# Crowded at the Top: An Empirical Description of the Oligopolistic Market for International Arbitration Institutions

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International arbitration institutions keep the global economy running by facilitating arbitrations and alternative dispute resolution (ADR) procedures for contract disputes worth hundreds of millions of dollars. The monetary value of these disputes reveals how important these institutions are to enforcing contracts in international commerce. Thus, many law journal articles, international law firms, practice guides, and treatises describe the most well-known institutions in international commercial arbitration. In addition to performing a vital legal function, these institutions also make business decisions to attract the most valuable contract disputes, generating millions of dollars in revenue. They compete for arbitration fees, which gives rise to an industry that should be

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<sup>1.</sup> The International Chamber of Commerce (ICC), the world's preeminent international arbitration institution, had disputes aggregating \$230 million USD before it in 2019. ICC Dispute Resolution 2019 Statistics, INT'L CHAMBER COM. 15 (2020) [hereinafter ICC 2019 Statistics], www.iccwbo.org/dr-stat2019; ICC Arbitration Case Statistics Show Positive Trends in Global Reach, Diversity, and Efficiency, VINSON & ELKINS (July 22, 2020), http://www.velaw.com/insights/icc-arbitration-case-statistics-show-positive-trends-in-global-reach-diversity-and-efficiency/.

<sup>2.</sup> See infra notes 79-84 and accompanying text.

<sup>3.</sup> The American Arbitration Association, which includes the International Centre for Dispute Resolution, reported net operating income of \$7,964,000 and generated \$110,709,000 in revenue from administration fees in 2018. Consolidated Financial Statements and Independent Auditor's Report, AM. ARB. ASS'N 5 (May 11, 2020), http://www.adr.org/sites/default/files/document\_repository/AAA\_AnnualReport\_2019.pdf.

examined from an economics perspective.<sup>4</sup> This Note adds to descriptions of international arbitration institutions by analyzing empirical data from the annual reports of international arbitration institutions to describe the economics behind the industry.

Part I provides background, and has two objectives. First, it sets out the "structure-conduct-performance paradigm" and discusses performance measurements of non-profit entities. This is the economics framework that will describe the concentration of the international arbitration industry. Second, it describes relevant context about international arbitration and prominent international arbitration institutions. Part II applies the structure-conduct-performance paradigm to reveal heavy among five prominent institutions. concentration hypothesizes that the industry performs well when accounting for measures of non-profit success, despite heavy concentration in the industry. It also suggests conducting a similar analysis for other legal dispute resolution for athat compete for controversies, like international bankruptcy courts and international commercial courts.

## PART I: LITERATURE REVIEW AND BACKGROUND

A. THE STRUCTURE-CONDUCT-PERFORMANCE PARADIGM IS THE TRADITIONAL FRAMEWORK FOR DESCRIBING THE STRUCTURE OF AN INDUSTRY AND EVALUATING BUSINESS PERFORMANCE OF ORGANIZATIONS WITHIN THAT INDUSTRY.

Industrial organizations (IO) economics analyzes how

<sup>4.</sup> Almost all prominent institutions charge fees ad valorem pursuant to rates established in their rules, so expenses owed to arbitration institutions increase with the value of the dispute. See, e.g., CRCICA ARB. RULES annex at tbl.1 (2021). The notable exception is the London Court of International Arbitration (LCIA), which charges fees based on time spent on the case. Schedule of Arbitration Costs, LONDON CT. INT'L ARB., https://www.lcia.org//Dispute\_Resolution\_Services/schedule-of-costs-lcia-arbitration-2020.aspx; see also LCIA RULES pmbl. (2021) (incorporating Schedule of Costs as part of the rules). It should be noted that three-fourths of a parties' arbitration costs go toward legal fees for private counsel. But common costs (which include arbitral fees and expenses) can still make up around 10-20% of expenses in an arbitration. CIArb Cost of International Arbitration Survey 2011, CHARTERED INST. ARBS., 10–11, https://www.international-arbitration-attorney.com/wpcontent/uploads/2017/01/CIArb-Cost-of-International-Arbitration-Survey.pdf [hereinafter CIArb Cost Survey].

imperfect markets lead some businesses to perform better than others.<sup>5</sup> IO economists apply the structure-conduct-performance paradigm ("SCP") to the businesses in an industry to analyze how the concentration of businesses within the industry leads to disparities in conduct and performance between individual businesses.<sup>6</sup> Therefore, by analyzing an industry's concentration, one can predict how individual businesses act, and how well they will perform.<sup>7</sup> SCP also enables policy-makers to make normative judgments about how market concentration should be altered for the public good.<sup>8</sup>

 Structure: An industry is heavily concentrated when a select number of firms dominate the industry. Concentration ratios, the Herfindahl-Hirschman Index, and various qualitative measures gauge the level of concentration in an industry.

The central determinant of market structure is the concentration of the industry's output among its businesses, because heavy concentration leads to sub-optimal market performance under SCP.<sup>9</sup> There are two common ways to measure concentration. The first is a simple concentration ratio (CR):

$$CR(x) = \sum_{i=1}^{x} market \ share \ of \ ith \ firm$$

where x = the number of firms whose concentration the

<sup>5.</sup> Manuela Mosca, Industrial Organization, in 3 HANDBOOK ON THE HISTORY OF ECONOMIC ANALYSIS 291, 291–93 (Gilbert Faccarello & Heinz D. Kurz, eds., 2016). Compare Daniel B. Suits, Agriculture, in The Structure of American Industry 1, 2–3 (11th ed., Walter Adams & James W. Brock, eds., 2005) (agriculture a practically competitive market with no incumbency advantage or barriers to entry), with George A. Hay, Cigarettes, in The Structure of American Industry 48, 52–55 (11th ed., Walter Adams & James W. Brock, eds., 2005) (cigarettes an extremely imperfect market due to its practically insurmountable barriers to entry).

<sup>6.</sup> Paul R. Ferguson & Glenys J. Ferguson, Industrial Economics  $16-18 \ (2d \ ed. \ 1994)$ .

<sup>7.</sup> ROBERT M. GRANT, CONTEMPORARY STRATEGY ANALYSIS 69 (6th ed. 2008).

<sup>8.</sup> See, e.g., F. M. SCHERER & DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 7–14 (3d ed. 1990).

<sup>9.</sup> FERGUSON & FERGUSON, supra note 6, at 84–85.

economist wishes to measure, and market share =  $\frac{firm\ output}{market's\ total\ output}$ . <sup>10</sup> The closer the CR(x) is to one, the more those (x) businesses dominate the industry. A concentration curve visualizes this: the steeper the curve, the more concentrated the industry. <sup>11</sup> As a rule of thumb, a CR(x) of 60% or higher among five businesses suggests an oligopoly among those five businesses. <sup>12</sup>

A more precise empirical measurement of market concentration is the Herfindahl-Hirschman Index (HHI):

$$\sum_{i=1}^{x} (market share of ith firm)^{2}$$

where x and market share are defined the same as for CR above.<sup>13</sup> The Antitrust Division of the U.S. Department of Justice considers markets with an HHI of over 2,500 to be highly concentrated, while markets with an HHI of 1,500–2,500 are moderately concentrated.<sup>14</sup>

Qualitative measures add to the above-described quantitative measurements to indicate important aspects of the industry structure. The most important of these might be barriers to entry, or advantages that incumbent businesses have over new entrants. <sup>15</sup> Joe Bain's observation of the manufacturing industry revealed an empirical connection between barriers to entry and performance, supporting the hypothesis that market structure affects performance. <sup>16</sup> Other examples of factors affecting market structure include product

<sup>10.</sup> *Id.* at 40. As an illustrative example, suppose a market of eight ADR firms has four top performers with market shares as follows:  $\alpha = 40\%$  market share,  $\beta = 26\%$ ,  $\chi = 14\%$ ,  $\delta = 14\%$ . The CR4 of this market is 94%, meaning the market is almost exclusively concentrated among this four-firm oligopoly.

<sup>11.</sup> Id. at 39-40.

<sup>12.</sup> Will Kenton, *Concentration Ratio*, INVESTOPEDIA (Sept. 6, 2020), https://www.investopedia.com/terms/c/concentrationratio.asp (CR(5) of 60% suggests oligopoly).

<sup>13.</sup> HHI is more precise than CR because it accounts for the difference between each firm in the market. FERGUSON & FERGUSON, supra note 6, at 43–44

<sup>14.</sup> U.S. DEP'T OF JUST., HORIZONTAL MERGER GUIDELINES  $\S$  5.3 (Aug. 19, 2010).

<sup>15.</sup> JOE S. BAIN, BARRIERS TO NEW COMPETITION 7–11 (1956). For example, the cigarette industry has notoriously high barriers to entry in the form of high government regulation and a declining smoking population, giving cigarette companies who are already in the industry a sizable advantage. Hay, *supra* note 5, at 53–55.

<sup>16.</sup> BAIN, supra note 15, at 190-204.

differentiation, 17 economies of scale, 18 and the formation of strategic groups within the market. 19

2. Conduct: Businesses Take Advantage of Their Dominance by Making Decisions to Their Benefit and to the Detriment of Their Rivals.

Conduct refers to decisions individual businesses make in order to gain a competitive advantage over other businesses in the industry. The quantitative measure that links conduct and performance is called the "Lerner Index." It postulates that as marginal cost<sup>20</sup> decreases for a dominant business, the more that business will exert its market power over its competitors.<sup>21</sup> In other words, when a business benefits from high concentration, it can profit more off of the sale of its goods. In turn, that business will set prices, advertise, and expand to its own benefit and to the detriment of its competitors.<sup>22</sup>

3. Performance: An Industry "Performs" Well When It Increases General Economic Welfare; Non-profit Entities Perform Well When They Make Progress Towards Accomplishing Their Mission While Maintaining Financial Solvency.

Economic performance is a holistic concept, and indicators of performance for non-profit entities are discussed later below. In the for-profit sector, an industry performs well when it increases the quality of life for industry stakeholders.<sup>23</sup> Even in

<sup>17.</sup> See JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION 176-208 (1933) (demonstrating the effects of price differentiation on market structure).

<sup>18.</sup> BAIN, *supra* note 15, at 53–56.

<sup>19.</sup> MICHAEL E. PORTER, COMPETITIVE STRATEGY 129–32 (1980).

<sup>20.</sup> Marginal cost is the cost a business incurs in producing one additional unit. Alicia Tuovila, *Marginal Cost of Production*, INVESTOPEDIA (Mar. 8, 2021), https://www.investopedia.com/terms/m/marginalcostofproduction.asp. The concept behind comparing marginal cost and total cost is that, as a business' dominance of an industry increases, the marginal cost decreases. This allows the business to generate more profit at the expense of its rivals.

<sup>21.</sup> FERGUSON & FERGUSON, supra note 6, at 15-16.

<sup>22.</sup> See SCHERER & ROSS, supra note 8, at 5.

<sup>23.</sup> See JOHN S. CUBBIN, MARKET STRUCTURE AND PERFORMANCE 7 (Alex Jacquemin ed., 1988) (defining performance as an increase in general economic welfare).

for-profit industries, however, IO economists consider non-monetary and matters of societal import when evaluating the performance of an industry or market, since these intangible factors directly affect the greater good.<sup>24</sup>

In the for-profit sector, higher concentration often leads to a decrease in general economic welfare because businesses exert their dominance by decreasing their economic output. An example would be when a business with monopoly power over an industry uses its market power to increase costs and reduce its economic output. <sup>25</sup> The general public loses out on the decrease in economic output, implying that monopolistic market structure deters the general economic welfare. <sup>26</sup>

SCP's focus on general economic welfare makes it well-suited for public policy analysis.<sup>27</sup> For example, Section 2 of the Sherman Act explicitly references market structure by interdicting the creation of a monopoly.<sup>28</sup> The Department of Justice has used a variant of HHI as a way to determine whether a proposed merger violates the Sherman Act's monopoly prohibition.<sup>29</sup> From Bain's works to today, SCP remains a valuable tool for addressing matters of public import through predicting market behavior and evaluating performance.

Because arbitration institutions are non-profit entities, however, more must be said of how to evaluate performance in a non-profit industry. Non-profit non-governmental organizations (NGOs) occupy the "third sector," meaning that they fill in the gaps of societal value creation left by the public and private sector, getting their impetus instead through a social movement.<sup>30</sup> There is little guidance for what exactly defines an NGO.<sup>31</sup> According to the broadest (and historical) definition of

<sup>24.</sup> SCHERER & ROSS, *supra* note 8, at 661 ("We must consider several dimensions of performance... allocative efficiency, efficiency of resource use, equity of income distribution, progressiveness, and diverse broader social concerns.").

<sup>25.</sup> FERGUSON & FERGUSON, supra note 6, at 84–85.

<sup>26.</sup> See id.

<sup>27.</sup> See, e.g., John Goddeeris, Health Care, in The Structure of American Industry ch. 10, 214, 240–46 (11th ed., Walter Adams & James Brock eds., 2005); Scherer & Ross, supra note 8, at 483–89.

<sup>28. 15</sup> U.S.C. § 2.

<sup>29.</sup> U.S. DEP'T. OF JUST., supra note 14; see~also FERGUSON & FERGUSON, supra note 6, at 166–69.

<sup>30.</sup> Hildy Teegen et al., The Importance of Nongovernmental Organizations (NGOs) in Global Governance and Value Creation: An International Business Research Agenda, 463, 463–66 (2004).

<sup>31.</sup> The UN Charter introduced the term "non-governmental organization"

NGOs, however, business organizations like the ICC count.<sup>32</sup> The field of NGO management only began to produce meaningful studies at the turn from the 20th to the 21st century due to mutual reluctance to cross disciplines.<sup>33</sup> However, research determining the international success and failure of firms applies to international NGOs and non-profits as well.<sup>34</sup> Unsurprisingly, the empirical studies suggest a correlation between the planning of business strategy and objective performance in non-profits.<sup>35</sup>

NGOs must satisfy "multiple bottom lines," since they must fulfill their stated mission in addition to generating enough revenue to survive.<sup>36</sup> NGO and non-profit performance is

without defining NGOs or providing much helpful guidance to what organizations might deserve consultative status. U.N. Charter art. 71 ("The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence."). Many (if not all) NGOs that receive consultative status are charitable or developmental in nature. See Rep. of the Comm. on Non-Governmental Orgs. on its 2020 Regular Session, at 40–46, U.N. Doc. E/2020/32 (Feb. 7, 2020).

- 32. Thomas Davies, Introducing NGOs and International Relations, in ROUTLEDGE HANDBOOK OF NGOS AND INTERNATIONAL RELATIONS 1, 2 (Thomas Davies ed., 2019).
- 33. Leaders of NGOs, normally purpose-driven and non-conventional problem solvers, see little more than distraction in management studies, which uses conventional problem-solving techniques as a means to an end. David Lewis, NGOs and Management Studies, in ROUTLEDGE HANDBOOK OF NGOS AND INTERNATIONAL RELATIONS 165, 166-67 (Thomas Davies ed., 2019). Before the turn of the century, much of the research into management of NGOs was unreflective and overly prescriptive. Id. at 166 (citing NGO MANAGEMENT: THE EARTHSCAN COMPANION (Fowler & Malunga eds., 2010)) as a compilation of meaningful inquiries into management studies in the NGO sector). Another possible "issue" with management studies in the NGO field is that the vast majority of new research on the subject concerns so-called "development NGOs." whose objectives and goals differ significantly from business-entity NGOs like the ICC. See, e.g., Brian Pratt, Strategic Issues Facing NGOs into the Foreseeable Future, in NGO MANAGEMENT: THE EARTHSCAN COMPANION 165 (Fowler & Malunga eds., 2010) (discussing management issues in the context of issues of relief and development programs). David Lewis is a groundbreaking figure in the field of NGO management studies. William Elbers, David Lewis: Non-Governmental Organizations, Management and Development, 3rd ed., 28 VOLUNTAS 2314, 2315 (2016) (book review).
- 34. Teegen et al., *supra* note 30, at 476; Richard Lambell et al., *NGOs and International Business Research: Progress, Prospects and Problems*, 10 INT'L J. MGMT. REVS. 75, 76 (2008).
- 35. Mohammed Aboramadan & Elio Borgonovi, Strategic Management Practices as a Key Determinant of Superior Non-Governmental Organizations Performance, 11 PROBS. MGMT. 21ST CENTURY 71, 81–82 (2016).
- 36. Daniel Schwenger et al., Competition and Strategy of Non-Governmental Organizations, EMES-SOCENT Conference Selected Papers, no.

therefore measured not only by meeting financial targets, like financial transparency and efficiency, but also by meeting non-financial goals, such as making a public impact, achieving desired outcomes, collaborating with other organizations and entities, delivering quality services, and utilizing human resources efficiently.<sup>37</sup> This arguably makes managing an NGO or non-profit more complicated than managing a comparable business in the for-profit sector.<sup>38</sup>

Some researchers have suggested an if-then analytical framework to evaluate a non-profit's effectiveness in achieving desired non-financial outcomes.<sup>39</sup> Stated alternately, *if* an organization correctly determines inputs and sets up process effectively, *then* the desired individual and societal outcomes will occur.<sup>40</sup>

- B. Parties in Contract Prefer Resolving Their Disputes Through Institutional Arbitration, Giving Rise to a Lucrative Industry for Those Institutions that Parties Choose for Their International Arbitration Clauses.
- Parties Prefer Resolving Contract Disputes with Arbitration Rather than Litigation for Many Reasons, Especially the Reliable Enforcement of Awards and Greater Party Autonomy.

Over the years, international arbitration conventions, national legislation, and model arbitration rules have created a transnational legal framework of arbitration-friendly

LG 13-45 (2013), https://emes.net/content/uploads/publications/Schwenger\_at\_al\_ECSP-LG13-45.pdf.

<sup>37.</sup> Aboramadan & Borgonovi, supra note 35, at 73 (2016).

<sup>38.</sup> Lewis, supra note 33, at 169.

<sup>39.</sup> Margaret C. Plantz et al., *Outcome Measurement: Showing Results in the Nonprofit Sector*, NEW DIRECTIONS FOR EVALUATION, Autumn 1997, at 15, 18–19.

<sup>40.</sup> Lena Lindgren, *The Non-Profit Sector Meets the Performance-Management Movement*, 7 EVALUATION 285, 289–90. Lindgren applies the theory to reflect on the effectiveness of a Swedish adult education program that desired to empower and increase participant self-esteem (individual outcomes) and decrease education gaps in Swedish society (societal goals) by setting up autonomous learning processes (processes) for participants who came to the program on their own free will (inputs). *Id.* at 290–92.

jurisdictions.<sup>41</sup> When cross-border transactions and investment increased after the Second World War, international arbitration provided a transnational dispute resolution network that an increasingly globalized economy required.<sup>42</sup>

Arbitration and litigation are mutually exclusive forms of "last resort" dispute resolution for international parties with contract disputes. <sup>43</sup> Parties to international commercial contracts overwhelmingly prefer drafting dispute resolution clauses that resort to arbitration over litigation. <sup>44</sup> Arbitration's benefits over transnational litigation include party autonomy, <sup>45</sup> more efficient proceedings, <sup>46</sup> privacy, <sup>47</sup> reliable and widespread enforcement of awards, <sup>48</sup> and avoidance of legal systems that are

<sup>41.</sup> Eric D. Green, International Commercial Dispute Resolution: Courts, Arbitration, and Mediation-Introduction, 15 B.U. INT'L L. J. 175, 176 (1997).

<sup>42.</sup> Joshua Karton, International Arbitration as Comparative Law in Action, 2020 J. DISP. RESOL. 293, 296 (2020).

<sup>43.</sup> Richard J. Graving, *International Commercial Arbitration Institutions: How Good a Job are They Doing*, 4 AM. U. J. INT'L L. & POL'Y 319, 322–23 (1989) (contrasting other forms of ADR with binding arbitration, the latter being an alternative to more "serious' litigation").

<sup>44.</sup> Queen Mary Univ. London & White & Case LLP, 2018 International Arbitration Survey, QUEEN MARY UNIV. LONDON, 5 [hereinafter 2018 Queen Mary Survey], http://www.arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey---The-Evolution-of-International-Arbitration-(2).PDF (last visited Jan. 10, 2022) (97% of survey respondents

Arbitration-(2).PDF (last visited Jan. 10, 2022) (97% of survey respondents prefer arbitration to litigation).

<sup>45.</sup> Justice Andrew Phang, Judge of Appeal, Sup. Ct. of Sing., Alternative Dispute Resolution and Regional Prosperity – A View from Singapore, China-ASEAN Justice Forum 2014 ¶ 4, https://www.supremecourt.gov.sg/docs/default-source/default-document-library/media-room/china-asean-justice-forum---adr-and-regional-prosperity-(final)-11092014-(phang-ja)-highlighted. pdf (last visited Jan. 10, 2022).

<sup>46.</sup> Thomas J. Stipanowich & J. Ryan Lamare, Living with ADR: Evolving Perceptions and Use of Mediation, Arbitration, and Conflict Management in Fortune 1000 Corporations, 19 HARV. NEGOT. L. REV. 1, 19 (2014).

<sup>47.</sup> See generally Amy J. Schmitz, Untangling the Privacy Paradox in Arbitration, 54 U. KAN. L. REV. 1211, 1214–17 (2006) (discussing what constitutes privacy in the context of commercial arbitration).

<sup>48. 2018</sup> Queen Mary Survey, *supra* note 44, at 7 (64% of respondents indicated that "enforceability of awards" is the most valuable characteristic of arbitration). The universal charter for the international arbitral process is the New York Convention of 1958. GARY B. BORN, 1 INTERNATIONAL COMMERCIAL ARBITRATION 99 (3d ed. 2021). Signatories to the agreement must enforce arbitral awards awarded in other signatory jurisdictions. *See* Convention on the Recognition and Enforcement of Foreign Arbitral Awards, art. 3, June 10, 1958, 21 U.S.T. 2517, 330 U.N.T.S. 3. The agreement currently has 164 signatories, ensuring arbitration's widespread enforcement. *List of Contracting States*, N.Y. ARB. CONVENTION, http://www.newyorkconvention.org/list+of+contracting +states (last visited Jan. 10, 2022).

less favorable to arbitration.49

Specialized international commercial courts present a minor yet important caveat to practitioners' current preference for arbitration. Some, such as the London Commercial Court and the Commercial Division of the State of New York, have existed for over a century. Meanwhile, judiciaries all over the world have also begun founding new commercial courts in recent years, with some having recently achieved global prominence. International commercial courts borrow certain desirable features from international arbitration institutions, such as factfinders who are experienced in commercial matters, expedited procedures, and more flexible court rules.

Because arbitration and litigation are mutually exclusive forms of last resort dispute resolution, growth and acceptance of international commercial courts could mean future competition between international arbitration institutions and international commercial courts.<sup>53</sup> While some parties might resort to litigating in an international commercial court, the co-existence of international commercial courts and institutional arbitration in London, New York, and Paris suggests that international

<sup>49. 2018</sup> Queen Mary Survey, *supra* note 44, at 7; *see also* BORN, *supra* note 48, at 186–89 (detailing jurisdictions with less supportive legislation for international arbitration).

<sup>50.</sup> See Chief Just. Sundaresh Menon, Sup. Ct. of Sing., Opening Lecture for the DIFC Courts Lecture Series 2015: International Commercial Courts: Towards a Transnational System of Dispute Resolution, paras. 10–16, 58–61, https://www.supremecourt.gov.sg/docs/default-source/default-document-library/media-room/opening-lecture---difc-lecture-series-2015.pdf (last visited Jan 10, 2022) (arguing that international commercial courts will play an increasingly important role in international ADR as enforcement of court judgements improves).

<sup>51.</sup> See generally Pamela K. Bookman, The Adjudication Business, 45 YALE. J. INT'L L. 227 (2020) (describing International Commercial Courts, including the old guard and notable new additions, and whether they compete with each other for cases).

<sup>52.</sup> Denise H. Wong, The Rise of the International Commercial Court: What Is It and Will It Work?, 33 CIV. JUST. Q. 205, 212–15 (2014).

<sup>53.</sup> Compare SIAC Model Clause, SING. INT'L ARB. CTR., http://www.siac.org.sg/model-clauses/siac-model-clause (last visited Apr. 15, 2021), with Singapore International Commercial Court Model Clauses, SING. INT'L COM. CT. (June 7, 2018), https://www.sicc.gov.sg/docs/default-source/guide-to-the-sicc/sicc\_model\_clauses.pdf. Some niche groups, such as the financial sector, already prefer international litigation over international arbitration. International Arbitration: Which Institution?, ASHURST 5 (May 12, 2021), https://www.ashurst.com/en/news-and-insights/legal-updates/qg-international-arbitration-which-institution/ (noting that financial institutions prefer commercial litigation for its summary dispositions).

commercial courts will not fundamentally alter the institutional international arbitration landscape.  $^{54}$ 

In sum, arbitration is the primary method for resolving international commercial disputes because of the reliable enforcement of awards and its preservation of party autonomy.<sup>55</sup> Once parties choose arbitration instead of litigation for the "last resort" form of ADR, they must carefully draft an arbitration clause.

- 2. Parties and Practitioners Prefer Institutional Arbitration over Ad Hoc Arbitration, and Have Countless Institutions to Choose From. Competition Between Institutions Gives Rise to an Industry.
- a. Parties Generally Prefer Institutional Arbitration Because It Is Less Uncertain than Ad Hoc Arbitration.

Choosing between institutional and *ad hoc* arbitration is a critical decision in drafting an arbitration clause.<sup>56</sup> The choice of arbitration institution is not to be confused with the location of the arbitral seat<sup>57</sup> or the location of the venue.<sup>58</sup> Both are distinct questions of arbitral clause drafting that could share the same physical location of the institution, but do not have to.<sup>59</sup>

An *ad hoc* arbitration means that the parties agree to adopt an accepted set of arbitration laws without the supervision or

<sup>54.</sup> See Marta Requejo Isidro, International Commercial Courts in the Litigation Market, 9 INT'L J. PROC. L. 4, 34–41 (2019) (outlining arguments for and against the compatibility of international arbitration and international commercial courts).

<sup>55.</sup> See supra notes 41–49 and accompanying text. One might assume that cost is an advantage of arbitration, but cost is arbitration's least-attractive feature, according to practitioners. 2018 Queen Mary Survey, supra note 44, at 8. This is probably because expensive external legal fees add up during arbitral proceedings. See CIArb Cost Survey, supra note 4, at 13, chart 17.

<sup>56.</sup> Oliver Dillenz, *Drafting International Commercial Arbitration Clauses*, 21 SUFFOLK TRANSNAT'L L. REV. 221, 223–24 (1998).

<sup>57.</sup> The arbitral seat determines the territorial law that governs an international arbitration. BORN, *supra* note 48, at 371–72.

<sup>58.</sup> The UNCITRAL Model Law and many institutional rules allow for parties and arbiters to physically conduct proceedings at some place other than the arbitral seat. NIGEL BLACKABY ET AL., REDFERN AND HUNTER ON INTERNATIONAL ARBITRATION §§ 3.57–.61 (6th ed. 2015). This physical location is sometimes referred to as the "venue" and is a distinct concept from the seat.

 $<sup>59.\,</sup>$  For example, the ICC, based in Paris, administered arbitrations that took place in 63 different countries. ICC 2019 Statistics, supra note 1, at 25 tbl.6.

assistance of an institution.<sup>60</sup> This is likely because institutional arbitration (1) minimizes the costs of a party delaying or disrupting proceedings and (2) decreases the chances of unwittingly drafting a pathological<sup>61</sup> or unfavorable arbitration clause.

First, arbitration rules generally provide procedures for the appointment of arbitrators in situations of deadlock, 62 party noncompliance with the arbitration rules, 63 and for facilitating the collection of deposits on the award or common costs of arbitration. 64 Institutions and their secretariats act as a third party to enforce procedures and hold costs in escrow, which keeps arbitration proceedings on-track when parties are noncompliant or in deadlock. 65 Without a neutral, well-regarded third party administering proceedings, enforcing compliance with arbitration (let alone disbursement of the award) can result in costly delays and even litigation. 66

Second, while *ad hoc* arbitration maximizes party discretion over arbitration proceedings,<sup>67</sup> parties drafting an *ad hoc* arbitration clause must spend extra time to ensure that guidelines and procedures normally taken care of by institutions

<sup>60. 2018</sup> Queen Mary Survey, *supra* note 44, at 15 (more than 84% of respondents using *ad hoc* arbitration adopted UNCITRAL model law); PAUL D. FRIEDLAND, ARBITRATION CLAUSES FOR INTERNATIONAL CONTRACTS 37–38 (2d ed. 2007). In a pure *ad hoc* arbitration, a set of rules and guidelines is not adopted, but this is not generally accepted practice. John P. Bowman, *In-House Lawyer's Role in International Arbitration*, 20 AM. REV. INT'L ARB. 285, 286 (2009).

<sup>61.</sup> A pathological arbitration clause "lead[s] to disputes over the interpretation of the arbitration agreement, result[s] in the failure of the arbitral clause, or result[s] in the unenforceability of an award" because of incompetent drafting. Doak Bishop, *Drafting Agreements in the International Arena*, 25 ADVOCATE (TEX.) 32, 35 (citing examples of pathological international arbitration clauses in case law).

<sup>62.</sup> See, e.g., ICC RULES art. 12–13, https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.

<sup>63.</sup> See, e.g., id. art. 14, https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.

<sup>64.</sup> See, e.g., id. arts. 34–36, https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.

<sup>65.</sup> Michael J. Moser & Friven Yeoh, *Choosing an Arbitral Institution in Cross-Border Commercial Arbitration*, IN-HOUSE PERSP., July 2006, at 18, 19. Conceivably, *ad hoc* arbitration can save parties time and money when the parties have done and will continue to do business with each other. *Id*.

<sup>66.</sup> JAN PAULSSON ET AL., THE FRESHFIELDS GUIDE TO ARBITRATION CLAUSES IN INTERNATIONAL CONTRACTS 59 (3d ed. 2011).

<sup>67.</sup> Id. at 58.

are provided for.<sup>68</sup> Inadequately drafted dispute resolution processes can lead to delays, litigation,<sup>69</sup> or an unenforceable award.<sup>70</sup>

b. There are Hundreds of Arbitration Institutions, but Parties Prefer a Select Few for their Reputation and Versatility.

Arbitration practitioners responding to a prominent survey named "more than a hundred distinct institutions" when asked for their five preferred arbitral institutions. The International Trade Centre lists over 150 organizations that offer international arbitration and other ADR services, such as mediation and conciliation. While most globally prominent institutions handle disputes of any general subject matter and are often leaders in important dispute areas, many specialized institutions focus on specific subject areas, like aerospace, 4

<sup>68.</sup> See BLACKABY ET AL., supra note 58, § 2.71; cf. Moser & Yeoh, supra note 65, at 18, 19 ("Parties often derive comfort from the fact that institutional arbitration automatically incorporates a comprehensive set of 'ground rules' to guide the parties from start to end, and, more importantly, to keep the arbitral process efficient."). Negotiations to international contracts often include lengthy and tedious negotiations over price, transport of goods, terms of investment, etc., so parties often attempt to minimize discussion over the dispute resolution design. Klaus Peter Berger, Understanding Transnat'l Com. Arb. § 1.0 (2000), Westlaw UTCARB 1.0.

<sup>69.</sup> Harout J. Samra & Ramya Ramachanderan, A Cure for Every Ill? Remedies for "Pathological" Arbitration Clauses, 74 U. MIAMI L. REV. 1110, 1115–16 (2020).

<sup>70.</sup> See, e.g., TermoRio S.A. v. Electranta S.P., 487 F.3d 928, 929 (D.C. Cir. 2007) (refusing to enforce arbitration award after a Colombian court found the parties' arbitration clause violated Colombia law).

<sup>71. 2018</sup> Queen Mary Survey, supra note 44, at 13.

<sup>72.</sup> Juris International - Dispute Resolution Centres, INT'L TRADE CTR., http://www.intracen.org/itc/trade-support/arbitration-and-mediation/ (last visited Jan. 10, 2022). See infra Map 1 (plotting the 172 institutions listed by the International Trade Centre).

<sup>73.</sup> For example, the ICC and the LCIA "dominated" in a recent survey of institutional arbitrations for construction contracts. Queen Mary Univ. London & Pinsent Masons, International Arbitration Survey – Driving Efficiency in International Construction Disputes, PINSENT MASONS 11, http://www.pinsentmasons.com/thinking/special-reports/international-arbitration-survey (last visited Jan. 10, 2022).

<sup>74.</sup> Carson W. Bennett, *Houston, We Have an Arbitration*, 19 PEPP. DISP. RES. L.J. 61, 70 n.80 (citing SILICON VALLEY ARB. & MEDIATION CTR., https://svamc.org/ (last visited Jan. 10, 2022) and SHANGHAI INT'L AVIATION CT. ARB., http://www.shiac.org/Aviation/news\_detail\_E.aspx?id=747 (last visited Jan. 10, 2022)).

maritime,<sup>75</sup> insurance,<sup>76</sup> commodity exchange,<sup>77</sup> and intellectual property disputes.<sup>78</sup> Given the number of general and specialized institutions available to parties to an international contract, a complete survey of international arbitration institutions is practically infeasible.

Reputable surveys are the most important way to gauge industry preferences and priorities<sup>79</sup> because arbitration is

<sup>75.</sup> Craig Neame & Holly Colaço, *The Maritime Arbitration Universe in Numbers*, Holman Fenwick Willan LlP, http://www.hfw.com/The-Maritime-Arbitration-Universe-in-Numbers-London-remains-ever-dominant-July-2020 (last visited Jan. 10, 2022) (naming The London Maritime Arbitrators Association (LMAA), Singapore Chamber of Maritime Arbitration, the Emirates Maritime Arbitration Centre, the Nordic Offshore and Maritime Association, the Society of Maritime Arbitration Association, the Houston Maritime Arbitrators Association, and the China Maritime Arbitration Commission as significant maritime arbitration institutions, with the LMAA and LIAC dominating this industry subset).

<sup>76.</sup> ARIAS U.S. arbitrates insurance disputes under its own set of institutional arbitration rules. *See Arias U.S. Rules*, ARIAS U.S., http://www.arias-us.org/arias-us-dispute-resolution-process/arias%E2%80% A2u-s-rules/ (last visited Jan. 10, 2022).

<sup>77.</sup> The London Metal Exchange provides arbitration and ADR services for commodities exchange disputes. *See Rulebook*, LONDON METAL EXCH., https://www.lme.com/en/Company/Market-Regulation/Rules/Rule-book visited Jan. 10, 2022).

<sup>78.</sup> The World Intellectual Property Organization (WIPO), an agency of the United Nations that is based in Geneva, is known for resolving intellectual property disputes through arbitration and other forms of ADR. Moser and Yeoh, supra note 65, at 20; see generally Joyce A. Tan, WIPO Guide on Alternative Dispute Resolution (ADR) Options for Intellectual Property Offices and Courts, WORLD INTELL. PROP. ORG. 21–56, https://www.wipo.int/edocs/pubdocs/en/wipo\_pub\_guide\_adr.pdf (last visited Jan. 10, 2022) (discussing legal framework and ADR options, including WIPO coordination with international intellectual property offices, from an intellectual property industry perspective).

<sup>79.</sup> Albert Bates Jr. & R. Zachary Torres-Fowler, The Intersection of International Arbitration and Construction Disputes: A Review of the 2019 Queen Mary University of London International Arbitration Survey, CONSTR. L. SPRING 2020, at 20, 20 ("Because international arbitrations are almost always confidential, surveys like the QMUL Survey pull back the certain and offer insight into a field that is commonly misunderstood."). For examples of helpful surveys about international arbitration, see, for example, 2018 Queen Mary Survey, supra note 44; John F. Coyle & Christopher R. Drahozal, An Empirical Study of Dispute Resolution Clauses in International Supply Contracts, 52 VAND. J. TRANSNAT'L L. 323 (2019); CIArb Cost Survey, supra note 4; Dyalá Jiménez Figueres, Are Latin American Institutions Innovating?, 23 ILSA J. INT'L & COMPAR. L. 289 (2017) (surveying Latin American institutions); Robert Wheal et al., Africa Focus: Autumn 2020, WHITE & CASE (Sep. 17, 2020), https://www.whitecase.com/publications/insight/africa-focus-autumn-2020/ institutional-arbitration-opportunities-challenges (surveying Institutions); Results of the WIPO Arbitration and Mediation Center

private and often confidential.<sup>80</sup> Additionally, global arbitration blogs,<sup>81</sup> law review articles,<sup>82</sup> authoritative treatises,<sup>83</sup> and bar publications<sup>84</sup> are all helpful secondary sources in determining which institutions have the requisite reputation to be considered part of the global international arbitration industry.

Arbitration institutions with a global reputation are transparent and publish statistics such as casework reports, aggregate or median amounts in dispute, other ADR services provided, diversity amongst arbiters appointed by the institutions, nationalities of parties to arbitrations, choice of law applied, and more.<sup>85</sup> Global institutions that publish statistics to some extent include: the International Chamber of Commerce's

International Survey on Dispute Resolution in Technology Transactions, WIPO ARB. & MEDIATION CTR. (Mar. 2013), https://www.wipo.int/export/sites/www/amc/en/docs/surveyresults.pdf (surveying ADR preferences in technological disputes).

- 80. While arbitration proceedings are essentially private, they are not essentially confidential. BLACKABY ET AL., supra note 58, § 2.170 ("[T]]he current trend in international arbitration is to diminish—or at least question—the confidentiality of arbitral proceedings as a whole."). The presumption of confidentiality in arbitral proceedings varies based on the arbitration laws of the arbitral seat, the rules of arbitration used by the parties, and the intentions of the parties pursuant to the arbitration agreement. Cindy G. Buys, The Tensions Between Confidentiality and Transparency in International Arbitration, 14 AM. REV. INT'L ARB. 121, 125—30 (2003). Thus, the institution chosen, and its rules, may affect the confidentiality of arbitral proceedings.
- 81. See, e.g., Dr. Markus Altenkirch & Brigitta John, Arbitration Statistics 2019 How Did Arbitration Institutions Fare in 2019?, GLOB. ARB. NEWS (July 15, 2020), https://globalarbitrationnews.com/how-did-arbitration-institutions-fare-in-2019/ (compiling statistics across leading institutions); Diva Rai, Scope of International Arbitration in the Middle East, IPLEADERS (Dec. 10, 2020) https://blog.ipleaders.in/scope-of-international-arbitration-in-the-middle-east/ (listing prominent Middle East institutions).
- 82. The study that comes closest to evaluating the structure, conduct, and performance of the global institutional arbitration industry is probably Graving, supra note 43. See generally Catherine A. Rogers, Transparency in International Commercial Arbitration, 54 U. KAN. L. REV. 1301, 1314–16 (2006) (describing how competition among institutions impacts their relative transparency); Figueres, supra note 79 (evaluating Latin American institutions on transparency, diversity, and other factors); Annie X. Li, Challenges and Opportunities of Chinese International Arbitral Institutions and Courts in a New Era of Cross-Border Dispute Resolution, BOSTON U. L. REV. 352 (2020) (surveying the landscape of Chinese international arbitration institutions).
- 83. See, e.g., GARY B. BORN, INTERNATIONAL COMMERCIAL ARBITRATION, 174–99 (2d. ed. 2014) (listing institutions with a prominent reputation).
- 84. See, e.g., Jonathan H. Zimmerman, When Dealing with Chinese Entities, Avoid the CIETAC Arbitration Process, 53 ADVOCATE 23 (Feb. 2010).
- 85. See Figueres, supra note 79, at 290;  $see\ also$  Rogers, supra note 82, at 1314–16.

International Court of Arbitration (ICC), 86 the London Court of International Arbitration (LCIA), 87 the International Dispute Resolution Centre at the American Arbitration Association (ICDR/AAA), 88 the Singapore International Arbitration Centre (SIAC), 89 the Hong Kong International Arbitration Centre (HKIAC), 90 the China International Economic and Trade Arbitration Commission (CIETAC), 91 the Stockholm Chamber of Commerce Arbitration Institute (SCC), 92 the Swiss Chambers' Arbitration Institution (SCAI), 93 the Vienna International Arbitral Centre (VIAC), 94 the Cairo Regional Centre for International Commercial Arbitration (CRCICA), 95 the World Intellectual Property Organization (WIPO), 96 the London Maritime Arbitrators Association (LMAA), 97 the German Arbitration Institute (DIS), 98 the Japan Commercial Arbitration

86. ICC 2019 Statistics, supra note 1.

<sup>87. 2019</sup> Annual Casework Report, LONDON CT. INT'L. ARB. (May 19, 2020), https://www.lcia.org/News/annual-casework-report-2019-the-lcia-records-its-highest-numbe.aspx.

<sup>88. 2019</sup> Annual Report, AM. ARB. ASS'N 5 (May 11, 2020), http://www.adr.org/sites/default/files/document\_repository/AAA\_AnnualReport \_2019.pdf.

<sup>89.</sup> Where the World Arbitrates: Annual Report 2019, SING. INT'L ARB. CTR. (June 30, 2020), https://www.siac.org.sg/images/stories/articles/annual\_report/SIAC%20AR\_FA-Final-Online%20(30%20June%202020).pdf.

<sup>90. 2020</sup> Statistics, H.K. INT'L ARB. CTR., https://www.hkiac.org/about-us/statistics (last visited Jan. 10, 2022).

<sup>91.</sup> CIETAC 2019 Work Report, CHINA INT'L ECON. & TRADE ARB. COMM'N, http://www.cietac.org/index.php?m=Article&a=show&id=16871&l=en visited Jan. 10, 2022). (last visited Jan. 10, 2022).

<sup>92.</sup> SCC Statistics 2019, ARB. INST. STOCKHOLM CHAMBER COM., https://sccinstitute.com/media/1800087/statistics-2019.pdf (last visited Jan. 10, 2022).

<sup>93.</sup> Arbitration Statistics 2019, SWISS CHAMBERS' ARB. INST., https://www.swissarbitration.org/wp-content/uploads/2021/08/SCAI-Stats-2019\_PDF\_v20200609\_for-publication.pdf (last visited Jan. 10, 2022).

<sup>94.</sup> VIAC Statistics 2019, VIENNA INT'L ARBITRAL CTR. https://www.viac.eu/en/service/statistics/2019 (last visited Jan. 10, 2022).

<sup>95.</sup> CRCICA Caseload of the Year 2018, CAIRO REG'L CTR. FOR INT'L COM. ARB., https://crcica.org/Arbitration\_Statistics.aspx (last visited Jan. 10, 2022) (statistics only available for 2018 and the first half of 2019).

<sup>96.</sup> WIPO Caseload Summary, WORLD INTELL. PROP. ORG. https://www.wipo.int/amc/en/center/caseload.html (last visited Jan. 10, 2022).

<sup>97.</sup> Statistics Calculation 2020, LONDON MAR. ARBS. ASS'N, https://lmaa.london/wp-content/uploads/2021/02/Statistics-2020-For-Website.pdf (last visited Jan. 10. 2022).

<sup>98.</sup> Our Work in Numbers, GERMAN ARB. INST. (DIS), https://www.disarb.org/en/about-us/our-work-in-numbers (last visited Jan. 10, 2022).

Association (JCAA),<sup>99</sup> the Asian International Arbitration Centre (AIAC),<sup>100</sup> the International Centre for Settlement of Investment Disputes at the World Bank (ICSID),<sup>101</sup> the Permanent Court of Arbitration (PCA),<sup>102</sup> the Korean Commercial Arbitration Board International (KCAB),<sup>103</sup> and the Center for Arbitration and Mediation at the Chamber of Commerce Brazil-Canada (CAM-CBCC).<sup>104</sup>

Arbitration institutions normally charge fees *ad valorem* based on the value of the amount in dispute. <sup>105</sup> This incentivizes institutions to cater their services toward parties with contracts of significant value. Applying IO economics to case reports from institutions' annual reports will reveal how institutions of varying prominence and incumbency compete for the most valuable disputes.

#### PART II

This Part collects case data from the annual reports of globally prominent arbitration institutions in order to apply the structure-conduct-performance (SCP) paradigm to the global market for these institutions' services. <sup>106</sup>

<sup>99.</sup> Statistics, JAPAN COM. ARB. ASS'N, https://www.jcaa.or.jp/en/arbitration/statistics.html (last visited Jan. 10, 2022).

<sup>100.</sup> Shaping Excellence, From Strength to Strength, ASIAN INT'L ARB. CTR., https://admin.aiac.world/uploads/ckupload/ckupload\_20210727102858\_34.pdf (last visited Jan. 10, 2022). This preeminent Malaysian institution was known for decades as the Kuala Lumpur Regional Centre for Arbitration, but its name changed in February 2018 pursuant to an amendment in the 2005 Arbitration Act. Committed to the Road Ahead: Annual Report 2018, ASIAN INT'L ARB. CTR. 2, https://admin.aiac.world/uploads/ckupload/ckupload\_20191023032658\_26.pdf (last visited Jan. 10, 2022).

 $<sup>101. \</sup>begin{tabular}{ll} The ICSID Case load - Statistics, Issue 2020-1, INT'L CTR. FOR SETTLEMENT INV. DISPS., https://icsid.worldbank.org/sites/default/files/publications/Caseload%20Statistics/en/The%20ICSID%20Caseload%20Statistics%20%282020-1%20Edition%29%20ENG.pdf (last visited Jan. 10, 2022). \end{tabular}$ 

<sup>102.</sup> Annual Report 2019, PERMANENT CT. ARB., https://docs.pca-cpa.org/2020/03/7726c41e-online-pca-annual-report-2019-final.pdf (last visited Jan. 10, 2022).

<sup>103.</sup> Annual Report, KCAB INT'L., http://www.kcabinternational.or.kr/user/Board/comm\_notice.do?BD\_NO=174&CURRENT\_MENU\_CODE=MENU0017 &TOP\_MENU\_CODE=MENU0014 (last visited Jan. 10, 2022).

<sup>104.</sup> Arbitration Annual Report 2019 – Facts and Figures, CAM-CCBC, https://ccbc.org.br/cam-ccbc-centro-arbitragem-mediacao/en/arbitration-statistics/ (last visited Jan. 10, 2022).

<sup>105.</sup> See supra note 4 and accompanying text.

<sup>106.</sup> The background in Section I(B) above discusses international commercial arbitration. However, because most of the bigger institutions

- A. INDUSTRY STRUCTURE: THE INSTITUTIONAL INTERNATIONAL ARBITRATION INDUSTRY IS AN ICC-LED OLIGOPOLY BETWEEN FIVE INSTITUTIONS: THE ICC, CIETAC, LCIA, SIAC, AND HKIAC.
- An Empirical Description of the Global Industry Structure of International Arbitration Institutions is Possible Thanks to Surveys, Annual Reports, and Academic Literature.

Applying SCP requires empirical measurements of the structure of an industry to make conclusions about the conduct, performance, and public policy implications about the industry.<sup>107</sup> One can measure the structure of the market for arbitration institutions since many prominent institutions publish statistics.<sup>108</sup> The Tables in the Appendix compile case numbers and aggregate amounts in dispute from significant<sup>109</sup> arbitration institutions.

Significant limitations on data collection must be mentioned. First, some important institutions, such as the Australian Center for Commercial Arbitration and JAMS International, do not always publish statistics in their annual reports. <sup>110</sup> Second, the types of statistics published differ by institution; for example, only some institutions specify how many of their new cases are international arbitrations, and some (most significantly, the LCIA and ICDR) do not publish cumulative amounts in dispute for international arbitrations. <sup>111</sup>

handle cases involving investor-state disputes, and there is no clean way to separate institution statistics between commercial arbitration and investor-state disputes, institutions that handle investor-state disputes (like the ISCID in Washington, D.C.) are included in the quantitative analysis in Part II.

- 107. Mosca, *supra* note 5, at 297–98.
- 108. Figueres, supra note 79, at 290.
- 109. The institutions were chosen based on their consistent appearances in the surveys, law review articles, and authoritative treatises described in Section (D(B)(2)
- 110. See Publications & Papers, Australian Ctr. for Int'l Com. Arb., https://acica.org.au/publications-and-papers/ (last visited Jan. 10, 2022) (not listing statistics in its annual report). JAMS International is unique because it is a for-profit, private entity that drives substantial revenue (40%) from arbitration. Robert B. Davidson & Matthew Rushton, Overview: JAMS, in The Arbitration Review of the Americas 2021 66, 66 (2020), https://www.jamsadr.com/pdf-viewer.aspx?pdf=/files/uploads/documents/articles/davidson-rushton-gar-arbitration-review-of-the-americas-2020-08.pdf.
  - 111. Altenkirch & John, supra note 81.

Third, while the vast majority of globally prominent institutions charge fees *ad valorem*, the LCIA charges based on time spent on the case.<sup>112</sup>

Concentration measurements describe how much of the industry market share the biggest firms have, relative to the market output of the entire industry. Thus, analyzing the concentration of the majority of globally prominent institutions reveals market structure for international arbitration institutions, despite the caveats in the data set mentioned in the paragraph above.

The concentration ratio and the Herfindahl-Hischman Index ("HHI") are calculated by comparing a business' output to the market's output. The charts below consider two forms of market output: aggregate amounts in dispute in 2019, and cases commenced in 2019. See the Tables in the Appendix for the full data sets used in this Note.

Chart 1: Concentration Measurements Between Seventeen International Arbitration Institutions in 2019, With "Market Output" Defined as the Number of International Arbitration Cases Filed in 2019.

Ratio Measured	ICC	CIETAC	LCIA	SIAC	HKIAC	CR(x)	HHI
vs. Institution							
Included							
CR(1)	X					.254	
CR(3)	X	X	X			.567	
CR(5)	X	X	X	X	X	.758	
ННІ	N/A	N/A	N/A	N/A			1396.951

<sup>112.</sup> See LCIA Releases Costs and Duration Data, LCIA (Nov. 3, 2015), https://www.lcia.org/News/lcia-releases-costs-and-duration-data.aspx.

<sup>113.</sup> For example, suppose there are only ten international arbitration institutions in the entire world. A Concentration Ratio of 2 would calculate how many arbitrations the two biggest institutions administered, relative to all the arbitrations administered by all ten institutions. See FERGUSON & FERGUSON, supra note 6, at 39-42.

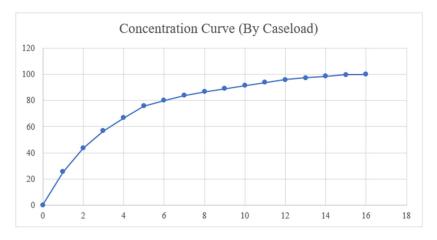
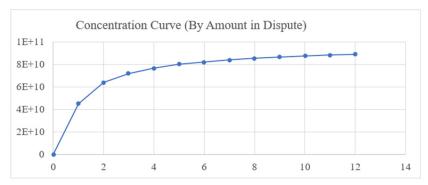


Chart 2: Concentration Measurements Among Thirteen Prominent Institutions, With "Market Output" Defined as Aggregate Amount in Dispute in 2019 International Arbitration Institutions.

Ratio Measured	ICC	CIETAC	SIAC	HKIAC	CR(x)	HHI
vs. Institution						
Included						
CR(1)	X				.508	
CR(3)	X	X	X		.810	
CR(4)	X	X	X	X	.863	
ННІ	N/A	N/A	N/A	N/A		3167.478



Recall that an HHI of 1,500-2,500 is moderately

concentrated, and 2,500+ is heavily concentrated.<sup>114</sup> Also recall that a CR(5) of above 60% is considered oligopolistic.<sup>115</sup> The concentration ratios in Charts 1 and 2 both exceed 60%, and the HHI for Chart 2 well exceeds 2,500. Therefore, the data suggests that the international arbitration institution industry is at least moderately concentrated with respect to caseloads, and heavily concentrated with respect to cases of high monetary value.

 While entering the arbitration institution market is inexpensive, barriers to entry, such as the importance of having a global reputation, insulate the top institutions from competitors, which explains the high concentration of cases and case value between them.

The start-up costs for a humble international arbitration institution are low. First, the institutions themselves do not require an accreditation or professional certification. <sup>116</sup> Second, the brunt of the expense of an international arbitration is payment to in-house counsel, arbitrators, and any other professionals the case may call for. <sup>117</sup> Finally, the market for international dispute resolution services continues to grow (in Asia particularly) as commercial transactions become increasingly global and necessarily involve parties from multiple jurisdictions. <sup>118</sup>

The lack of a certification requirement and an increase in international transactions have led to a proliferation of arbitration institutions. This makes a complete itinerary of arbitration institutions that administered at least one arbitration between parties of different nationalities impossible. Map 1 below visualizes what a fraction of a complete picture might look like. Thus, the market for international arbitration institutions generally has low barriers to entry.

The global market for high dispute amounts, however, has high barriers to entry, which accounts for the high concentration

<sup>114.</sup> U.S. DEP'T OF JUST., supra note 14.

<sup>115.</sup> Kenton, supra note 12.

<sup>116.</sup> Given international arbitration's private, piecemeal rise to prominence in the latter half of the  $20^{\rm th}$  Century, I found no governing body or accreditation bureau that certifies which organizations are "officially" international arbitration institutions.

<sup>117.</sup> See CIArb Cost Survey, supra note 4, at 10–11.

<sup>118.</sup> As business becomes increasingly globalized, more contracts have international parties, meaning more international dispute resolution will be required. See Karton, supra note 42, at 296; Menon, supra note 50,  $\P$  5.

seen in the data above. The Queen Mary survey provides helpful insight about these barriers. First and foremost, reputation and name-recognition of the arbitration is the single-most important factor in practitioners' preference for a given institution, with prior experience, efficiency of administrative staff, and neutrality also receiving significant votes. <sup>119</sup> This survey also highlighted that parties are more likely to select an institution capable of handling arbitrations around the world, and not just in the country of their headquarters. <sup>120</sup>

Put differently, while it might not be per se expensive to start an international arbitration institution from scratch, significant monetary and non-monetary costs must be incurred to compete with well-established institutions who have the reputation and capabilities of the established institutions. This is exemplified by what institutions outside the "Top Five" are doing to try and break into that strategic group. For example, the AIAC recently rebranded from the Kuala Lumper International Arbitration Centre and participated in a multitude of ADR- and arbitration-related events in order to increase its prominence in a region that has three of the five busiest international arbitration institutions.<sup>121</sup> And Saudi Arabia, which founded two specialized commercial courts in 2020<sup>122</sup> and an arbitration institution in 2018, aspires to make its international arbitration institution "the preferred ADR choice in the region by 2030."123

In sum, while countless institutions can facilitate international arbitrations (Map 1), there are more elite strategic groups with higher barriers to entry. Map 2 illustrates the 18 institutions surveyed for their prominence, and Map 3 plots the group of institutions with the most market power.

<sup>119. 2018</sup> Queen Mary Survey, supra note 44, at 14.

<sup>120.</sup> *Id.* (stating that Latin American respondents thought of the ICC more highly when it opened an office in São Paulo).

<sup>121.</sup> Annual Report 2018, supra note 100, at 2.

<sup>122.</sup> Richard Bell & Mohammed Aldowish, Saudi Arabia: The New Saudi Commercial Courts Law: A Bold Step for the Administration of Commercial Disputes, MONDAQ (May 20, 2020), https://www.mondaq.com/saudiarabia/trials-appeals-compensation/936928/the-new-saudi-commercial-courts-law-a-bold-step-for-the-administration-of-commercial-disputes.

<sup>123.</sup> SAUDI CTR. FOR COM. ARB., https://www.sadr.org/?lang=en (last visited Jan. 10, 2022).

Map 1: Institutions from International Trade Centre's Database, Plotted $^{124}$ 



Map 2: Institutions with Global Reputation Whose Data was Examined for This Note



<sup>124.</sup> See Juris International – Dispute Resolution Centres, supra note 72 (listing the approximately 150 international arbitration institutions that are plotted on this map).



Map 3: Institutions Where Caseload & Highest Value of Dispute are Concentrated

- B. CONDUCT: THE DOMINANT INTERNATIONAL ARBITRATION INSTITUTIONS TAKE ADVANTAGE OF THEIR REPUTATIONS AND FURTHER CONCENTRATE THE MARKET BY EXPANDING INTERNATIONALLY AND DEVELOPING SPECIALIZATIONS.
- An Examination of Arbitration Fees Reveals that the ICC Leverages its Position as the Front-Runner of Institutional Arbitration by Charging Slightly Higher Fees than its Peers.

When analyzing for-profit industries, IO economists normally apply the Lerner Index to measure how dominant firms raise prices above marginal cost in order to leverage their market power to increase profits. <sup>125</sup> Arbitration institutions and centers of commerce are non-profits, and the vast majority of expenses in international arbitration go to in-house legal fees. <sup>126</sup> Still, institutions charge a modest administrative fee that goes straight to the institution. <sup>127</sup> Those rates are collected and examined below.

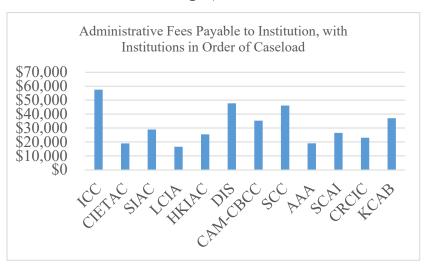
<sup>125.</sup> FERGUSON & FERGUSON, supra note 6, at 15–16.

<sup>126.</sup> CIArb Cost Survey, supra note 4, at 2.

<sup>127.</sup> See supra note 4 and accompanying text. The vast majority of these fees are ad valorem and provided for in the appendices of institutional arbitration rules. Id.

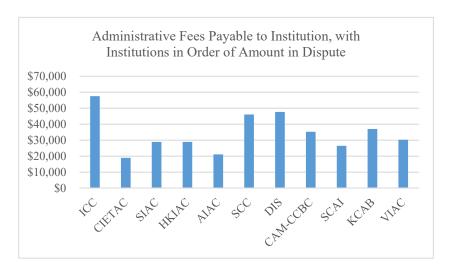
To compare fees among institutions, the author postulated a dispute of \$10,000,000<sup>128</sup> for a three-arbiter tribunal. The graphs below plot institutional administrative fees. Graph 1 lists institutions in order of decreasing case amount, and the second in decreasing order of aggregate amount heard in dispute. The Tables section of the Appendix lists all fees plotted below.

Graph 1: Administrative Fees Payable to Institution, with Institutions Listed in Order of Caseload in 2019 (Highest to Lowest from Left to Right)



<sup>128.</sup> For the LCIA arbitration, which charges based on time spent on the case, the author used an estimate of 200 hours spent on the case. \$10,000,000 is a fairly arbitrary figure that was intended to best resemble an "average" LCIA arbitration. In 2019, 28% of LCIA arbitrations disputed between \$1-5 million, 20% between \$5-50 million, and 9% over \$50 million. 2019 Annual Casework Report, supra note 87, at 12.

Graph 2: Administrative Fees Payable to Institution, with Institutions Listed in Order of Aggregate Amount in Dispute (Highest to Lowest from Left to Right)



The ICC charges the highest administration fees, and average tribunal fees in ICC institutions exceed that of every industry sampled. This is consistent with the SCP's contention that firms with monopolistic power will raise prices above marginal cost. Other than this observation, not much can be gleaned from comparing the relatively small fees institutions charged. Instead, the leading institutions identified from market structure analysis in Section II(A) differentiate their product from that of other institutions in other ways, not by raising the cost of their services.

2. A Summary of Six Leading International Arbitration Institutions, and How Their Conduct Reinforces Their Market Dominance.

The ICC, based in Paris, is the world's preeminent international arbitration institution, and distinguishes itself from all other institutions.<sup>131</sup> It hosted arbitrations in over 62

<sup>129.</sup> See infra Table 3 and accompanying note 228.

<sup>130.</sup> FERGUSON & FERGUSON, supra note 6, at 15–16.

<sup>131.</sup> BORN, supra note 48, at 196-97.

countries in 2019,<sup>132</sup> and runs a separate ADR center that processed 70 cases in 2018.<sup>133</sup> It has case management offices in Hong Kong, New York, Sao Paolo, Singapore, and Abu Dhabi,<sup>134</sup> making it arguably the most internationally versatile arbitration institution. It also requires that parties and the arbitral tribunal agree to a Terms of Reference sheet that regards certain fundamental aspects of the arbitration<sup>135</sup> and closely scrutinizes arbitral awards.<sup>136</sup> The ICC also has "an abundance of literature" written on it, making its proceedings more predictable to in-house counsel.<sup>137</sup>

Arbitration in China deserves special mention, as CIETAC is arguably the lone institution in this Note that earned its high caseload more from the bargaining power of the parties who insist on drafting CIETAC clauses, and less from its reputation as an arbitration institution. Non-Chinese practitioners remain suspicious of CIETAC, and international arbitrations are declining across Chinese institutions because of competition from the HKIAC and other direct competitors. CIETAC cannot be ignored as a significant arbitration institution, but its position in the market complicates the IO analysis. Unlike the other five institutions described here (ICC, LCIA, AAA/ICDR, SCIA, HKIAC), it is difficult (and indeed, not accomplished here) to find an English-language source that recommends CIETAC as an arbitration institution of choice. All that said, only the ICC exceeds CIETAC's market power. The hards to the sheer number

<sup>132.</sup> ICC 2019 Statistics, supra note 1, at 4.

<sup>133.</sup> Record Number of Cases Signals Ongoing ADR Momentum, INT'L CHAMBER COM. (Feb. 9, 2019), https://iccwbo.org/media-wall/news-speeches/record-number-of-cases-signals-ongoing-adr-momentum/.

<sup>134.</sup> ICC Court to Open 5th Overseas Case Management Office in Abu Dhabi Global Market, INT'L CHAMBER COM. (Dec. 21, 2020), https://iccwbo.org/media-wall/news-speeches/icc-court-to-open-5th-overseas-case-management-office-in-abu-dhabi-global-market/.

 $<sup>135.\</sup> ICC\ RULES$  art.  $23,\ https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.$ 

<sup>136.</sup> *Id.*, art. 34, https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.

<sup>137.</sup> Blackaby et al., supra note 58, § 1.166 n.172 (citing examples).

<sup>138.</sup> *Cf.* Bookman, *supra* note 51, at 258, 261 (suggesting that the caseload for China's International Commercial Court comes more from China exerting superior bargaining power in its quest for control rather than the actual quality of the institution).

<sup>139.</sup> International Arbitration: Which Institution?, supra note 53, at 12-13; Zimmerman, supra note 85.

<sup>140.</sup> Annie X. Li, supra note 82, at 352, 381–82.

<sup>141.</sup> See infra Table 1 and Table 2.

of Chinese contracts in international commerce, <sup>142</sup> CIETAC is a potential "threat" to the ICC's dominance of the international institutional arbitration industry.

The LCIA was founded in the late 19th Century, likely making it one of the oldest international arbitration institutions. Practitioners, particularly those outside the Americas, continue to prefer the ICC and LCIA over any other institution. Has the ICC, the LCIA markets itself as an internationally versatile institution. For example, it publicized its once-longstanding partnership with the Dubai International Financial Centre. It has long been seen as a common law alternative to the ICC. And while location of the arbitral seat is an independent issue from the choice of institutional rules, Italian and a global hub for arbitration, making the LCIA a convenient and reputable choice for an arbitral institution.

Singapore is a world dispute resolution hub, and the SIAC has arguably the best reputation among the international

<sup>142.</sup> For example, a World Bank study found that 40% of global merchandise exports in 71 economies in the Belt and Road corridors came as a result of China's Belt and Road project alone. *Belt and Road Initiative*, WORLD BANK (Mar. 29, 2018), https://www.worldbank.org/en/topic/regional-integration/brief/belt-and-road-initiative.

<sup>143.</sup> History, LCIA, https://lcia.org/LCIA/history.aspx (last visited Jan. 10, 2022).

<sup>144. 2018</sup> Queen Mary Survey, supra note 44, at 13.

<sup>145.</sup> Essam Al Tamimi, *The DIFC-LCIA: 10 Years Old and Looking to the Future*, AL TAMIMI & CO. (Nov. 2018), https://www.tamimi.com/law-update-articles/the-difc-lcia-10-years-old-and-looking-to-the-future/. [Editor's note: The DIFC-LCIA agreement was surprisingly terminated shortly before publication. *Update: DIFC LCIA*, LCIA (Oct. 7, 2021), https://www.lcia.org/News/update-difc-lcia.aspx.]

<sup>146.</sup> Dillenz, supra note 56, at 226 ("The primary difference between the LCIA and the ICC exists in the common law approach of the LCIA as opposed to the predominantly civiliste proceedings of the ICC.").

<sup>147.</sup> In other words, the arbitration can apply the arbitration rules of one jurisdiction (the seat) despite the arbitration applying rules for an institution that resides in a different location. For example, the seat of an ICC arbitration can be, and often is, London, even though the ICC is in Paris. *See supra* notes 57–59 and accompanying text.

<sup>148. 2018</sup> Queen Mary Survey, *supra* note 44, at 9 (64% of respondents preferred London as their organization's preferred seat, the most of any city). See also Rory Mac Neice, Why is London a Global Capital for International Arbitration, ASHFORDS (Mar. 20, 2015), https://www.ashfords.co.uk/news-and-media/general/why-is-london-a-global-capital-for-international-arbitration; The Maritime Arbitration Universe in Numbers, supra note 75, at 2 (London handled 1,737 maritime arbitrations, the next highest being Singapore, at 229 cases).

arbitration institutions headquartered in Asia.<sup>149</sup> Like the LCIA rules, the SIAC rules, which have been translated into thirteen languages, contain explicit stipulations for confidentiality,<sup>150</sup> and its default rules stipulate a sole arbiter instead of the usual three, which can decrease arbitration costs.<sup>151</sup> HKIAC is a regional rival and close competitor to the SIAC, both in terms of the value of cases handled<sup>152</sup> and worldwide reputation among practitioners.<sup>153</sup> Both the SIAC and HKIAC have opened offices in Shanghai and Seoul, and the SIAC has an Americas office in New York.<sup>154</sup>

New York is also an arbitration hub, and the International Centre for Dispute Resolution at the American Arbitration Association has a global reputation despite not being in the top five of caseloads and amounts in disputes. <sup>155</sup> It could be the most frequently used among parties in the Americas, despite competition from JAMS International. <sup>156</sup> Practitioners have dozens of branches and offices throughout the United States and Canada to choose from, and there is a case management office in Singapore. <sup>157</sup> It has reputation of being "sui generis" among

<sup>149. 2018</sup> Queen Mary Survey, supra note 44, at 7, 13 (Singapore is the top arbitral seat in Asia, and the SIAC is the preferred Asian institution); Menon, supra note 50, paras. 22–29 (citing statistics confirming Asia's central importance in global transactions and arguing for Singapore's status as Asia's leading legal hub). Its reputation is bolstered by its staff—Gary Born serves as President of the SIAC's Court of Arbitration. Where the World Arbitrates: Annual Report 2019, supra note 44, at 3.

 $<sup>150.\,</sup>$  SIAC RULES 2016 art. 39, https://www.siac.org.sg/our-rules/rules/siac-rules-2016.

<sup>151.</sup> *Id.* r. 9.1.

<sup>152.</sup> Singapore's aggregate disputes resolved was \$8,090,000,000, compared to HKIAC's \$4,700,000,000. Compare Where the World Arbitrates: Annual Report 2019, supra note 89, at 12, with 2020 Statistics, supra note 90.

<sup>153. 2018</sup> Queen Mary Survey, *supra* note 44, at 7, 13 (HKIAC is second among Asian institutions to SIAC).

<sup>154.</sup> H.K. INT'L ARB. CTR., https://www.hkiac.org/about-us (last visited Jan. 10, 2022) (tabs for Seoul and Shanghai offices); *About Us*, SING. INT'L ARB. CTR., https://www.siac.org.sg/about-us/about-us (last visited Jan. 10, 2022) (tabs for overseas offices).

<sup>155.</sup> See, e.g., 2018 Queen Mary Survey, supra note 44, at 9, 13.

<sup>156.</sup> In a study of international supply contracts with a majority having at least one American party, thirty specified the AAA/ICDR, while twenty-nine used the ICC. Coyle & Drahozal, *supra* note 79, at 355–56.

<sup>157. 2019</sup> Annual Report, supra note 88, at 6, 34–37; Global and Domestic AAA-ICDR Office Locations, AM. ARB. ASS'N, https://www.adr.org/OfficeLocations (last visited Jan. 10, 2022); see also ICDR Canada, INT'L CTR. FOR DISP. RESOL., https://www.icdr.org/index.php/icdrcanada (last visited Jan. 10, 2021).

other institutions. 158

3. Institutions Also Diversify Their Products by Offering Various ADR Services and Highlighting Their Specialty Subject Matter.

While practitioners overwhelmingly prefer arbitration over litigation as a method of last-resort ADR, they also prefer arbitration in conjunction with other services. These alternative services can include mini-trial, conciliation, mediation, and others. For example, the AAA specializes in alternative ADR services, and the LCIA offers to sit as an appointing authority of an expert determination clause or administer mediations in lieu of arbitration. 162

The prominent institutions, especially the ICC, can handle all types of arbitration, whether it be investor-state or commercial. That said, self-reported statistics of many institutions reveal a trend toward developing a reputation in certain practice areas. Some institutions, like the Court of Arbitration for Sport and the WIPO, expressly specialize; but many others, like the Swiss Chambers' Arbitration Institution (manufacturing and commodities), the CRCICA (construction) and the LCIA (banking and finance) either showed especially high caseloads in certain areas or advertised their specialties in their annual reports. Map 4 below lists areas in which institutions are developing a reputation for handing frequent

<sup>158.</sup> The AAA is "sui generis" because it offers a vast array of alternative ADR solutions and non-profit activities that are not all offered by many institutions. Graving, supra note 43, at 336. The 2019 AAA Annual Report states that the AAA's mission is "to be the global leader in conflict management," and it also notes fee waivers in addition to a fellowship program for "up-and-coming dispute resolution professionals from diverse backgrounds traditionally underrepresented in the field," issuing millions in grants and raising nearly \$2 million for charitable programs in 2019. 2019 Annual Report, supra note 88, at 2, 19–20, 24, 30 (emphasis added).

<sup>159. 2018</sup> Queen Mary Survey, *supra* note 44, at 2–6 (explaining that parties prefer arbitration "with a twist" and in conjunction with other ADR services); *cf.* Stipanowich & Lamare, *supra* note 46, at 51–54 (finding that Fortune 1,000 companies prefer mediation and other ADR services to arbitration in all disputes).

<sup>160.</sup> BERGER, supra note 68, § 1.I.2 (Westlaw UTCARB 1.I.2).

<sup>161. 2019</sup> Annual Report, supra note 88, at 30–31.

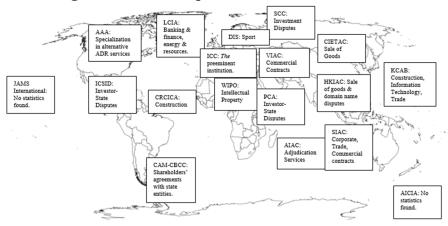
<sup>162.</sup> Other ADR Services, LCIA (last visited Jan. 10, 2022), https://www.lcia.org/Dispute\_Resolution\_Services/Other\_Services.aspx.

<sup>163.</sup> ICC 2019 Statistics, supra note 1, at 6, 9–11.

<sup>164.</sup> See infra Map 4.

caseloads.

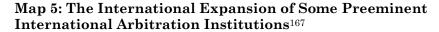
Map 4:165 Significant Institutions from Each Region and Fields in Which They Reported High Caseloads, According to 2019 Case Reports166

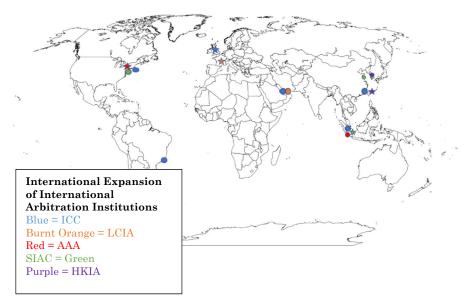


As international reputation matters for institution preference, so too does the ability to effectively and promptly carry out and administer global arbitrations. This has led the most resourceful institutions to expand across national borders. Map 5 shows how five of the most prominent institutions have expanded across the globe.

<sup>165.</sup> Blank Map of the World, http://www.wpmap.org/wp-content/uploads/2015/01/printable-white-transparent-political-blank-world-map-c3.png (last visited Jan. 10, 2022) (blank map of the world used to make this graphic).

<sup>166.</sup> All information for this map was pulled from each institutions' respective annual report, *supra* notes 86–104.





4. In Addition to Differentiating Their Products Like For-Profit Businesses Would, International Arbitration Institutions Act in Other Ways Like Cooperative, Non-Profit Entities by Collaborating to Promote Arbitration and Gender Diversity in Arbitration.

By opening offices in other cities and continents and diversifying their wares to include an increasing array of ADR solutions, international arbitration institutions behave like forprofit firms that compete for limited cases by expanding geographically and diversifying their product offerings.<sup>168</sup>

<sup>167.</sup> The points on this map represent the international expansion of five of the most prominent international arbitration institutions: the ICC, LCIA, AAA, SIAC, and HKIAC. The stars are the headquarters locations, and the dots are case management or liaison offices. The ICC has opened case management offices in Hong Kong, New York, Sao Paolo, and Singapore; the LCIA to Dubai; the AAA to Singapore; the SIAC in Seoul, New York, and Shanghai; and the HKIAC in Seoul and Shanghai. ICC Court to Open 5th Overseas Case Management Office in ADGM, supra note 134; Al Tamimi, supra note 145; H.K. INT'L ARB. CTR., supra note 154; About Us, supra note 154; Global and Domestic AAA-ICDR Office Locations, supra note 157.

<sup>168.</sup> See supra Section II(B)(3); cf. Michael A. Hitt et al., The Strategic

However, international arbitration institutions are non-profit entities, which in part informs their conduct as businesses.<sup>169</sup>

Institutions advertise their education and outreach activities, such as the CAM-CBCC's support and organization of academic events. <sup>170</sup> Institutions like the AIAC hold arbitration summits and conferences that promote the use of arbitration and ADR for business disputes. <sup>171</sup> The ICC alone hosted 270 events in over 80 countries in 2019, <sup>172</sup> and the AAA awards numerous grants and supports programs that support and facilitate arbitration in the United States. <sup>173</sup>

Arbitration practitioners and institutions desire greater diversity in the profession.<sup>174</sup> Non-profits that have succeeded in bringing about desired societal changes use an if-then analytical framework to put structures in place that facilitates reaching their goals.<sup>175</sup> International arbitration institutions have responded accordingly by highlighting the ways in which they facilitate gender and ethnic diversity.<sup>176</sup> In 2015, for example, arbitration practitioners introduced an organization to encourage the appointment of female arbitrators, and many prominent institutions have signed on to a pledge to increase diversity among appointed arbitrators.<sup>177</sup>

For example, the Permanent Court of Arbitration in Geneva

Evolution of Large U.S. Law Firms, 50 BUS. HORIZONS 17, 18–21 (2007) (describing similar competitive behavior among for-profit law firms).

169. See generally Schwenger et al., supra note 36 (describing competitive strategy of non-profit businesses).

170. Arbitration Annual Report 2019 – Facts and Figures, supra note 104, at

171. For example, the AIAC hosts an annual Asia Arbitration and Gala Dinner. *Committed to the Road Ahead: Annual Report 2018, supra* note 100, at 39.

172. ICC 2019 Statistics, supra note 1, at 7.

173. 2019 Annual Report, supra note 88, at 19 (noting that the AAA issued \$1.6 million in grants to 38 organizations to "fulfil unmet needs in dispute resolution").

 $174.\ See\ 2018\ {
m Queen\ Mary\ Survey},\ supra\ {
m note}\ 44,\ {
m at}\ 16\mbox{--}20$  (discussing diversity in arbitrators).

175. See Lindgren, supra note 40, at 289–90; Plantz et al., supra note 39, at 18–19

176. See, e.g., 2019 Annual Report, supra note 104, at 10 (requiring 30% of panel speakers for CAM-CBCC to be female); KCAB Annual Report 2019, supra note 103, at 17 (demonstrating a female-majority secretariat); 2019 Annual Report, supra note 88, at 21–23 (highlighting ethnic diversity among AAA arbitrators and panelists).

177. About the Pledge, EQUAL REPRESENTATION ARB., http://www.arbitrationpledge.com/about-the-pledge (last visited Jan. 10, 2022).

and the International Center for Settlement of Investment Disputes in Washington, D.C., are the two chief specialty institutions for investment disputes, and have an agreement to cooperate and support each other for investment dispute cases.<sup>178</sup> In addition, the LCIA and the Dubai International Financial Centre (which contains Dubai's international arbitration institution) also have a collaborative partnership.<sup>179</sup>

In sum, institutions act in some ways like for-profit businesses, and like non-profits in others. By differentiating their products through specialization and international expansion, they resemble for-profit businesses; however, by cooperating, charging similar fees, and setting up processes to increase diversity and interest in arbitration, they act more like non-profits.

C. Performance: The Institutional International Arbitration Industry Performs Well, as Evidenced by Increases in Arbitration Caseloads and Visible Gender Diversity in the Field.

The structure and conduct of the institutional international arbitration industry reveal how institutions act in some ways like for-profit businesses, and in other ways like non-profits. Their performance should therefore be analyzed in part based on perceived increase in economic welfare, but also based on metrics that measure their broader societal objectives. <sup>180</sup>

1. High Concentration of Valuable Cases Has Not Decreased the Economic Welfare Provided by the International Arbitration Institutions.

As was the case in the 1980s and 1990s, the institutional arbitration industry is performing "very well indeed." <sup>181</sup> Cases in nearly every prominent institution have steadily risen in the 2010s, and many major institutions, such as the ICC and LCIA, broke caseload records in 2018. <sup>182</sup>

<sup>178.</sup> See The ICSID Caseload – Statistics, Issue 2020–1, supra note 101, at 9.

<sup>179.</sup> Al Tamimi, supra note 145.

<sup>180.</sup> Aboramadan & Borgonovi, supra note 35, at 73.

<sup>181.</sup> Graving, supra note 43, at 370.

<sup>182.</sup> See, e.g., Altenkirch & John, supra note 81 (recording rise in cases among notable institutions since 2012). This data is plotted below.

Total International Arbitrations From 13 Institutions, 2012–2019

8000

7000
6000
5000
4000
3000
2000
1000
0

Graph 3: Data Collected by Altenkirch & John on the Rise in Institutional Arbitration Caseloads<sup>183</sup>

Apparently, only one major institution explored here, the AAA/ICDR, publishes its financial statements.<sup>184</sup> However, since the value of claims disputed among the big institutions reaches the hundreds of billions of dollars, and since fees are often a fraction of the amount in dispute, it is inferred that these institutions satisfy their bottom lines and run themselves, so to speak.

2015 2016 2017

2018 2019

The ICC is the world leader in international arbitrations. It has greater market power than any other institution, <sup>185</sup> and the "abundance of literature" and praise about the ICC and its proceedings leaves little doubt that it is *the* preeminent institution. <sup>186</sup> Parties worldwide prefer ICC arbitrations. <sup>187</sup>

That said, the LCIA (UK/London); AAA/ICDR and CAM-CCBC (Americas); SIAC, HKIAC, and CEITAC (Asia); the Dubai International Financial Centre (DIFC)<sup>188</sup> (Middle East); and the

2012

2013

2014

<sup>183.</sup> *Id*.

 $<sup>184. \ \</sup> Consolidated \ Financial \ Statements \ and \ Independent \ Auditor's \ Report, supra \ note \ 3.$ 

<sup>185.</sup> See Section II(A)(1).

<sup>186.</sup> See Blackaby et al., supra note 58, § 1.166 n.172.

<sup>187.</sup> See, e.g., Wheal et al., supra note 79 (showing ICC preferred in Africa in 2019); Coyle & Drahozal, supra note 79, at 355–56 (ICC second to AAA by one contract in survey of international contracts with American parties).

<sup>188.</sup> DUBAI INT'L ARB. CTR., http://www.diac.ae/idias/ (last visited Jan. 10,

CRCICA (Africa) are reasonable regional alternatives to the ICC. Smaller regional and specialty institutions, discussed above, are also available, but in numbers too large to account for here. 189

In conclusion, given the increased use of institutional international arbitrations and viable alternatives to the biggest institutions, heavy concentration in the industry has not decreased economic welfare to its stakeholders.

2. In Addition to Satisfying Their Bottom Lines, International Arbitration Institutions Are Also Accomplishing Their Broader Societal Aims.

International arbitration institutions also fulfill their more holistic, societal aims by putting structures in place to gradually accomplish them.<sup>190</sup> This can be seen by examining how institutions have increased (1) global interest in arbitration and (2) diversity.

First, all institutions promote arbitration generally through hosting events, training sessions, and working with the legal communities in their respective locales.<sup>191</sup> By increasing visibility and name recognition of the very institutions that streamline and facilitate the arbitration process, it is little surprise that arbitration has grown worldwide, even in regions such as the Middle East, Africa, and Latin America, which are historically less favorable for arbitration.<sup>192</sup>

Second, arbitration parties and practitioners have expressed a desire for more diversity in the industry. <sup>193</sup> By keeping track of diversity statistics and making a conscious effort to increase gender and nationality diversity in appointing arbiters, arbitration institutions have promoted a more diverse industry while promoting the industry itself. The table below lists percentages of female arbiters appointed by the institution to sit on the tribunal.

<sup>2022).</sup> 

<sup>189.</sup> See supra Map 1 and accompanying notes.

<sup>190.</sup> See Lindgren, supra note 40, at 289–92.

<sup>191.</sup> See, e.g., ICC 2019 Statistics, supra note 1, at 8.

<sup>192.</sup> Compare BORN, supra note 48, at 186–89 (detailing jurisdictions historically less supportive of arbitration), with Wheal et al., supra note 79 (noting recent rise in African arbitrations).

<sup>193. 2018</sup> Queen Mary Survey, supra note 44, at 19.

Table: Percentage of Female Arbitrators Appointed by International Arbitration Institutions in 2019

Institution	Number of Female Arbiters Appointed
ICC	869
LCIA	346
AAA	86
CIETAC	617
SCC	88
SCAI	82
VIAC	19
HKIAC	308
SIAC	454
DIS	50
AIAC	10

## D. TWO OPPORTUNITIES FOR FURTHER RESEARCH

1. Applying IO Economics to Other Non-Profit Legal Dispute Resolution Arenas Would Reveal Their Economic Structure.

This Note described the market structure of a group of international arbitration institutions that effectively compete for high-value cases. But healthy competition exists between international fora for transnational litigation, creating an industry. 194 And the international commercial courts, mentioned below, vie for lucrative commercial contacts. 195 Applying theories of IO economics to legal entities that compete for

<sup>194.</sup> See generally Pamela K. Bookman, The Unsung Virtues of Global Forum Shopping, 92 NOTRE DAME L. REV. 579 (2016) (discussing virtues of transnational forum shopping).

<sup>195.</sup> See Bookman, supra note 51, at 246–57 (describing commercial courts in Singapore and Europe as "aspiring litigation destinations").

disputes would lead to descriptive and prescriptive observations that parties, practitioners, and policy-makers could take stock of.

Forum shopping in international bankruptcy is especially ripe for an SCP analysis. First, jurisdictions like Hong Kong, Singapore, and England and Wales compete for high-value cases in both personal and enterprise insolvency. <sup>196</sup> In response to the U.S.' historical dominance in this area, many jurisdictions have recently updated their enterprise insolvency laws in order to more closely model the U.S. reorganization model. <sup>197</sup> An IO economics analysis of caseloads or amounts in dispute might reveal whether these legal developments have shifted the market for international bankruptcy cases.

2. How Might International Arbitration Institutions Coexist with the Rise in International Commercial Courts?

There is speculation as to whether the rise in prominence of international courts of law will compete with arbitration institutions in the future, despite the overwhelming current preference for arbitration and ADR. <sup>198</sup> On its face, it might seem like the newer commercial courts, particularly those in Asia, are innovating in both investor-state and commercial dispute resolution in ways that could challenge or compete with arbitration institutions for the dispute resolution clauses in high-monetary value contracts. <sup>199</sup>

The analysis of industry structure and conduct could provide some insight into this question. Over the years, international arbitration institutions have themselves competed with and challenged each other, with the result being collaboration and a global framework for international arbitration despite heavy market concentration. In light of this analysis, perhaps international arbitration institutions will collaborate and interact with newer commercial courts to foster a truly global and comprehensive dispute resolution framework.

<sup>196.</sup> See Jay Lawrence Westbrook, Bankruptcy Tourism, 3 INT'L J. PROC. L. 159, 162 (2013) (describing origin of forum shopping in international bankruptcy).

<sup>197.</sup> See Gerrard McCormack, Corporate Rescue Law in Singapore and the Appropriateness of Chapter 11 of the U.S. Bankruptcy Code as a Model, 20 SING. ACAD. L.J. 396, 396 (2008).

<sup>198.</sup> Isidro, *supra* note 54, at 34–41.

<sup>199.</sup> Bookman, supra note 51, at 275-80.

## CONCLUSION

Surveys, law review articles, and other secondary sources describe international arbitration institutions from a legal perspective. Few, if any, describe how the institutions strategize to reach their monetary and non-monetary goals. This Note uses empirical data from annual reports to describe the industry of international arbitration institutions. Among the most prominent institutions, the ICC, CIETAC, LCIA, SIAC, and HKIAC have concentrated the market for high-value international arbitrations by maintaining their global reputation and expanding their international reach.

As a whole, the international arbitration institution industry is performing well because the number of institutional arbitrations continues to rise, and institutions are promoting the use of international arbitration and gender diversity within the industry. Continued performance of the institutional arbitration industry is good, as international arbitration institutions play an important role in establishing a global dispute resolution infrastructure that an increasingly global economy requires.

## APPENDIX: DATA TABLES

Table 1: Market Share Data by Caseload

Institution Market Share by New Arbitrations	New Cases Filed in 2018	Market Share	Market Share Squares
ICC	$869^{200}$	25.40935673	645.6354092
CIETAC	$617^{201}$	18.04093567	325.4753599
SIAC	$454^{202}$	13.2748538	176.2217434
LCIA	$346^{203}$	10.11695906	102.3528607
HKIAC	$308^{204}$	9.005847953	81.10529736
DIS	$145^{205}$	4.239766082	17.97561643
AIAC	$125^{206}$	3.65497076	13.35881126
CAM-CBCC	$97^{207}$	2.83625731	8.044355528
SCC	88208	2.573099415	6.620840601
SCAI	$82^{209}$	2.397660819	5.748777402
CRCIC	$77^{210}$	2.251461988	5.069081085
KCAB	$70^{211}$	2.046783626	4.189323211
PCA	$49^{212}$	1.432748538	2.052768373
VIAC	$45^{213}$	1.315789474	1.731301939

<sup>200.</sup> ICC 2019 Statistics, supra note 1, at 9.

<sup>201.</sup> CIETAC 2019 Work Report, supra note 91, § 1.1.

<sup>202.</sup> Where the World Arbitrates: Annual Report 2019, supra note 89, at 4, 14.

<sup>203. 2019</sup> Annual Casework Report, supra note 87, at 18.

<sup>204. 2020</sup> Statistics, supra note 90.

<sup>205.</sup> Our Work in Numbers, supra note 98.

<sup>206.</sup> Shaping Excellence, From Strength to Strength, supra note 100, at 12.

<sup>207.</sup> Arbitration Annual Report 2019 - Facts and Figures, supra note 104, at 12.

 $<sup>208. \ \</sup> SCC\ Statistics\ 2019, supra\ {\tt note}\ 92.$ 

<sup>209.</sup> Arbitration Statistics 2019, supra note 93.

<sup>210.</sup> CRCICA Caseload of the Year 2018, supra note 95. Data was only available for 2018 for this institution at the time of data compilation.

<sup>211.</sup> Annual Report, supra note 103, at 10.

<sup>212.</sup> Annual Report 2019, supra note 102, at 10.

<sup>213.</sup> VIAC Statistics 2019, supra note 94.

ICSID	$39^{214}$	1.140350877	1.300400123
JCIA	$9^{215}$	0.263157895	0.069252078
Total	3506	100	1396.951199

Table 2: Market Share Data by Amount in Dispute

Institution Name	Total Amount in Dispute (2019, USD)	Market Share (% of Amount in Dispute)	Market Share Squares
ICC	$$45,180,000,000^{216}$	50.77489543	2578.090006
CIETAC	$$18,846,996,281^{217}$	21.18092663	448.6316531
SIAC	$\$8,090,000,000^{218}$	9.091830545	82.66138266
HKIAC	$$4,700,000,000^{219}$	5.282027634	27.89981593
AIAC	$\$3,284,126,441^{220}$	3.690818429	13.62214068
SCC	$\$1,955,999,785^{221}$	2.198222323	4.832181381
DIS	$$1,868,552,610^{222}$	2.099946069	4.409773493
CAM-CCBC	$\$1,605,654,770^{223}$	1.804492099	3.256191736
DIAC	$$1,089,039,880^{224}$	1.22390186	1.497935762
SCAI	$$1,035,611,122^{225}$	1.163856716	1.354562455
KCAB	$\$875,000,000^{226}$	0.983356209	0.966989433

<sup>214.</sup> The ICSID Caseload – Statistics, Issue 2020–1, supra note 101, at 7.

<sup>215.</sup> Statistics, supra note 99.

<sup>216.</sup> Altendirch & John, supra note 81.

<sup>217.</sup> CIETAC 2019 Work Report, supra note 91, § 1.1.

<sup>218.</sup> Annual Report 2019, supra note 89, at 15.

<sup>219.</sup> Statistics, supra note 90.

<sup>220.</sup> Shaping Excellence, From Strength to Strength, supra note 100, at 24. Data was only available for 2018 for this institution at the time of data compilation.

<sup>221.</sup> SCC Statistics 2019, supra note 92.

<sup>222.</sup> Our Work in Numbers, supra note 98, at 2. Data was only available for 2018 for this institution at the time of data compilation.

<sup>223.</sup> Arbitration Annual Report 2019 – Facts and Figures, supra note 104, at 14.

 $<sup>224.\,</sup>$  Dubai Int'l Arb. Ctr., http://www.diac.ae/idias/ (last visited Aug. 1, 2021).

<sup>225.</sup> Arbitration Statistics 2019, supra note 93, at 4.

<sup>226.</sup> KCAB Annual Report 2019, supra note 103, at 11.

VIAC	$$450,000,000^{227}$	0.50572605	0.255758838
Total	\$88,980,980,889	100	3167.478391

Table 3: Administrative and Average Tribunal Fees Per Institution<sup>228</sup>

Institution	Admin. Fees	Admin. + Tribunal Fees
ICC	\$57,515	\$339,851
LCIA	\$16,530.00	\$92,753
CIETAC	\$18,942.87	\$90,318
AAA	\$18,975	\$62,000
SCC	\$46,064.27	\$63,196
SCAI	\$26,452	\$294,506
VIAC	\$30,258	\$382,278
HKIAC	\$25,424.33	\$248,209
CRCIC	\$23,000	\$239,103
SIAC	\$28,902.82	\$264,129
WIPO	\$12,000	
DIS	\$47,674.64	\$214,834
CAM-CBCC	\$35,242.07	\$42,645
KCAB	37,008.42	\$131,532

<sup>227.</sup> VIAC Statistics 2019, supra note 94.

<sup>228.</sup> Administrative fees to the institution were calculated using institution rules for administrative fees, except the LCIA amount, which was calculated using LCIA Arbitration Cost Calculator, ACERIS L. LLC, https://www.international-arbitration-attorney.com/lcia-arbitration-cost-calculator/ (last visited Apr. 16, 2021). Average tribunal fees + administrative fees were calculated using the fee calculators provided on each institution's website, with the exception of the LCIA amount, which was calculated using LCIA Arbitration Cost Calculator, ACERIS L LLC, https://www.international-arbitration-attorney.com/lcia-arbitration-cost-calculator/ (last visited Apr. 16, 2021). All amounts that were not in USD were converted using xe.com.