w2ym> (last visited Mar. 22, 2011), it appears that at least one case may have been related to a conciliation claim, *Togo Electricité v. Republic of Togo*, ICSID Case No. CONC/05/1 (Apr. 6, 2006), under an investment treaty that ultimately transformed into an arbitration, *Togo Electricité v. Republic of Togo*, ICSID Case No. ARB/06/7 (Aug. 10, 2010), but even that is uncertain.

59. ICSID, *Statistics 2011*, *supra* note 54, at 8.

60. *Id.* at 19.

61. Given that ICSID can theoretically have mixed jurisdiction — namely, adjudicating investor-state disputes under contracts, national legislation, or IIAs — it is critical to recall that not all of these cases are necessarily investment treaty disputes. Indeed, ICSID's own data indicate (through general percentages rather than hard data about the number of cases) that only 28% of its caseload does not involve cases arising under IIAs. *Id.* at 10. Extrapolating from the available data, this would suggest that approximately 213 cases arise under IIAs. See also McArthur & Ormachea, *supra* note 46, at 560 (“Today, ICSID is the leading forum for the adjudication of disputes between private international investors and [states] . . . and the number of claims filed annually at ICSID has increased dramatically in the last two decades.”).

62. *About ICSID*, ICSID, <http://tinyurl.com/4jsxltf> (last visited Mar. 23, 2011).

63. Franck, *supra* note 15, at 40.

64. See UNCTAD, *IIA Monitor No. 1 (2009): Latest Developments in Investor-State Dispute Settlement*, at 2–3, UN Doc. UNCTAD/WEB/DIAE/IA/2009/6/Rev1 (2009).

sources suggest that ICSID is a key element in an international dispute settlement process that aspires to promote sustainable development and foreign investment.<sup>65</sup>

### C. *The ICSID Debate*

Given its prominence and affiliation with a major Bretton Woods international economic institution, it is perhaps little wonder that ICSID has become the focus of scrutiny.<sup>66</sup> The debate focuses upon ICSID's institutional integrity<sup>67</sup> and has reached the *New York Times*<sup>68</sup> as well as other mainstream media outlets.<sup>69</sup> The *Financial Times* observed that critiques of ICSID "serve as a reminder that the system remains a fragile one whose authority depends on the consent of those it governs."<sup>70</sup>

One might categorize concerns about ICSID as relating to procedural and substantive aspects. On the procedural side, there have been concerns related to the transparency of the process, the capacity for third-party intervention, the availability of meaningful appeal of legal errors, and the cost of the proceedings.<sup>71</sup> After consultations with member states, ICSID considered various procedural reforms. It ultimately rejected certain areas for reform, including proposals to

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65. See, e.g., Collins, *supra* note 56, at 213 (noting the role that ICSID may play in encouraging foreign investment).

66. Supnik, *supra* note 27, at 355 ("ICSID's surge in usage has simultaneously rendered it less popular among host states."); see also McArthur & Ormachea, *supra* note 46, at 560–61 (suggesting ICSID's increasing prominence requires an assessment of its neutrality).

67. See Gabriel Bottini, *Should Arbitrators Live on Mars? Challenge of Arbitrators in Investment Arbitration*, 32 SUFFOLK TRANSNAT'L L. REV. 341, 341 (2009) ("Legitimacy of investment arbitration is becoming one of the main concerns of all the institutions and persons involved in the process."); W. Mark C. Weidemaier, *Disputing Boilerplate*, 82 TEMP. L. REV. 1, 18–19 (2009) (noting the scope of the debate regarding ICSID's possible bias). See generally Franck, *supra* note 23, at 436 (outlining the debate about institutional legitimacy); Franck, *supra* note 40, at 1595–1600 (describing the critiques of arbitration more generally).

68. Anthony DePalma, *NAFTA's Powerful Little Secret; Obscure Tribunals Settle Disputes, But Go Too Far, Critics Say*, N.Y. TIMES, Mar. 11, 2001, at BU1 ("Their meetings are secret. Their members are generally unknown. The decisions they reach need not be fully disclosed. Yet the way a small group of international tribunals handles disputes between investors and foreign governments has led to national laws being revoked, justice systems questioned and environmental regulations changed."); Editorial, *The Secret Trade Courts*, N.Y. TIMES, Sept. 27, 2004, at A1 ("[T]he arbitration process itself is often one-sided, favoring well-heeled corporations over poor countries, and must be made fairer than it is today.").

69. *Arbitration and Secrecy: Behind Closed Doors — A Hard Struggle to Shed Some Light on a Legal Grey Area*, ECONOMIST, Apr. 23, 2009, at 68; Alan Beattie, *Concern Grows over Global Trade Regulation*, FIN. TIMES, Mar. 12, 2008, at 9; Alan Beattie, *From a Trickle to a Flood — How Lawsuits Are Coming to Dictate the Terms of Trade*, FIN. TIMES, Mar. 20, 2007, at 13; Kevin Gallagher, *Stop Private Firms Exploiting Poor States*, GUARDIAN (Feb. 5, 2010, 11:00 AM), <http://tinyurl.com/yz7w6va>; Sheila McNulty, *Chevron Takes Ecuador Fight to the Hague*, FIN. TIMES, (Sept. 24, 2009, 3:45 AM), <http://tinyurl.com/4rm4sjc>.

70. Peel & Croft, *supra* note 2.

71. See, e.g., Supnik, *supra* note 27, at 356.

create an appellate body<sup>72</sup> and to construct a mediation facility.<sup>73</sup> ICSID did, however, adopt procedural reforms in April 2006 to facilitate greater transparency and permit participation by *amicus curiae*.<sup>74</sup> These procedural innovations helped to address many concerns related to perceived procedural justice. Nevertheless, remaining concerns about process and principles of substantive justice<sup>75</sup> raise the question of whether arbitration — particularly at ICSID — is always the appropriate method for resolving investment treaty disputes.<sup>76</sup> Yet, since arbitration still appears to be the default mechanism for resolving investment treaty conflict, the fundamental question becomes: What substantive criticisms are aimed at the major venues for resolving these disputes?

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72. ICSID Secretariat, Suggested Changes to the ICSID Rules and Regulations 3–4 (May 12, 2005) (working paper), available at <http://tinyurl.com/4sx2v7c>; ICSID Secretariat, Possible Improvements of the Framework for ICSID Arbitration 14–16 (Oct. 22, 2004) (discussion paper), available at <http://tinyurl.com/4tbvoc5> [hereinafter ICSID 2004 Discussion Paper].

73. ICSID 2004 Discussion Paper, *supra* note 72, at 4, 13–14. There is renewed interest in consideration of this aspect of mediation, and international organizations such as ICSID and UNCTAD are exploring the utility of mediation and other forms of alternative dispute resolution. See UNCTAD, *Investor-State Disputes: Prevention and Alternatives to Arbitration II*, UNCTAD Doc. UNCTAD/WEB/DIAE/IA/2010/8 (forthcoming 2011) [hereinafter UNCTAD, ADR II], available at <http://tinyurl.com/4kvpcj5>.

74. See Press Release, ICSID, Amendments to the ICSID Rules and Regulations (Apr. 5, 2006), <http://tinyurl.com/6gqbl93> (Apr. 5, 2006); see also Susan D. Franck, *ICSID Institutional Reform: The Evolution of Dispute Resolution and the Role of Structural Safeguards*, in INTERNATIONAL INSTITUTIONAL REFORM: PROCEEDINGS OF THE HAGUE JOINT CONFERENCE ON CONTEMPORARY ISSUES IN INTERNATIONAL LAW 276–83 (Agata Fijalkowski ed., 2007) (discussing revision of ICSID procedures); Andrew P. Tuck, *Investor-State Arbitration Revised: A Critical Analysis of the Revisions and Proposed Reforms to the ICSID and UNICTRAL Arbitration Rules*, 13 LAW & BUS. REV. AM. 885, 892–901 (2007) (providing a comprehensive review of ICSID-related reforms); J. Anthony VanDuzer, *Enhancing the Procedural Legitimacy of Investor-State Arbitration Through Transparency and Amicus Curiae Participation*, 52 MCGILL L.J. 681, 706–08 (2007).

75. See William W. Burke-White, *The Argentine Financial Crisis: State Liability Under BITs and the Legitimacy of the ICSID System*, 3 ASIAN J. WTO & INT'L HEALTH L. & POL'Y 199, 222–23 (2008) (suggesting that ICSID's legitimacy depends upon substantive outcomes); William W. Burke-White & Andreas von Staden, *Investment Protection in Extraordinary Times: The Interpretation and Application of Non-Precluded Measures Provisions in Bilateral Investment Treaties*, 48 VA. J. INT'L L. 307, 373–74 (2008) (suggesting that ICSID legitimacy could be enhanced by substantive changes affecting outcome, particularly the incorporation of an interpretive “margin of appreciation”); David D. Caron, *Investor-State Arbitration: Strategic and Tactical Perspectives on Legitimacy*, 32 SUFFOLK TRANSNAT'L L. REV. 513, 514–15 (2009) (observing that although several critiques relate to concerns of procedural legitimacy, substantive justice is also key); Michael Waibel, *Opening Pandora's Box: Sovereign Bonds in International Arbitration*, 101 AM. J. INT'L L. 711, 723 (2007) (“Legitimacy of ICSID arbitral awards depends on respecting this adjudicatory mission . . .”). But see Johanna Kalb, *Creating an ICSID Appellate Body*, 10 UCLA J. INT'L L. & FOREIGN AFF. 179, 202 (2005) (cautioning that, even as a matter of substance, there can be legitimacy challenges even if the “right” substantive result is reached through the “wrong” reasoning).

76. See UNCTAD, *Investor-State Disputes: Prevention and Alternatives to Arbitration*, at 19–20, UNCTAD Doc. UNCTAD/DIAE/IA/2009/11, U.N. Sales No. E.10.II.D.11 (2010) [hereinafter UNCTAD, ADR I].

Given ICSID's pivotal role and the scope of public scrutiny, it is useful to examine concerns about the legitimacy of ICSID's substantive services. Commentators have expressed different substantive concerns about ICSID-related investment treaty disputes. Some concerns relate to the lack of consistency in outcome,<sup>77</sup> which could be remedied by procedural safeguards. Other concerns relate to the loss of risk-free exercise of domestic "policy space,"<sup>78</sup> the purported failure to support development objectives,<sup>79</sup> or the incorporation of norms related to corporate social responsibility,<sup>80</sup> the environment, or human rights.<sup>81</sup> While meaningful and important, these issues have less to do with the adjudication of international law rights; rather, they arise from the state's original delegation in the treaty of unilateral rights for foreign investors, the acceptance of responsibility for state conduct, and the

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77. Franck, *supra* note 40, at 1521–22; Weidemaier, *supra* note 67, at 12–13. *But see* Emmanuel Gaillard, *A "Black Year": ICSID at Crossroads After Troubling Trend*, INT'L ARB. L. NEWS, Mar. 1, 2007, at 3 (stating ICSID case law shows remarkable consistency).

78. Multi-Year Expert Meeting on Investment for Development, Geneva, Switz., Feb. 10–11, 2009, *Rep. on the Multi-Year Expert Meeting on Investment for Development on its First Session*, ¶ 16, U.N. Doc. TD/B/C/II/MEM.3/3 (Mar. 18, 2009); Vicente Yu & Fiona Marshall, *Investors' Obligations and Host State Policy Space*, 2D ANNUAL FORUM OF DEVELOPING COUNTRY INVESTMENT NEGOTIATORS, Nov. 4, 2008, at 4, <http://tinyurl.com/4k2thhr>; *see also* Martins Paparinskis, *Investment Arbitration and the Law of Countermeasures*, 9 BRIT. Y.B. INT'L L. 264, 288–92 (2008) (questioning whether ICSID precludes states from taking countermeasures and arguing that alleged preclusion is an inappropriate intrusion on sovereignty). Similarly, there has also been a concern that IIAs are "unbalanced" by providing unilateral rights to foreign investors without requiring investor responsibility or offering states an express affirmative defense. Joseph E. Stiglitz, *Regulating Multinational Corporations: Towards Principles of Cross-Border Legal Frameworks in a Globalized World Balancing Rights with Responsibilities*, 23 AM. U. INT'L L. REV. 451, 468 (2008); Vaughan Lowe, Oxford Univ., Fair and Equitable Treatment in International Law, Remarks at the Annual Meeting of the American Society of International Law (Mar. 30, 2006), in 100 PROC. ANN. MEETING (AM. SOC'Y INT'L L.) 73, 73–74 (2006). *But see* ANDREW NEWCOMBE & LLUÍS PARADELL, LAW AND PRACTICE OF INVESTMENT TREATIES: STANDARDS OF TREATMENT 481–527 (2009) (outlining defenses of states to IIA obligations); Mortenson, *supra* note 44, at 312–13 (describing Argentina's capacity to raise the defense of necessity to certain claims because that defense was written into the IIA).

79. *See, e.g.*, Odumosu, *supra* note 28, at 262 (describing the need to address development concerns); UNCTAD, *IIA Monitor No. 2 (2007): Development Implications for International Investment Agreements*, UNCTAD Doc. UNCTAD/WEB/ITE/IIA/2007/2 (2007); SUSTAINABLE DEVELOPMENT IN INTERNATIONAL INVESTMENT LAW 355 (Marie-Claire Cordonier Segger et al. eds., 2011).

80. *See* HUMAN RIGHTS IN INTERNATIONAL INVESTMENT LAW AND ARBITRATION 89–90 (Pierre-Marie Dupuy et al. eds., 2009); Burke-White & von Staden, *supra* note 75, at 369–76 (discussing human rights incorporation); *see also* Sweet, *supra* note 22, at 62–64 (discussing the value of importing concepts such as proportionality and balancing).

81. Mary E. Footer, *BITs and Pieces: Social and Environmental Protection in the Regulation of Foreign Investment*, 18 MICH. ST. J. INT'L L. 33, 61–63 (2009) (advocating incorporation of corporate social responsibility and environmental norms); Kate Miles, *International Investment Law: Origins, Imperialism and Conceptualizing the Environment*, 21 COLO. J. INT'L ENVTL. L. & POL'Y 1 (2010); Peter Muchilinski, *Corporate Social Responsibility, in THE OXFORD HANDBOOK OF INTERNATIONAL INVESTMENT LAW* (Muchilinski et al. eds., 2008).

failure to include defenses or exclusions within the scope of treaty obligations.<sup>82</sup> Nevertheless, there is one critique that is regular, poignant, and has critical implications for the integrity of the investor-state dispute settlement system: namely, a concern that arbitration is biased, particularly with respect to the outcomes of ICSID cases.

ICSID is at the center of a series of criticisms that international investment arbitration exhibits “institutional bias” and fosters “a sense that ‘the system is rigged’ . . . .”<sup>83</sup> Some commentators even suggest that “ICSID represents the inequities of an international system biased against the developing countries.”<sup>84</sup> Other academics argue that the arbitration process has created “unduly pro-investor interpretations at the expense of states,”<sup>85</sup> and “[i]nvestment treaty arbitration as currently constituted is not a fair, independent, and balanced method for the resolution of investment disputes and therefore should not be relied on for this purpose.”<sup>86</sup> There are also blunt statements that “there is a growing perception that ICSID is in the throes of a legitimacy crisis,”<sup>87</sup> and even that “ICSID faces serious challenges to its legitimacy, some of which fundamentally threaten its very existence as a tool for resolving investment disputes.”<sup>88</sup> The President of Ecuador stated “he has ‘no

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82. This concern about “policy space” and lost sovereignty is less about adjudication of international law rights but more about a delegation of sovereign authority a state cedes when entering into IIAs in the first instance. This is also a function of the scope of rights, obligations, and defenses in IIAs and is arguably why many states are more carefully drafting rights, exclusions, and defenses in model treaties. *See, e.g.,* Asha Kaushal, Note, *Revisiting History: How the Past Matters for the Present Backlash Against the Foreign Investment Regime*, 50 HARV. INT’L L.J. 491, 494–95 (2009).

83. Sandra L. Caruba, *Resolving International Investment Disputes in a Globalised World*, 13 N.Z. BUS. L.Q. 128, 150 (2007); *see also* George K. Foster, *Collecting from Sovereigns: The Current Legal Framework for Arbitral Awards and Court Judgments Against States and Their Instrumentalities, and Some Proposals for its Reform*, 25 ARIZ. J. INT’L & COMP. L. 665, 705 (2008) (“In recent years, ICSID and the ICSID Convention have increasingly become targets of criticism by countries facing liability under ICSID awards, who have accused ICSID of being biased in favor of investors, and have described the Convention as a threat to their sovereignty.”); William W. Park, *Arbitrator Integrity: The Transitory and the Permanent*, 46 SAN DIEGO L. REV. 629, 658 (2009) (discussing a purported “pro-investor” bias on the part of arbitrators).

84. Letter from Food & Water Watch, USA et al., to Ana Palacio, Sec’y Gen. of ICSID (June 21, 2007), <http://tinyurl.com/4g749dv>; *see also* Christian Tietje et al., *Once and Forever? The Legal Effects of a Denunciation of ICSID*, 6 TRANSNAT’L DISP. MGMT. 1, 5 (Mar. 2008) (suggesting Bolivia’s withdrawal from ICSID was due to “ICSID’s alleged bias”); Steve Josselson, *Pro-North Bias Seen at ICSID*, STEVEN JOSSELSON ONLINE (June 19, 2007), <http://tinyurl.com/4g2557d> (“[ICSID] is biased toward corporation[s] based in the Developed World.”).

85. Public Statement, *supra* note 10, ¶ 5.

86. *Id.* ¶ 8.

87. Sweet, *supra* note 22, at 68.

88. W. Mark C. Weidemaier, *Toward a Theory of Precedent in Arbitration*, 51 WM. & MARY L. REV. 1895, 1945 (2010); *see also* Ibrónke T. Odumosu, *The Antinomies of the (Continued) Relevance of ICSID to the Third World*, 8 SAN DIEGO INT’L L.J. 345, 373 (2007) (providing examples that “reflect the legitimacy crisis that ICSID faces”).

confidence' in the World Bank arbitration branch [ICSID] that is hearing [a dispute] against Ecuador."<sup>89</sup> There have also been concerns articulated by counsel appearing at ICSID<sup>90</sup> and arbitrators<sup>91</sup> participating in the annulment process of ICSID Convention cases.<sup>92</sup>

Other observers suggest that, despite its status as an autonomous organization, bias may not just be a function of arbitration outcomes;<sup>93</sup> rather, ICSID's close ties with the World Bank, major international financial organizations, and multinational corporations call into question ICSID's integrity.<sup>94</sup> Commentators note that although the World Bank

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89. Gabriela Molina, *Ecuador Wary of World Bank Arbitration in Occidental Case*, USA TODAY, May 11, 2008, <http://tinyurl.com/4q8c57m>.

90. Sebastian Perry, *ICSID Annulment Committees Under Fire from Counsel*, GLOBAL ARB. REV., Sept. 20, 2010, <http://tinyurl.com/4et6gb4> (quoting R. Doak Bishop as saying, "I think it is very disconcerting and disturbing that the [Enron] committee created its own basis of annulment independent of the arguments raised before the committee by the parties themselves") (internal quotation marks omitted).

91. *Compañía de Aguas del Aconquija S.A. v. Argentine Republic*, ICSID Case No. ARB/97/3, Decision in Annulment Proceeding, Additional Opinion of Professor J.H. Dalhuisen, (Aug. 10, 2010), <http://tinyurl.com/4retyub> (raising procedural concerns about the activities of ICSID in supporting the drafting of an annulment decision) ("[T]he Secretariat is not the fourth member of ICSID Tribunals or *ad hoc* Committees and is not an interested party in any other way."); Sebastian Perry, *Argentina to Lodge Complaint Against ICSID*, GLOBAL ARB. REV., Oct. 8, 2010, <http://tinyurl.com/6e4dl4m> (suggesting Argentina will lodge complaint against ICSID related to the behavior of the ICSID Secretariat in the annulment process and observing that "Dalhuisen complained that the ICSID secretariat had caused 'multiple complications' and delays by attempting to involve itself in the drafting of the decision"); Tom Toulson, *Annulment Committee Criticizes Kaufman-Kohler*, GLOBAL ARB. REV., Aug. 16, 2010, <http://tinyurl.com/4ru4cjk> ("In an additional opinion attached to the committee's decision, Dutch academic Jan Hendrik Dalhuisen launched an unprecedented attack on the ICSID secretariat, accusing senior members of approaching 'individual committee members informally with a view to amending the text.'").

92. The unit of analysis in this research is awards rather than decisions of *ad hoc* committees. Future research might usefully analyze these decisions. See *supra* note 13; *infra* note 133.

93. Criticism of ICSID may also be a function of disappointed, perhaps overly high and unrealistic expectations. As ICSID is a creation of international law, one commentator suggested ICSID should be held to a higher standard than arbitration occurring pursuant to the *ad hoc* UNCITRAL Rules. Odumosu, *supra* note 28, at 378 ("ICSID is a creation of treaty; thus, it potentially has a level of international legitimacy not shared by regular *ad hoc* arbitration. . . . As a result of the position that it occupies in the international economic order [and since] . . . it is an international institution specializing in settling investment disputes, ICSID should situate itself in a space where it can take matters of international concern and public interest into account . . ."). The suggestion is that ICSID may have a need, and perhaps a duty, as a leading international economic organization, to be proactive in promoting legitimacy and effective dispute resolution in an era of globalization.

94. Amanda L. Norris & Katina E. Metzidakis, *Public Protests, Private Contracts: Confidentiality in ICSID Arbitration and the Cochabamba Water War*, 15 HARV. NEGOT. L. REV. 31, 63–64 (2010); see also *Petition of La Coordinadora Para la Defensa del Agua y Vida*, La Federación Departamental Cochabambina de Organizaciones Regantes, Semapa Sur, Friends of the Earth-Netherlands, Oscar Olivera, Omar Fernandez, Father Luis Sánchez, and Congressman Jorge Alvarado to the Arbitral Tribunal, *Aguas Del Tunari v. Republic of Bolivia (Neth. v. Bol.)*, ICSID Case No. ARB/02/3 (Aug. 29, 2002), 20 ICSID Rev. 450, 457 (2005) (asserting problems with "bias" and the "integrity" of the process); *Why Bolivia Quit ICSID*, STOP TELECOM ITALIA,

and International Monetary Fund (IMF) often agree to multi-billion-dollar debt write-offs for countries like the Congo, these same countries remain at risk for billion-dollar liability in ICSID arbitrations.<sup>95</sup>

These concerns involve more than political rhetoric. They are linked to action with ramifications for international law and the international economic order. States have proactively withdrawn from the ICSID system.<sup>96</sup> As Professor Mortenson described, “In April 2007, Bolivia, Nicaragua, and Venezuela agreed to withdraw from the ICSID Convention as a means of creating a ‘New Regional Economic Order’ for the Americas.”<sup>97</sup> Bolivia withdrew from ICSID in 2007,<sup>98</sup> in one proceeding, Bolivia challenged the entirety of the ICSID tribunal<sup>99</sup> and stated that it “‘will not comply’ with any award” rendered in favor of foreign investors.<sup>100</sup> Ecuador limited the scope of its participation by removing certain classes of disputes related to oil, gas, and minerals from ICSID jurisdiction.<sup>101</sup> Nicaragua has stopped including consent to ICSID arbitration in its IIAs.<sup>102</sup> Other states have expressed concern

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<http://stopeti.wordpress.com/actions/why-bolivia-quit-icsid> (“[T]here is a conflict of interest” because the “World Bank is both judge and party to the ICSID processes.”) (last visited Mar. 23, 2011).

95. See Kaushal, *supra* note 82, at 506–07 (referring to the link between World Bank and IMF loans and ITA); William Wallis, *Congo’s Struggles Delay Debt Write-Off*, FIN. TIMES, July 4, 2010, <http://tinyurl.com/3lqcwjh> (referring to a US\$10.8 billion debt write-off and discussing an ICSID dispute that could result in “billions of dollars” of liability). *But see* Susan D. Franck, *International Decisions*, Occidental Exploration & Production Co. v. Republic of Ecuador, 99 AM. J. INT’L L. 675, 681 (2005) (indicating that the U.S. government proposed cutting financial aid to Ecuador given a possibility that Ecuador considered non-payment of an adverse ITA award).

96. This may not purely be a function of the ICSID system, however. For example, after an adverse award in the Yukos case, Russia has withdrawn from the Energy Charter Treaty, which permits foreign investors to bring arbitration claims under that energy-sector-specific investment agreement. Emmanuel Gaillard, Letter to the Editor, *Russia Cannot Walk away from its Legal Obligations*, FIN. TIMES, Aug. 18, 2009, at 6; Alison Ross, *Russia Withdraws from Energy Charter Treaty*, GLOBAL ARB. REV., Aug. 7, 2009, <http://tinyurl.com/6ed4pj3>.

97. Mortenson, *supra* note 44, at 313; *see also Just Say No: Vocal Rejection of Bank Fund Increasing*, BRETTON WOODS PROJECT (July 2, 2007), <http://tinyurl.com/4ckxhep>; Tietje et al., *supra* note 84, at 5.

98. Letter from David Choquehuanca Cespedes, Foreign Affairs Minister, Bol., to Paul Wolfowitz, President, World Bank, *Cancillería Oficializa la Salida de Bolivia del CIADI* [Ministry of Bolivia Officially Exits ICSID] (May 1, 1997), *reprinted in* 46 I.L.M. 973 (2007); Press Release, ICSID, Bolivia Submits a Notice Under Article 71 of the ICSID Convention (May 16, 2007), <http://tinyurl.com/57ky25>.

99. Syriaki Karadelis, *Bolivia Challenges Entire ICSID Tribunal*, GLOBAL ARB. REV., May 10, 2010, <http://tinyurl.com/69unacq>.

100. Sebastian Perry, *Bolivia Ramps Up Anti-ICSID Rhetoric*, GLOBAL ARB. REV., July 14, 2010, <http://tinyurl.com/6hf5cja>.

101. Press Release, ICSID, Ecuador’s Notification Under Article 25(4) of the ICSID Convention (Dec. 5, 2007), <http://tinyurl.com/856ga3>.

102. Fernando Cabrera Diaz, *South American Alternative to ICSID in the Works as Governments Create an Energy Treaty*, INVESTMENT TREATY NEWS (Int’l Inst. for Sustainable Dev., Winnipeg, Man.), Sept. 1, 2008, at 7.

about ICSID and its ongoing utility.<sup>103</sup> Even developed states have acted to foreclose ICSID arbitration. For example, the United States-Australia Free Trade Agreement excluded all investor-state dispute settlement,<sup>104</sup> and Australia rejected investor-state treaty arbitration more broadly in April 2011.<sup>105</sup>

Criticisms about ICSID have other ramifications. A recent public statement suggested that, given concerns about investment treaty arbitration, “[t]here 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 against them . . . .”<sup>106</sup> Meanwhile, there has been a movement to create an arbitration body to replace ICSID. A coalition of various states, known as the Bolivarian Alternative for the People of Our America (ALBA),<sup>107</sup> have advocated the creation of an organization that mimics the function of ICSID but that supposedly offers a more legitimate arbitration process.<sup>108</sup> Presumably, this means that they believe the problem lies not with international arbitration as a dispute settlement mechanism *per se*, but rather with ICSID itself.<sup>109</sup>

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103. See Marco E. Schnabl & Julie Bédard, *The Wrong Kind of ‘Interesting,’* NAT’L L.J., July 30, 2007, <http://tinyurl.com/3r3mzg9> (discussing possible withdrawal from the ICSID Convention by Cuba, Nicaragua, and Venezuela).

104. William S. Dodge, *Investor-State Dispute Settlement Between Developed Countries: Reflections on the Australia-United States Free Trade Agreement*, 39 VAND. J. TRANSNAT’L L. 1, 2 (2006).

105. See AUSTRALIAN GOVERNMENT DEP’T OF FOREIGN AFFAIRS & TRADE, GILLARD GOVERNMENT TRADE POLICY STATEMENT: TRADING OUR WAY TO MORE JOBS AND PROSPERITY 14 (April 2011), available at <http://tinyurl.com/3w3ungv>; Luke Eric Peterson, *In Policy Switch, Australia Disavows Need for Investor-State Arbitration Provisions in Trade and Investment Agreements*, INVESTMENT ARB. REP., Apr. 14, 2011, <http://www.iareporter.com/articles/20110414>.

106. Public Statement, *supra* note 10, ¶ 8.

107. This organization is officially known as Alianza Bolivariana para los Pueblos de Nuestra América. See generally Ignacio A. Vincentelli, *The Uncertain Future of ICSID in Latin America*, 16 LAW & BUS. REV. AM., 409, 421–22 (2010) (discussing ALBA); Teresa Arreaza, *ALBA: Bolivarian Alternative for Latin America and the Carribean*, VENEZUELANALYSIS.COM, (Jan. 30, 2004), <http://venezuelanalysis.com/analysis/339> (same).

108. Fernando Cabrera Diaz, *ALBA Moves Forward with Plan to Create Regional Investment Arbitration Alternative to ICSID at 7th Summit*, INVESTMENT TREATY NEWS (Int’l Inst. for Sustainable Dev., Winnipeg, Man.), Nov. 4, 2009, at 3–4; see also Steven Donziger et al., *Rainforest Chernobyl Revisited: The Clash of Human Rights and BIT Investor Claims: Chevron’s Abusive Litigation in Ecuador’s Amazon*, 17 HUM. RTS. BRIEF 8, 14 (2010); Vincentelli, *supra* note 107, at 454–55 (“Venezuela has fiercely promoted the creation of an alternative — maybe regional — center of investor-State dispute resolution, as an alternative to ICSID.”); Adam D. Link, Comment, *The Perils of Privatization: International Developments and Reform in Water Distribution*, 22 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 379, 392 (2010) (discussing ALBA’s proposal to create a regional arbitral forum for resolving treaty disputes).

109. It may also be a question of politics. See Carlos Hecker, *Estados que se retiran del Ciadi [States That Withdrew from ICSID]*, DERECHOS & INVERSIONES (Apr. 19, 2010), <http://blog.juristasiberoamericanos.com/invest/?p=115> (“Se podría concluir entonces que el retiro del Ciadi es una cuestión más política que práctica.”) (“One might then conclude that withdrawal

Despite these criticisms, proponents of ICSID are unconvinced that the system is experiencing problems. Judge Charles Brower and Stephan Schill suggest that the rejection of ICSID is “a phenomenon that seems to be limited to a minority of states and can often be explained more by the countries’ internal political situation rather than a more widespread view of a lack of legitimacy . . . .”<sup>110</sup> Other supporters champion ICSID as a responsive organization that proactively addresses stakeholder concerns and concerns related to perceived bias.<sup>111</sup> Meanwhile, after recent critiques about ICSID’s annulment process, key figures have gone on record to say that “[t]he [ICSID] secretariat provides invaluable assistance”<sup>112</sup> and that other recent critiques are “ill-conceived and insolent.”<sup>113</sup> Yet, as noted arbitrator and arbitration scholar V.V. Veeder observed, even if “ICSID is the best institution in its field, the best run, the best staffed, with the best rules and the best treaty . . . [t]he question today is whether the ICSID we know and support will still exist in a few years from now?”<sup>114</sup>

#### D. Empirical Insights to Evaluate the Debate

Given the foregoing debate, there have been calls for a “comprehensive empirical literature addressing the settlement of investor-state disputes through ICSID arbitration.”<sup>115</sup> Thus far, the empirical literature specifically on ICSID has taken the form of descriptive statistics (sometimes gathered by ICSID),<sup>116</sup> the scope of legal reasoning,<sup>117</sup> and analysis of general jurisdictional outcomes.<sup>118</sup>

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from ICSID is a political question rather than a practical one.”).

110. Charles N. Brower & Stephan W. Schill, *Is Arbitration a Threat or a Boon to the Legitimacy of International Investment Law?*, 9 CHI. J. INT’L L. 471, 496 (2009); see also Mortenson, *supra* note 44, at 304–05 (discussing ICSID’s institutional expertise and legitimacy).

111. Caruba, *supra* note 83, at 141 (“In the past several years, a number of ICSID awards have clearly demonstrated that ICSID is taking measured steps in response to two major criticisms frequently leveled by public interest advocates against arbitration, that is, secretiveness and institutional bias.”).

112. Perry, *supra* note 91 (quoting Yves Fortier) (internal quotation marks omitted).

113. Toulson, *supra* note 91 (quoting Albert Jan van den Berg); see also *id.* (suggesting that van den Berg believes the critiques “are totally contrary to my experience at ICSID”); *id.* (quoting Emmanuel Gaillard as saying the annulment decision was “ill conceived on every account” and suggesting that “the tone and wording of the decision [were] ‘extremely questionable’”); Perry, note 90 (quoting Doak Bishop to suggest that the *Vivendi* annulment decision contained “‘gratuitous and harsh’ criticism of [a] Swiss arbitrator” involved in the dispute).

114. V.V. Veeder, “*Why Bother and Why it Matters*,” NEWS & NOTES, (Inst. for Transnat’l Arb., Plano, Tex.), Summer 2006, at 2.

115. McArthur & Ormachea, *supra* note 46, at 561.

116. See e.g., ICSID, *International Centre for Settlement of Investment Disputes: Stakeholder Survey* (Oct. 2004), <http://tinyurl.com/4nfssb7>; ICSID, *Statistics, 2011*, *supra* note 54; see also Franck, *supra* note 15, at 38–41.

117. Ole Kristian Fauchald, *The Legal Reasoning of ICSID Tribunals — An Empirical Analysis*, 19 EUR. J. INT’L L. 301 (2008).

There has been some general research on outcomes of investment arbitration,<sup>119</sup> as well as a specific call to consider “whether there are other differences associated with each type of arbitral forum. For example, it would be useful to consider whether investors or governments were more or less likely to win in one venue or another . . . [or whether awards] were higher with a particular type of institution.”<sup>120</sup> Unfortunately, this gap has not yet been addressed. There is still no analysis of ICSID-specific amounts in dispute or substantive outcomes that evaluates possible systemic differences based upon aggregate data and assesses claims about ICSID’s bias.

Such a gap in the literature is perhaps unsurprising given the challenges related to reliable data collection and the establishment of a comparative baseline against which to measure ICSID conduct. As IIAs do not necessarily permit national court litigation, there is no public record of investors choosing national court litigation over ITA for the resolution of IIA claims. The gap may also be unsurprising since national court litigation permits states to invoke sovereign immunity or political question doctrines to quash claims. There may also be other concerns related to adjudicative independence and neutrality. These factors suggest that national court litigation may not provide an appropriate comparative baseline for an assessment of ITA generally and ICSID in particular. Similarly, although investment claims can be brought before the International Court of Justice (ICJ) on the basis of a state-to-state mechanism, there may not be a meaningful comparative baseline given the different legal standards, population size, or existence of selection bias that may derive from states’ election to espouse claims strategically.<sup>121</sup> Although a useful comparison might consider the treatment of investor-state investment disputes from *ad hoc* mixed-claims tribunals, the Iran-U.S. Claims Tribunal is probably the only tribunal with a sufficiently large number of claims to compare. Unfortunately, there is no pre-existing source of reliably coded data and

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118. McArthur & Ormachea, *supra* note 46; W. Michael Tupman, *Case Studies in the Jurisdiction of the International Centre for Settlement of Investment Disputes*, 35 INT’L & COMP. L.Q. 813 (1986).

119. Franck, *supra* note 23; Franck, *supra* note 15; *see also* Daphna Kapeliuk, *The Repeat Appointment Factor: Exploring Decision Patterns of Elite Investment Arbitrators*, 96 CORNELL L. REV. 47 (2010).

120. Franck, *supra* note 15, at 41.

121. The author is unaware of a database that specifically compiles information on investment-related cases before the ICJ. Rather, the typical sources might be the databases that provide access to ICJ decisions as a general matter, such as those in Westlaw, Lexis, or on the ICJ website itself. *See, e.g.*, Lyonette Louis-Jacques, *Gaps in International Legal Literature: A Skeptical Reappraisal*, 35 SYRACUSE J. INT’L. L. & COM. 363, 366 (2008) (addressing the availability of ICJ cases in certain formats); Mirela Roznovschi, *Building an Electronic Law Library in a Foreign Country*, 24 INT’L J. LEGAL INFO. 161, 190 (1996).

variables. Moreover, the tribunal's unique activities and limited scope over disputes involving only U.S. and Iranian investors may confine the external validity of the data and inhibit its suitability for comparison. Future research, however, might usefully consider the creation of a database to provide meaningful and useful comparisons with ITA.

There are, however, comparable data in a pre-existing dataset that consists of ITA awards from ICSID and other forums. This will permit direct comparison of ICSID cases to an analogous set of cases: ITA disputes arising in non-ICSID venues, including the SCC and *ad hoc* arbitrations under UNCITRAL rules. This Article uses that data to explore variance related to ICSID and its arbitration awards. This is only one of multiple ways to assess ICSID, and future research might usefully explore ICSID-related differences in the post-award phase (such as in *ad hoc* annulment committees, attempts to vacate awards, and court enforcement of awards). While research that conducts this analysis will necessarily be limited to comparing across arbitral forums to look for meaningful differences across categories, it has the virtue of comparing apples with apples — namely, investment treaty disputes arising under a roughly equivalent legal framework.<sup>122</sup>

### III. EMPIRICAL ANALYSIS: INSTITUTIONAL COMPARISONS

Previous empirical research provided basic descriptive information and associative hypothesis testing related to ITA in general. This sets the stage for a more refined analysis. This Part therefore provides a preliminary overview and then tests a series of hypotheses related to ICSID. Although those raising the possibility of ICSID bias have not operationalized “bias,” this Article defines bias as a critical aspect of a dispute — namely, the starting or ending point of adjudication<sup>123</sup> — that

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122. See NEWCOMBE & PARADELL, *supra* note 78 (providing an overview of international treaty law); STEPHAN W. SCHILL, *THE MULTILATERALIZATION OF INTERNATIONAL INVESTMENT LAW* (2009) (describing the emergence of a multilateral system of investment protection on the basis of bilateral treaties); see also Michael Feit, *Responsibility of the State Under International Law for the Breach of Contract Committed by a State-Owned Entity*, 28 BERKELEY J. INT'L L. 142, 168 (2010) (“[M]ost investment treaties share the same basic principles. However, investment treaties are not identical and may vary quite substantially with regard to the formulations . . .”) (footnote omitted); Jason Webb Yackee, *Conceptual Difficulties in the Empirical Study of Bilateral Investment Treaties*, 33 BROOK. J. INT'L L. 405 (2008).

123. The starting point (namely amounts claimed) and ending points (outcomes and amounts awarded) are theoretically useful aspects to evaluate as a moment where perceptions of bias may be formed or confirmed. Cognitive psychology suggests that the primacy effect can affect our perceptions as data that we encounter at the outset of an event can shape future perceptions by weighting the importance of early evidence more heavily. JONATHAN BARON, *THINKING AND DECIDING* 205–07 (4th ed. 2008). Likewise, cognitive biases such as the recency effect create disproportionate weight on the last pieces of information. *Id.* at 206; Joseph N. Scudder, *Social Sciences Approaches to Persuasion*, in CHARLES U. LARSON, *PERSUASION: RECEPTION AND*

exhibits a substantial difference in different adjudicative forums. The theoretical hope was that, given a rough doctrinal equivalence of procedural rules and applicable law, there should be reasonable equivalence across adjudicative forums.

The first set of hypotheses therefore address, as a general matter, whether ICSID awards fundamentally differed from non-ICSID awards in amounts claimed and ultimate outcome. The second set of hypotheses then considers three variables and whether there was any reliable relationship with ICSID and amounts claimed or ultimate outcome. Specifically, this Article explores the role of Energy disputes, the presence of Latin American respondents, and a respondent state's Development Status to assess whether any meaningful differences were attributable to ICSID.

This research operationalized the independent variable "ICSID Status" in two ways. First, ICSID Status was a categorical variable that distinguished between all cases at ICSID, including both ICSID Convention and ICSID Additional Facility cases (ICSID-ALL), and all other disputes, namely cases arising under the SCC, UNCITRAL, or other *ad hoc* rules. This measure ensures that the independent variable takes into account those disputes where ICSID arguably retains oversight over procedural aspects of the case. Second, ICSID Status was operationalized as a categorical variable differentiating between those cases arising exclusively under the ICSID Convention (ICSID-C) as compared to awards requiring enforcement through the New York Convention, including ICSID Additional Facility (ICSID-AF), SCC, UNCITRAL, and other *ad hoc* rules.<sup>124</sup> This measure takes into account ICSID's relationship to the dispute but demarcates the underlying doctrinal basis for arbitration and enforcement.

#### A. Data & Analysis

Based upon existing archival data coding investment treaty awards publicly available prior to 2007,<sup>125</sup> research indicated that of the eighty-two cases in which an award had been rendered, nearly 75% were rendered at ICSID (59.8% ICSID Convention and 14.6% ICSID Additional Facility),<sup>126</sup> and the remaining 25.6% were resolved under either SCC or other *ad hoc* rules.<sup>127</sup>

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RESPONSIBILITY 91, 100–02 (12th ed. 2010).

124. See *infra* note 139 (using this definition of ICSID Status for the independent variables).

125. The data used to conduct the analyses came from the population of 102 investment treaty awards from eighty-two cases that were publicly available before June 1, 2006. Franck, *supra* note 15, at 24. Research is underway to create a second-generation database that expands upon this initial dataset. *Id.* at 52.

126. *Id.* at 40. *But see id.* at 40 n.172 (acknowledging that one ICSID-AF case was not

For the fifty-two final awards in that subset of the population, the data refuted the general conception that ITA was biased in favor of investors. The general data showed that, for the fifty-two cases resulting in final awards, (1) states won 57.69% of those cases; (2) investors won 38.46% of those cases; and (3) 3.85% memorialized settlement agreements.<sup>128</sup> That research suggested that there was generally<sup>129</sup> no reliable statistical relationship between the development background of

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rendered at ICSID but the parties agreed to use ICSID-AF rules).

127. *Id.* at 40.

128. *Id.* at 49–50, 73. Previous research using different datasets and different measurements has largely replicated this finding. See UNCTAD, *IIA Issues Note No. 1: Latest Developments in Investor-State Dispute Settlement*, at 3, UNCTAD Doc. UNCTAD/WEB/DIAE/IA/2010/3 (2010) (“[B]y the end of 2009, 164 cases had been brought to conclusion. Out of these, 38 per cent were decided in favour of the State (62) and 29 per cent in favour of the investor (47), while 34 per cent (55) cases were settled.”); Linda A. Ahee & Richard E. Walck, *ICSID Arbitration in 2009*, 7 *TRANSNAT’L DISP. MGMT.* (Apr. 2010) (“Claimants were successful in less than one-half of the matters that went to an award . . . .”); Kapeliuk, *supra* note 119, at 81 (suggesting that for an analysis focused on “elite” arbitrators, tribunals denied recovery to claims in 60.5% of the cases and only 7% of investors were awarded 100% of amounts claimed); see also Kassi D. Tallent, *State Responsibility by the Numbers: Towards an Understanding of the Prevalence of the Latin America Countries in Investment Arbitration*, 8 *TRANSNAT’L DISP. MGMT.* (Feb. 2011).

129. Given the limited dataset, defined measures, and statistical models, follow-up tests that suggested that tribunals with a presiding arbitrator from a developing country (when considered as a function of the World Bank Status of their country of nationality) sometimes favored respondents from the developed world over some subsets of respondents from the developing world, see Franck, *supra* note 23, at 471–74, should be approached with caution.

the respondent state<sup>130</sup> and case outcome, whether as a function of winning or losing<sup>131</sup> or the amounts awarded.<sup>132</sup>

This Article focuses upon data from ICSID awards<sup>133</sup> rather than other aspects of ICSID case management.<sup>134</sup> Given the particular

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130. Previous research defined the independent variable, “Development Status,” in two ways: (1) as a two-category variable (OECD status) based upon a respondent’s membership in OECD, and (2) as a “more nuanced” four-category variable (World Bank Status) based upon pre-existing categories from the World Bank. *Id.* at 455. Recognizing that there may be other indicators of development, this Article adopts the definitions and uses the variables “OECD Status” and “World Bank Status” previously operationalized in Franck, *supra* note 23.

As the dataset used in this current analysis closed during the summer of 2006, the categories of OECD and World Bank Status were created and defined at that time. *Id.* at 455 nn.110 & 112; Franck, *supra* note 15, at 28 n.125, 29 n.127. Variables are therefore limited to four categories for World Bank Status and two for OECD Status, which means that Mexico was an Upper-Middle Income state and OECD Member whereas the Czech Republic was a High Income state and an OECD Member. The choice to adopt categorical definitions used by other researchers was in accordance with established social science protocols and proper, as even the World Trade Organization does not provide a definition for “Development Status.” See KING ET AL., *supra* note 15, at 157 (“Our advice [when coding information] is, first, to try to use judgments made for entirely different purposes by *other researchers* [to avoid the risk of subjective measurement error].”) (emphasis in original); Jeswald W. Salacuse & Nicholas P. Sullivan, *Do BITs Really Work?: An Evaluation of Bilateral Investment Treaties and Their Grand Bargain*, 46 HARV. INT’L L.J. 67, 104–15 (2005) (using OECD membership as a proxy for development); Mary Hallward-Driemeier, *Do Bilateral Investment Treaties Attract FDI? Only a Bit . . . and They Could Bite* 8, 9, 11–12 (World Bank, Policy Research Working Paper No. 3121, 2003), available at <http://tinyurl.com/4ggql45> (referring to “rich OECD countries,” distinguishing between OECD members and “developing countries,” and analyzing FDI flows “from OECD countries to developing country hosts”).

131. Franck, *supra* note 23, at 460–64. The “ultimate win” dependent variable was defined as a function of whether the tribunal awarded US\$0 for a treaty breach (government win) or more than US\$0 for a treaty breach (investor win). *Id.* at 456. This Article adopts that definition of “ultimate win.”

132. *Id.* at 465–71. This dependent variable was a quantitative variable that was analyzed with raw and winsorized data. *Id.* at 456–57. This Article adopts those same variables and definitions, which use the date of the actual award. See *id.* at 454 n.105 (relying on the dataset referred to in Franck, *supra* note 15); see also Franck, *supra* note 15, at 22 n.98 (stating that a single website was used to convert the foreign currencies into a U.S. dollar amount with “the date of the award as the relevant conversion date” to create a common currency). The skewness of amounts awarded in the pre-2007 dataset was: (1) raw data = 5.311, (2) winsorized data = 1.414, (3) log = 0.506, and (4) inverse = -0.404; and the standard error for the skewness was 0.330. Although raw data reflected real dollars awarded, its skewing (over 5.0) mean it should not be analyzed in isolation. The lower skewing (i.e. closer to 0.00) for the winsorized, logged, and inverse data generally mean that their use was preferable for analysis.

133. As the dataset focuses on awards, this necessarily excludes analysis of other ICSID decisions, such as applications for provisional measures or the decisions of *ad hoc* annulment committees. See Franck, *supra* note 15, at 20–21, 24 (describing the unit of analysis in the dataset). As these procedural steps are critical and the annulment decisions are an area of rising controversy, see *supra* notes 90–92, 112–13, future research on these issues could provide fruitful analysis for assessing ICSID.

134. This meant there was no assessment of qualitative aspects, including a variable to measure investors’, states’, counsel’s, and arbitrators’ satisfaction with aspects of the ICSID process, or a comparison with alternative dispute resolution venues. It also means that this research did not assess ICSID’s normative and doctrinal foundations related to award

interest in ICSID outcomes, it is useful to offer descriptive data about the subset of the fifty-two final awards that were the subject of analysis. Overall, the percentage of final awards involving ICSID was reasonably similar to the overall pre-2007 population of awards, albeit with a slightly smaller proportion of ICSID Convention awards and slightly larger proportions of ICSID Additional Facility and non-ICSID awards.<sup>135</sup> See Table 1.

TABLE 1: BREAKDOWN OF FINAL AWARDS AS A FUNCTION OF ICSID STATUS

Applicable Rules	Frequency	Percentage
ICSID Convention	24	46.2
ICSID Additional Facility	11	21.1
Other (UNCITRAL, SCC, etc.)	17	32.7
<i>Total</i>	52	100.0

#### B. General Differences Between ICSID & Non-ICSID Awards

Given suggestions of ICSID bias,<sup>136</sup> it is appropriate to examine how ICSID cases differ on amounts claimed and ultimate outcomes. The objective is to consider indicators of bias by evaluating whether there was a meaningful difference in amounts at risk and whether there were any meaningful differences in outcome. Arguably, arbitration doctrine, rules, and presumably the pool of arbitrators are functionally equivalent for ICSID and non-ICSID disputes.<sup>137</sup> Doctrinally, there is little basis for suggesting that ICSID's procedural framework for adjudicating cases through arbitration—whether for ICSID Convention or Additional Facility cases—should create a different substantive result.<sup>138</sup> Accordingly, the research hypotheses were that there would be

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jurisprudence, which is the province of more traditional legal scholarship.

135. A detailed breakdown of the fifty-two final awards indicated there were twenty-four ICSID Convention awards (46.15%), eleven ICSID Additional Facility awards (21.15%), eleven UNCITRAL awards (21.15%), five SCC awards (9.62%), and one other award (1.92%).

136. See *supra* Part II.C.

137. Although there is variation in some sub-issues, as a general matter, there is textual similarity and harmonization among arbitration rules for ICSID Convention, ICSID Additional Facility, SCC, and UNCITRAL. See Cedric C. Chao & James Shurz, Commentary, *International Arbitration: Selecting The Proper Forum*, 22-2 MEALEY'S INT'L ARB. REP. 17 (2007); Parra, *supra* note 47, at 54–56.

138. The main difference is doctrinal in that ICSID Convention awards have self-contained and exclusive ICSID Convention enforcement mechanisms, whereas other awards rely on New

no reliable statistical relationship between ICSID and either amounts claimed or substantive outcomes. The objective was to evaluate whether the aspirational hope was falsifiable.

The independent variable was ICSID Status as defined previously.<sup>139</sup> The dependent variables were (1) amounts claimed,<sup>140</sup> (2) ultimate winner,<sup>141</sup> and (3) amounts awarded.<sup>142</sup> Using models tested in previous scholarship,<sup>143</sup> this study analyzed the data using an analysis of variance (ANOVA)<sup>144</sup> and a Pearson's Chi-square Test of Independence (Chi-square).<sup>145</sup>

### 1. *Amounts Claimed*

Research used one-way ANOVA for independent groups to compare the means of amounts claimed for ICSID versus non-ICSID cases.<sup>146</sup> As hypothesized, the results of the tests did not find a reliable statistical relationship between amounts claimed and ICSID Status. This held true irrespective of whether ICSID Status compared amounts for ICSID-ALL<sup>147</sup> or ICSID-C<sup>148</sup> awards. To contextualize the raw data,

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York Convention enforcement. *See supra* notes 40–41 and accompanying text. Other major doctrinal differences involve the ICSID Secretariat's authority to avoid registering cases with a "manifest" lack of jurisdiction, the capacity to resolve cases at an early stage, and the power to accept amicus submissions. These procedural aspects arguably have minimal impact on substantive outcomes, as they do not affect the underlying legal merits of the dispute.

139. *See supra* notes 123–24 (defining ICSID Status as: (1) "ICSID-ALL" that compared all ICSID cases (including ICSID Convention and Additional Facility) against cases in other arbitral venues, and (2) "ICSID-C," namely ICSID Convention versus other New York Convention awards (i.e., ICSID Additional Facility, SCC, and other venues)).

140. Previous research analyzed raw values of amounts claimed, and those amounts were based upon a subset of forty-four final awards that contained data about claimed amounts. Franck, *supra* note 15, at 57–59. The original skewness of the raw claimed damages was 6.792, which was large. After winsorizing, the skewness for claimed amounts was –1.034; after log transformations, the skewness was 0.088. Reliance on the log transformation is most appropriate as it reduces the skewness and promotes analysis of data that most closely conform to the underlying assumption of the statistical tests (i.e., normally distributed data) and enhances statistical conclusion validity. This research therefore analyzed raw data, winsorized data, and transformed data. *See also* Franck, *supra* note 23 at 456–57 (analyzing raw and winsorized data to enhance statistical conclusion validity and allowing the analyses to operate more effectively); Franck, *supra* note 14 (analyzing raw, winsorized and transformed data for amounts claimed).

141. *See supra* note 131 and accompanying text.

142. *See supra* note 132 and accompanying text.

143. *See generally* Franck, *supra* note 23 (prior use of models).

144. An ANOVA analysis compares the means of two or more groups on a dependent variable to determine if the group means are significantly different from each other. TIMOTHY C. URDAN, STATISTICS IN PLAIN ENGLISH 101–02, 117–18 (2d ed. 2005).

145. The Pearson's Chi-square ( $\chi^2$ ) test evaluates whether there is a pattern of relationship between two categorical variables or whether the variables appear to be independent and unrelated. *Id.* at 161–63.

146. Of the eighty-two different cases in the dataset, forty-four cases quantified investors' claimed damages either fully or partially. Franck, *supra* note 15, at 58.

147. For raw data comparing differences in ICSID-ALL cases, there was no significant

this means that for ICSID Convention and ICSID Additional Facility disputes, the mean amount claimed was US\$424,615,349,<sup>149</sup> whereas the mean amount claimed for non-ICSID cases was US\$169,463,547.<sup>150</sup> While visually striking, the mean difference did not differ from what one would otherwise expect due to chance alone. The generally small effect sizes ( $r < 0.10$ ) also suggest it is unlikely that the lack of relationship between ICSID Status and amount claimed resulted from an underpowered sample or an effect is simply so tiny that it may be difficult to justify resources to research the effect.<sup>151</sup> Nevertheless, out of an abundance of caution, it would be prudent to replicate this aspect of research before making definitive inferences beyond the dataset to the current population.

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difference ( $F(1,43) = 0.308$ ;  $p = 0.58$ ;  $n = 44$ ) and the effect size was less than small ( $r = 0.08$ ). For winsorized data, there was no significant difference ( $F(1,43) = 1.103$ ;  $p = 0.30$ ;  $n = 44$ ), and the effect size was small ( $r = 0.16$ ). For transformed data, there was no significant difference ( $F(1,43) = 0.134$ ;  $p = 0.72$ ;  $n = 44$ ), and the effect size was less than small ( $r = 0.06$ ).

148. For raw data comparing differences in ICSID-C cases, there was no significant difference ( $F(1,43) = 0.911$ ;  $p = 0.35$ ;  $n = 44$ ), and the effect size was small ( $r = 0.14$ ). For winsorized data, there was no difference ( $F(1,43) = 0.012$ ;  $p = 0.91$ ;  $n = 44$ ), and the effect size was less than small ( $r = 0.02$ ). For transformed data, there was no difference ( $F(1,43) = 0.068$ ;  $p = 0.80$ ;  $n = 44$ ), and the effect size was less than small ( $r = 0.04$ ).

149. The standard deviation for the raw mean of ICSID cases in the ICSID-ALL analysis was US\$170,089,435 ( $n = 30$ ). For ICSID-C cases in the ICSID-C analysis, the mean amount claimed was US\$537,501,194.85 ( $SD = 1,938,099,681$ ;  $n = 23$ ).

150. The standard deviation for the raw mean of non-ICSID cases in the ICSID-ALL analysis was US\$268,385,246 ( $n = 14$ ). For New York Convention awards in the ICSID-C analysis, the mean amount claimed was US\$130,877,269 ( $SD = 224,054,789$ ;  $n = 21$ ).

151. Effect sizes estimate the risk of missing a reliable statistical relationship, find the sample size necessary to assess reliably whether a statistical relationship exists, and measure the magnitude of a potential effect. See Franck, *supra* note 23, at 457–58, 461 n.132. Cohen's conventions for understanding effect sizes suggest a "small" effect is  $r = 0.10$ , a "medium" effect is  $r = 0.30$ , and a "large" effect  $r = 0.50$ . Effect sizes below  $r = 0.10$  are less than "small" and arguably of trivial impact. JACOB COHEN, STATISTICAL POWER ANALYSIS FOR THE BEHAVIORAL SCIENCES 124 (2d ed. 1988); LOUIS COHEN ET AL., RESEARCH METHODS IN EDUCATION 113–16 (6th ed. 2007); see also FREDERICK J. GRAVETTER & LARRY B. WALLNAU, ESSENTIALS OF STATISTICS FOR THE BEHAVIORAL SCIENCES 198–201, 345–48 (6th ed. 2007) (describing Type-I and Type-II errors and explaining ANOVA formulas); see generally PAUL D. ELLIS, THE ESSENTIAL GUIDE TO EFFECT SIZES: AN INTRODUCTION TO STATISTICAL POWER, META-ANALYSIS AND THE INTERPRETATION OF RESEARCH RESULTS (2010); Jacob Cohen, *A Power Primer*, PSYCHOLOGICAL BULLETIN 112, 155 (1992). For the ICSID-ALL and ICSID-C analyses conducted in notes 147 and 148, *post hoc* power analyses suggests power was in the order of 0.20 and risk of a Type-II error was in the order of 80%. For those less than small effect sizes ( $r < 0.10$ ), the results were likely not a function of power or may simply be so small that it will be difficult to justify resources to research the issue. For the two analyses with a small effect ( $r = 0.14$  and  $0.16$ ), the risk of error from an underpowered sample for inferences beyond the dataset analyzed indicates replication is warranted.

## 2. *Ultimate Winner*

To analyze the ultimate outcome, the research used a  $2 \times 3$  cross-tabulation to see if there was a reliable relationship between ICSID Status and the ultimate outcome of ITA awards. As hypothesized, the results demonstrated that for ICSID-ALL awards, there was no significant pattern of relationship between the ultimate winner of a dispute and whether disputes were brought before ICSID or another forum ( $\chi^2(2) = 0.241$ ;  $p = 0.56$ ;  $n = 52$ ).<sup>152</sup> Follow-up  $2 \times 2$  cross-tabulations likewise revealed no significant patterns of relationship based upon ICSID-ALL and case outcome.<sup>153</sup> See Table 2. There was also no significant relationship when comparing outcomes for ICSID-C versus New York Convention awards, either as a function of the Omnibus Chi-Square<sup>154</sup> or the  $2 \times 2$  follow-up comparisons.<sup>155</sup> The lack of a relationship between ICSID Status and the ultimate winner remained even after removing awards codifying settlement agreements.<sup>156</sup> Given the less than small effect sizes ( $r < 0.10$ ), the failure to find a meaningful pattern of relationship may not be a function of an underpowered sample or an effect is simply so tiny that it may be difficult to justify resources to research the effect. Nevertheless, out of an abundance of caution and given that certain follow-up analyses suggested the presence of a possible small-to-medium effect<sup>157</sup> beyond

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152. The effect size for this analysis was less than small ( $r = 0.07$ ), which suggests that the result is likely not a function of an underpowered sample or may be so small that it will be difficult to justify resources to research the issue given the lack of a statistically significant effect and miniscule effect size.

153. For the  $2 \times 2$  comparing ICSID-all and investor and government wins, there was no pattern of relationship ( $\chi^2(1) = 1.797$ ;  $p = 0.18$ ;  $n = 50$ ;  $r = 0.19$ ). For the  $2 \times 2$  comparing ICSID-ALL and investor wins and settlements, there was no pattern of relationship ( $\chi^2(1) = 1.523$ ;  $p = 0.22$ ;  $n = 22$ ;  $r = 0.26$ ). For the  $2 \times 2$  comparing ICSID-ALL and government wins and settlement, there was no pattern of relationship ( $\chi^2(1) = 0.711$ ;  $p = 0.40$ ;  $n = 32$ ;  $r = 0.15$ ). As the effect sizes are in the small-to-medium range, replication of the analyses is warranted, particularly as *post hoc* power analyses suggest that the power of the analyses models ranges from 0.20–0.30 and the related risk of Type-II error is in the 70–80% range.

154. For the omnibus analysis, there was no pattern of relationship ( $\chi^2(2) = 0.781$ ;  $p = 0.61$ ;  $n = 52$ ), and the effect size for this was small ( $r = 0.12$ ).

155. For the  $2 \times 2$  comparing ICSID-C and investor and government wins, there was no pattern of relationship ( $\chi^2(1) = 0.483$ ;  $p = 0.49$ ;  $n = 50$ ;  $r = 0.10$ ). For the  $2 \times 2$  comparing ICSID-C and investor wins and settlements, there was no pattern of relationship ( $\chi^2(1) = 0.08$ ;  $p = 0.78$ ;  $n = 22$ ;  $r = 0.06$ ). For the  $2 \times 2$  comparing ICSID-C and government wins and settlement, there was no pattern of relationship ( $\chi^2(1) = 0.001$ ;  $p = 0.99$ ;  $n = 32$ ;  $r < 0.01$ ). As the effect sizes for all of these calculations are small ( $r = 0.10$ ) or less than small, it suggests the result is likely not a function of an underpowered sample or an effect is simply so tiny that it may be difficult to justify resources to research the effect.

156. See *supra* notes 153, 155 (demonstrating a lack of relationship in the  $2 \times 2$  analyses that examined differences purely between investor and government wins).

157. For those analyses in notes 153, 154, and 155 where  $r > 0.10$ , the power ranged from 0.20–0.30, which indicates there is a 70–80% risk of a Type-II error when attempting to make

the pre-2007 population analyzed here, the low power and related risk of error suggests that it would be prudent to replicate this aspect of research before making conclusive inferences about the current population.

TABLE 2: ICSID STATUS OF AWARD & FREQUENCY BREAKDOWN OF THE ULTIMATE WINNER OF AN INVESTMENT TREATY ARBITRATION CASE

	Investor Win	Government Win	Settlement Award	Total
ICSID Convention & Additional Facility	11	22	2	35
Other Awards (SCC, UNCITRAL, etc.)	9	8	0	17
<i>Total</i>	20	30	2	52

\* *None of the observed frequencies differed from what would be expected due to chance.*

### 3. Amounts Awarded

As another way to analyze whether ICSID is linked to arbitration outcome, the research used a one-way ANOVA for independent groups to compare the mean amount awarded in ICSID versus non-ICSID cases. As hypothesized, there was no reliable statistical relationship between the mean amount awarded and resolving an ITA dispute at ICSID or at some other forum. This was true irrespective of whether the tests looked at aggregated ICSID awards (ICSID-ALL)<sup>158</sup> or ICSID Convention awards (ICSID-C).<sup>159</sup> As an example, using winsorized

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inferences beyond the pre-2007 population. Replication with expanded data and statistical control is therefore warranted.

158. For raw data, there was no significant difference ( $F(1,50) = 1.576$ ;  $p = 0.22$ ;  $n = 52$ ), and the effect size was small ( $r = 0.18$ ). For winsorized data, there was no significant difference ( $F(1,50) = 0.183$ ;  $p = 0.67$ ;  $n = 52$ ), and the effect size was less than small ( $r = 0.06$ ). For the log-transformed data, there was no significant difference ( $F(1,50) = 1.529$ ;  $p = 0.22$ ;  $n = 52$ ), and the effect size was small ( $r = 0.17$ ). For inverse-transformed data, there was no significant difference ( $F(1,50) = 1.643$ ;  $p = 0.21$ ;  $n = 52$ ), and the effect size was likewise small ( $r = 0.18$ ). For the analyses where  $r = 0.18$  or  $0.17$  and  $n = 52$ , the power was between 0.20 and 0.30, which suggests a Type-II error rate of 70–80% that warrants replication of the analysis before drawing inferences beyond the pre-2007 population.

159. For raw data, there was no significant difference ( $F(1,50) = 0.324$ ;  $p = 0.57$ ;  $n = 52$ ), and the effect size was less than small ( $r = 0.08$ ). For winsorized data, there was no significant difference ( $F(1,50) = 0.028$ ;  $p = 0.87$ ;  $n = 52$ ), and the effect size was less than small ( $r = 0.02$ ). For the log-transformed data, there was no significant difference ( $F(1,50) = 0.158$ ;  $p = 0.69$ ;  $n = 52$ ), and the effect size was less than small ( $r = 0.06$ ). For inverse-transformed data, there was

data,<sup>160</sup> the mean amount awarded for ICSID Convention and ICSID Additional Facility disputes was US\$1,178,081 ( $n = 35$ ),<sup>161</sup> whereas the mean amount awarded in non-ICSID cases was US\$1,446,001 ( $n = 17$ ).<sup>162</sup> The lack of a reliable relationship between ICSID Status and amounts awarded means that ICSID could not be the statistical cause of the outcome for the dataset analyzed. Given the many miniscule effect sizes (technically defined as less than small as Cohen's conventions define a "small" effect as  $r = 0.10$ - $.29$ )<sup>163</sup> of the analyses, the failure to reject the null hypothesis may not purely be a function of an underpowered sample and the 70-80% risk of statistical error. It may be a byproduct of the fact that the relevant effect may simply be so small that it will be difficult to justify resources to pursue research on the effect. Nevertheless, the analyses on the pre-2007 population that used log- and inverse-transformed data suggested that there was a possibility of a small effect on ICSID-ALL outcomes ( $r = 0.17$  or  $0.18$ ). Thus, replication with additional statistical control would be prudent before making conclusive inferences about the current population based upon these initial findings.

#### 4. Discussion

All of the statistical analyses failed to identify a statistically significant pattern among ICSID Status, amounts claimed, or outcome. The consistency in these results and small to less than small effect sizes offer a uniform narrative. For the dataset studied from prior to 2007, the

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no significant difference ( $F(1,50) = 0.149$ ;  $p = 0.70$ ;  $n = 52$ ), and the effect size was also less than small ( $r = 0.06$ ). The power is technically below 0.20 and involves an 80% or higher risk of a Type-II error. Nevertheless, given the lack of statistically significant effects and uniformly less than small effect sizes, the results may not simply be the byproduct of a lack of power as the effects may be so small that it will be difficult to justify resources to research the effect.

160. If there are anomalies and outliers in the dataset, the data can be corrected in different ways, for example by using winsorizing or trimming procedures. Trimming involves removing a data point, and decisions to "remove a data point (or participant) should not be taken lightly." JOHN J. SHAUGNESSY, ET AL., RESEARCH METHODS IN PSYCHOLOGY 403 (7th ed. 2006). If data are winsorized, statistical procedures are used and the outlier is replaced with a data point that reflects the mean. See W.J. Dixon, *Simplified Estimation from Censored Normal Samples*, 31 ANNALS MATH. STAT. 385, 385 (1960). The winsorizing procedure allows all data points to be kept, while correcting for the skewness (i.e., either positive or negative) that the outlier would have had on the mean. Winsorizing here involved identifying and converting extreme values in data into the upper or lower bounds of the distribution of the normal curve. John W. Tukey, *The Future of Data Analysis*, 33 ANNALS MATH. STAT. 1, 18-19 (1962). The use of winsorized data was also preferable to trimmed data as the skewing of the trimmed data (2.437) was higher than that of the winsorized data (1.414). See also *supra* note 132.

161. Using the raw data for all ICSID cases, the mean award was US\$5,304,954 ( $SD = 22,532,273$ ;  $n = 35$ ).

162. Using the raw data from all non-ICSID administered cases, the mean award was US\$20,857,559 ( $SD = 66,406,812$ ;  $n = 17$ ).

163. See *supra* note 151.

tests did not support the hypothesis that ICSID awards were statistically different from other arbitration forums. The initial evidence of possible statistical equivalence — both at the initiation and the end of the primary adjudicative process — begins to undercut the argument that ICSID is somehow biased or that the arbitration process is unfairly tilted to favor either investors or states.

Although the pattern was not statistically significant — in contrast to the suggestions that investors benefitted by ICSID jurisdiction — state respondents at ICSID won almost twice as many cases. The small or less than small effect sizes for ICSID Status (typically  $r < 0.10$ )<sup>164</sup> suggest that, even though the null hypothesis (that is, no differences related to ICSID Status) must be retained for the pre-2007 population, the analyses may not be underpowered for making inferences beyond the dataset or the potential effects are simply so tiny that it may be difficult to justify resources to research the effect. The dataset was real-world data, and sample sizes could not have been increased to enhance statistical power because the awards represented the defined population with a prescribed timeframe. As a result, the initial probabilistic evidence undercuts assertions that investment arbitration “is not a fair, independent, and balanced method for the resolution of investment disputes.”<sup>165</sup>

Given the overall pattern of this general data, it seems reasonable to suggest that ICSID was not a forum where the outcomes of awards were predetermined or substantially different from other arbitral venues. This initial evidence also begins to undercut the case for radical overhaul or outright rejection of ICSID as an acceptable forum. Nevertheless, replication of these analyses, with additional data and more sophisticated models controlling for extraneous variance that may otherwise affect the validity of inferences, is sensible given the low power for the purpose of making inferences beyond the population studied. Replication would aid in the assessment of this pre-2007 baseline and increase our confidence in assessing whether the current population is evolving in a similar or markedly different manner.<sup>166</sup>

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164. The largest effect size related to follow-up analyses related to who won and lost ( $r = 0.26$ ). See *supra* note 153. In that instance, the power of the analysis is approximately 0.40 ( $N = 50$ ;  $S = 47$ ), which would suggest that the statistical probability that the null hypothesis has been improperly retained is approximately 60%. A liberal approach to an *a priori* power analysis ( $r = 0.80$ ;  $S = 120$ ) would suggest a sample size of  $N = 120$  could reliably detect a statistically significant effect. Using a more conservative *a priori* power analysis with the smallest effect size ( $r = 0.02$ ;  $S = 781$ ), *supra* note 159, a sample to catch the smallest effect would be 782.

165. Public Statement, *supra* note 10, ¶ 8.

166. Replication might also involve qualitative research with sound *ex ante* methodology to understand groups of cases with contextual nuances. Offering quantitative analysis with a holistic view is fundamental to having a balanced understanding of the system that minimizes the impact

C. *ICSID's Relationship with Energy Disputes, Latin American Respondents, and Development Status*

Given the basic nature of the foregoing models, to the extent the dataset size permits, it is prudent to control for other variables and to evaluate their possible contribution to both initial arbitration risk and actual outcome. This Section therefore analyzes how the dependent variables and ICSID Status relate to other independent variables, including (1) Energy disputes, (2) the presence of a Latin American respondent, and (3) the respondent state's Development Status.

1. *Energy Disputes*

Previous descriptive research identified that Energy disputes were the single largest proportion (23.17%) of ITA dataset.<sup>167</sup> Foreign investments in the energy sector can be high-value and long-term,<sup>168</sup> and investment treaty disputes can likewise involve large amounts.<sup>169</sup> Given the prevalence, potential value, and political sensitivity of energy disputes, it is helpful to ascertain whether "Energy"<sup>170</sup> disputes contributed meaningfully to the variance in ICSID outcomes. As analysis suggested there was no statistically meaningful difference in amounts claimed for Energy and non-Energy disputes,<sup>171</sup> the research

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of cognitive biases, such as confirmation bias, which inhibit an accurate understanding. See Jane Risen & Thomas Gilovich, *Informal Logical Fallacies*, in CRITICAL THINKING IN PSYCHOLOGY 110, 112–13 (Robert J. Sternberg et al., eds., 2007) (exploring logical fallacies, like confirmation bias, whereby people favor information that confirms their preconceptions to gather, analyze, and interpret information selectively to report their findings in a biased manner); see also BARON, *supra* note 123, at 171–77, 191–92, 221–27; Joshua Klayman, *Varieties of Confirmation Bias*, in DECISIONMAKING FROM A COGNITIVE PERSPECTIVE 385–95 (Jerome Busemeyer et al., eds. 1995) (discussing confirmation bias).

167. Franck, *supra* note 15, at 41–43.

168. PETER CAMERON, INTERNATIONAL ENERGY INVESTMENT LAW: THE PURSUIT OF STABILITY (2009); see also David Elward, *ICSID Releases New Caseload Stats*, GLOBAL ARB. REV., Sept. 5, 2010, <http://tinyurl.com/4lahhwf> (discussing the predominant scope of energy disputes at ICSID and describing how "energy sector [investments] typically involve substantial, long-term commitments"); *International Energy Investment Law: The Pursuit of Stability*, ICSID BLOG (Apr. 14, 2010, 10:17 PM), <http://tinyurl.com/4klwqa3> (discussing the "high value" of energy disputes).

169. Law firms have practice groups devoted to these disputes. See, e.g., *Energy Disputes: Overview*, HERBERT SMITH LLP, <http://tinyurl.com/4764yuw> (last visited Mar. 27, 2011) (describing practice in "high value" energy disputes).

170. This variable used the Code Book's definition of "Energy" disputes: "Infrastructure investments related to: (a) electricity generation, transmission, and distribution; (b) natural gas exploration, transmission or distribution; (c) oil exploration, transmission or distribution; and (d) dam construction and/or hydro-electric projects." Susan Franck, *Code Book – Empirical Analysis of Cost Shifting in Investment Treaty Arbitration*, <http://tinyurl.com/3lls6jw> (last visited Apr. 5, 2011) [hereinafter *Code Book*]. The presence of an Energy dispute was categorized as a binary variable (0 = *Non-Energy*; 1 = *Energy*).

171. Forty-four awards had either partial or complete data on amounts claimed. Using raw

hypothesis was that the presence of an Energy dispute, whether at ICSID or elsewhere, would not affect outcome.

Given that there is no prior literature about the intersection of Energy disputes and outcome, it is useful to provide preliminary analyses for Energy and outcome before conducting analyses to consider the relationship with ICSID. Two groups of tests analyzed the independent variables ICSID Status and Energy. Initial analyses used a Chi-square cross-tabulation to see if there was a statistically significant pattern of relationship between Energy disputes and the ultimate winner. A second test used an ANOVA  $2 \times 2$  between-subjects factorial design to analyze the effect of ICSID Status, Energy disputes, and their interaction on the mean amount awarded.

#### a. General Energy Outcomes

As hypothesized, the results did not reveal a statistically significant pattern of relationship between Energy disputes and outcome. Table 3 demonstrates that, irrespective of whether an Energy or non-Energy dispute was involved, investor wins, state wins, and settlement agreements were not statistically different ( $\chi^2(2) = 0.529$ ;  $p = 0.77$ ;  $n = 52$ ;  $r = 0.10$ ). Simple  $2 \times 2$  follow-up analyses confirmed that there was likewise no statistically meaningful difference for Energy disputes when comparing (1) investor and government wins ( $\chi^2 = 0.090$ ;  $p = 0.76$ ;  $n = 50$ ;  $r = 0.04$ ), (2) investor wins and settlements

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data, the mean amount claimed for Energy disputes was US\$156,669,038 ( $n = 8$ ;  $SD = 155,250,729$ ); the mean amount claimed for non-Energy disputes was US\$384,933,273 ( $n = 36$ ;  $SD = 1,557,895,347$ ); and a  $2 \times 2$  between groups ANOVA analyzing ICSID-ALL awards and Energy showed (1) no interaction between ICSID and Energy disputes on claimed amounts ( $F(1,40) = 0.005$ ;  $p = 0.94$ ;  $r = 0.01$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.124$ ;  $p = 0.73$ ;  $n = 44$ ;  $r = 0.06$ ), and (3) no main effect (i.e., the mean differences in claimed amounts were not statistically significant) for Energy ( $F(1,40) = 0.089$ ;  $p = 0.77$ ;  $n = 44$ ;  $r = 0.05$ ). Even follow-up comparisons ( $HSD = 1,253,440,256$ ;  $k = 4$ ) of cell means reflected no significant differences. Using winsorized data, the mean amount claimed for Energy disputes was US\$29,626,750 ( $n = 8$ ;  $SD = 13,663,780$ ); the mean amount claimed for non-Energy disputes was US\$27,555,641 ( $n = 36$ ;  $SD = 157,651,44$ ); and a  $2 \times 2$  between groups ANOVA analyzing ICSID-ALL and Energy showed (1) no interaction between ICSID Status and Energy on claimed amounts ( $F(1,40) = 0.461$ ;  $p = 0.50$ ;  $n = 44$ ;  $r = 0.11$ ), (2) no main effect for ICSID Status ( $F(1,40) = 1.702$ ;  $p = 0.20$ ;  $r = 0.20$ ), and (3) no main effect on amounts claimed as a result of the existence of an Energy dispute ( $F(1,40) = 0.224$ ;  $p = 0.64$ ;  $n = 44$ ;  $r = 0.08$ ). Follow-up comparisons ( $HSD = 17,699,481$ ;  $k = 4$ ) likewise reflected no significant differences across conditions. Transformed data likewise did not show a significant statistical effect of Energy on amounts claimed ( $F(1,40) = 0.413$ ;  $p = 0.52$ ;  $n = 44$ ;  $r = 0.10$ ) at either the macro-level or the micro-level after pairwise comparisons ( $HSD = 1.088$ ;  $k = 4$ ). Given that most of these analyses had an effect size of  $r < 0.10$ , the failure to reject the null hypothesis may not derive from an underpowered dataset. Given that two effect sizes for Energy disputes were small ( $r = 0.10$  for transformed data and  $r = 0.11$  for winsorized data) and that the power of those analyses are 0.20 with an 80% risk of a Type-II error, caution is warranted and replication required to assess the link between Energy disputes and amounts claimed for the current population.

( $\chi^2 = 0.488$ ;  $p = 0.49$ ;  $n = 22$ ;  $r = 0.15$ ), and (3) government wins and settlements ( $\chi^2 = 0.395$ ;  $p = 0.53$ ;  $n = 32$ ;  $r = 0.11$ ). In other words, statistical tests could not identify a reliable relationship between Energy and whether an investor won, a state won, or settlements. Nevertheless, given that two analyses suggested that a small effect may be present for Energy outcomes, for inferences beyond the pre-2007 population analyzed here,<sup>172</sup> it would be prudent to replicate these initial findings before making definitive conclusions about current population.

TABLE 3: ENERGY DISPUTES & FREQUENCY BREAKDOWN OF THE ULTIMATE WINNER OF AN INVESTMENT TREATY ARBITRATION CASE

	Investor Win	Government Win	Settlement Award	Total
Energy Disputes	4	5	0	9
Non-Energy Disputes	16	25	2	43
<i>Total</i>	20	30	2	52

\* None of the observed frequencies differed from what would be expected due to chance.

#### b. Energy & Amounts Awarded at ICSID

As regards the effect of Energy disputes on amounts awarded at ICSID or non-ICSID cases, an ANOVA revealed three things. First, using winsorized data, there was no statistically significant interaction among ICSID-ALL awards, Energy disputes, and the amounts tribunals awarded ( $F(1,48) = 0.929$ ;  $p = 0.34$ ;  $n = 52$ ;  $r = 0.14$ ).<sup>173</sup> Second, ICSID Status (that is, comparing all awards rendered at ICSID versus other non-ICSID arbitration venues) had no main effect on amounts tribunals awarded ( $F(1,48) = 0.842$ ;  $p = 0.36$ ;  $n = 52$ ;  $r = 0.13$ ).<sup>174</sup>

172. As many effect sizes were small or less than small ( $r < 0.10$ ), the results may not suffer from a power problem as the potential effect of Energy may be negligible. For the small effect sizes ( $r = 0.15$  and  $r = 0.10$ ), however, a *post hoc* power analysis suggests that the power was between 0.20–0.30, which suggests a 70–80% risk of a Type-II statistical error and a need for replication given an underpowered sample.

173. There was likewise no significant interaction with ICSID, Energy, and amounts awarded when analyzing ICSID Status as a function of ICSID-C versus New York Convention awards using raw data ( $F(1,48) = 0.908$ ;  $p = 0.35$ ;  $n = 52$ ;  $r = 0.14$ ), winsorized data ( $F(1,48) = 0.114$ ;  $p = 0.74$ ;  $n = 52$ ;  $r = 0.05$ ), log-transformed data ( $F(1,48) = 0.680$ ;  $p = 0.41$ ;  $n = 52$ ;  $r = 0.12$ ), or inverse-transformed data ( $F(1,48) = 0.929$ ;  $p = 0.34$ ;  $n = 52$ ;  $r = 0.14$ ).

174. There was likewise no main effect on amounts awarded for ICSID-C awards versus New York Convention awards when using raw data ( $F(1,48) = 0.043$ ;  $p = 0.84$ ;  $n = 52$ ;  $r = 0.03$ ), winsorized data ( $F(1,48) = 0.114$ ;  $p = 0.74$ ;  $n = 52$ ;  $r = 0.05$ ), log-transformed data ( $F(1,48) = 0.697$ ;  $p = 0.41$ ;  $n = 52$ ;  $r = 0.12$ ), or inverse-transformed data ( $F(1,48) = 0.842$ ;

Third, there was no main effect for the existence of an Energy dispute ( $F(1,48) = 0.025$ ;  $p = 0.88$ ;  $n = 52$ ;  $r = 0.02$ ).<sup>175</sup> Even follow-up comparisons ( $HSD = 2,260,112$ ;  $k = 4$ ) of the non-significant results did not reveal any latent differences in amounts awarded for different combinations of Energy disputes and ICSID Status.<sup>176</sup> Using raw data<sup>177</sup> with statistical outliers or two different types of transformed data with minimal skewing,<sup>178</sup> there was likewise no mean difference in the amount awarded, even conducting follow-up comparisons.<sup>179</sup> As hypothesized, the results could not identify that the mean amount awarded differed as a function of ICSID Status, the presence of an Energy dispute, or an interaction of those variables. See Table 4. Some of the analyses suggested possible small effects and exhibited a risk of a Type-II error beyond the standard acceptable rate of 20%. For the purposes of inferring beyond the pre-2007 population analyzed here,<sup>180</sup> it would therefore be prudent to replicate the research before making conclusive inferences about the current population based on these initial findings.

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$p = 0.36$ ;  $n = 52$ ;  $r = 0.13$ ).

175. When analyzing ICSID Status for ICSID-C versus New York Convention awards, there was likewise no main effect for Energy disputes when analyzing raw data ( $F(1,48) = 1.167$ ;  $p = 0.29$ ;  $n = 52$ ;  $r = 0.154$ ), winsorized data ( $F(1,48) = 0.423$ ;  $p = 0.52$ ;  $n = 52$ ;  $r = 0.09$ ), log-transformed data ( $F(1,48) = 0.198$ ;  $p = 0.66$ ;  $n = 52$ ;  $r = 0.06$ ), or inverse-transformed data ( $F(1,48) = 0.025$ ;  $p = 0.88$ ;  $n = 52$ ;  $r = 0.02$ ).

176. For ICSID-C awards, there were likewise no statistically significant simple effects when comparing cell means using winsorized data ( $HSD = 2,260,446$ ;  $k = 4$ ) or log-transformed data ( $HSD = 3.502$ ;  $k = 4$ ).

177. For raw data, there was no interaction ( $F(1,48) = 1.594$ ;  $p = 0.21$ ;  $n = 52$ ;  $r = 0.18$ ), no main effect for ICSID Status ( $F(1,48) = 0.012$ ;  $p = 0.92$ ;  $n = 52$ ;  $r = 0.02$ ), and no main effect for Energy ( $F(1,48) = 0.557$ ;  $p = 0.46$ ;  $n = 52$ ;  $r = 0.11$ ).

178. For the log transformations, there was no interaction ( $F(1,48) = 0.215$ ;  $p = 0.65$ ;  $n = 52$ ;  $r = 0.07$ ), no main effect for ICSID ( $F(1,48) = 1.390$ ;  $p = 0.24$ ;  $n = 52$ ;  $r = 0.17$ ), and no main effect for Energy ( $F(1,48) = 0.079$ ;  $p = 0.78$ ;  $n = 52$ ;  $r = 0.04$ ). For the inverse transformations, there was no interaction ( $F(1,48) = 0.296$ ;  $p = 0.59$ ;  $n = 52$ ;  $r = 0.08$ ), no main effect for ICSID ( $F(1,48) = 1.727$ ;  $p = 0.20$ ;  $n = 52$ ;  $r = 0.19$ ), and no main effect for Energy ( $F(1,48) < 0.001$ ;  $p = 0.99$ ;  $n = 52$ ;  $r < 0.01$ ).

179. For raw ( $HSD = 43,985,527$ ;  $k = 4$ ) data, the log-transformed data ( $HSD = 3.479$ ;  $k = 4$ ) and the inverse-transformed data ( $HSD = 0.526$ ;  $k = 4$ ) analyzing ICSID-ALL awards, no simple effects were present when comparing cell means.

180. The effects that were present had  $r$  values that ranged from 0.12–.18, which meant the power ranged from below 0.20–.30, suggesting a 70% or greater risk of a Type-II error. Many of the effect sizes, however, were less than small ( $r < 0.10$ ), which suggests those analyses may not necessarily simply suffer from a lack of statistical power or may be so small as to not justify future research.

TABLE 4: WINSORIZED DATA OF MEAN AMOUNT OF DAMAGES AWARDED BY INVESTMENT TREATY TRIBUNALS AS A FUNCTION OF ICSID STATUS & PRESENCE OF AN ENERGY DISPUTE ( $n = 52$ )

ICSID Status	Energy Dispute Present	Amount		Total
		Mean	Standard Deviation	
ICSID Convention & Additional Facility	Energy	1,418,884	2,837,769	4
	Non-Energy	1,147,010	2,112,406	31
Other Awards (SCC, UNCITRAL, etc.)	Energy	1,954,707	2,407,804	5
	Non-Energy	1,234,041	1,923,250	12

Table 3 indicated that there was no reliable relationship between Energy disputes and outcome of investment arbitration generally. Rather, the number of investor and state wins in Energy disputes was relatively balanced. Similarly, no strong trends appeared in Table 4. Irrespective of ICSID's involvement, the models could not prove that the amounts awarded were statistically different regardless of whether disputes were Energy or non-Energy. Likewise, the models did not demonstrate that ICSID tribunals or tribunals in other venues exhibited statistically different awards in Energy and non-Energy cases. Although Energy disputes had numerically higher amounts awarded, this difference was not statistically meaningful.

### c. Discussion

None of the statistical analyses could ascertain a statistically meaningful difference in relationships involving ICSID Status, Energy disputes, and arbitration awards. The consistency in results and small effect sizes for this pre-2007 data offered a uniform narrative: The outcomes for Energy disputes were not statistically different, regardless of whether the dispute was adjudicated at ICSID or another arbitral forum. The initial evidence from the dataset suggests that awards at ICSID and other venues were statistically equivalent and begins to undercut the argument that ICSID is somehow meaningfully different than other arbitration forums. The initial evidence also could not demonstrate that the arbitration process was tilted to favor investors, even when controlling for the effect of ICSID, Energy, or some

interaction of those variables. Because there was not even a reliable statistical relationship among those variables, based upon these models, it would be inaccurate to suggest that the existence of an ICSID arbitration causes a result.

As most of the effect sizes for the pre-2007 population were less than small ( $r < 0.10$ ) and the relationships were non-significant, those models may not suffer from a power problem requiring a larger sample before making inferences beyond the dataset. Nevertheless, as some analyses indicated the potential presence of a “small” effect ( $r < 0.20$ ),<sup>181</sup> the power of those analyses was low and the risk of a Type-II error was beyond traditionally acceptable levels. It would be prudent to replicate this research to control for additional variance and analyze additional data before drawing definitive inferences about the current population.<sup>182</sup>

## 2. *Latin American Respondents*

Latin American presidents have publicly expressed skepticism of ICSID’s capacity to render unbiased awards.<sup>183</sup> Some commentators suggest that Latin America faces an inordinate number of investment treaty disputes at ICSID.<sup>184</sup> Archival data of the eighty-two pre-2007 disputes with a public award indicated that Latin American respondents (LA) were 40.2% ( $n = 33$ ) of that population, whereas the remaining 59.8% ( $n = 49$ ) were not Latin American states.<sup>185</sup> Given the

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181. There were small effect sizes in the various analyses ( $r = 0.14$ ,  $r = 0.14$ ,  $r = 0.13$ ,  $r = 0.15$ ,  $r = 0.12$ ;  $r = 0.12$ ;  $r = 0.17$ ,  $r = 0.18$ ,  $r = 0.11$ , and  $r = 0.19$ ;  $n = 52$ ). See *supra* notes 173–75, 177, and 178. *Post hoc* power analysis suggests that the power of the models for the pre-2007 data was between 0.20–0.30, which suggests a 70% or greater risk of a Type-II statistical error. Replication of these results is therefore warranted before drawing more inferences about the current population.

182. Using a conservative approach to look for the smallest effect size ( $r = 0.02$ , *supra* note 175) in the four-condition model, a sample of 1562 final arbitration awards would be required. This would be for an analysis with an effect of 0.10 ( $S = 781$ ) with 80% power ( $N = n (781 / 2) \times k (4)$ ). Using a more liberal *a priori* analysis with the largest effect size ( $r = 0.19$ ), *supra* note 178, the sample would require 382 awards ( $S = 191$ ;  $r = 0.20$ ;  $N = n (191 / 2) \times k (4)$ ) to create 80% power and a 20% risk of a Type-II error.

183. See *supra* note 89 (discussing criticism of ICSID by Ecuador’s President); Franck, *supra* note 15, at 48 (quoting Bolivian President Evo Morales saying, “Governments from Latin America and I think all over the world never win the cases. The transnationals always win.”) (internal quotation marks omitted).

184. Christopher M. Ryan, *Meeting Expectations: Assessing the Long-Term Legitimacy and Stability of International Investment Law*, 29 U. PA. J. INT’L L. 725, 745–46 (2008); Rebecca Dreyfus, *Latin America Faces 61% of Ongoing Mining Cases at the International Center for Settlement of Investment Disputes*, NETWORK FOR JUSTICE IN GLOBAL INVESTMENT (Feb. 26, 2010), <http://tinyurl.com/48aueyh>.

185. Using an existing definition from another context in conformity with social science practices, the Code Book defined a Latin American state (Latin America) as a country “listed in <http://lanic.utexas.edu/subject/countries>, excluding Puerto Rico as it is a United States territory.”

sensitivities articulated by heads of state and the withdrawals from the international investment regime by Latin American governments,<sup>186</sup> it is critical to consider how the “LA” variable contributed, if at all, to ICSID cases in the pre-2007 population. This Subsection explores whether there was a difference in amounts claimed in cases against Latin America, who the ultimate winner in LA cases was, and whether amounts awarded were somehow related to ICSID Status.

a. Amounts Claimed

Data from forty-four awards were used to analyze amounts claimed to compare LA and non-LA respondents. Raw data that included statistical outliers revealed that the mean amount claimed against LA respondents was US\$142,173,117 ( $n = 14$ ;  $SD = 140,670,846$ ); the mean amount claimed against non-LA respondents was US\$437,350,883 ( $n = 30$ ;  $SD = 1,705,641,271$ ).<sup>187</sup> The question is whether these claims differed as a function of LA respondents, ICSID Status, or an interaction of those variables. On the theory that Latin American investments are not necessarily more or less valuable than comparable investments in other states, the research hypotheses were that there would be no difference in amounts claimed against LA and non-LA respondents.

A  $2 \times 2$  between-groups ANOVA factorial using winsorized data to control for skewing caused by statistical outliers demonstrated three things. First, for ICSID-ALL awards, there was no statistically significant interaction among ICSID Status, LA respondents, and the mean amount claimed ( $F(1,40) = 1.133$ ;  $p = 0.29$ ;  $n = 44$ ;  $r = 0.16$ ).<sup>188</sup> Second, ICSID had no main effect on the mean amount investors claimed ( $F(1,40) = 0.026$ ;  $p = 0.87$ ;  $n = 44$ ;  $r = 0.03$ ).<sup>189</sup> Third, there was a main effect for LA respondents, such that there was a statistically

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including Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, French Guiana, Grenada, Guadalupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts & Nevis, Saint Lucia, St. Vincent & Grenadines, Suriname, Trinidad & Tobago, Turks & Caicos, Uruguay, Venezuela, and Virgin Islands ( $LA = 1$ ). See *Code Book*, *supra* note 170. All other states were coded as not Latin American states ( $LA = 0$ ).

186. See *supra* text accompanying notes 96–103.

187. The mean amount claimed in LA disputes for the winsorized data, which minimized skewing caused by statistical outliers, was US\$34,384,481 ( $n = 14$ ;  $SD = 10,627,298$ ), and the mean amount claimed in non-LA disputes for the winsorized data was US\$24,921,144 ( $n = 30$ ;  $SD = 16,306,131$ ).

188. There was likewise no significant interaction when analyzing ICSID-C awards ( $F(1,40) = 1.065$ ;  $p = 0.31$ ;  $n = 44$ ;  $r = 0.16$ ).

189. There was likewise no main effect for ICSID-C awards ( $F(1,40) = 0.007$ ;  $p = 0.93$ ;  $n = 44$ ;  $r = 0.01$ ).

significant difference between the mean amount claimed by investors ( $F(1,40) = 4.476$ ;  $p = 0.04$ ;  $n = 44$ ;  $r = 0.32$ ). Pairwise comparisons using an HSD<sup>190</sup> revealed that, in keeping with the research hypothesis, there was no difference in amounts claimed in ICSID cases for LA and non-LA disputes. Contrary to the research hypothesis, there *was* a difference between non-ICSID cases such that the mean amount claimed against LA respondents was higher than the mean amount claimed against non-LA respondents.<sup>191</sup> Raw<sup>192</sup> and inverse-transformed<sup>193</sup> data generally mirrored these results, with the exception that all main effects were descriptive and there was otherwise no statistically meaningful difference in amounts claimed by virtue of an ICSID venue, an LA respondent, or a combination of those variables.

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190. For this model ( $k = 4$ ) based on winsorized data, the HSD was 16,942,718.

191. Similarly, there was no significant main effect for Latin America when analyzing ICSID-C versus New York Convention awards ( $F(1,40) = 3.332$ ;  $p = 0.08$ ;  $n = 44$ ;  $r = 0.28$ ). Although approaching significance, follow-up pairwise comparisons ( $HSD = 17,061,003$ ;  $k = 4$ ) did not reveal any differences in amounts claimed against LA respondents for either ICSID-C or New York Convention awards.

192. For all ICSID-ALL awards, using raw data to analyze LA and amounts claimed, the analysis showed (1) no interaction between ICSID Status and LA on claimed amounts ( $F(1,40) = 0.126$ ;  $p = 0.73$ ;  $n = 44$ ;  $r = 0.06$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.152$ ;  $p = 0.70$ ;  $r = 0.06$ ), and (3) no main effect for LA ( $F(1,40) = 0.205$ ;  $p = 0.65$ ;  $n = 44$ ;  $r = 0.07$ ). Even follow-up comparisons did not reveal any significant simple effects across conditions ( $HSD = 1,650,857,407$ ;  $k = 4$ ). For ICSID-C awards, the analysis showed, (1) no interaction between ICSID Status and LA on claimed amounts ( $F(1,40) = 0.077$ ;  $p = 0.78$ ;  $n = 44$ ;  $r = 0.04$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.416$ ;  $p = 0.52$ ;  $n = 44$ ;  $r = 0.10$ ), and (3) no main effect for LA ( $F(1,40) = 0.217$ ;  $p = 0.64$ ;  $n = 44$ ;  $r = 0.07$ ). Similarly, follow-up comparisons did not reveal any statistically significant differences ( $HSD = 1,647,014,406$ ;  $k = 4$ ).

193. For ICSID-ALL awards, transformed data analyzing the effect of LA on amounts claimed, the analysis showed (1) no interaction between ICSID Status and LA on claimed amounts ( $F(1,40) = 0.399$ ;  $p = 0.53$ ;  $n = 44$ ;  $r = 0.10$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.016$ ;  $p = 0.90$ ;  $n = 44$ ;  $r = 0.02$ ), and (3) no main effect for LA ( $F(1,40) = 1.277$ ;  $p = 0.27$ ;  $n = 44$ ;  $r = 0.18$ ). Follow-up comparisons revealed no significant simple effects ( $HSD = 1.091$ ;  $k = 4$ ). For ICSID-C awards analyzing the effect of LA, the analysis showed (1) no interaction between ICSID Status and LA on claimed amounts ( $F(1,40) = 0.002$ ;  $p = 0.96$ ;  $n = 44$ ;  $r = 0.01$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.192$ ;  $p = 0.66$ ;  $n = 44$ ;  $r = 0.07$ ), and (3) no main effect for LA ( $F(1,40) = 1.109$ ;  $p = 0.30$ ;  $n = 44$ ;  $r = 0.16$ ). Follow-up comparisons revealed no statistically significant differences among cell means ( $HSD = 1.093$ ;  $k = 4$ ).

TABLE 5: WINSORIZED DATA OF MEAN AMOUNT OF DAMAGES CLAIMED BY INVESTORS AS A FUNCTION OF ICSID STATUS & PRESENCE OF A LATIN AMERICAN RESPONDENT ( $n = 44$ )

ICSID Status	Latin American Respondent Present	Amount		Total
		Mean	Standard Deviation	
ICSID Convention & Additional Facility	LA Respondent	33,302,050	11,866,203	11
	Non-LA	27,428,635	15,629,626	19
Other Awards (SCC, UNCITRAL, etc.)	LA Respondent	38,353,394	0	3
	Non-LA	25,590,025	17,285,455	11

As hypothesized, for the pre-2007 population, the results could not support the conclusions that the mean amount claimed differed as a function of an ICSID venue by itself or when combining ICSID Status and the presence of a LA respondent. This model revealed that the amounts involved in ICSID arbitration were not substantially different for LA respondents.

Yet, the pre-2007 population indicated Latin American respondents were affected in an unexpected way. The winsorized data revealed a statistically significant effect for LA status, and follow-up comparisons revealed the difference in amounts claimed against LA respondents was not attributable to ICSID. The difference in amounts claimed was statistically attributable *only* to non-ICSID disputes, such that amounts claimed against LA respondents in three cases were higher than non-LA respondents in eleven cases. The tests did not reveal a statistically meaningful difference for the mean amount claimed against LA respondents at ICSID. See Table 5.

These initial findings for the pre-2007 population chip away at the idea that ICSID arbitration resulted in materially different risk for LA respondents; it also disrupts the idea that Latin American respondents facing ICSID arbitration experienced higher amounts claimed. Although there were only three LA respondents in the subset, the findings do suggest, however, that Latin American states' concerns of perceived bias in arbitration are worthy of exploration in the context of non-ICSID arbitration. The difference in amounts claimed (arguably one of the primary and memorable experiences in arbitration in that it gives states

a sense of their potential risk and fiscal exposure) may form a basis of legitimate concern. The data, however, suggest that discontent (at least as regards the pre-2007 population) should not be attributed to ICSID, as the effect was only present in non-ICSID cases. This adds credence to the argument that radical reform or rejection of ICSID may be unnecessary, but it also suggests that further exploration of differential arbitration risk in non-ICSID arbitrations is appropriate.

However, as the significant effect of higher claimed damages against LA respondents in non-ICSID cases was not present in analyses of the raw and transformed data for the pre-2007 population, replication of this research is necessary. Given the small number of cases against Latin American respondents in non-ICSID forums, it would be prudent to avoid strong inferences and confirm whether this effect is replicable and an ongoing population parameter. Although many of the effect sizes were less than small ( $r < 0.10$ ), the possible small effects ( $r = 0.18$ ) in some of the non-significant analyses suggests replication is also warranted to address potentially underpowered samples<sup>194</sup> and replicate the significant findings before drawing firm conclusions about the current population.<sup>195</sup>

#### b. Ultimate Outcome

The process and doctrines of ITA are reasonably similar across institutions, and systematic bias against LA respondents — or any respondent — should be unacceptable as a normative matter.<sup>196</sup> The research hypothesis and normative hope was that there should be no difference in outcomes as a function of ICSID Status, the presence of an LA respondent, or a combination of these variables. Two models were used to analyze the hypothesis. First, an initial analysis used a Chi-square cross-tabulation to see if there was a statistically significant pattern of relationship between disputes with LA respondents and the ultimate winner. Second, a  $2 \times 2$  between-subjects factorial design

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194. The six small effect sizes were  $r = 0.16$ ,  $r = 0.16$ ,  $r = 0.10$ ,  $r = 0.10$ ,  $r = 0.18$ , and  $r = 0.16$ . See *supra* notes 188, 191–93. *Post hoc* power analysis suggests that the power of the models for the pre-2007 data was between 0.20–0.30, which suggests a 70–80% risk of a Type-II error. For the nearly medium effect ( $r = 0.28$ ) comparing ICISID-C and New York Convention awards, the power of the analysis was 0.50, which suggests a 50% risk of a Type-II error. Given the low power, replication is warranted before drawing definitive inferences from the initial data.

195. Using a conservative approach to look for the smallest effect size ( $r = 0.10$ , *supra* notes 192–93) in the four-condition model, a sample of 1562 final arbitration awards would be required. This would be for an analysis with an effect of 0.10 ( $S = 781$ ) with 80% power ( $N = n(781 / 2) \times k(4)$ ). Using a less conservative approach ( $r = 0.20$ ;  $S = 191$ ), the requisite sample size would be 382.

196. Franck, *supra* note 23, at 437–38.

analyzed the effects of two independent variables, namely ICSID Status and the presence of a LA respondent on the mean amount awarded.

As regards the Chi-square analyses, as hypothesized, the results could not prove a statistically significant pattern of relationship between disputes with LA respondents and outcome. Table 6 shows the numbers of investor wins, government wins, and settlement agreements were not statistically different ( $\chi^2(2) = 1.065$ ;  $p = 0.59$ ;  $n = 52$ ;  $r = 0.14$ ). Simple two-way follow-up analyses confirmed that there is likewise no statistically significant pattern between (1) investor and government wins ( $\chi^2(1) = 0.137$ ;  $p = 0.71$ ;  $n = 50$ ;  $r = 0.05$ ), (2) investor wins and settlements ( $\chi^2(1) = 1.026$ ;  $p = 0.31$ ;  $n = 22$ ;  $r = 0.22$ ), and (3) government wins and settlements ( $\chi^2(1) = .834$ ;  $p = 0.36$ ;  $n = 32$ ;  $r = 0.16$ ).<sup>197</sup> In other words, statistical tests could not identify a meaningfully different pattern of relationship between Latin American respondents and whether an investor won, a state won, or the case resulted in a settlement agreement. Nevertheless, given that two analyses (both related to the effect of settlement agreements) suggested the possibility of a small effect of LA status, the statistical power for making inferences beyond the analyzed dataset was low.<sup>198</sup> Before making conclusive inferences about the current population, replication of these initial results is warranted.

TABLE 6: LATIN AMERICAN RESPONDENTS AND FREQUENCY BREAKDOWN OF THE ULTIMATE WINNER OF AN INVESTMENT TREATY ARBITRATION CASE

	Investor Win	Government Win	Settlement Award	Total
Latin American	7	9	0	16
Non-Latin American	13	21	2	36
<i>Total</i>	20	30	2	52

\* None of the observed frequencies differed from what would be expected due to chance.

197. When the “ultimate win” variable is condensed to a binary respondent wins or loses, there was likewise no statistically significant relationship with Latin American respondents ( $\chi^2(1) = 0.138$ ;  $p = 0.71$ ;  $n = 50$ ;  $r = 0.05$ ). This model is the equivalent of the first two-way follow-up.

198. As the comparison between LA and non-LA respondents was less than small ( $r < 0.10$ ) for the investor versus government wins, this suggests that the results did not suffer from a power problem or the potential effect was likely negligible. For the small effect sizes ( $r = 0.22$  and  $r = 0.16$ ), which were linked to comparisons with settlements, a *post hoc* power analysis suggests that the power was between 0.20–0.30, which suggests a 70–80% risk of a Type-II statistical error. Replication with expanded data is warranted to address the likely underpowered inferences.

### c. Amounts Awarded

As regards the ANOVA, the results indicated three things. First, using winsorized data to analyze ICSID-ALL, there was no statistically significant interaction among ICSID Status, disputes with LA respondents, and the amounts awarded ( $F(1,48) = 0.842$ ;  $p = 0.36$ ;  $n = 52$ ;  $r = 0.13$ ).<sup>199</sup> Second, ICSID Status (that is, all awards at ICSID versus non-ICSID awards) had no main effect on amounts tribunals awarded ( $F(1,48) = 0.007$ ;  $p = 0.93$ ;  $n = 52$ ;  $r = 0.01$ ).<sup>200</sup> Third, there was no main effect for LA respondents ( $F(1,48) = 0.752$ ;  $p = 0.39$ ;  $n = 52$ ;  $r = 0.12$ ).<sup>201</sup> Follow-up analyses of cell means also revealed no latent significant differences across conditions ( $HSD = 2,206,190$ ;  $k = 4$ ).<sup>202</sup> Even conducting the same analysis but using raw,<sup>203</sup> log-transformed,<sup>204</sup> or inverse-transformed<sup>205</sup> data, there were likewise no

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199. There was likewise no significant interaction when analyzing ICSID Status for ICSID-C versus New York Convention awards using raw data ( $F(1,48) = 0.1159$ ;  $p = 0.29$ ;  $n = 52$ ;  $r = 0.15$ ), winsorized data ( $F(1,48) = 0.056$ ;  $p = 0.81$ ;  $n = 52$ ;  $r = 0.03$ ), log-transformed data ( $F(1,48) = 0.450$ ;  $p = 0.51$ ;  $n = 52$ ;  $r = 0.10$ ) or inverse-transformed data ( $F(1,48) = 0.459$ ;  $p = 0.50$ ;  $n = 52$ ;  $r = 0.10$ ).

200. There was likewise no main effect for ICSID Status when comparing ICSID-C versus New York Convention awards as a function of raw data ( $F(1,48) = 0.001$ ;  $p = 0.29$ ;  $r = 0.01$ ), winsorized data ( $F(1,48) = 0.007$ ;  $p = 0.93$ ;  $n = 52$ ;  $r = 0.01$ ), log-transformed data ( $F(1,48) < 0.001$ ;  $p = 0.98$ ;  $n = 52$ ;  $r < 0.01$ ), or inverse-transformed data ( $F(1,48) = 0.001$ ;  $p = 0.97$ ;  $n = 52$ ;  $r = 0.01$ ).

201. When ICSID Status was a function of being an ICSID Convention award, there was likewise no main effect for LA respondents as a function of raw data ( $F(1,48) = 0.360$ ;  $p = 0.55$ ;  $n = 52$ ;  $r = 0.09$ ), winsorized data ( $F(1,48) = 0.1839$ ;  $p = 0.18$ ;  $n = 52$ ;  $r = 0.19$ ), log-transformed data ( $F(1,48) = 0.429$ ;  $p = 0.52$ ;  $n = 52$ ;  $r = 0.09$ ), or inverse-transformed data ( $F(1,48) = 0.154$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ).

202. For ICSID-C awards analyzing LA respondents, there was likewise no difference when doing follow-up comparisons between individual cell means using either winsorized data ( $HSD = 2,231,913$ ;  $k = 4$ ) or log-transformed data ( $HSD = 3.51$ ;  $k = 4$ ).

203. For raw data analyzing ICSID-ALL using raw data, there was no interaction ( $F(1,48) = 0.335$ ;  $p = 0.57$ ;  $n = 52$ ;  $r = 0.08$ ), no main effect for ICSID Status ( $F(1,48) = 0.770$ ;  $p = 0.39$ ;  $n = 52$ ;  $r = 0.13$ ), and no main effect for LA respondents ( $F(1,48) = 0.092$ ;  $p = 0.76$ ;  $n = 52$ ;  $r = 0.04$ ). Follow-up analyses ( $HSD = 44,629,486$ ;  $k = 4$ ) revealed no latent differences. For ICSID-C and New York Convention awards, there was no interaction ( $F(1,48) = 1.159$ ;  $p = .29$ ;  $r = 0.15$ ), no main effect for ICSID Status ( $F(1,48) = 0.001$ ;  $p = 0.29$ ;  $r = 0.01$ ), and no main effect for LA. Follow-ups revealed no other significant differences ( $HSD = 44,898,478$ ;  $k = 4$ ).

204. For ICSID-ALL awards using log data, there was no statistically significant interaction ( $F(1,48) = 2.867$ ;  $p = 0.10$ ;  $n = 52$ ;  $r = 0.24$ ), no main effect for ICSID Status ( $F(1,48) = 0.144$ ;  $p = 0.71$ ;  $n = 52$ ;  $r = 0.06$ ), and no main effect for LA respondents ( $F(1,48) = 0.005$ ;  $p = 0.94$ ;  $n = 52$ ;  $r = 0.01$ ). Even with the interaction approaching significance, pair-wise comparisons ( $HSD = 3.371$ ;  $k = 4$ ) failed to reveal any latent difference among cell means. The potential effect of the interaction was that, at ICSID, it may be possible that there was a trend towards higher mean award against Latin American respondents (3.3836;  $SD = 3.5810$ ;  $n = 12$ ) than non-LA respondents (1.6318;  $SD = 2.8282$ ;  $n = 23$ ); in contrast, at other venues, there was a trend towards a potentially lower mean award again Latin American respondents (1.9636;  $SD = 3.9273$ ;  $n = 4$ ) versus non-LA respondents (3.8702;  $SD = 3.2983$ ;  $n = 13$ ). As the results and follow-up tests were all non-significant, it would be improper to suggest this was a population parameter.

mean differences in the amount awarded as a function of either ICSID Status or LA respondents. The results did not demonstrate that the mean amount awarded differed as a function of ICSID Status, LA respondents, or an interaction of those variables. See Table 7.

TABLE 7: WINSORIZED DATA OF AMOUNT OF DAMAGES AWARDED BY INVESTMENT TREATY TRIBUNALS AS A FUNCTION OF ICSID STATUS & PRESENCE OF LATIN AMERICAN RESPONDENTS ( $n = 52$ )

ICSID Status	Latin American Respondent	Amount		Total
		Mean	Standard Deviation	
ICSID Convention & Additional Facility	LA Respondent	2,007,200	2,698,869	12
	Non-LA	745,498	1,726,958	23
Other Awards (SCC, UNCITRAL, etc.)	LA Respondent	1,418,884	2,837,769	4
	Non-LA	2,837,769	1,860,741	13

#### d. Discussion

Table 6 indicates that, for the pre-2007 population, there was no reliable relationship between disputes with LA respondents and outcome of investment arbitration; the breakdown of wins as a function of LA respondents was also reasonably balanced. Proportionally, it may appear that there was a higher degree of government wins for non-LA respondents, yet the results were not statistically different. Similarly, Table 7 reflects a lack of statistically significant difference in amounts awarded for the pre-2007 population. Although winsorized data suggested that, for ICSID cases, LA respondents experienced awards that were 100% larger than non-LA respondents, these results were not statistically significant, and even the log- and inverse-transformed data did not reveal a significant effect. Although it may be appropriate to rule out variables such as an adjustment for inflation,<sup>206</sup> the intriguing

205. For ICSID-ALL awards using inverse transformations, there was no interaction ( $F(1,48) = 3.433$ ;  $p = 0.07$ ;  $n = 52$ ;  $r = 0.26$ ), no main effect for ICSID Status ( $F(1,48) = 0.103$ ;  $p = 0.75$ ;  $n = 52$ ;  $r = 0.05$ ), and no main effect for LA respondents ( $F(1,48) = 0.150$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ). Even with the interaction approaching significance, pair-wise comparisons ( $HSD = 0.509$ ;  $k = 4$ ) failed to reveal any latent difference among cell means.

206. Out of an abundance of caution, given that the effect for the ICSID-ALL model (but not

facial difference could be attributable to other variables (such as amounts claimed) or even chance alone. There have, however, been several awards rendered against countries, including Argentina, since the dataset was closed. This suggests that the results of this research bear watching in the future analysis.

Even with a difference in amounts claimed at non-ICSID venues, the analyses did not demonstrate that LA respondents experienced statistically different fiscal outcomes from non-LA respondents. Rather, the initial results suggest that LA respondents experienced statistically equivalent awards irrespective of whether ICSID or another body rendered the award. Many effect sizes were less than small ( $r < 0.10$ ). Nevertheless, the presence of some statistically small effects in non-significant analyses means that, for making inferences beyond the population studied, replication is warranted given the lack of power in the dataset,<sup>207</sup> and certain models using transformed data were approaching significance for an interaction effect only.

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the ICSID-C model) was approaching significance for the log transformations, this research controlled for the time value of money by adjusting the amounts awarded in accordance with the Consumer Price Index or Nominal Gross Domestic Product. For all of the analyses using the ICSID-ALL model using log-transformed data, even controlling for the time value of money, there was no statistically significant relationship between the variables studied and mean amounts awarded. For the CPI-adjusted raw amount awarded, there was no interaction ( $F(1,48) = 0.335$ ;  $p = 0.57$ ;  $n = 52$ ;  $r = 0.08$ ), no main effect for ICSID Status ( $F(1,48) = 0.790$ ;  $p = 0.38$ ;  $n = 52$ ;  $r = 0.13$ ), and no main effect for LA respondents ( $F(1,48) = 0.068$ ;  $p = 0.80$ ;  $n = 52$ ;  $r = 0.07$ ). For the CPI-adjusted winsorized amount awarded, there was no interaction ( $F(1,48) = 0.731$ ;  $p = 0.40$ ;  $n = 52$ ;  $r = 0.12$ ), no main effect for ICSID Status ( $F(1,48) = 0.011$ ;  $p = 0.92$ ;  $n = 52$ ;  $r = 0.02$ ), and no main effect for LA respondents ( $F(1,48) = 0.737$ ;  $p = 0.40$ ;  $n = 52$ ;  $r = 0.12$ ). For the CPI-adjusted log-transformed amount awarded, there was no interaction ( $F(1,48) = 2.849$ ;  $p = 0.10$ ;  $n = 52$ ;  $r = 0.24$ ), no main effect for ICSID Status ( $F(1,48) = 0.136$ ;  $p = 0.71$ ;  $n = 52$ ;  $r = 0.05$ ), and no main effect for LA respondents ( $F(1,48) = 0.006$ ;  $p = 0.94$ ;  $n = 52$ ;  $r = 0.01$ ). For the CPI-adjusted transformed amount awarded, there was no interaction ( $F(1,48) = 3.433$ ;  $p = 0.07$ ;  $n = 52$ ;  $r = 0.26$ ), no main effect for ICSID Status ( $F(1,48) = 0.103$ ;  $p = 0.75$ ;  $n = 52$ ;  $r = 0.05$ ), and no main effect for LA respondents ( $F(1,48) = 0.150$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ). For the GDP-adjusted raw amount awarded, there was no interaction ( $F(1,48) = 0.337$ ;  $p = 0.56$ ;  $n = 52$ ;  $r = 0.08$ ), no main effect for ICSID Status ( $F(1,48) = 0.800$ ;  $p = 0.38$ ;  $n = 52$ ;  $r = 0.13$ ), and no main effect for LA respondents ( $F(1,48) = 0.053$ ;  $p = 0.82$ ;  $n = 52$ ;  $r = 0.03$ ). For the GDP-adjusted winsorized amount awarded, there was no interaction ( $F(1,48) = 0.692$ ;  $p = 0.41$ ;  $n = 52$ ;  $r = 0.12$ ), no main effect for ICSID Status ( $F(1,48) = 0.014$ ;  $p = 0.91$ ;  $n = 52$ ;  $r = 0.02$ ), and no main effect for LA respondents ( $F(1,48) = 0.708$ ;  $p = 0.40$ ;  $n = 52$ ;  $r = 0.12$ ). For the GDP-adjusted log-transformed amount awarded, there was no interaction ( $F(1,48) = 2.840$ ;  $p = 0.10$ ;  $n = 52$ ;  $r = 0.24$ ), no main effect for ICSID Status ( $F(1,48) = 0.133$ ;  $p = 0.72$ ;  $n = 52$ ;  $r = 0.05$ ), and no main effect for LA respondents ( $F(1,48) = 0.007$ ;  $p = 0.93$ ;  $n = 52$ ;  $r = 0.01$ ). For the GDP-adjusted transformed amount awarded, there was no interaction ( $F(1,48) = 3.433$ ;  $p = 0.07$ ;  $n = 52$ ;  $r = 0.26$ ), no main effect for ICSID Status ( $F(1,48) = 0.103$ ;  $p = 0.75$ ;  $n = 52$ ;  $r = 0.05$ ), and no main effect for LA respondents ( $F(1,48) = 0.150$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ). Despite the low power, the repeated finding of a lack of a statistically significant relationship suggests that the results were robust.

207. As various models had small effect sizes ( $r = 0.13$ ;  $r = 0.15$ ;  $r = 0.10$ ;  $r = 0.12$ ;  $r = 0.19$ ;  $r = 0.13$ ;  $r = 0.15$ ;  $n = 52$ ), *see supra* notes 199, 201, and 203, this suggests that the power of the analysis is in the order of 0.20–0.30 and there is a 70–80% probability of having

The net effect is that the current results provide initial evidence that a differential initial arbitration risk for LA respondents was not attributable to ICSID. In any event, outcomes for LA respondents did not differ meaningfully either within or without ICSID for the pre-2007 population studied. For the pre-2007 population, without proof of a meaningful difference, the initial evidence suggests that the results for LA respondents were statistically equivalent irrespective of the venue for arbitration. This may not be the case for the current population (which includes both pre-2007 and post-2007 awards), but future research could usefully explore this aspect and also control for the effect of amounts claimed on the fiscal outcome.

The differences in amounts claimed against LA respondents in non-ICSID cases does suggest that it would also be appropriate to consider how best to manage concerns that Latin American states may experience larger claims and presumably face a larger initial arbitration risk. The overall evidence from the pre-2007 population could not establish differential outcomes at ICSID on the basis of classification as an LA or non-LA respondent, let alone provide evidence that the Latin American respondents experienced harsher outcomes than other states. Although worthy of future monitoring and additional research to consider the implications for the emerging population given the low power of the models,<sup>208</sup> these initial findings did not support the claim of bias against Latin American states at ICSID. Although Latin American respondents may wish to consider reform to IIAs or ITA for other policy reasons, the assessments from the pre-2007 population did not support the conclusion of systemic differences in outcomes that might otherwise justify the abandonment of ICSID.

### 3. Respondent Development Status

Previous research highlighted concerns related to the role that states' developmental background may have on outcome. That research explored the Development Status<sup>209</sup> of respondents, of presiding arbitrators, and the interaction of those variables. Yet that research did not control for the role of ICSID or other arbitral venues. Given stated concerns about ICSID, this Article continues the exploration of links between Development Status and

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made a Type-II error.

208. Using a conservative approach to look for the smallest effect size ( $r = 0.01$ , *supra* note 200) in the four-condition model with 80% power, a sample of 1562 final arbitration awards would be required. This would be for an analysis with an effect of 0.10 ( $S = 781$ ) with 80% power ( $N = n (781 / 2) \times k (4)$ ). Using a more liberal approach to isolate the largest effect observed,  $r = 0.26$  at *supra* note 205, using an effect of 0.25, the requisite sample with 80% power would be 240 ( $S = 120$ ;  $N = n (120 / 2) \times k (4)$ ).

209. Development Status was defined in previous research as derivative of OECD membership or analysis of World Bank classification. *See supra* note 130 and accompanying text. As previously explained, those categorical variables were created either by virtue of a state's ratification of the OECD Convention or a pre-existing World Bank classifications. *Id.*

outcome. This Subsection treats ICSID Status as an independent variable in order to explore differences in amounts claimed and outcome as a function of respondents' Development Status.

a. Amounts Claimed

Using raw data that included statistical outliers from the forty-four cases offering data on amounts claimed, the mean amount claimed against OECD respondents was US\$162,184,890; ( $n = 15$ ;  $SD = 256,603,333$ ), whereas the mean amount claimed for disputes against non-OECD respondents was US\$437,178,510 ( $n = 29$ ;  $SD = 1,729,849,697$ ).<sup>210</sup> This binary variable lacks some subtlety.<sup>211</sup> A more refined assessment of Development Status—using four World Bank categories—and raw data indicated the mean amount claimed against High Income respondents was US\$250,855,045 ( $n = 8$ ;  $SD = 333,851,690$ ); the mean amount claimed against Upper Middle Income respondents was US\$125,235,035 ( $n = 15$ ;  $SD = 141,121,927$ ); the mean amount claimed against Lower Middle Income respondents was US\$639,509,132 ( $n = 16$ ;  $SD = 2,336,891,369$ ); and the mean amount claimed against Low Income respondents was US\$198,687,629 ( $n = 5$ ;  $SD = 218,579,080$ ).<sup>212</sup> Although there were facial differences in claims, the next issue was whether that difference was significant and otherwise attributable to statistical chance.

The research examined whether amounts claimed differed as a function of a Development Status, ICSID Status, or an interaction of those independent variables. The research hypotheses were that there would be no difference in amounts claimed for disputes with respondents from different developmental backgrounds, even controlling for the presence of ICSID disputes. To analyze this question, the research used winsorized data to analyze  $2 \times 2$  between groups ANOVA factorials analyzing OECD membership and the presence of an ICSID dispute and a  $2 \times 4$  between groups ANOVA factorials analyzing World Bank status and the presence of an ICSID dispute.

When analyzing development as a function of respondent's OECD membership, the results demonstrated three things. First, there was no statistically significant interaction as a function of OECD membership, ICSID-ALL status (comparing ICSID Convention and Additional Facility

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210. The mean amount claimed against OECD respondents for the winsorized data was US\$32,097,218 ( $n = 15$ ;  $SD = 27,932,206$ ), while the mean amount claimed against non-OECD respondents for the winsorized data was US\$25,777,889 ( $n = 29$ ;  $SD = 15,892,812$ ).

211. See *supra* note 130 and accompanying text.

212. For winsorized data, the mean amount claimed against High Income respondents was US\$28,844,788 ( $n = 8$ ;  $SD = 17,606,735$ ); mean amount against Upper Middle Income respondents was US\$31,277,610 ( $n = 15$ ;  $SD = 12,369,857$ ); mean amount against Lower Middle Income respondents was US\$24,943,804 ( $n = 16$ ;  $SD = 16,768,855$ ); and mean amount against Low Income respondents was US\$25,998,745 ( $n = 5$ ;  $SD = 17,085,503$ ).

awards versus other awards), and amounts claimed ( $F(1,40) = 2.165$ ;  $p = 0.15$ ;  $n = 44$ ;  $r = 0.23$ ).<sup>213</sup> Second, ICSID-ALL status (comparing ICSID Convention and Additional Facility awards versus other awards) had no main effect on the amounts investors claimed ( $F(1,40) = 1.330$ ;  $p = 0.25$ ;  $n = 44$ ;  $r = 0.18$ ).<sup>214</sup> Third, there was no main effect for OECD Status ( $F(1,40) = 3.829$ ;  $p = 0.06$ ;  $n = 44$ ;  $r = 0.30$ ).<sup>215</sup> Raw<sup>216</sup> and inverse-transformed<sup>217</sup> data analyzing differences in ICSID-ALL awards had similar results for the mean amount claimed.<sup>218</sup> The only small variation — despite

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213. See also *infra* note 232 and accompanying text (reporting results of HSD follow-up analyses on the interaction of ICSID-ALL and OECD awards, despite its non-significance). Although there was a significant interaction with outcome when analyzing OECD Status and ICSID Status as a function of ICSID-C versus New York Convention awards ( $F(1,40) = 9.307$ ;  $p < 0.01$ ;  $n = 44$ ;  $r = 0.43$ ), this result is likely not meaningful. For this model, there is only one award, *Maffezini v. Spain*, that is both an ICSID Convention award and an award involving an OECD respondent. *Maffezini v. Kingdom of Spain (Arg. v. Spain)*, ICSID Case No. ARB/97/7, Award (Nov. 13, 2000), 5 ICSID Rep. 419 (2002). As explained in previous research, it is not clear that *Maffezini* is a representative case, given that it had the lowest amount claimed in the entire dataset and it is one of two awards that involved an undisputed amount from a loan. See Franck, *supra* note 23, at 472.

214. There was likewise no main effect for ICSID when analyzing ICSID-C versus New York Convention awards using winsorized data ( $F(1,40) = 1.858$ ;  $p = 0.18$ ;  $n = 44$ ;  $r = 0.211$ ).

215. There was also no significant main effect for OECD Status when analyzing ICSID-C awards ( $F(1,40) = 0.437$ ;  $p = 0.51$ ;  $n = 44$ ;  $r = 0.10$ ).

216. For ICSID-ALL awards using raw data analyzing OECD Status on amounts claimed, the analysis showed (1) no interaction between ICSID and OECD Status on claimed amounts ( $F(1,40) = 0.616$ ;  $p = 0.44$ ;  $n = 44$ ;  $r = 0.12$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.075$ ;  $p = 0.79$ ;  $n = 44$ ;  $r = 0.04$ ), (3) no main effect for OECD ( $F(1,40) = 0.077$ ;  $p = 0.78$ ;  $n = 44$ ;  $r = 0.04$ ), and (4) no latent statistically significant simple effects ( $HSD = 1,646,705,471$ ;  $k = 4$ ). For ICSID-C awards analyzing the effect of OECD Status, analyses showed (1) no interaction between ICSID and OECD Status on claimed amounts ( $F(1,40) = 1.82$ ;  $p = 0.67$ ;  $n = 44$ ;  $r = 0.21$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.045$ ;  $p = 0.83$ ;  $n = 44$ ;  $r = 0.03$ ), (3) no main effect for OECD Status ( $F(1,40) = 0.072$ ;  $p = 0.79$ ;  $n = 44$ ;  $r = 0.04$ ), and (4) no latent significant simple effects ( $HSD = 1,648,679,500$ ;  $k = 4$ ).

217. For all ICSID-ALL awards using *transformed* data analyzing OECD Status on amounts claimed, the analysis showed (1) no interaction between ICSID and OECD Status on claimed amounts ( $F(1,40) = 3.975$ ;  $p = 0.053$ ;  $n = 44$ ;  $r = 0.30$ ), (2) no main effect for ICSID Status ( $F(1,40) = 0.002$ ;  $p = 0.97$ ;  $n = 44$ ;  $r = 0.01$ ), and (3) no main effect for OECD ( $F(1,40) = 0.403$ ;  $p = 0.53$ ;  $n = 44$ ;  $r = 0.01$ ). As the  $p$ -value (0.053) was on the cusp of significance, a follow-up set of pairwise comparisons ( $HSD = 1.057$ ;  $k = 4$ ) did not reveal any significant differences, although one possible simple effect — namely, that for non-ICSID awards, average claims against OECD respondents was higher — bears watching. One might expect investments in higher-income economies to be worth more; damage to those investments would have a higher value. See Franck, *supra* note 23, at 441 n.22 (suggesting that equivalent investments in higher income countries may be worth more).

218. Using transformed data, for ICSID-C (comparing ICSID-C and New York Convention awards) analyzing the effect of OECD Status, there were significant differences related to (1) the interaction between ICSID and OECD Status on claimed amounts ( $F(1,40) = 11.72$ ;  $p < 0.01$ ;  $n = 44$ ;  $r = 0.48$ ), (2) a main effect for ICSID Status ( $F(1,40) = 4.388$ ;  $p = 0.04$ ;  $n = 44$ ;  $r = 0.31$ ), and (3) a main effect for OECD Status ( $F(1,40) = 4.079$ ;  $p = 0.05$ ;  $n = 44$ ;  $r = 0.30$ ). Follow-up simple effects ( $HSD = 0.975$ ;  $k = 4$ ) suggested two things. First, for ICSID-C awards only, there were higher amounts claimed against non-OECD countries than OECD countries, and

the non-significant effect of OECD Status — was that when comparing cell means in non-ICSID cases, the amounts investors claimed against OECD respondents were higher than against non-OECD respondents.<sup>219</sup> This effect, while interesting, may be a function of the arguably higher-value investments in OECD member states. Nevertheless, even where there was a latent difference in amounts claimed for the pre-2007 population, the critical point was that the variance was not linked to ICSID. At ICSID, the results did not indicate the amounts claimed were statistically different. That initial evidence, particularly as non-ICSID claims operated against the developed world, begins to chip away at the idea that claims at ICSID exhibited systemic bias against the developing world in the form of higher proportional risk of liability.<sup>220</sup>

When analyzing Development Status with the more nuanced World Bank variable, the results demonstrated a similar lack of relationship among ICSID, Development Status, and mean amount claimed. First, using winsorized data, there was no statistically significant interaction between World Bank and ICSID-ALL awards against others for amounts claimed ( $F(3,36) = 2.612$ ;  $p = 0.07$ ;  $n = 44$ ;  $r = 0.42$ ). Second, ICSID Status (for ICSID-ALL versus other awards) had no main effect on the amounts investors claimed ( $F(1,36) = 1.918$ ;  $p = 0.18$ ;  $n = 44$ ;  $r = 0.23$ ). Third, as shown on Table 8, there was no main effect for World Bank Status ( $F(3,36) = 0.314$ ;  $p = 0.82$ ;  $n = 44$ ;  $r = 0.16$ ).<sup>221</sup> Follow-up comparisons on

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this effect was not present when comparing New York Convention awards. Second, for OECD respondents, amounts claimed were higher in New York Convention awards than ICSID-C awards, but this effect was not present when comparing non-OECD respondents. These simple effects were only present when *Maffezini* was the basis of comparison to the remainder of the sample. As the model has one cell that contains a single case (*Maffezini*) that is arguably unrepresentative, *see supra* note 213, these results must be treated with caution, as a single data point was arguably responsible for all the statistically significant differences.

219. Follow-up analyses ( $HSD = 16,872,303$ ;  $k = 4$ ) suggested that this was the only statistically meaningful difference; all other follow-ups could not demonstrate a statistically meaningful difference in ICSID-ALL awards for claims against OECD and non-OECD respondents.

220. Several of the analyses exhibited less than small effect sizes ( $r < 0.10$ ), suggesting the results did not suffer from a lack of power. Several small-to-medium effects ( $r = 0.23$ ;  $r = 0.18$ ;  $r = 0.21$ ;  $r = 0.30$ ;  $r = 0.10$ ;  $r = 0.12$ ,  $r = 0.21$ ;  $r = 0.30$ ;  $n = 44$ ), *see supra* notes 213–17, however, suggest that caution is warranted and replication is required before making inferences about current population parameters as the analyses ranged from 0.20–0.50 in power, suggesting a 50–80% risk of a Type-II error.

221. When comparing ICSID-C awards, there was neither a main effect for ICSID Convention awards ( $F(1,36) = 0.014$ ;  $p = 0.91$ ;  $n = 44$ ;  $r = 0.02$ ) nor World Bank Status ( $F(3,36) = 1.792$ ;  $p = 0.17$ ;  $n = 44$ ;  $r = 0.36$ ). There was, however, a significant interaction ( $F(3,36) = 2.866$ ;  $p = 0.05$ ;  $n = 44$ ;  $r = 0.43$ ), but this result is likely not meaningful. There is only one award in the category of “High Income” ICSID-C award, namely *Maffezini*, which is likely an unrepresentative case as regards amounts claimed, and it may have undue influence on the results. *See supra* notes 213, 218. Moreover, there is only one case, *Petrobart v. Kyrgyz Republic*, in the category of “Low Income” respondents that were not New York Convention awards, and *Petrobart* may not be representative, as it is only one of three Energy Charter Treaty

marginal means ( $HSD = 16,834,436$ ;  $k = 4$ ) and cell means ( $HSD = 28,519,487$ ;  $k = 8$ ) did not indicate any significant simple effects. In other words, for the pre-2007 population, statistical tests using winsorized data could not identify a statistical link between World Bank Status and the mean amount claimed. The interaction has sufficient statistical power to reject the null hypothesis and make inferences beyond the dataset studied.<sup>222</sup> However, as other analyses suggested the possibility of small or medium effects beyond the pre-2007 population,<sup>223</sup> it would be prudent to replicate the research with a larger dataset before making strong inferences about ongoing population parameters.

TABLE 8: WINSORIZED DATA OF MEAN AMOUNT OF DAMAGES CLAIMED BY INVESTORS AS A FUNCTION OF ICSID STATUS AND WORLD BANK STATUS FOR RESPONDENTS ( $n = 44$ )

ICSID Status	World Bank Status	Amount		Total
		Mean	Standard Deviation	
ICSID Convention & Additional Facility	High Income	19,254,354	27,010,121	2
	Upper Middle	36,737,595	4,815,250	11
	Lower Middle	24,533,483	16,818,863	13
	Low Income	31,477,268	13,752,252	4
Other Awards (SCC, UNCITRAL, etc.)	High Income	32,041,598	15,460,678	6
	Upper Middle	16,262,652	15,062,083	14
	Lower Middle	26,721,867	20,146,395	3
	Low Income	4,084,652	0	1

claims in the dataset and is the sixth-smallest amount claimed in the sample. Petrobart Ltd. v. Kyrgyz Republic (SCC), Arb. No. 126/2003, Award (Mar. 29, 2005), [http://ita.law.uvic.ca/documents/petrobart\\_kyrgyz.pdf](http://ita.law.uvic.ca/documents/petrobart_kyrgyz.pdf). This has implications for the replicability of the model's results.

222. As the effect size is  $r = 0.42$  and  $n = 44$ , the interaction has 80% power and an acceptable 20% risk of a Type-II error, according to social science conventions.

223. The majority of effect sizes were less than small ( $r < 0.10$ ), which suggests the results may not suffer from a power problem or that the effect is simply so tiny that it may be difficult justifying resources to isolate the effect. For the small-to-medium effects ( $r = 0.12$ ;  $r = 0.15$ ;  $r = 0.36$ ,  $r = 0.11$ ;  $n = 44$ ), however, a *post hoc* power analysis suggests that the power was between 0.20–0.60, which suggests a 40–80% risk of a Type-II statistical error and a need for replication.

Raw<sup>224</sup> and inverse-transformed data<sup>225</sup> analyzing differences between ICSID-ALL and other awards had similar results to the winsorized data. Inverse-transformed data — which adheres even more closely to the statistical assumptions of underlying tests — did, however, suggest that there was a significant interaction with ICSID Status<sup>226</sup> and World Bank status for amounts claimed ( $F(3,36) = 2.904$ ;  $p = 0.048$ ;  $r = 0.44$ ).<sup>227</sup> The small cell counts for “Low Income” non-ICSID cases ( $n = 1$ ) and “High Income ICSID Cases” ( $n = 2$ ) were arguably at the root of this significant result; and given the arguably

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224. For ICSID-ALL awards using raw data to analyze World Bank Status and mean amount claimed, the analysis showed (1) no interaction between ICSID and World Bank Status on claimed amounts ( $F(3,36) = 0.136$ ;  $p = 0.94$ ;  $n = 44$ ;  $r = 0.11$ ), (2) no main effect for ICSID Status ( $F(1,36) = 0.090$ ;  $p = 0.77$ ;  $n = 44$ ;  $r = 0.05$ ), and (3) no main effect for World Bank Status ( $F(3,36) = 0.096$ ;  $p = 0.96$ ;  $n = 44$ ;  $r = 0.09$ ). Follow-up analyses using HSDs did not reveal differences for either marginal ( $HSD = 1,745,690,656$ ;  $k = 4$ ) or cell ( $HSD = 2,957,391,991$ ;  $k = 8$ ) means. For ICSID-C versus New York Convention awards, the effect of World Bank Status and ICSID Status suggested (1) no interaction between ICSID and World Bank Status on claimed amounts ( $F(3,36) = 0.095$ ;  $p = 0.96$ ;  $n = 44$ ;  $r = 0.09$ ), (2) no main effect for ICSID Status ( $F(1,36) = 0.107$ ;  $p = 0.75$ ;  $n = 44$ ;  $r = 0.05$ ), and (3) no main effect for World Bank Status ( $F(3,36) = 0.073$ ;  $p = 0.97$ ;  $n = 44$ ;  $r = 0.08$ ). HSD follow-ups likewise did not reveal any statistically significant differences on marginal ( $HSD = 1,744,837,088$ ;  $k = 4$ ) or cell ( $HSD = 2,955,945,954$ ;  $k = 8$ ) means.

225. For all ICSID-ALL awards using inverse-transformed data analyzing World Bank Status on amounts claimed, the analysis showed (1) no main effect for ICSID Status ( $F(1,36) = 0.195$ ;  $p = 0.66$ ;  $n = 44$ ;  $r = 0.07$ ), and (2) no main effect for World Bank Status ( $F(3,36) = 0.277$ ;  $p = 0.84$ ;  $n = 44$ ;  $r = 0.15$ ).

226. This reflected an analysis for ICSID Status looking at ICSID-ALL awards. When analyzing ICSID-C awards, there was no main effect for ICSID ( $F(1,36) = 0.092$ ;  $p = 0.76$ ;  $n = 44$ ;  $r = 0.05$ ) and no main effect for World Bank Status ( $F(3,36) = 2.644$ ;  $p = 0.06$ ;  $n = 44$ ;  $r = 0.43$ ). Although there was an interaction ( $F(3,36) = 5.122$ ;  $p = 0.01$ ;  $n = 44$ ;  $r = 0.55$ ) and a large effect size, for reasons similar to those explained *infra* note 227 related to the small cell counts and *Maffezini* and *Petrobart*, it is doubtful that this result is meaningful.

227. Using traditional follow-up to analyze both marginal means ( $HSD = 1.049$ ;  $k = 4$ ) and cell means ( $HSD = 1.778$ ;  $k = 8$ ), there were no differences in amounts claimed in the interaction. A more sensitive measure known as the Least Significant Difference (LSD) is more likely to find statistically significant differences but with a higher rate of error. For marginal means ( $LSD = 0.789$ ;  $k = 4$ ) to analyze differences among World Bank Status, there were no statistically significant differences. For cell means to look for simple effects ( $LSD = 1.116$ ;  $k = 8$ ), there were statistically significant differences. For amounts claimed in ICSID awards, (1) amounts claimed against Upper Middle income was greater than High Income respondents, (2) amounts claimed against Low Income respondents was greater than High Income, and (3) all other comparisons failed to demonstrate a statistically significant difference in amounts claimed. For amounts claimed in non-ICSID awards, (1) amounts claimed against High Income respondents were greater than Low, and (2) all other comparisons failed to reveal a statistically significant difference. When comparing results for claims against High Income respondents, ICSID cases had lower amounts claimed whereas other forums have higher amounts; meanwhile, when comparing claims against Low Income respondents, ICSID cases have higher amounts claimed, whereas other forums have lower amounts claimed; for both Upper Middle and Lower Middle income respondents, there is no statistically significant difference between ICSID and non-ICSID cases in amounts claimed.

unrepresentative awards — namely *Maffezini*<sup>228</sup> and *Petrobart*<sup>229</sup> — that are likely the root of the interaction,<sup>230</sup> results from the model examining Development Status as a function of World Bank categorization should be viewed cautiously. Instead, the model considering ICSID and development as a function of OECD Status — with larger cell counts balanced across all categories and involving more representative cases — may provide a better basis for inferences beyond the population studied. Although results from that model demonstrated no statistical difference in amounts claimed, the interaction is on the cusp of significance ( $p = 0.053$ ) and the model is slightly underpowered. This makes the model worthy of replication before making strong inferences about the current population.<sup>231</sup> Replication is also warranted by the follow-up pair-wise comparisons that suggest *only* for non-ICSID awards (many of which were North American Free Trade Agreement claims) that mean amount claimed against OECD respondents was higher than the mean amount claimed against non-OECD respondents.<sup>232</sup>

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228. See *supra* notes 213, 218, and 221.

229. See *supra* note 221 and accompanying text.

230. Using transformed data, for ICSID-C versus New York Convention awards analyzing the effect of OECD Status, there were significant differences related to (1) the interaction between ICSID and OECD Status on claimed amounts ( $F(1,40) = 11.72$ ;  $p < 0.01$ ;  $n = 44$ ;  $r = 0.48$ ), (2) a main effect for ICSID Status ( $F(1,40) = 4.388$ ;  $p = 0.04$ ;  $n = 44$ ;  $r = 0.31$ ), and (3) a main effect for OECD Status ( $F(1,40) = 4.079$ ;  $p = 0.05$ ;  $n = 44$ ;  $r = 0.30$ ). Follow-up simple effects ( $HSD = 0.975$ ) suggested two things. First, for ICSID Convention cases, there were higher amounts claimed against non-OECD countries than OECD countries, and this effect was not present when comparing New York Convention awards. Second, for OECD respondents, amounts claimed were higher in New York Convention cases than ICSID Convention cases, but this effect was not present when comparing non-OECD respondents. These simple effects were only present when *Maffezini* was the basis of comparison to the remainder of the sample. As the model has one cell with a single, arguably unrepresentative data point that may be the basis of the differences, the results must be treated with caution. *Maffezini v. Kingdom of Spain (Arg. v. Spain)*, ICSID Case No. ARB/97/7, Award (Nov. 13, 2000), 5 ICSID Rep. 419 (2002).

231. This is key as the power for this analysis was slightly over 50% ( $r = 0.30$ ;  $n = 44$ ), which is moving toward the 80% acceptable error rate. An *a priori* power analysis suggests that the requisite sample to capture the four-condition OECD interaction ( $r = 0.30$ ;  $S = 82$ ) would be 164 ( $N = n (82 / 2) \times k (4)$ ). Replication could also contextualize why the significant interaction using transformed data to analyze World Bank Status and amounts claimed revealed no significant follow-up effects using traditional measures (HSD), but liberal measures (LSD) — but pointed to various permutations: (1) in ICSID cases, higher amounts claimed against Upper Middle Income respondents than High Income respondents, (2) in ICSID cases, higher amounts claimed against Low Income respondents than High Income cases, and (3) in non-ICSID cases, higher amounts claimed against High Income than Low Income respondents. See *supra* note 227.

232. The HSD for this model was 16,872,303. For ICSID awards, amounts claimed against OECD and non-OECD respondents were not statistically different. This also means: (1) for OECD respondents, ICSID and non-ICSID amounts claimed were not statistically different, and (2) for non-OECD respondents, ICSID and non-ICSID amounts claimed were not statistically different.

b. Ultimate Winners

Previous research on the Development Status of respondents and presiding arbitrators did not reveal any statistically significant pattern of relationships for winning or losing investment arbitrations.<sup>233</sup> This research expands on that research by considering the outcomes and as a function of Development Status and ICSID Status.

A  $2 \times 2 \times 2$  Chi-Square analysis of ICSID-ALL and OECD Status failed to reveal any statistically significant pattern of relationship. See Table 9. With regard to the simple two-way effect of ICSID, for ICSID Convention and Additional Facility (ICSID-ALL) cases, there was no pattern of relationship between OECD Status and outcome ( $\chi^2(1) = 0.068$ ;  $p = 0.79$ ;  $n = 33$ ;  $r = 0.05$ ). Likewise, for the simple two-way analysis of non-ICSID cases, there was no significant pattern of relationship between OECD Status and outcome ( $\chi^2(1) = 1.446$ ;  $p = 0.23$ ;  $n = 17$ ;  $r = 0.29$ ).<sup>234</sup> Because the simple two-way tests were not significant, it is unlikely that there is a three-way interaction or that the two two-ways are meaningfully different from each other. Although the ICSID-ALL model evaluating OECD Status suggested the possible effect on outcome was less than small ( $r = 0.05$ ), the possibility of a medium-sized effect ( $r = 0.30$ ) on outcome for Other Awards (SCC, UNCITRAL, etc.) suggests the analyses are underpowered and require replication before drawing strong inferences for the current population.<sup>235</sup>

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233. Franck, *supra* note 23, at 460–64.

234. When using OECD to evaluate Development Status, the results were similar when analyzing ICSID as a function of ICSID-C awards ( $\chi^2(1) = 0.224$ ;  $p = 0.64$ ;  $n = 23$ ;  $r = 0.10$ ). For ICSID Convention awards, there was no pattern of relationship on OECD Status and outcome. For New York Convention awards, there was no pattern of relationship on OECD Status and outcome ( $\chi^2(1) = 1.556$ ;  $p = 0.21$ ;  $n = 27$ ;  $r = 0.24$ ).

235. The effect sizes suggest that power is in the order of 0.20, which means there is an 80% or larger risk of a Type-II error.

TABLE 9: ICSID STATUS OF DISPUTE, OECD STATUS OF RESPONDENT STATE, AND FREQUENCY BREAKDOWN OF THE ULTIMATE WINNER OF AN INVESTMENT TREATY ARBITRATION CASE ( $n = 50$ )

ICSID Status	Respondent State	Ultimate Winner		Total
		Claimant	Respondent	
ICSID Convention & Additional Facility	OECD	4	7	11
	Non-OECD	7	15	22
Other Awards (SCC, UNCITRAL, etc.)	OECD	3	5	8
	Non-OECD	6	3	9
<i>Total</i>		20	30	50

\* None of the observed frequencies differed from what would be expected due to chance.

A  $2 \times 4 \times 2$  Chi-Square analysis of ICSID-ALL and World Bank status failed to reveal any statistically significant pattern of relationship. See Table 10. Even when defining Development Status according to World Bank criteria, the omnibus Chi-Square analyses in the two  $2 \times 4$  analyses did not reveal a significant pattern of relationship between ICSID-ALL<sup>236</sup> Development Status and the ultimate winner ( $\chi^2(>1) = 2.337$ ;  $p = 0.51$ ;  $n = 33$ ;  $r = 0.26$ ). For just the follow-up simple two-way analyses comparing the outcomes of ICSID-ALL awards, none of the six tests revealed a statistically significant pattern of relationship.<sup>237</sup> Similarly, for the follow-up simple two-way analyses comparing outcomes for Other Awards, none of the six tests revealed a statistically significant pattern of relationship.<sup>238</sup>

236. When analyzing World Bank Status and ICSID as a function of ICSID-C awards, there was no reliable pattern of relationship among, ICSID-C awards, World Bank Status, and outcomes ( $\chi^2(>1) = 2.585$ ;  $p = 0.46$ ;  $n = 23$ ;  $r = 0.32$ ).

237. Using World Bank Status as a proxy for Development Status, there was no pattern of results when comparing (1) High versus Upper Middle income respondents ( $\chi^2(1) = 1.534$ ;  $p = 0.22$ ;  $n = 19$ ;  $r = 0.28$ ), (2) High versus Lower Middle income respondents ( $\chi^2(1) = 0.16$ ;  $p = 0.69$ ;  $n = 18$ ;  $r = 0.09$ ), (3) High versus Low income respondents ( $\chi^2(1) = 0.888$ ;  $p = 0.37$ ;  $n = 8$ ;  $r = 0.33$ ), (4) Upper Middle versus Lower Middle respondents ( $\chi^2(1) = 0.01$ ;  $p = 0.92$ ;  $n = 15$ ;  $r = 0.03$ ), (5) Upper Middle versus Low respondents ( $\chi^2(1) = 0.525$ ;  $p = 0.47$ ;  $n = 14$ ;  $r = 0.19$ ), and (6) Lower Middle versus Low respondents ( $\chi^2(1) = 0.525$ ;  $p = 0.49$ ;  $n = 14$ ;  $r = 0.19$ ).

238. There was no pattern of results when comparing (1) High versus Upper Middle income respondents ( $\chi^2(1) < 0.01$ ;  $p > 0.99$ ;  $n = 12$ ;  $r < 0.01$ ), (2) High versus Lower Middle income respondents ( $\chi^2(1) < 0.00$ ;  $p > 0.99$ ;  $n = 10$ ;  $r < 0.01$ ), (3) High versus Low income respondents ( $\chi^2(1) = 0.875$ ;  $p = 0.35$ ;  $n = 7$ ;  $r = 0.35$ ), (4) Upper Middle versus Lower Middle respondents

Although several effects were less than small ( $r < 0.10$ ), other effect sizes suggested the analyses were underpowered, namely with a beyond traditionally accepted risk of a Type-II error. Out of an abundance of caution, replication is necessary before drawing strong inferences beyond the population analyzed.<sup>239</sup>

TABLE 10: ICSID STATUS OF DISPUTE, WORLD BANK STATUS OF RESPONDENT STATE, AND FREQUENCY BREAKDOWN OF THE ULTIMATE WINNER OF AN INVESTMENT TREATY ARBITRATION CASE ( $n = 50$ )

ICSID Status	Respondent State	Ultimate Winner		Total
		Claimant	Respondent	
ICSID Convention & Additional Facility	High Income	1	5	6
	Upper Middle	6	7	13
	Lower Middle	3	9	12
	Low Income	1	1	2
Other Awards (SCC, UNCITRAL, etc.)	High Income	3	3	6
	Upper Middle	3	3	6
	Lower Middle	2	2	4
	Low Middle	1	0	1
<i>Total</i>		20	30	50

\* None of the observed frequencies differed from what would be expected due to chance.

As hypothesized, for the pre-2007 population, the data did not reveal any meaningful pattern of relationship among respondents' Development Status, ICSID Status, and whether the claimant or respondent won the treaty dispute. The lack of a reliable pattern of relationship between OECD membership and winning or losing —

( $\chi^2(1) < 0.00$ ;  $p > 0.99$ ;  $n = 10$ ;  $r < .01$ ), (5) Upper Middle versus Low respondents ( $\chi^2(1) = 0.875$ ;  $p = 0.35$ ;  $n = 7$ ;  $r = 0.35$ ), and (6) Lower Middle versus Low respondents ( $\chi^2(1) = 0.833$ ;  $p = 0.36$ ;  $n = 5$ ;  $r = 0.41$ ).

239. The effect sizes suggest the omnibus tests for ICSID-ALL and ICSID-C comparisons of World Bank Status are underpowered (approximately 0.20–0.40 power), given as there is a 60–80% likelihood of a Type-II error. Given the larger number of sub-categories and decreased cell counts, the follow-up comparisons are similarly underpowered (less than 0.20 power and greater than 80% risk of error).

irrespective of whether the dispute was resolved at ICSID or elsewhere — suggests that the outcomes at ICSID were statistically equivalent to other arbitration venues for both OECD and non-OECD respondents. The World Bank analyses, which were more nuanced in measuring development, mirrored the results and also failed to reveal a significant pattern of relationship. This initial evidence from the pre-2007 population chips away at the theory that ICSID arbitration awards were somehow different (presumably exhibiting a form of bias) from other venues. Rather, the evidence could not demonstrate that ICSID awards were meaningfully different, and even controlling for variables intended to address concerns related to development, the outcomes did not favor either investors or states.

The evidence from the pre-2007 population did not support the hypothesis that ICSID arbitration was associated with meaningfully different outcomes when controlling for Development Status. Although inferences about the current population should be made with caution, this is a piece of evidence that suggests ICSID arbitration need not be radically overhauled or rejected. The caution is particularly warranted as the effect size for the subset of non-ICSID awards model in the OECD-based bordered on medium-sized ( $r = 0.29$ ) and, for inferential purposes, the model was underpowered.<sup>240</sup> For this reason, before extrapolating beyond the dataset analyzed in this research, replication is warranted to promote an assessment of whether the initial finding represents an ongoing population parameter or if there has been a systemic change.<sup>241</sup>

### c. Amounts Awarded

Since a binary win–loss dependent variable condenses potential variations in outcome, this research also used a continuous variable to assess outcome by focusing on amounts awarded. The research used

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240. With a non-significant pattern of relationship and a less than small effect size ( $r = 0.05$ ) for the OECD model, the lack of an effect in the ICSID awards may not result from an underpowered sample. For the non-ICSID awards, the effect sizes ( $r = 0.29$ ;  $n = 17$ ) indicates the power is between 0.20–0.30 and there is a 70–80% risk of a Type-II error; this is worthy of replication. *See also supra* note 234 and accompanying text (offering power analyses for the World Bank models).

241. Using a conservative approach to look for the smallest effect size for all the different OECD-based models ( $r = 0.10$ , *supra* note 234) in the four-condition model, a sample of 1562 final arbitration awards would be required. This would be for an analysis with an effect of 0.10 ( $S = 781$ ) with 80% power ( $N = n (781 / 2) \times k (4)$ ). Using a less conservative approach (effect size of  $r = 0.30$ ;  $S = 82$ ) for the OECD model, the requisite sample would be 164. If using a conservative approach and the smallest effect size from the World Bank models ( $r = 0.10$ ;  $S = 781$ ) in an eight-condition model, the requisite sample would be 3124 final arbitration awards ( $N = n (781 / 2) \times k (8)$ ). Using a less conservative approach for the World Bank models (effect size  $r = 0.25$ ;  $S = 120$ ), a sample of 480 final awards is required.

various between-subjects factorials to analyze the effects of two independent variables, namely ICSID Status and the respondent's Development Status, on the mean amount awarded. Given ICSID's doctrinal equivalence with other venues and the existing data suggesting that a respondent's development background is not reliably associated with outcome, the research hypothesis — and normative hope — was that there would be no reliable statistical relationship between the independent and dependent variables.

i. Raw Amounts Awarded

Using raw data that included statistical outliers from the fifty-two final awards, the mean amount awarded against OECD respondents was US\$15,650,907 ( $n = 19$ ;  $SD = 61,675,838$ ), whereas the mean amount claimed for disputes against non-OECD respondents was US\$7,360,140 ( $n = 33$ ;  $SD = 25,792,613$ ).<sup>242</sup> As binary categories potentially hide variation, a more sensitive analysis using World Bank categories and raw data indicated the mean amount claimed against High Income respondents was US\$250,855,045 ( $n = 8$ ;  $SD = 333,851,690$ ); the mean amount claimed against Upper Middle Income respondents was US\$125,235,035 ( $n = 15$ ;  $SD = 141,121,927$ ); the mean amount claimed against Lower Middle Income respondents was US\$639,509,132 ( $n = 16$ ;  $SD = 2,336,891,369$ ); and the mean amount claimed against Low Income respondents was US\$198,687,629 ( $n = 5$ ;  $SD = 218,579,080$ ).<sup>243</sup> As the facial differences in raw data (with statistical outliers) might suggest, awards against developed countries were larger than awards against developing states; this research considered whether the means were any different than what might be due to chance alone.

ii. Amounts Awarded: OECD Status & ICSID

The next question was whether awards differed meaningfully as a function of Development Status, ICSID Status, or an interaction of those variables. This research therefore analyzed winsorized data to evaluate those relationships through  $2 \times 2$  between groups ANOVA factorials

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242. Means for winsorized data, which minimized the skewing caused by statistical outliers, mean amount awarded against OECD respondents was US\$1,169,437 ( $n = 19$ ;  $SD = 2,171,590$ ); the mean awards for non-OECD respondents was US\$1,321,078 ( $n = 33$ ;  $SD = 2,089,101$ ).

243. For winsorized data, the mean award rendered against High Income respondents was US\$22,851,784 ( $n = 12$ ;  $SD = 77,780,645$ ); the mean award against Upper Middle Income respondents was US\$8,981,026 ( $n = 19$ ;  $SD = 30,345,259$ ); the mean award against Lower Middle Income respondents was US\$4,839,440 ( $n = 17$ ;  $SD = 17,300,488$ ); and the mean award against Low Income respondents was US\$3,280,124 ( $n = 4$ ;  $SD = 4,007,490$ ).

analyzing OECD membership and a  $2 \times 4$  between groups ANOVA factorials analyzing World Bank categories.

When analyzing development as a function of respondent's OECD Status, the results demonstrated three things. First, there was no statistically significant interaction of OECD membership and ICSID Status (comparing all ICSID cases against others) on amounts awarded ( $F(1,48) = 0.052$ ;  $p = 0.82$ ;  $n = 52$ ;  $r = 0.03$ ).<sup>244</sup> Second, there was no main effect for ICSID-ALL on amounts awarded ( $F(1,48) = 0.174$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ).<sup>245</sup> Third, there was no main effect for OECD Status ( $F(1,48) = 0.132$ ;  $p = 0.72$ ;  $n = 52$ ;  $r = 0.05$ ).<sup>246</sup> Also, follow-up comparisons ( $HSD = 2,267,233$ ;  $k = 4$ ) did not demonstrate that there were any latent statistically significant simple effects when comparing the individual cell means. Raw,<sup>247</sup> log-transformed,<sup>248</sup> and inverse-transformed<sup>249</sup> data exhibited similar results whereby there were

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244. When ICSID Status is a function of being an ICSID-C or New York Convention award, there was likewise no significant interaction using winsorized data ( $F(1,48) = 0.451$ ;  $p = 0.51$ ;  $n = 52$ ;  $r = 0.10$ ).

245. There was no main effect for ICSID-C or New York Convention awards using winsorized data ( $F(1,48) = 0.476$ ;  $p = 0.49$ ;  $n = 52$ ;  $r = 0.10$ ).

246. There was no significant main effect for OECD Status when analyzing ICSID-C versus New York Convention awards using winsorized data ( $F(1,48) = 0.504$ ;  $p = 0.48$ ;  $n = 52$ ;  $r = 0.10$ ).

247. For ICSID-ALL awards using raw data analyzing OECD Status on amounts awarded, there was no reliable relationship between amounts awarded for (1) an interaction between ICSID and OECD Status ( $F(1,48) = 1.376$ ;  $p = 0.25$ ;  $n = 52$ ;  $r = 0.17$ ), (2) a main effect for ICSID Status ( $F(1,48) = 1.805$ ;  $p = 0.19$ ;  $n = 52$ ;  $r = 0.19$ ), (3) a main effect for OECD Status ( $F(1,48) = 0.655$ ;  $p = 0.42$ ;  $n = 52$ ;  $r = 0.12$ ), or (4) follow-up comparisons among cell means ( $HSD = 44,219,238$ ;  $k = 4$ ). For ICSID-C versus New York Convention awards, analyses showed that for amounts awarded there was (1) no interaction between ICSID-ALL and OECD Status ( $F(1,48) = 0.236$ ;  $p = 0.63$ ;  $r = 0.07$ ), (2) no main effect for ICSID Status ( $F(1,48) = 0.233$ ;  $p = 0.63$ ;  $n = 52$ ;  $r = 0.07$ ), (3) no main effect for OECD Status ( $F(1,48) = 0.006$ ;  $p = 0.94$ ;  $n = 52$ ;  $r = 0.01$ ), and (4) no significant simple effects when comparing cell means ( $HSD = 45,417,872$ ;  $k = 4$ ).

248. For ICSID-ALL awards using log-transformed data analyzing OECD Status on amounts awarded, the analysis showed (1) no interaction between ICSID and OECD Status on claimed awarded ( $F(1,48) = 0.699$ ;  $p = 0.41$ ;  $n = 52$ ;  $r = 0.11$ ), (2) no main effect for ICSID Status ( $F(1,48) = 1.279$ ;  $p = 0.26$ ;  $r = 0.16$ ), (3) no main effect for OECD ( $F(1,48) = 0.579$ ;  $p = 0.45$ ;  $n = 52$ ;  $r = 0.11$ ), and (4) no significant simple effects ( $HSD = 3.454$ ;  $k = 4$ ). For ICSID-C versus New York Convention awards, analyses similarly showed that, for amounts awarded, there was (1) no interaction between ICSID-C and OECD Status ( $F(1,48) = 0.189$ ;  $p = 0.67$ ;  $n = 52$ ;  $r = 0.06$ ), (2) no main effect for ICSID-C ( $F(1,48) = 0.081$ ;  $p = 0.78$ ;  $n = 52$ ;  $r = 0.04$ ), (3) no main effect for OECD Status ( $F(1,48) = 0.091$ ;  $p = 0.76$ ;  $n = 52$ ;  $r = 0.04$ ), and (4) no significant simple effects when comparing cell means ( $HSD = 3.514$ ;  $k = 4$ ).

249. For ICSID-ALL awards using inverse-transformed data analyzing OECD Status on amounts awarded, the analysis showed (1) no interaction between ICSID and OECD Status on claimed awarded ( $F(1,48) = 1.147$ ;  $p = 0.29$ ;  $n = 52$ ;  $r = 0.15$ ), (2) no main effect for ICSID Status ( $F(1,48) = 1.316$ ;  $p = 0.26$ ;  $r = 0.16$ ), (3) no main effect for OECD ( $F(1,48) = 0.757$ ;  $p = 0.39$ ;  $n = 52$ ;  $r = 0.13$ ), and (4) no significant simple effects ( $HSD = 0.52$ ;  $k = 4$ ). For ICSID-C versus New York Convention awards, analyses similarly showed that, for amounts awarded, there was (1) no interaction between ICSID-C and OECD Status ( $F(1,48) = 0.612$ ;  $p = 0.44$ ;

no interactions, no main effects, and no simple effects when comparing individual cell means with HSD follow-ups.

The results did not support a hypothesis that amounts awarded at ICSID differed meaningfully as a function of the OECD Status of the respondent. The tests failed to demonstrate that amounts at ICSID awarded against OECD respondents was higher; likewise, the tests failed to demonstrate that the mean amount awarded at ICSID against non-OECD respondents was higher than the mean amount awarded against OECD respondents. This suggests that amounts awarded — as a function of OECD and ICSID-ALL awards — may be functionally equivalent. Without a reliable statistical relationship between ICSID and outcome, it is inappropriate to suggest ICSID caused outcomes for either OECD or non-OECD members. Much like the lack of a relationship with OECD Status and ICSID Status in the binary win–loss dependent variable, the lack of a reliable pattern of relationship between OECD membership and amounts awarded indicates that awards at ICSID in the pre-2007 population were not meaningfully different. The results also offer initial probabilistic evidence that mean awards are currently not meaningfully different. While the inferences are based upon initial data from the first generation of a population, the results offer evidence that undercuts the argument that ICSID arbitration awards were biased and that the proper normative outcome is to reject ICSID arbitration. Nevertheless, before drawing definitive conclusions, caution is warranted and replication is necessary. While effect sizes for many of the OECD-analyses were less than small ( $r < 0.10$ ), the possibility of small effects and the possibility of underpowered models with a related risk of error<sup>250</sup> suggests that replication with a larger dataset is needed before drawing strong inferences about the current population.<sup>251</sup>

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$r = 0.11$ ), (2) no main effect for ICSID-C ( $F(1,48) = 0.007$ ;  $p = 0.93$ ;  $n = 52$ ;  $r = 0.01$ ), (3) no main effect for OECD Status ( $F(1,48) = 0.018$ ;  $p = 0.89$ ;  $n = 52$ ;  $r = 0.02$ ), and (4) no significant simple effects when comparing cell means ( $HSD = 0.529$ ;  $k = 4$ ).

250. For the various small effect sizes from the different models analyzing raw, winsorized and transformed data ( $r = 0.10$ ;  $r = 0.10$ ;  $r = 0.10$ ;  $r = 0.17$ ;  $r = 0.19$ ;  $r = 0.12$ ;  $r = 0.16$ ;  $r = 0.15$ ;  $r = 0.16$ ;  $r = 0.13$ ;  $n = 52$ ), see *supra* notes 244–49, the power of the models ranged between 0.20–0.30 and there is a 70% or greater risk of a Type-II error. For the analyses where there is a less than small effect size ( $r < 0.10$ ) and a non-significant effect, it is unlikely that these analyses suffer from an underpowered sample, or the effect may be so small that it will be difficult to justify research resources. Out of an abundance of caution, however, replication is prudent.

251. Using a conservative approach to look for the smallest effect ( $r = 0.10$ , *supra* notes 244–46) in the four-condition model, an *a priori* power analysis indicates that a sample of 1,562 final arbitration awards would be required. This would be for an analysis with an effect of 0.10 ( $S = 781$ ) with 80% power ( $N = n(781 / 2) \times k(4)$ ). Using a less conservative approach (effect size of  $r = 0.20$ ;  $S = 191$ ), the requisite sample would be 382.

### iii. Amounts Awarded: World Bank Status & ICSID

As the binary OECD Status variable is a blunt measure to analyze Development Status, the next model used the more sensitive four-category variable of World Bank Status. The analysis then evaluated the effect on the continuous dependent variable (amounts awarded) from the two independent variables, namely World Bank Status and the presence of an ICSID (or non-ICSID) dispute.

As regards the similarities, at the macro level, as hypothesized, there was no reliable relationship between either the independent variables or their interaction upon the amounts awarded. First, there was no statistically significant interaction between World Bank and ICSID Status (comparing all ICSID Convention and Additional Facility awards against others) and amounts claimed ( $F(3,44) = 0.903$ ;  $p = 0.45$ ;  $n = 52$ ;  $r = 0.24$ ). Second, there was no main effect of ICSID-ALL awards on amounts awarded ( $F(1,44) = 0.001$ ;  $p = 0.97$ ;  $n = 52$ ;  $r < 0.01$ ). Third, there was no main effect for World Bank Status ( $F(3,44) = 0.453$ ;  $p = 0.72$ ;  $n = 52$ ;  $r = 0.10$ ). See Table 11. Raw,<sup>252</sup> log-transformed,<sup>253</sup> and inverse-transformed<sup>254</sup> data analyzing

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252. For ICSID-ALL using *raw* data analyzing World Bank Status on amounts awarded, the analysis showed (1) no interaction between ICSID and World Bank Status on amounts ( $F(3,44) = 1.068$ ;  $p = 0.37$ ;  $n = 52$ ;  $r = 0.26$ ), (2) no main effect for ICSID Status ( $F(1,44) = 0.579$ ;  $p = 0.34$ ;  $n = 52$ ;  $r = 0.11$ ), (3) no main effect for World Bank Status ( $F(3,44) = 0.399$ ;  $p = 0.45$ ;  $n = 52$ ;  $r = 0.10$ ), and (4) no statistically simple effects when comparing across cell means ( $HSD = 75,735,126$ ;  $k = 8$ ). For ICSID-C and New York Convention awards analyzing the effect of World Bank Status, analyses showed (1) no interaction between ICSID and World Bank Status on amounts awarded ( $F(3,44) = 0.696$ ;  $p = 0.56$ ;  $n = 52$ ;  $r = 0.21$ ), (2) no main effect for ICSID Status ( $F(1,44) = 0.119$ ;  $p = 0.73$ ;  $n = 52$ ;  $r = 0.05$ ), (3) no main effect for World Bank Status ( $F(3,44) = 0.094$ ;  $p = 0.96$ ;  $n = 52$ ;  $r = 0.05$ ), and (4) follow-up pairwise comparisons across cells did not reveal a statistically significant latent effect ( $HSD = 77,408,533$ ;  $k = 8$ ). None of the HSD follow-ups for those two models revealed statistically significant differences in marginal means or simple effects.

253. For ICSID-ALL awards using log-transformed data analyzing World Bank Status on amounts awarded, the analysis showed (1) no interaction with ICSID and World Bank Status ( $F(3,44) = 0.347$ ;  $p = .79$ ;  $n = 52$ ;  $r = 0.15$ ), (2) no main effect for ICSID Status ( $F(1,44) = 1.406$ ;  $p = 0.24$ ;  $n = 52$ ;  $r = 0.18$ ), (3) no main effect for World Bank Status ( $F(3,44) = 0.893$ ;  $p = 0.45$ ;  $n = 52$ ;  $r = 0.24$ ), (4) no simple effects across marginal means ( $HSD = 3.46$ ;  $k = 4$ ), and (5) no significant simple effects across cell means ( $HSD = 5.836$ ;  $k = 8$ ). For ICSID-C and New York Convention awards analyzing the effect of World Bank Status, analyses showed: (1) no interaction between ICSID and World Bank Status on amounts awarded ( $F(3,44) = 0.512$ ;  $p = 0.68$ ;  $n = 52$ ;  $r = 0.18$ ), (2) no main effect for ICSID Status ( $F(1,44) = 0.174$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ), (3) no main effect for World Bank Status ( $F(3,44) = 0.982$ ;  $p = 0.41$ ;  $n = 52$ ;  $r = 0.25$ ), (4) no simple effects across marginal means ( $HSD = 3.504$ ;  $k = 4$ ), and (5) no significant simple effects across cell means ( $HSD = 5.911$ ;  $k = 8$ ).

254. For ICSID-ALL awards using inverse-transformed data analyzing World Bank Status on amounts awarded, the analysis showed (1) no interaction with ICSID and World Bank Status ( $F(3,44) = 0.250$ ;  $p = 0.86$ ;  $n = 52$ ;  $r = 0.13$ ), (2) no main effect for ICSID Status ( $F(1,44) = 1.692$ ;  $p = 0.20$ ;  $n = 52$ ;  $r = 0.19$ ), (3) no main effect for World Bank Status

differences among ICSID-ALL awards similarly failed to demonstrate a relationship between development and outcome at the macro level.

TABLE 11: WINSORIZED DATA OF AMOUNT OF DAMAGES AWARDED TO INVESTORS AS A FUNCTION OF ICSID STATUS & WORLD BANK STATUS FOR RESPONDENTS ( $n = 52$ )

ICSID Status	World Bank Status	Amount		Total
		Mean	Standard Deviation	
ICSID Convention & Additional Facility	High Income	25,886	63,407	6
	Upper Middle	1,852,800	2,643,258	13
	Lower Middle	640,459	1,630,155	13
	Low Income	2,888,391	2,839,123	3
Other Awards (SCC, UNCITRAL, etc.)	High Income	1,654,604	2,479,167	6
	Upper Middle	1,303,900	1,442,693	6
	Lower Middle	1,425,035	2,833,692	4
	Low Income	1,130,859	0	1

For the ICSID-ALL model, follow-up comparisons of individual cell means ( $HSD = 3,752,306$ ;  $k = 8$ ) across categories did not reveal any statistically significant latent effects. When focusing purely on ICSID Convention and Additional Facility cases, for example, this suggests that the following combinations of amounts awarded were not statistically different: (1) High versus Upper Middle Income respondents, (2) High versus Lower Middle Income respondents, (3) High versus Low Income respondents, (4) Upper Middle versus Lower Middle Income respondents, (5) Upper Middle versus Low Income respondents, and (6) Lower Middle versus Low Income respondents. Although the difference in amounts awarded between High and Low

( $F(3,44) = 0.921$ ;  $p = 0.44$ ;  $n = 52$ ;  $r = 0.14$ ), and (4) no significant simple effects across cell means ( $HSD = 0.526$ ;  $k = 4$ ). For ICSID-C and New York Convention awards analyzing the effect of World Bank Status, analyses showed (1) no interaction between ICSID and World Bank Status on amounts awarded ( $F(3,44) = 0.443$ ;  $p = 0.72$ ;  $n = 52$ ;  $r = 0.17$ ), (2) no main effect for ICSID Status ( $F(1,44) = 0.154$ ;  $p = 0.70$ ;  $n = 52$ ;  $r = 0.06$ ), and (3) no main effect for World Bank Status ( $F(3,44) = 0.861$ ;  $p = 0.47$ ;  $n = 52$ ;  $r = 0.10$ ). Although the HSD follow-ups did not reveal any statistically significant differences in marginal means or cell means, using the less conservative LSD did for did reveal some significant effects. See *infra* notes 260–61, 263.

Income respondents in ICSID awards seems facially striking, the follow-ups demonstrated that the difference was not statistically meaningful. Instead, the initial evidence suggests that, for the pre-2007 population, the mean amount awarded may be statistically equivalent. The absence of a meaningful difference on the basis of different World Bank development classifications suggests that, for the pre-2007 population, ICSID was no better or worse than other arbitration venues. Moreover, without a reliable statistical relationship between ICSID and outcome, it is inappropriate to suggest World Bank classification caused ICSID outcomes. Those results, like their counterparts when analyzing development as a function of OECD status, offer preliminary evidence that undercuts the hypothesis that ICSID was biased. If ICSID were somehow biased against the developing world, one would have at least expected to see meaningfully different (and presumably larger) awards against developing states, but this was not the case. Given that some analyses suggested that there may be a small-to-medium size effect of the models beyond the pre-2007 population analyzed here,<sup>255</sup> it would be prudent to replicate the research before making definitive conclusions about the current population parameters.

If ICSID Status was not viewed as a comparison purely between all ICSID awards (namely ICSID Convention and Additional Facility cases) and other arbitration awards (that is, other institutions or *ad hoc* proceedings), the results were generally the same, but they exhibited a slight but noteworthy divergence. Like the “ICSID-ALL” counterpart, when comparing ICSID Convention awards against all other New York Convention awards (and including ICSID Additional Facility cases), (1) there was no statistically significant interaction claimed ( $F(3,44) = 1.321$ ;  $p = 0.28$ ;  $n = 52$ ;  $r = 0.29$ ), (2) there was no main effect for ICSID Convention awards awarded ( $F(1,44) = 0.624$ ;  $p = 0.43$ ;  $n = 52$ ;  $r = 0.12$ ), and (3) there was no main effect for World Bank Status ( $F(3,44) = 1.114$ ;  $p = 0.35$ ;  $n = 52$ ;  $r = 0.16$ ).<sup>256</sup> These

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255. For the various small to medium effects from different models analyzing raw, winsorized, log-transformed, and inverse-transformed data ( $r = 0.24$ ;  $r = 0.10$ ;  $r = 0.26$ ;  $r = 0.11$ ;  $r = 0.10$ ;  $r = 0.21$ ;  $r = 0.24$ ;  $r = 0.18$ ;  $r = 0.15$ ;  $r = 0.13$ ;  $r = 0.19$ ;  $r = 0.14$ ;  $r = 0.17$ ;  $r = 0.10$ ;  $n = 52$ ), see *supra* notes 252–54, the power of the models ranged 0.20–0.40, which means there is a 60–80% risk of a Type-II error. For the analyses where there is a less than small effect size ( $r < 0.10$ ) and a non-significant effect, it is unlikely that these analyses suffer from an underpowered sample, or the effect may be so small that it will be difficult to justify research resources. Out of an abundance of caution, before drawing conclusive inferences about the current population, using the smallest effect size ( $r = 0.10$ ;  $S = 781$ ) in an eight-condition model requires a sample of 3,124 final arbitration awards ( $N = n (781 / 2) \times k (8)$ ). Using a more realistic approach and an effect size of  $r = 0.20$  ( $S = 191$ ), a sample of 764 would be required before making statistically definitive conclusions.

256. The macro level results from the winsorized data were replicated using both raw, log-transformed, and inverse-transformed data of amounts awarded. See *supra* notes 252–54.

macro-level results indicated that, for the pre-2007 population, there was no reliable relationship between the ICSID and Development Status.

Although the latent effects were not replicated when using transformed data, the winsorized data revealed two latent differences when comparing the individual cell means for the ICSID-C model.<sup>257</sup> First, for Low Income countries, the mean ICSID Convention award was higher than a New York Convention award. All other follow-ups comparing ICSID Convention to New York Convention awards for High, Upper Middle, and Lower Middle Income respondents were not statistically different.<sup>258</sup> Second, for ICSID Convention awards only, the mean amount awarded against Low Income respondents was statistically larger than their High Income counterparts.<sup>259</sup> All other follow-up effects for ICSID Convention awards failed to reveal a statistically significant difference, including comparisons between (1) High Income versus Upper Middle Income respondents, (2) High Income versus Lower Middle Income respondents, (3) Upper Middle versus Lower Middle Income respondents, (4) Upper Middle versus Low Income respondents, and (5) Lower Middle versus Low Income respondents. All New York Convention awards did not have statistically different amounts awarded. If the more sensitive Fisher's Least Significant Difference (LSD)<sup>260</sup> test was used, the phenomenon whereby Low Income respondents experienced larger awards than their High Income counterparts at ICSID was also present when comparing cell means across ICSID-ALL versus other awards in winsorized data,<sup>261</sup> log-transformed data,<sup>262</sup> and inverse-transformed<sup>263</sup> data. The

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257. *See supra* notes 253–54 (demonstrating a lack of statistically significant simple effects using HSD follow-up analyses in the ICSID-C models). For the winsorized data, the follow-up comparisons were for cell means of ICSID-C versus New York Convention awards ( $HSD = 3,714,086; k = 8$ ).

258. For the interaction of ICSID-C and World Bank Status, follow-ups revealed no significant differences in the marginal means of various World Bank categories ( $HSD = 2,202,104; k = 4$ ). The results were also mirrored in the interaction of ICSID-ALL and World Bank Status with no significant differences in marginal means ( $HSD = 2,224,765; k = 4$ ). In other words, there was no statistically significant difference between amounts awarded against High, Upper Middle, Low Middle, and Low Income respondents.

259. While all other follow-ups for ICSID-C awards were descriptive, this effect mimics a potential effect found analyzing all ICSID cases but only using the more liberal and sensitive LSD follow-up. *See infra* note 261.

260. LSD analyses must be treated with extreme caution given the lack of a statistically significant effect and the sometimes overly sensitive nature of LSDs that may result in inadvertently finding non-replicable significant effects.

261. Using LSD follow-ups in winsorized data, while there were no differences in the marginal means for various World Bank categories ( $LSD = 1,677,746; k = 4$ ), there was one striking and significant simple effect ( $LSD = 2,372,691; k = 8$ ). For ICSID-ALL cases, there was a significant difference whereby amounts awarded by Low Income countries experienced higher awards than High Income countries; all other comparisons for awards at ICSID (i.e., High versus

lack of a significant macro effect, the arguable oversensitivity of LSDs, and slight divergence in follow-ups suggests inferences from this analysis should be treated cautiously. Prior to making definitive inferences, further research that contains a larger sample and additional statistical control is required.

In the meantime, macro-level analyses of the pre-2007 population all found that outcome was not reliably linked to World Bank classification or the presence of an ICSID dispute. The lack of a statistically meaningful difference in the initial evidence of statistical equivalence in amounts awarded suggests that ICSID was not any better (or any worse) than other forms of arbitration for resolving treaty disputes. Inferences from this evidence undermine suggestions that ICSID caused outcomes or was somehow biased against developing states. It also provides a preliminary, but limited, baseline for considering whether that result continues to be the current population parameter.

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Upper-Middle, High versus Lower-Middle, Upper-Middle versus Lower-Middle, Upper-Middle versus Low, and Lower-Middle versus Low) were not statistically different. No awards in other arbitral forums were statistically different. For ICSID-ALL, the awards involving High Income respondents were: *ADF Group Inc. v. United States of America (NAFTA)*, ICSID Case No. ARB(AF)/00/1, Award (Jan. 9, 2003), 6 ICSID Rep. 470 (2004); *Genin v. Republic of Estonia (U.S. v. Est.)*, ICSID Case No. ARB/99/2, Award (June 25, 2001), 17 ICSID Rev. 395 (2002); *Loewen Group, Inc. v. United States of America (NAFTA)*, ICSID Case No. ARB(AF)/98/3, Award (June 26, 2003), 7 ICSID Rep. 442 (2005); *Mondev Int'l Ltd. v. United States of America (NAFTA)*, ICSID Case No. ARB(AF)/99/2, Award (Oct. 11, 2002), 6 ICSID Rep. 192; *Soufraki v. United Arab Emirates (It. v. U.A.E.)*, ICSID Case No. ARB/02/7, Award (July 7, 2004), [http://ita.law.uvic.ca/documents/Soufraki\\_000.pdf](http://ita.law.uvic.ca/documents/Soufraki_000.pdf); *Maffezini v. Kingdom of Spain (Arg. v. Spain)*, ICSID Case No. ARB/97/7, Award (Nov. 13, 2000), 5 ICSID Rep. 419 (2002). The ICSID-ALL awards against Low Income respondents were: *Am. Mfg. & Trading, Inc. v. Republic of Zaire*, ICSID Case No. ARB/93/1, Award (Feb. 21, 1997), 5 ICSID Rep. 14 (2002); *Goetz v. Republic of Burundi (Belg. v. Burundi)*, ICSID Case No. ARB/95/3, Award (Feb. 10, 1999), 6 ICSID Rep. 5 (2004); *Yaung Chi Oo Trading PTE Ltd. v. Gov't of the Union of Myanmar, ASEAN I.D. Case No. ARB/01/1 (Mar. 31, 2003)*, 42 I.L.M. 540 (2003).

262. Using LSD follow-ups analyzing ICSID-ALL for log-transformed data, there were differences in marginal means across World Bank categories, such that (1) High Income awards were lower than those against Low Income respondents, and (2) Low Middle Income awards were lower than those against Low Income respondents ( $LSD = 2.690$ ;  $k = 4$ ). All other follow-ups were statistically equivalent. For cell means using transformed data ( $LSD = 3.690$ ;  $k = 8$ ), there was only one significant effect: namely, that awards against Low Income respondents outside of ICSID were higher than those against High Income respondents at ICSID. All other comparisons were statistically equivalent. None of these effects were present using the statistically more conservative HSD follow-ups.

263. Using LSD follow-ups analyzing ICSID-ALL for inverse-transformed data, there were differences in marginal means across World Bank categories, such that (1) High Income awards were lower than those against Low Income respondents, and (2) Low Middle Income awards were lower than those against Low Income respondents ( $LSD = 0.469$ ;  $k = 4$ ). For cell means using transformed data ( $LSD = 0.664$ ;  $k = 8$ ), there was only one significant effect: namely, that awards against Low Income respondents outside ICSID were higher than those against High Income respondents inside ICSID. All other comparisons were statistically equivalent.

Nevertheless, although the effect was expressed in pure ICSID Convention cases and not all ICSID cases generally, the presence of two simple effects with a unique, and arguably adverse, impact on Low Income respondents is worthy of further consideration, both in terms of additional research and due care in policy choices. While the pre-2007 data do not necessarily suggest that ICSID is in need of radical overhaul, these results may be evidence that targeted incremental strategies might usefully redress areas of concern. Further research to establish whether these simple effects using winsorized data from the pre-2007 population are replicable in the future — and whether the results from the population analyses can be extrapolated as a parameter for the current population — is therefore warranted. Replication is also prudent, given the scope of the nearly medium effect sizes and the possibility that, for the basis of making inferences beyond the pre-2007 population, there would be an underpowered sample with non-significant effects.<sup>264</sup>

#### IV. THE LIMITATIONS OF THE ANALYSES

While the results of the analyses are a useful starting place to assess ICSID, it is critical to place the results within their proper context. As suggested in previous research using the current database, recognizing the limitations is fundamental to understanding the scope of reasonable inferences that can and should be drawn from the data<sup>265</sup> as they inevitably have implications for the integrity of potential normative reforms.<sup>266</sup> First, the population data come from public awards. This necessarily means that there is a case selection bias that may affect the external validity of the results. Although it is not certain that the effect would weigh in favor of either investors or states, it is possible that private awards differ in some critical aspect from public awards. Likewise, the data do not include any awards rendered after June 1, 2006. This necessarily means that more than four years of data are not

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264. For the ICSID-ALL and World Bank interaction using winsorized data, the effect size was close to medium ( $r = 0.24$ ), but for the ICSID-C and World Bank interaction, there was a medium effect size ( $r = 0.29$ ). Such effects, where close to 30% of that variance is attributable to the isolated variables, is worthy of reflection. Using effect sizes from the winsorized data, for the ICSID-ALL interaction, the power of the analysis was between 0.40–0.50, suggesting a 50–60% risk of a Type-II error, and for the ICSID-C interaction, the power of the analysis is between 0.50–0.60, suggesting a 40–50% risk of a Type-II error. Even the log-transformed data exhibited closer to medium effect sizes for the interaction for ICSID-ALL ( $r = 0.24$ ) and ICSID-C ( $r = 0.25$ ). *Post hoc* power analysis suggests the power of the interaction was 0.40, which indicates a 60% risk of a Type-II error.

265. Franck, *supra* note 23, at 440, 459 n.129, 472, 474–76, 478 n.187; Franck, *supra* note 15, at 17, 24 n.109, 39 n.170, 62, 68, 73, 83.

266. Franck, *supra* note 30 at 811–12.

included, and cases, particularly some of the larger awards against countries such as Argentina and Ecuador, were omitted from the analysis. To the extent that the analysis does not reflect the current population and provides a historical baseline for ongoing consideration, it is necessary to expand the dataset, replicate the analysis, and engage in more precise analyses that control for spurious or co-linear variables that may inadvertently contribute to the results. The author is expanding the “Generation 2” database to address such issues, which means the analyses in this Article will offer a baseline for future analysis and consideration.

Second, the strength of these inferences beyond the analyses conducted for the population is necessarily limited because the sample may not reflect the current population parameters. For the main effect of Latin American respondents, whereby in non-ICSID cases higher amounts were claimed against LA respondents than non-LA respondents, the cell count for LA respondents in non-ICSID cases was relatively small ( $n = 3$ ). For LA respondents, there was also an interaction that was approaching significance ( $p = 0.10$ ) in the logged data, which in light of the relatively low power of the dataset and close-to-medium effect size, requires replication and additional statistical control before a definitive assessment that there is no reliable relationship in the population. Regarding Development Status and mean amount claimed, although the main effect for OECD Status was on the cusp of significance ( $p = 0.06$ ), the significant simple effect that only for other cases (that is, non-ICSID disputes) amount claimed against OECD respondents was higher than non-OECD respondents must be viewed cautiously. When a main effect is not significant, follow-ups that reveal significant simple effects may not necessarily represent replicable variance within the larger population.<sup>267</sup> Along a similar vein, for the simple effect that suggests for ICSID cases only, there was a significant difference such that Low Income countries had higher amounts awarded against them than High Income countries,<sup>268</sup> there was no significant interaction or main effect, and it would be inappropriate to attribute too much to those simple effects. Nevertheless, focusing on significant simple effects (provided they correct for statistical error) even with a non-significant main effect might offer a useful early

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267. For example, an identical  $2 \times 2$  factorial using transformed data, which more closely adheres to the statistical assumptions of the underlying test, revealed an interaction approaching significance ( $p = 0.053$ ), *see supra* note 217, but follow-up comparisons ( $HSD = 1.057$ ) did not reveal any statistically significant differences. In any event, when analyzing amounts claimed as a function of ICSID and World Bank Status, the winsorized data did not reveal any significant differences, and inferences from transformed data are limited. *See supra* notes 221–26 and accompanying text.

268. *See supra* notes 234–42.

warning signal that could create a basis for thoughtful discussion about appropriate normative reform, particularly where additional analyses offer an opportunity for replication.

Third, given the relatively new nature of empirical approaches to ITA and the current limitations of the dataset, the statistical models used were blunt and the variables were limited. It would be prudent for future research to address the possibility of co-linearity, control for spurious variables, and consider multi-variate regressions to reflect the real-life complexities while simultaneously decreasing statistical error.<sup>269</sup> Although this research may be a moment in a greater historical narrative, future analyses may find different or complementary nuances as we develop more sophisticated measures and models in the quest to minimize statistical error. Future scholarship may focus on historical shifts and methodological innovations in an effort to improve the common knowledge.

Finally, there may be issues related to the statistical conclusion validity of the data. While there were a multitude of effect sizes ( $r$ ) that were less than small (that is,  $r < 0.10$ ), there were analyses that exhibited small-to-medium effect sizes ( $r = 0.10$ – $0.30$ ). This suggests that, for those analyses failing to find a statistically significant effect, the power of the research was relatively low and the resulting risk of statistical error is beyond traditionally accepted levels.<sup>270</sup> Analyses with larger sample sizes will be necessary to redress this issue. As replication is the *sine qua non* of social science research, future analysis is both normal and prudent.

To the extent that ITA is a relatively recent phenomenon in international law, we should not be surprised that the research has limited statistical power. Any attempt to increase the power of the analyses by increasing the dataset would have been futile, as the dataset was comprised of real-world data that represented all of the public awards within the prescribed timeframe. In the past, there were simply no investment awards available to analyze and no databases existed that contained information capable of analysis. This should not stop us from conducting analyses, particularly when prominent political scientists remind us that, “[u]ncertainty and limited data should not cause us to abandon scientific research. On the contrary, the biggest payoff for using the rules of scientific inference occurs precisely when data are limited, observation tools are flawed, measurements are unclear, and relationships are uncertain.”<sup>271</sup> The phenomenon of a small dataset for

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269. Franck, *supra* note 23, at 475.

270. See *supra* notes 152, 155, 158, 172, 181, 207, 237, 250 (considering the power of various analyses and providing *post hoc* power analyses).

271. KING ET AL., *supra* note 15, at 10.

new international economic dispute resolution systems is perhaps typical. The General Agreement on Tariffs and Trade (GATT)<sup>272</sup> and the revised Dispute Settlement Understanding<sup>273</sup> have similarly experienced a limited number of cases (ten to forty per year), but this has not stopped vital research on this area.<sup>274</sup> Particularly where there are now more awards and even more investment treaty disputes in the pipeline, some sense of what the data show now is vital for creating the baseline for future consideration. Nevertheless, it is always critical to remember that (1) systematic analysis must describe its methodology to promote the reliability of data collection, statistical research, and related statistical inferences; (2) research must be subject to replication in the future; and (3) expanded analysis with more sophisticated models and statistical control is prudent. While no quantitative research is perfect, provided it is methodologically sound *ex ante*, it is normatively preferable to no research at all or the substitution of chance, personal opinion, instinct, or unrepresentative examples that may be byproducts of cognitive biases.

More research is therefore required to generate analyses with better levels of power, stability, statistical control, and enhanced external validity before reaching definitive conclusions about the role of ICSID in setting population parameters in investment treaty arbitration. UNCTAD's recent research suggests that there are over 350 known investment treaty arbitrations.<sup>275</sup> At the rate of approximately thirty new cases a year,<sup>276</sup> it will likely take decades before there is a sufficient pool of awards — potentially more than 1500 final awards, as *a priori* power analyses suggest<sup>277</sup> — to conduct the requisite analyses that would be needed to reliably ascertain the smallest effects and whether it is appropriate to retain the null hypothesis. Recognizing the imperfection of life, but hoping to do the best we can within those limitations, future research will be challenging and will likely require a pooling of scholarly resources. Nevertheless, it is an undertaking well worth doing, and doing well. There is too much at stake in terms of

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272. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194.

273. Marrakesh Agreement, *supra* note 21, Annex 2.

274. The empirical evidence for international trade law disputes suggests that, during the GATT era, there were approximately nine cases a year, but there are now approximately thirty to thirty-five per year. See Robert E. Hudec, *The New WTO Dispute Settlement Procedure: An Overview of the First Three Years*, 8 MINN. J. GLOBAL TRADE 1, 15–16 (1999); Eric A. Posner & John C. Yoo, *Judicial Independence and International Tribunals*, 93 CALIF. L. REV. 1, 46 (2005).

275. UNCTAD, *World Investment Report 2010: Investing in a Low-Carbon Economy*, at 83, U.N. Sales No. E.10.II.D.2 (2010).

276. *Id.*

277. See *supra* notes 182, 195, 208, 231, 251, 255, 264 and accompanying text. Using similar models and an *a priori* power analysis, previous research found that a sample of 1562 awards would be required. Franck, *supra* note 23, at 461 n.132.

economic, political, and legal implications to sit idly by without methodically attempting to improve the quality of the research and the basis for either potential normative reforms or the retention of the existing status quo.

## V. ANALYSIS & RECOMMENDATION

Given ICSID's leading role in the provision of arbitration services for the resolution of investment disputes, ICSID has been at the forefront of thoughtful consideration of the management of investment treaty disputes. It is therefore prudent to evaluate ICSID in light of the existing data and quantitative analyses. This Part explores the general results, findings related to amounts claimed, and analyses related to outcome. This Article argues that, based upon the analyses from the pre-2007 population data and related inferences, ICSID arbitrations did not generally appear to be meaningfully different (presumably biased) as a function of amounts claimed or outcomes. In light of the results that do point to specific and limited areas of potential concern, the Part recommends ongoing research and the implementation of targeted normative measures. The objective should be to promote incremental reforms and structural safeguards at ICSID that are designed to prevent inadvertent systemic bias and to minimize the backlash to a treaty network that forms a core backdrop of the international economic system.

### A. *General Findings & Recommendations*

There were no general differences between ICSID and non-ICSID cases in amounts claimed and outcomes. When refining the analyses to address three variables of interest, ICSID was still not reliably linked to either amounts claimed or outcomes. First, there was no reliable relationship between ICSID and Energy disputes for either amounts claimed or outcomes. Second, although there was a relationship between amounts claimed against Latin American respondents in non-ICSID awards, there was no reliable relationship among ICSID, Latin American respondents, and outcomes. Third, there was no reliable relationship for either amounts claimed or outcome, as a function of Development Status and all ICSID awards (that is, ICSID Convention and Additional Facility awards).

As a general matter, this meant that, for the pre-2007 population data, the claims and outcomes of arbitration awards at ICSID were not statistically different, and the evidence did not suggest that ICSID was any worse (or any better) than other arbitration forums. That evidence supported neither the contention that ICSID was biased nor the

hypothesis that ICSID arbitration awards were meaningfully different.<sup>278</sup> The data revealed no obvious general disparity at ICSID when controlling for Energy disputes, Latin American respondents, or respondents' Development Status. Given that the pre-2007 data cannot even establish a meaningful statistical relationship between the variables of interest and ICSID, it would be improper to suggest that ICSID caused differences. Inferences from these initial analyses of pre-2007 population data suggest that calls to reject ICSID, such as that from ALBA, are arguably misplaced or perhaps misattributed. Likewise, calls for radical overhaul or outright rejection of ICSID may appear overstated as a general matter on the basis of current data. While there may be specific cases where states question the specific "benefit of their bargain" in agreeing to grant unilateral rights to investors in exchange for the potential value of foreign investment,<sup>279</sup> that is a different question from whether ICSID and the investment arbitration system as a whole exhibit bias or are otherwise fundamentally unsound.

Nevertheless, in light of certain findings, follow-ups, effect sizes, and power analyses, there are aspects that require further reflection. For amounts claimed, this relates to (1) the significant main effect for LA such that, in non-ICSID awards, higher amounts were claimed against LA respondents; and (2) the latent simple effect for OECD Status such that, for non-ICSID awards, amounts claimed against OECD respondents were higher than non-OECD members. For amounts awarded, this relates to (1) the absence of any impact on reliable link between ICSID and LA respondents upon outcome; (2) the latent simple effect for Low Income respondents such that ICSID Convention awards were higher than New York Convention awards; and (3) the latent simple effect for ICSID Convention awards whereby awards against Low Income respondents were higher than awards against High Income

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278. The author is unaware of any investment treaty claim having been brought before a national court, even though many states include provisions in their IIAs to permit investors to sue the state within the state's own national courts. See Parra, *supra* note 31, at 288, 358 (indicating investors can sometimes litigate before national courts). Given investors' failure to pursue their treaty claims before national courts, the inference about a lack of ICSID bias should be limited to comparisons with other forms of arbitration. Unfortunately, the inference cannot be extended to all forms of adjudication, as there is no comparable court litigation, given investors' failure to take states up on their offers to litigate claims before national courts.

279. It is likewise prudent to recall that the analyses in this Article are quantitative and holistic in nature. The analyses evaluate systemic associations rather than predicting individual outcomes or identifying the unique value of an IIA in an individual state-to-state negotiation. A qualitative assessment of specific IIAs, particularly with a sound *ex ante* research protocol, may identify specific areas of concern or suggest a different cost-benefit analysis that is a variation from the population as a whole. That does not undermine, however, the value of providing systemic information to ensure that a selection bias occurs such that cognitive biases (such as the confirmation bias) operate to undermine the value of the research and related analyses. See *supra* notes 134, 166 and accompanying text.

states. Given the concerns raised by those analyses, these highlighted issues are arguably worthy of targeted solutions. Concerns related to disparate amounts claimed, for example, might be addressed by instituting pleading rules that may require a good-faith obligation for pleading, particularization of claimed damages, or cost-shifting for unsubstantiated claims. Likewise, to the extent that concerns about disparate outcomes reflect concerns about the availability of counsel or states that have recently experienced civil war (whether from Africa or elsewhere), reforms may consider how to usefully address gaps in legal capacity and rule of law infrastructure. Otherwise, the initial evidence from this research — which is subject to the evolution of future research before making broader inferences — does not support the theory of radical rejection or reform. While the data do not mean the system is perfect, they do offer preliminary statistical evidence that is a cause for cautious optimism as regards the effect of ICSID.

### *B. Amounts Claimed*

This Section explores the differences in amounts claimed that were linked to LA or OECD Status. It then assesses ICSID's arguable possible bias on this dependent variable, given that amounts claimed by investors are currently outside ICSID's control.

For amounts claimed against LA respondents, the presence of the statistically significant main effect is intriguing, particularly given the sensitivities expressed by some Latin American heads of state. Making an inference on the basis of the pre-2007 population, the results suggest that, in non-ICSID arbitrations, LA respondents may initially experience a larger fiscal exposure and therefore perceive a larger arbitration risk. Given the role of cognitive biases and how initial perceptions may affect ultimate conclusions drawn about institutions despite evidence to the contrary,<sup>280</sup> perhaps this small seed — namely, disparate amounts claimed against LA respondents — is at the root of stated concerns about the perceived bias of ICSID. It would therefore be prudent to explore further the intersection of amounts claimed and Latin American states to consider the scope of the risk and explore how best to minimize the potential differential arbitration risk. Nevertheless, three critical elements must be considered to properly contextualize the results.

First, the differential amounts claimed against LA respondents in non-ICSID cases did not affect the actual amounts awarded, irrespective

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280. See, e.g., Dan M. Kahan, *Two Conceptions of Emotion in Risk Regulation*, 156 U. PA. L. REV. 741 (2008) (describing theories of risk perception and the role of emotional apprehension, including whether such apprehension acts as an improper predictor of future risk, and creates challenges for informed and rational policymaking).

of whether the case occurred inside or outside of ICSID. Even though LA respondents experienced higher amounts claimed in non-ICSID cases than their non-LA counterparts, the analyses could not demonstrate that LA respondents experienced differential results. In other words, despite the initial risk, the results offered preliminary evidence that outcomes in the pre-2007 population were statistically equivalent across arbitral forums.

Second, to the extent that differences in amounts claimed reflect an area of concern within investment arbitration, those concerns may be improperly attributed to ICSID. While LA respondents may experience legitimate concerns about their high risk in ITA, casting doubt on ICSID's integrity appears to be misplaced at present. Rather, although the number of claims in the subset is small, inferences from the data suggest that the perception of enhanced arbitration risk would be more rightly attributed to non-ICSID venues.

Third, differences even in a non-ICSID context may simply reflect case selection bias such that investors may elect non-ICSID venues in higher value disputes or in cases that require the immediate formation of a tribunal. For example, to the extent that the ICSID registration process, the formation of ICSID tribunals, and the overall timetable of ICSID arbitrations may take longer than alternative forums<sup>281</sup> — particularly as the registration process is not an element of SCC or *ad hoc* arbitration — it is possible that investors may have self-selected a venue that they assume operates more quickly than ICSID. In such a case, for example, where the claim is substantial or interim relief is needed expeditiously, it may be unsurprising that larger-value disputes find their way into non-ICSID venues.<sup>282</sup> This may be partially responsible for, or perhaps co-linear with, the variance reflected in the larger amounts claimed against LA respondents in other arbitration venues. Future research might test this theory by controlling for the length of the dispute or the presence of a request for interim relief.

For amounts claimed as a function of a respondent's OECD status, as hypothesized, data revealed that the mean amount claimed did not generally differ as a function of respondent's Development Status when comparing all ICSID awards (that is, combining ICSID Convention and ICSID Additional Facility cases) against disputes in all other venues (that is, the SCC, International Chamber of Commerce (ICC), etc.). In other words, the presence of an ICSID or non-ICSID venue was not

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281. LUCY REED ET AL, GUIDE TO ICSID ARBITRATION 127 (2d ed. 2011) (“Registration historically was slow, with the average registration time being 83 days from the request filing date. ICSID has, however, radically improved registration times — for the second half of 2009, the average time for registration was only 29 days.”).

282. The author is grateful to Ingrid Wuerth for exploring these issues.

reliably associated with differential amounts claimed in ITA. Nevertheless, certain follow-up comparisons on the non-significant analyses suggested a latent difference on amounts claimed, but only in non-ICSID arbitral venues.<sup>283</sup> This has various implications. First, the direction of the difference is key. The amounts claimed against OECD respondents were higher than their non-OECD counterparts. To the extent that OECD membership is actually linked to a greater risk of higher claims, this presumably operates in favor of the developing world rather than against it. Moreover, if the value of investments in OECD respondents is higher, this may be a reasonable result. Future research might usefully explore this element by controlling for the average value of investments or limiting the co-linearity of OECD Status and investment value.

Even though there were differences in claimed amounts as a function of both LA and OECD Status, analyses revealed that neither effect was attributable to ICSID awards. Moreover, ICSID is not currently permitted to regulate the amounts investors claim. Rather than reflecting the institutional integrity of ICSID, the results reflect the discretion of investors and their lawyers — the sole actors permitted to make claims. Amounts claimed ultimately reflect investors' pleading choices (which presumably, but not necessarily, reflect the value of the underlying investment), the IIAs that offer investors unbridled discretion to claim damages, and the absence of a good-faith pleading obligation or affiliated sanctions in international arbitration. In other words, the differences in claimed amounts may be an inevitable byproduct of the legal doctrine stakeholders created. Rather than relying on rules and other legal structures to create incentives for proper pleading decisions, parties must instead rely upon informal market mechanisms, such as concerns about reputation for those lawyers and parties who are "repeat players" in the ITA game, to encourage reasonable and appropriate damage claims. ICSID's lack of legal authority to control pleading of damage amounts and the possible statistical equivalence of amounts claimed at ICSID across categories suggest that ICSID has not caused, as a quantitative matter, the scope of arbitration risk. Nevertheless, given the highlighted results, there may be value in ICSID considering targeted reforms to offer incentives for stakeholders to make reasonable and substantiated damage claims.

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283. This was for the  $2 \times 2$  model comparing ICSID-ALL awards and OECD Status using winsorized data ( $HSD = 16,872,303$ ) and inverse-transformed data ( $HSD = 1.057$ ). Similarly, for the  $2 \times 4$  analyzing World Bank Status, a facial review of winsorized data suggested a possible gap in amounts claimed in non-ICSID cases whereby Low Income respondents experienced lower claims than High Income respondents. Yet, this difference was not statistically significant.

### C. Award Outcomes

This Section explores the results of amounts awarded as a function of ICSID, LA, and Development Status. Given ALBA's stated concerns about ICSID arbitration, this Section first explores the implications of the lack of a reliable relationship between ICSID and outcomes for LA respondents. It then turns to a consideration of the role of Development Status in outcome, focusing on the latent simple effects related to ICSID Convention awards, World Bank Status, and amounts awarded.

The results of the data contradict claims that ICSID somehow treats LA respondents unfairly. None of the statistical analyses exhibited a statistically significant pattern of relationship among ICSID Status, LA respondents, and arbitration outcomes in the population studied. The consistency in the results offers useful information that demonstrates ICSID awards were not substantially different (neither better nor worse) with respect to Latin American states as compared to other states. Many of the effect sizes are less than small ( $r < 0.10$ ) and the relationships were non-significant. This suggests that it is unlikely that those relationships suffer from a power problem requiring a larger sample or it may simply be that the possible effect is simply so tiny that it may not warrant the investment of research resources to attempt to identify a variable of minimal impact. Nevertheless, some analyses indicated that the presence of a possible small to bordering on medium effect ( $r < 0.24$ ) in the raw, winsorized and log-inverse data.<sup>284</sup> This warrants caution before drawing broad inferences from the initial data of the pre-2007 population as a current population parameter; it would therefore be prudent to replicate this research with a larger sample, control for additional variance, and address potential co-linearity.<sup>285</sup>

Nevertheless, the analyses demonstrated that, irrespective of whether the dispute occurs at ICSID or some other arbitral venue, the amounts awarded against LA respondents were not meaningfully different from those awarded against non-LA respondents, which supports the inference that amounts awarded to either category were possibly statistically equivalent. Inferences drawn from the pre-2007 dataset are

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284. Winsorized data is available in Table 7. For the raw data comparing all ICSID cases versus others: (1) ICSID awards against LA respondents averaged US\$13,568,009 ( $SD = 37,992,637$ ;  $n = 12$ ); (2) ICSID awards against non-LA respondents averaged US\$993,795 ( $SD = 2,497,730$ ;  $n = 23$ ); (3) Other awards against LA respondents averaged US\$17,883,387 ( $SD = 35,766,775$ ;  $n = 4$ ); and (4) Other awards against non-LA respondents averaged US\$21,772,699 ( $SD = 74,539,575$ ;  $n = 13$ ). Data related to the log-transformed data is available, *supra*, at notes 204, 206.

285. Provided there are not missing data and that it is possible to ascertain both the amount claimed and the amount awarded in a single dispute, it would be prudent to control for amounts claimed. This is key for awards against LA respondents given the differential amounts claimed in non-ICSID cases.

pieces of evidence suggesting that ALBA and others are arguably incorrect to suggest that the problem with ITA is that ICSID is somehow biased against Latin American states. If those stakeholders are concerned about the integrity of the existing arbitral regime, creating alternative regional regional arbitration regime does not necessarily offer an antidote to the underlying concerns. Instead, it arguably re-creates the issues, but it does so in an even more fragmented manner.

If ALBA and others were concerned about the procedural integrity of ICSID and ITA, it would be appropriate to consider alternative means of promoting norms of procedural justice and substantive fairness rather than painting ICSID with too broad a brush. Procedural integrity concerns are a critical element of both procedural and substantive justice, but it is normatively preferable to address identifiable problems with targeted solutions rather than masking the real issue and missing the mark. This is not to say that certain states may have experienced results that are atypical. For example, Ecuador and Argentina may have arguably experienced caseloads that are unique as regards the general population or even the sub-population of Latin American states, and future research might usefully explore those differences. While much could be learned from thinking systematically about the qualitative experiences of certain states, the holistic analysis of quantitative data based upon pre-2007 data does not point to a specific problem in the overall system for Latin American states, at least as regards the matter of award outcome.

As regards Development Status, the results also offer evidence that contradict claims of ICSID bias against the developing world. Development Status had little to no impact on “outcome” at ICSID, irrespective of how the variables were operationalized. Chi-square comparisons suggested there was no difference in outcome as a function of ICSID and development. Rather, analyses replicating aspects of previous research found minimal links between development and outcome. There was no reliable pattern of relationship among ICSID, OECD Status, and winning or losing ITA. Likewise, as regards ANOVAs analyzing amounts awarded, there was generally a lack of any reliable statistical relationships among ICSID awards and Development Status. The absence of a reliable statistical relationship makes it more challenging to assert that either Development Status or ICSID improperly affected the outcome of ITA. These results demonstrate that ICSID was neither better nor worse than other arbitration venues, and such results offer initial evidence based upon the pre-2007 population that contradicts the assertion that outcomes of ICSID arbitration awards were biased.

Generally, follow-up analyses did not reveal any statistically significant differences among awards as a function of ICSID or Development Status. None of the follow-up analyses of ICSID and OECD Status revealed any statistically significant effects.<sup>286</sup> Even the cell-by-cell comparisons based upon World Bank Status and comparisons of all ICSID Awards (ICSID Convention and Additional Facility disputes versus disputes in other venues) — arguably the most appropriate model for sensitively analyzing the cases on ICSID's docket — failed to reveal any statistically reliable differences.<sup>287</sup> All twelve different permutations of individual cell comparisons — including the six comparisons involving ICSID disputes only — could not reveal a meaningful difference and, as such, were initial evidence of statistically equivalent awards.

Follow-up analyses for the model that analyzed ICSID Status as a function of ICSID Convention awards versus New York Convention awards (that is, including ICSID Additional Facility and other institutional awards) analyzing winsorized amounts awarded interject a small note of caution. Although neither the interaction nor main effects were significant, comparisons of the subset of specific cell-means for ICSID and World Bank Status revealed two latent effects whereby (1) for ICSID Convention awards, Low Income respondents ( $n = 2$ ) experienced larger awards than High Income respondents ( $n = 3$ ); and (2) for Low Income respondents, amounts awarded in ICSID Convention awards ( $n = 2$ ) were higher than New York Convention awards ( $n = 2$ ).<sup>288</sup> Given the reasonable doctrinal equivalence between ICSID and non-ICSID regimes, the suggestion that ICSID experiences differential outcomes beneath the surface is perplexing. To assess that issue, it is prudent to consider the specific disputes creating cell-means and assess whether cases are arguably representative. The ICSID-C awards (and raw amounts awarded) involving High Income respondents were *Genin v. Estonia*<sup>289</sup> (US\$0), *Soufraki v. United Arab Emirates*<sup>290</sup> (US\$0), and *Maffezini v. Spain*<sup>291</sup> (US\$155,314),<sup>292</sup> whereas the ICSID

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286. This was true for ICSID-ALL and ICSID-C awards analyzing winsorized and transformed data.

287. This was true for ICSID-ALL awards analyzing winsorized and transformed data.

288. This was true for winsorized data. Log- and inverse-transformed data did not reveal this effect in HSD follow-ups, but it was present in LSD follow-ups. Arguably, reliance on the transformed data, which exhibit better conformity to the underlying statistical assumptions of the test, is preferable.

289. *Genin v. Republic of Estonia (U.S. v. Est.)*, ICSID Case No. ARB/99/2, Award (June 25, 2001), 17 ICSID Rev. 395 (2002).

290. *Soufraki v. United Arab Emirates (It. v. U.A.E.)*, ICSID Case No. ARB/02/7, Award (July 7, 2004), [http://ita.law.uvic.ca/documents/Soufraki\\_000.pdf](http://ita.law.uvic.ca/documents/Soufraki_000.pdf).

291. *Maffezini v. Kingdom of Spain (Arg. v. Spain)*, ICSID Case No. ARB/97/7, Award (Nov. 13, 2000), 5 ICSID Rep. 419 (2002).

Convention awards (and raw amounts awarded) against Low Income respondents were *American Manufacturing and Trading v. Zaire*<sup>293</sup> (US\$9 million) and *Goetz v. Burundi*<sup>294</sup> (US\$2,989,636).<sup>295</sup> There are various explanations for this phenomenon in the pre-2007 data that have implications for possible normative reform.

First, the differences may be a function of the quality of legal representation readily available to High Income respondents.<sup>296</sup> Spain and United Arab Emirates (U.A.E.) are states with rather large GDPs<sup>297</sup> and government budgets.<sup>298</sup> They are in a position to spend large amounts on high quality legal representation. In *Soufraki*, for example, the multinational law firm Allen & Overy represented the U.A.E.<sup>299</sup>

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292. This was the amount coded in the common currency of United States Dollars (USD) as at the date of the award. The amount awarded in the original currency was 3 million Spanish Pesetas (ESP).

293. *Am. Mfg. & Trading, Inc. v. Republic of Zaire*, ICSID Case No. ARB/93/1, Award (Feb. 21, 1997), 5 ICSID Rep. 14 (2002).

294. *Goetz v. Republic of Burundi (Belg. v. Burundi)*, ICSID Case No. ARB/95/3, Award (Feb. 10, 1999), 6 ICSID Rep. 5 (2004).

295. The specific finding of higher amounts awarded against Low Income countries in ICSID-C awards. The three Additional Facility cases that would be added were all against High Income respondents, namely the United States under NAFTA, where the award amounts were all US\$0. *See supra* note 261. For the Low Income respondents in the ICSID-ALL category, the awards were the same. The additional case of *Yaung Chi Oo Trading v. Myanmar*, however — which was an *ad hoc* case outside ICSID using ICSID-AF Rules — resulted in no award. *Yaung Chi Oo Trading PTE Ltd. v. Gov't of the Union of Myanmar*, ASEAN I.D. Case No. ARB/01/1 (Mar. 31, 2003), 42 I.L.M. 540 (2003).

296. There is a rich empirical literature related to the role of lawyers in litigation outcomes. *See* Kyung Hwan Baik & In-Gyu Kim, *Strategic Decisions on Lawyers' Compensation in Civil Disputes*, 45 ECON. INQUIRY 854 (2007) (exploring the role of lawyer compensation in outcomes); Yeon-Koo Chee & Ian Gale, *Difference-Form Contests and the Robustness of All-Pay Auctions*, 30 GAMES & ECON. BEHAV. 22, 22 (2000) (suggesting success is a function of different performance of lawyers); Avery Katz, *Judicial Decisionmaking and Litigation Expenditure*, 8 INT'L REV. L. & ECON. 127 (1988). This must be tempered with recent research on lawyers' capacity to predict litigation outcomes, which generally suggests that lawyers are overconfident but that female lawyers exhibit less overconfidence and predict outcomes more reliably. Jane Goodman-Delahunty et al., *Insightful or Wishful: Lawyers' Ability to Predict Case Outcomes*, 16 PSYCH. PUB. POL'Y & L. 133, 141–43 (2010).

297. World Bank estimates from 2009 indicate Spain's gross domestic product (GDP) is US\$1,573,409 million and the U.A.E.'s GDP is US\$230,252 million. World Bank, *Gross Domestic Product 2009*, World Development Indicators Database (Dec. 15, 2010), <http://tinyurl.com/yg5fsj> [hereinafter World Bank, *GDP 2009*]. Estonia, however, had a GDP of US\$19,084 million. *Id.*

298. Data from 2009 suggest that the U.A.E. has nearly US\$5 billion in net revenue, taking into account estimated government expenditures on the order of US\$60.05 billion; similarly, although in a deficit situation, Spain had expenditures totaling US\$648.6 billion. Central Intelligence Agency [CIA], *World Factbook, Field Listing: Budget*, <http://tinyurl.com/4zzn5lr> (last visited Mar. 24, 2011) [hereinafter CIA, *World Factbook*]. Estonia's budget of US\$8.677 billion is much smaller. *Id.*

299. *Soufraki v. United Arab Emirates (It. v. U.A.E.)*, ICSID Case No. ARB/02/7, Award (July 7, 2004), [http://ita.law.uvic.ca/documents/Soufraki\\_000.pdf](http://ita.law.uvic.ca/documents/Soufraki_000.pdf). Likewise, if considering the LSD analyses for the ICSID-ALL awards, the United States was the respondent in the three

Similarly, lawyers from two different firms, one of which was Howrey & Simon LLP, represented Estonia.<sup>300</sup> In contrast, in *American Manufacturing and Trading v. Zaire*, the respondent appears to have been represented by one internal government lawyer and Zaire's ambassador to France.<sup>301</sup> Large GDPs and annual budgets may have another impact on the quality of legal representation. High Income respondents are arguably capable of paying for protracted arbitration and have access to funds to retain expert witnesses, such as international law or damages experts, should the dispute require it. Theoretically, states — particularly Low Income respondents — with small GDPs or annual budgets may be unable to marshal the funds for an equally vigorous defense. Future research should collect data on law firms, other experts, and the length of proceedings to control for the effect of those variables on outcome. Similarly, it may be necessary to control for GDP and state budgets. By holding critical variables constant in future analyses, it will reduce co-linearity and the impact of other spurious variables. Such an approach would decrease error and aid statistical conclusion validity.

Second, differences in award amounts may also be a function of the unique characteristics of Low Income respondents in ICSID Convention cases. For two ICSID Convention awards that created the latent simple effect, the Low Income respondents, Burundi and Zaire (now Democratic Republic of the Congo), were neighboring African states subjected to civil war and unrest at a time that was proximate to the beginning of the dispute.<sup>302</sup> *AMT v. Zaire* involved a claim filed in 1993 related to destruction caused by armed government forces in 1991 and

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additional awards in those analyses. The United States likewise has a high GDP, US\$14.119 trillion. World Bank, *GDP 2009*, *supra* note 297. Aside from its US\$3.397 trillion budget, the United States also has an entirely separate legal department at the U.S. Department of State with a highly qualified defense team. CIA, *World Factbook*, *supra* note 298; *International Claims and Investment Disputes (L/CID)*, U.S. DEP'T OF STATE, <http://tinyurl.com/45u4pnp> (last visited Mar. 24, 2011).

300. *Genin v. Republic of Estonia (U.S. v. Est.)*, ICSID Case No. ARB/99/2, Award (June 25, 2001), 17 ICSID Rev. 395 (2002).

301. *Am. Mfg. & Trading Inc. (AMT) v. Zaire*, ICSID Case No. ARB/93/1, Award (Feb. 21, 1997), 36 I.L.M. 1531, 1539–40; *see also* *Goetz v. Republic of Burundi (Belg. v. Burundi)*, ICSID Case No. ARB/95/3, Award (Feb. 10, 1999), 6 ICSID Rep. 5 (2004) (indicating that while officials from the Ministry of Finance and the Ministry of Commerce, Industry and Tourism signed the settlement agreement, the lawyers for the respondent in *Goetz v. Burundi* are unknown).

302. Moreover, as these are some of the older awards within the sample, it may be useful in the future to control for the effect of time and the historical evolution of ITA. Theoretically, one might posit that initial cases, particularly in what was a relatively untested dispute resolution method, would exhibit more extreme characteristics, as parties and arbitrators may be unsure as to how to plead, proceed, and resolve claims.

1993.<sup>303</sup> *Goetz v. Burundi* involved a claim filed in 1995 related to the revocation of the tax and customs concessions<sup>304</sup> granted in 1993, near the time of the first democratic elections after a period of civil war but before a 1996 *coup d'état*.<sup>305</sup> It is possible that the results are not due to ICSID's treatment or the choice to use the ICSID Convention enforcement regime; rather, it may be a function of the historical, political, and government structures leading to the underlying dispute. The two cases at the root of the significant effects both involve a turbulent period in African history, recent civil war, relative state instability, and a gap in regulatory infrastructure that might otherwise manage and prevent disputes from arising. These qualitative similarities suggest that, in the future, it would be appropriate to control for the potential influence of a recent civil war, the length of time that governments have been established, and the scope of regulatory infrastructure. It may also be appropriate to code and control for the type of state activity, namely the forcible use of military intervention.<sup>306</sup>

Third, differences in amounts awarded for Low Income countries, whereby ICSID Convention awards are higher than New York Convention awards, may be a function of the terms of the underlying treaties. In both *AMT* and *Goetz*, for example, the relevant bilateral investment treaties only permitted investment treaty arbitration to occur at ICSID, pursuant to either the ICSID Convention or Additional Facility Rules.<sup>307</sup> There was no opportunity to bring a claim at another institution or in an *ad hoc* proceeding pursuant to the UNCITRAL Rules.<sup>308</sup> By the same token, if either the investor or the respondent is

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303. See *Am. Mfg. & Trading*, 5 ICSID Rep. 14; see also Bob W. White, *The Political Undead: Is it Possible to Mourn for Mobutu's Zaire*, 48 AFR. STUD. REV. 65, 68 (2005) (discussing Zaire's "announced plans for democratic reform in 1991 and the resulting urban unrest that took the form of widespread pillaging in 1991 and 1993").

304. See *Goetz*, 6 ICSID Rep. 5; Eloïse Obadia, *Introductory Note: Antoine Goetz and others v. Burundi*, 15 ICSID REV. FOREIGN INVEST. L.J. 454, 456 (2000).

305. See Léonce Ndikumana, *Towards a Solution to Violence in Burundi: A Case for Political and Economic Liberalisation*, 38 J. MOD. AFR. STUD. 431, 432–35 (2008) (discussing economic liberalization in Burundi in light of civil war and the disintegration of the state).

306. See *Yaung Chi Oo Trading PTE Ltd. v. Gov't of the Union of Myanmar*, ASEAN I.D. Case No. ARB/01/1, Award (Mar. 21, 2003), 42 I.L.M. 540, 540–41 (Even here, a case decided under ICSID-AF rules, investors filed suit in 2000 as a result of Myanmar's armed seizure of a brewery from 1997 to 1998).

307. See *Convention Entre L'Union Economique Belgo-Luxembourgeoise et La Republique du Burundi concernant L'Encouragement et la Protection Reciproques des Investissements [Agreement Between the Belgo-Luxemburg Economic Union, on the one Hand, and the Republic of Burundi, on the Other Hand, on the Reciprocal Promotion and Protection of Investments]*, Burundi–Bel., Apr. 13, 1989, art. 8, available at <http://tinyurl.com/4sb38m8>; see also *Treaty Between the United States of America and the Republic of Zaire concerning the Reciprocal Encouragement and Protection of Investment*, U.S.–Zaire, Aug. 3, 1984, art. VII, S. TREATY DOC. No. 99-17 (1986).

308. Even had that option for a non-ICSID forum been available, it is possible that a case

not an ICSID Convention signatory, ICSID Convention arbitration may not have been an available forum. Future research might therefore usefully control for (1) whether the respondent is an ICSID Convention signatory; (2) whether the investor is an arguable national of an ICSID Convention signatory; and (3) the availability of a forum other than ICSID, such as the SCC or *ad hoc* venues.

#### *D. Normative Recommendations*

Analyses suggested that, on the whole, ICSID did not exhibit bias in that, for critical elements of arbitration (namely initial amounts claimed and ultimate outcome), ICSID did not differ materially from other arbitration options. The general lack of a reliable relationship with ICSID and variables of interest suggests that ICSID can be neither the statistical cause of amounts claimed nor the cause of ultimate outcome. Without a reliable relationship at the outset, it would be imprudent to develop a predictive model that uses ICSID as a causal variable for claims and outcomes; ICSID Status may, however, be a useful control variable for future research.

One arguable conclusion to draw from the initial evidence from the pre-2007 population — particularly given that ICSID appeared neither better nor worse than other arbitration venues when controlling for key variables — is that the status quo is acceptable and nothing more need be done than distribute the research and correct misperceptions.<sup>309</sup> This approach, however, prevents ICSID from taking a proactive role as a major international organization responsible for dispensing justice, as a matter of both form and substance, during a time of international economic transitions. Given the main effect for amounts claimed against LA respondents in non-ICSID cases that are arguably misattributed to ICSID and the latent simple effects that point to issues relating to Low Income respondents, ICSID and other stakeholders should consider proactive normative measure to prevent problems from arising. Such potential reforms could include (1) implementing a pleading system requiring plaintiffs to particularize damages, (2) encouraging technical assistance, capacity building, and legal advisory capacity for states —

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selection bias may exist where investors may voluntarily elect ICSID arbitration. For example, given the political sensitivities of certain disputes or when dealing with states in crisis, it may be prudent to rely upon ICSID's institutional integrity and place trust in the reputation of a branch of the World Bank.

309. Another conclusion is that more research is necessary. Although the results provided in this article apply to a pre-2007 population from which statistical inference is unnecessary, inferences about the current and future population must be drawn cautiously. This is precisely why this research has identified effect sizes and error rates, conducted different power analyses, and called for replication of the research throughout this Article.

particularly Low Income states, states emerging from civil unrest, or states experiencing other fundamental changes to their forms of government, and (3) exploring the value of ADR both to prevent disputes and to target appropriate disputes for adjudication, whether at ICSID or elsewhere. Such options hold the promise of addressing perceived issues, fostering norms of substantive fairness, and promoting procedural justice.

First, outside of ICSID, there were certain significant differences related to amounts claimed. Neither ICSID nor other institutions currently have rules constraining amounts claimed, guidelines for particularizing claims, or requirements for good-faith pleading. There is no equivalent of the U.S. Federal Rule of Civil Procedure 11<sup>310</sup> in international arbitration that sanctions improper conduct during the course of adjudication, and parties are free to claim any amount, irrespective of the merits of the claim. On that basis, it may be prudent for stakeholders, particularly those with requisite drafting power, to implement pleading requirements that promote claim amounts that are predictable and verifiable, and that prevent exorbitant claims. States may use a “legislative approach” to negotiate or revise IIAs in order to offer guidance to investors about the acceptable methodologies and legal doctrines that form the basis for calculating damages. Similarly, ICSID might use its authority to promulgate institutional rules that create structural safeguards, enhance its institutional integrity, and promote the interests of stakeholders. Such improvements might include (1) substantiating claimed damages with evidence or requiring pleading of damages with specificity, (2) permitting assessment of damages at a preliminary phase, or (3) establishing a good-faith pleading rule in ICSID arbitration and granting a tribunal’s authority to sanction parties or their counsel for making frivolous claims, perhaps via cost awards. Such an approach can enhance certainty for investors about the scope of their legally permissible damages. Likewise, it can inform states more accurately about the scope of risk, control investor discretion, and create incentives for constructive behavior for all participants involved in the arbitration process. Informal market mechanisms related to reputation may already create these incentives. Nevertheless, it is likewise prudent to create incentives for those who are not repeat players and do not have the same reputational incentives for good behavior.<sup>311</sup> Moreover, it

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310. Fed. R. Civ. P. 11; see also Martin B. Louis, *Intercepting and Discouraging Doubtful Litigation: A Golden Anniversary View of Pleading, Summary Judgment, and Rule 11 Sanctions Under the Federal Rules of Civil Procedure*, 67 N.C. L. REV. 1023 (1989).

311. See Franck, *supra* note 14 (advocating for changes to IIAs and institutional rules in order to create incentives for pleading actual, specified damages rather than creating incentives for unintentional claim inflation).

encourages institutional integrity to create rules that promote norms of clarity, that manage party expectations related to arbitration risk, and that offer dispute resolution procedures reflecting standards of professionalism, integrity, and fairness.

Second, recognizing that the results may be confined to the pre-2007 population and that there were no statistically significant effects at the macro level, the simple effects related to Low Income states in ICSID Convention cases and disparate amounts awarded offer initial evidence in support of initiating reforms in support of Low Income states with limited legal resources and regulatory infrastructure. The implementation of structural safeguards — in the form of programs that offer technical assistance, training and education, general capacity building related to dispute prevention and management, and the possible creation of a legal advisory center — could minimize concerns of actual bias, promote enhanced institutional integrity, and improve perceptions about procedural justice. If the effects are attributable to civil war, the disruption of regulatory infrastructure, or the challenges of establishing a new form of government, redressing these gaps is fundamental. If international organizations (such as ICSID or UNCTAD) or others provided technical assistance, training, and capacity building targeted for Low Income respondents — particularly those in Africa or those transitioning to new forms of government — the underlying concern might be addressed.

Similarly, if the effects are by-products of legal representation, it suggests that there is real value in creating — whether at ICSID or elsewhere — a legal advisory center. Commentators have raised issues regarding the “capacity of the poorest developing countries to defend” themselves in ITA,<sup>312</sup> and the effects specifically address that claim and provide some evidence that the Low Income respondents (as compared with High Income respondents) experienced the largest awards rendered against them. By “leveling the playing field” through a legal assistance facility, the lack of domestic lawyers in Low Income states with proper capacity to resolve disputes could be addressed; similarly, the economic power of High Income respondents to hire and retain high quality legal teams could be equalized. Beginning to create structural safeguards to redress this possible issue has merit. Such a structural reform fosters norms of procedural fairness and substantive justice. Moreover, it

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312. LUKE ERIC PETERSON, UK BILATERAL INVESTMENT TREATY PROGRAM AND SUSTAINABLE DEVELOPMENT: IMPLICATIONS OF BILATERAL NEGOTIATIONS ON INVESTMENT REGULATION AT A TIME WHEN MULTILATERAL TALKS ARE FALTERING 10 (2004), available at <http://tinyurl.com/4flds29>; see also Eric R. Gottwald, *Leveling the Playing Field: Is it Time for a Legal Assistance Center for Developing Nations Facing Investment Treaty Arbitration?*, 22 AM. U. INT'L L. REV. 237 (2007).

mimics the Legal Advisory Center at the World Trade Organization, which provides a structural safeguard to enhance the quality of dispute resolution, to promote equal opportunity for defense of state interests, and to redress arguable power and capacity imbalances in the resolution of international trade disputes.<sup>313</sup>

Third, there is also value in building infrastructure that encourages the creation of ADR modalities for states. ICSID has methods of dispute resolution other than arbitration.<sup>314</sup> These have, unfortunately, either never been used or used so sporadically that they are of little value.<sup>315</sup> ICSID might therefore consider ways to reinvigorate these alternative processes. More broadly, ICSID might undertake initiatives to develop programs related to early neutral evaluation or mediation. To facilitate this endeavor, ICSID or other professional bodies could offer mediation guidelines or mediation-related protocols to increase ease of access to the processes. Similarly, it would be prudent to create technical assistance (particularly for states) to offer them access to mediation training and conflict management courses.

There are various reasons to consider ADR programs, including cost and time savings for parties, the preservation of investment relationships, access to justice for small investors, and the creation of enhanced policy space for states seeking to regain control of the outcome of investment conflict. Beyond this, it may be possible that the simple effects arguably impacting Low Income respondents were linked to a state's ability to prevent, manage, and strategically settle investment treaty disputes efficiently. In such a case, implementing ADR programs might offer a critical structural safeguard to ensure the integrity of ITA and the effective and proper use of arbitration.

There is value in assisting states — particularly Low Income respondents identified in the analyses — to implement rule of law regimes or otherwise foster internal infrastructure to minimize and to prevent investment treaty conflict. Developing countries, such as Peru, have created ADR procedures designed to promote information exchange, to educate domestic officials on the scope of risk, and to prevent investment treaty conflict.<sup>316</sup> Meanwhile, other countries such

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313. See Gottwald, *supra* note 312, at 264–73. See generally Kim van der Borgh, *The Advisory Center on WTO Law: Advancing Fairness and Equality*, 2 J. INT'L ECON. L. 723 (1999).

314. ICSID Additional Facility Rules, *supra* note 47.

315. See *supra* notes 56–58 and accompanying text; see also UNCTAD, ADR I, *supra* note 76, at 62–63 (discussing the limited use of non-arbitral processes at ICSID).

316. Peruvian Law No. 28933, *Ley que Establece el Sistema de Coordinación y Respuesta del Estado en Controversias Internacionales de Inversión* [Law Establishing the System of Coordination and Response of the State in International Investment Disputes], *El Peruano*, Normas Legales 334635 (Dec. 16, 2006), available at <http://tinyurl.com/4k3e8t6>; see also UNCTAD, ADR I, *supra* note 76, at 68–72 (discussing the Peruvian law); UNCTAD, ADR II,

as the Dominican Republic, Colombia, and Thailand are seeking to explore opportunities for “investment after care.”<sup>317</sup> One objective would be to train domestic regulators about the scope of potential liability. By sensitizing officials to possible unintended consequences and offering them communication networks, the objective would be to prevent the initiation of high value disputes at ICSID or other venues. Another objective would be to create governmental regulatory infrastructure, implement strategic negotiation and mediation opportunities, and offer training for states to understand where, when, and how to manage investment conflict. Such ADR strategies may promote settlements on appropriate terms that prevent tribunals from rendering large awards against developing countries. The value inherent in these possibilities perhaps explains why there has been demonstrated interest in ADR by UNCTAD, ICSID, parties, academics, and other stakeholders. Such ADR regimes can enhance the integrity of ITA generally by creating opportunities to manage conflict that preserve policy space, promote access to justice, and foster outcomes that are both procedurally fair and substantively appropriate.

There is, however, one structural safeguard that may be unnecessary. The lack of statistically significant differences in amounts awarded against LA respondents, whether at ICSID or otherwise, suggests that the data and models in this research did not necessarily provide evidence that justifies the normative solution of creating a regional arbitration center for Latin America. However, to the extent that regionalism might play into concerns about the integrity of ITA or ICSID, an approach to regionalism that does seem supported by the data might involve creating arbitration capacity in Africa, particularly central African states or other African states transitioning to new governments. To address African states’ concerns about ICSID’s integrity, ICSID or other international organizations might rightly support capacity-building efforts in Africa related to the proper negotiation of IIA terms, the training of government officials about how to implement their IIA obligations, technical assistance to create infrastructure and conflict management teams to prevent disputes from occurring in the first instance, and offers of advice and other training for internal government lawyers to prepare them for arbitration. Such a suggestion naturally builds upon the existing targeted areas of reform and fosters norms of efficiency, fairness, and justice.

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*supra* note 73, at 68–70 (same).

317. Susan Franck & Jason Ratigan, *Post-Symposium Rapporteur Report: The Way Forward*, JOINT SYMPOSIUM ON INTERNATIONAL INVESTMENT LAW AND ALTERNATIVE DISPUTE RESOLUTION, 6, <http://tinyurl.com/4aan7q4> (last visited Mar. 27, 2011); *see also* UNCTAD, ADR II, *supra* note 73 at 2, 81–85, 87–91.

### CONCLUSION

Overall, the current data and models have demonstrated that there was no evidence of a reliable relationship between ICSID and concerns about Energy disputes, Latin American respondents, or respondent's Developmental Status. As there was no reliable relationship, it would be inappropriate to suggest that ICSID somehow caused either the amounts claimed or ultimate outcomes of investment treaty disputes. The lack of divergence in ICSID cases, both in terms of amount claimed and ultimate outcome, also undercuts the suggestion that ICSID was substantially different (and presumably worse) than other venues of treaty arbitration. Recognizing that this research has focused on pre-2007 arbitration awards rather than the life cycle of all ICSID disputes, this evidence nevertheless provides a basis for cautious optimism for the investment arbitration system and provides initial evidence that suggests that wholesale abandonment or radical rejection of ICSID arbitration may not be warranted.

Critically, however, there were areas of potential concern, and those analyses can and should be replicated through future research with a larger sample of the growing population, greater statistical control and decreased risk of statistical error. In the meantime, for those areas of potential concern, it would be prudent to consider implementing a series of reform measures that could begin to redress these issues, to enhance institutional integrity and to promote procedural justice. The creation and maintenance of consistent, fair, and just dispute resolution in international economic law is a laudable goal worthy of thoughtful evolution.

We are in a time of global economic transitions, where the integrity of international institutions — particularly the World Bank — is of vital importance. Now is the time for institutions such as ICSID to minimize concerns about legitimacy and maximize opportunities for equality. ICSID can and should be a model of fairness, efficiency, and justice in the field of international economic dispute resolution. Taking steps today will ensure that, rather than potential perils being realized, ICSID's promise is achieved. Ultimately, there is value in implementing structural safeguards to create targeted strategic reforms at ICSID in an effort to minimize potential areas of concern, to improve the management of international economic conflict, and to minimize the backlash to the international investment system.