

Loyola of Los Angeles International and Comparative Law Review

Volume 47 | Number 2

Article 2

Summer 10-9-2024

Lawyers and Non-Lawyers in International Arbitration: Discovering **Diminishing Diversity**

Luke Nottage University of Sydney Law School

Nobumichi Teramura Institute of Asian Studies, University of Brunei Darussalam

James Tanna University of Sydney Law School

Follow this and additional works at: https://digitalcommons.lmu.edu/ilr



Part of the Comparative and Foreign Law Commons, and the International Law Commons

Recommended Citation

Luke Nottage, Nobumichi Teramura, and James Tanna, Lawyers and Non-Lawyers in International Arbitration: Discovering Diminishing Diversity, 47 Loy. L.A. Int'l & Comp. L. Rev. 139 (2024). Available at: https://digitalcommons.lmu.edu/ilr/vol47/iss2/2

This Article is brought to you for free and open access by the Law Reviews at Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in Loyola of Los Angeles International and Comparative Law Review by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact digitalcommons@lmu.edu.

Lawyers and Non-Lawyers in International Arbitration: Discovering Diminishing Diversity

Cover Page Footnote

This article draws (with permission from the publisher, Elgar) on a much shorter and earlier summary of empirical findings in our chapter "Developing Diversity in Diversity Discourse: Remembering Non-Lawyers in Arbitration" in Diversity in International Arbitration: Why It Matters and How to Sustain It (Shahla Ali, Giorgio Colombo, Filip Balcerzak and Joshua Karton, eds, 2022) 101-118. *Professor of Comparative and Transnational Business Law, University of Sydney Law School; Special Counsel, Williams Trade Law. **Assistant Professor at the Institute of Asian Studies, the University of Brunei Darussalam; Affiliate at the Centre for Asian and Pacific Law at the University of Sydney. #Former Research Assistant at the University of Sydney Law School.

Lawyers and Non-Lawyers in International Arbitration: Discovering Diminishing Diversity##

LUKE NOTTAGE*, NOBUMICHI TERAMURA** AND JAMES TANNA#

Abstract: This article highlights a curious lack of diversity within the proliferating discourse about the lack of diversity in international arbitration. There is hardly any awareness or at least sustained discussion about the limited diversity of professional backgrounds, and more specifically, the dominance nowadays of those with practicing lawyer positions or primary careers across the key groups and publication outlets for international arbitration. Yet this encroachment of lawyers was still being contested in the 1990s, as being linked to burgeoning costs and delays, and such "formalisation" has been re-emerging in recent years. Diversifying the world of international arbitration to involve more nonlawyers, including academics, could promote various other objectives, too, as outlined in Part I. This article, therefore, empirically analyses how lawyers have come to dominate key nodes of influence across international commercial arbitration and the overlapping, more controversial field of investor-state arbitration. Part II looks at key general associations or organizations promoting international arbitration, including their leadership and presenters at symposiums. Part III focuses on various arbitration centres globally, which actually administer cases. Part IV examines contributions to some key arbitration journals, an influential book series, and a widely-read Blog. The conclusion reiterates

^{***}This article draws (with permission from the publisher, Elgar) on a much shorter and earlier summary of empirical findings in our chapter "Developing Diversity in Diversity Discourse: Remembering Non-Lawyers in Arbitration" in Diversity in International Arbitration: Why It Matters and How to Sustain It (Shahla Ali, Giorgio Colombo, Filip Balcerzak and Joshua Karton, eds, 2022) 101-118.

^{*}Professor of Comparative and Transnational Business Law, University of Sydney Law School; Special Counsel, Williams Trade Law.

^{**}Assistant Professor at the Institute of Asian Studies, the University of Brunei Darussalam; Affiliate at the Centre for Asian and Pacific Law at the University of Sydney.

[#]Former Research Assistant at the University of Sydney Law School.

that restoring more non-lawyers in the world of international arbitration should help not only to reduce formalisation and inefficiencies in international arbitration, but also have various other salutary effects, including potentially improving gender diversity.

Keywords: international arbitration, dispute resolution, legal profession, diversity, comparative law, sociology of law

I.	INTRODUCTION	141
II.	ASSOCIATIONS AND INSTITUTIONS PROMOTING ARBITRATION	149
	A. International Council for Commercial Arbit	ration
	(ICCA)	149
	1. ICCA Board, Taskforce, and Young-	
	Leaders Members (and Authors)	
	2. ICCA Congress Presentations (and Cha	
	B. Chartered Institute of Arbitrators (CIArb)	
	C. International Bar Association (IBA)	
III.		
	A. Leadership of Arbitration Centres	
	B. Arbitration Centre Conferences and Webinars	
IV.	JOURNALS, BOOKS AND BLOGS	
	A. Arbitration Journals	
	B. Books	
	C. Kluwer Arbitration Blog (KAB)	
	1. Associate/Editors	
	2. Authors	
V	CONCLUSIONS	

I. INTRODUCTION

The 1996 book by French and American legal sociologists, Yves Dezalay and Bryant Garth, ¹ caused quite a stir in international arbitration circles. Drawing partly on Pierre Bourdieu's theory of symbolic capital and extensive interviews with past and present experts, *Dealing in Virtue* explained how a new generation of arbitrators and counsel had emerged. The "grand old men" appointed as arbitrators and leaders of the field in the 1950s and 1960s were increasingly being supplanted by lawyers, especially from Anglo-American law firms that started to grow in size from the 1970s and set up branches in Europe. Their work also documented how the new generation of lawyers trained in arbitration took those skills and networks back to their home countries, underpinning the growth of arbitration law and practice in new parts of the world. This development indicates an early shift towards greater geographical, professional, and gender diversity in international arbitration.

The analysis and interviews conducted by Dezalay and Garth, however, documented growing concerns about the burgeoning costs and delays in ICA that accompanied this transformation, arguably linked to the growing influence of common law approaches to resolving disputes. Other contemporaneous studies, including survey-based research by Christian Buhring-Uhle, also highlighted this emerging "formalisation" or "juridification." Journals started publishing articles about the pros and cons of retaining non-lawyers as arbitrators, such as engineers, and conferences also debated such issues. By the late 1990s, a first wave of arbitral institution rule changes was evident, aiming to restore some time- and cost-

^{1.} YVES DEZALAY & BRYANT G. GARTH, DEALING IN VIRTUE: INTERNATIONAL COMMERCIAL ARBITRATION AND THE CONSTRUCTION OF A TRANSNATIONAL LEGAL ORDER (1996).

^{2.} See, e.g., CHRISTIAN BÜHRING-UHLE, ARBITRATION AND MEDIATION IN INTERNATIONAL BUSINESS (1996); John Flood & Andrew Caiger, Lawyers and Arbitration: The Judification of Construction Disputes, 56 THE MODERN LAW REVIEW 412, 413 (1993) (focusing on UK); see also, e.g., Kap-You (Kevin) Kim & Daniel Greineder, Making the Most of Diversity: In Favour of Arbitral Liberalism, Kluwer Arbitration Blog (Sept. 1, 2021), http://arbitrationblog.kluwerarbitration.com/2021/09/02/making-the-most-of-diversity-in-favour-of-arbitral-liberalism/.

^{3.} Dennis James & John Sims, Lay Advocacy Revisited, 56 ARBITRATION: THE INT'L JOURNAL OF ARBITRATION, MEDIATION AND DISPUTE MGMT. 253 (1990); Geoffrey M. Beresford Hartwell, Who Shall Be the Arbitrators?, 56 ARBITRATION: THE INT'L JOURNAL OF ARBITRATION, MEDIATION AND DISPUTE MGMT. 235 (1990). By around the turn of the century, reflected in the further dearth of articles and discussion about this topic, the lawyers had largely prevailed over the non-lawyers in terms of who is best to appoint as arbitrator. The non-lawyers, such as architects and accountants, continued of course to be appointed as expert witnesses (and at earlier stages of project management). As noted more generally by Flood & Caiger, supra note 2, at 413, relatively less is at stake financially in this professional context for such non-lawyer businesspeople encouraging growing juridification of arbitration by lawyers. As they become predominantly expert witnesses, these non-lawyers end up with less status and influence in the arbitration world (evident from our empirical analysis below), compared to those known as active arbitrators who are increasingly from lawyer backgrounds, thus reinforcing juridification.

efficiencies, and even some discussions about updating arbitration laws.⁴ Initially, this counter-reaction seemed to bear some fruit. A decade later, though, surveys and other evidence started to reveal renewed concerns about costs and delays,⁵ paralleling the rise of investment treaty arbitration,⁶ despite the continued spread East of arbitration and large law firms.⁷ Although the COVID-19 pandemic forced most international arbitration online,⁸ the longer-term implications for costs and delays remain unclear.⁹

Commentators also suggest that the pandemic-induced shake-up will offer further opportunities for greater diversity in arbitration practice, including for those in more geographically remote parts of the world (such as Australia) for new, younger, and female arbitrators. Truthermore, the Asian International Arbitration Centre (AIAC), formerly Kuala Lumpur Regional Centre for Arbitration, launched a series of "Charting the Way" events for its "Diversity in Arbitration Week 2021", over 5-9 July 2021, including "The World is Your Oyster - A Reflection on Professional Diversity." A closer analysis of speakers for the latter event, held in collaboration with the Chartered Institute of Arbitrators (CIArb) Malaysia Branch, shows that it involved interviews with professionals from a barristers' chamber, an accountancy firm, an information technology communications service provider,

- 4. Luke Nottage, The Vicissitudes of Transnational Commercial Arbitration and the Lex Mercatoria: A View from the Periphery, 16 ARBITRATION INT'L 53, 69 (2000).
- 5. NOBUMICHI TERAMURA, EX AEQUO ET BONO AS A RESPONSE TO THE 'OVERJUDICIALISATION' OF INTERNATIONAL COMMERCIAL ARBITRATION 9-34 (2020).
- 6. Luke Nottage, A Weather Map for International Arbitration: Mainly Sunny, Some Cloud, Possible Thunderstorms, 26 AMERICAN REVIEW OF INTERNATIONAL ARBITRATION 495 (2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2630401 (last visited Sept. 7, 2021).
- 7. Luke Nottage, In/Formalization and Glocalization of International Commercial Arbitration and Investment Treaty Arbitration in Asia, in FORMALISATION AND FLEXIBILISATION OF DISPUTE RESOLUTION 211, 228-243 (2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2987674 (last visited 7 September 2021).
- 8. Nobumichi Teramura, et al., Expanding Asia-Pacific Frontiers for International Dispute Resolution: Conclusions and Recommendations, in NEW FRONTIERS IN ASIA-PACIFIC INTERNATIONAL ARBITRATION AND DISPUTE RESOLUTION 355 (Luke Nottage et al. eds., 2021).
- 9. LUKE NOTTAGE, INTERNATIONAL COMMERCIAL AND INVESTOR-STATE ARBITRATION: AUSTRALIA AND JAPAN IN REGIONAL AND GLOBAL CONTEXTS 379 (2021).
- 10. See Justin Gleeson & Jonathan Redwood, Australia as a Centre for Excellence, in 2020 ARBITRATION REPORT (2021),https://acica.org.au/wp-content/ uploads/2021/03/ACICA-FTI-Consulting-2020-Australian-Arbitration-Report-9-March-2021.pdf (last visited 13 September 2021); Jo Delaney & Erika Williams, Diversity in Arbitration, in 2020 ARBITRATION REPORT (2021),https://acica.org.au/wp-28 content/uploads/2021/03/ACICA-FTI-Consulting-2020-Australian-Arbitration-Report-9-March-2021.pdf (last visited 13 September 2021); Keilin Anderson, et al., Australian Arbitration Week Recap: Gender Diversity in Arbitral Proceedings Amidst a Global Pandemic, KLUWER ARB. BLOG (Oct. 30,2020), http://arbitrationblog.kluwerarbitration.com/2020/10/30/australian-arbitrationweek-recap-gender-diversity-in-arbitral-proceedings-amidst-a-global-pandemic/.
- 11. AIAC, Diversity in Arbitration Week 2021: Charting the Way -the World Is Your Oyster -a Reflection on Professional Diversity, YOUTUBE (July 6, 2021), https://www.youtube.com/@officialaiac/search?query=oyster.

engineering consultants, and architects.¹² Notably, in our perspective, as primarily academic researchers familiar with the history of international arbitration sketched by Dezalay and Garth,¹³ no academics were involved in this event. Nor for any of the other events during the AIAC's "Diversity in Arbitration Week," except "Tackling Intersectionality and Beyond".

Beyond the AIAC, proliferating webinars or events focusing on diversity typically do not discuss professional diversity. Nor do they often include presenters who are not lawyers (or, in the common law tradition, current or past judges) - although for some events, especially on other topics, academics or others from non-legal professional backgrounds may sometimes be presenters or moderators. The latter group's contributions to the main arbitral institutions or associations, and even to publications on international arbitration, also seems to be diminishing.¹⁴

Accordingly, the current assumption seems to be that those who are or were primarily lawyers are best placed to influence the trajectory of international arbitration. Yet would such a diversity gap, as investigated empirically in this chapter, be ideal - or sustainable - for the field? After all, many lawyers today work within a "billable hours" organisational culture that ties their remuneration and career progression to an hourly time charge, which may not translate into optimal dispute resolution practices if extended to international arbitration.¹⁵

Other types of professionals, and especially full-time academics, may well have a different approach to charging fees and resolving disputes as effectively as possible. That is important not just on the utilitarian grounds of reducing costs and delays for parties (including sometimes governments) and the court (if disputes escalate to taxpayer-subsidised litigation). Efficiencies in international arbitration are also important because the procedure deliberately trades off the rule of law values, partly on the assumption that it is more cost- and time-effective than litigation, to maintain legitimacy vis-à-vis litigation. ¹⁶

More generally, involving more non-lawyer professionals in the world of international arbitration could generate further benefits.¹⁷ They may be more open

- 12. *Id*.
- 13. DEZALAY & GARTH, supra note 1.
- 14. Luke Nottage, *International Arbitration and Society at Large*, *in* CAMBRIDGE COMPENDIUM OF INT'L COM. & INV. ARB.: Vol I (Stefan Kroell et al. eds., 2023) 389, 410-417, with a manuscript version at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3116528.
- 15. See generally Shahla Ali, Resolving Disputes in the Asia-Pacific Region: International Arbitration and Mediation in East Asia and the West 268, 80 (2011) (procedure and benefits of arbitration); Linda Ouyang & Jacquelyn Palmer, Analysis: Hours Data Show the Sweet Spot for Lawyer Satisfaction, Bloomberg L. (Mar. 11, 2021), https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-hours-data-show-the-sweet-spot-for-lawyer-satisfaction.
- 16. Sundaresh Menon, *Arbitration's Blade: International Arbitration and the Rule of Law*, 38 J. OF INT'L ARB. 1, 1 (2021).
- 17. See generally Brian Opeskin, Dismantling the Diversity Deficit: Towards a More Inclusive Australian Judiciary, in THE JUDGE, THE JUDICIARY AND THE COURT: INDIVIDUAL,

to different (even "bespoke") approaches to procedure, which may result in quicker or cheaper arbitrations. For example, they may be more open to active settlement facilitation (Arb-Med) with the parties' consent. By contrast, one empirical study demonstrated that the most preferred arbitrators nowadays are those perceived as good case managers. This may likely include lawyers or ex-judges who are familiar with "guerrilla practices" in international dispute resolution, but also bring their own baggage to resist such practices.

Another possible advantage of reviving more professional diversity is greater subject-matter expertise. At present, one way of getting appointed as an arbitrator, including the crucial first few appointments, is where a lawyer at one firm is approached to be a party-appointed arbitrator but is forced to decline due to a conflict of interest and recommends a lawyer at another firm instead. ²¹ If this lawyer at a different firm accepts the appointment, she or he may feel beholden to the lawyer who declined the original appointment and reciprocate by recommending the originally appointed lawyer as an arbitrator in a future dispute - even if they are not necessarily the greatest expert in the relevant subject-matter. ²²

This possibility may also impact the independence and impartiality of arbitrators. Expanding the pool of arbitrators to non-lawyers can impact those essential features of international arbitration, more generally, given that a significant proportion of challenges concern arbitrators who work mainly in large law firms or barristers' chambers with a wider scope for at least perceived conflicts of interest.²³

COLLEGIAL AND INSTITUTIONAL JUDICIAL DYNAMICS IN AUSTRALIA 83, 83 (Gabrielle Appleby & Andrew Lynch eds., 2021).

^{18.} See Luke Nottage et al., The ACICA Arbitration Rules 2021: Advancing Australia's Pro-Arbitration Culture, 38 J. of INT'L ARB. 775, 775-806 (2021), https://papers.ssm.com/sol3/papers.cfm?abstract_id=3931086.

^{19.} Thomas Schultz & Robert Kovacs, *The Rise of a Third Generation of Arbitrators*?, 28 ARB. INT'L 161 (2012).

^{20.} GUNTHER J. HORVATH & STEPHAN WILSKE, GUERRILLA TACTICS IN INTERNATIONAL ARBITRATION (Gunther J. Horvath & Stephan Wilske eds., 2013).

^{21.} See ACICA Ltd., RAI/ACICA45 Webinar: Navigating the Promise and Perils of Your First Appointments, YOUTUBE (May 23, 2021), https://www.youtube.com/ watch?v=tSfBZBSYhgY [hereinafter RAI/ACICA45 Webinar]; see also Zuzanna Cieplińska, The Rising Arbitrator's Challenge: Navigating the Premise and Perils of Your First Appointment(s) Australia New Zealand. KLUWER ARB. 2021). http://arbitrationblog.kluwerarbitration.com/2021/07/17/the-rising-arbitrators-challengenavigating-the-premise-and-perils-of-your-first-appointments-australia-and-new-zealand/ (summarizing RAI/ACICA45 Webinar).

^{22.} ACICA Ltd., supra note 21.

^{23.} See Sharanya Shivaraman, Relationship Between the Arbitrators and Their Law Firm: A Case for Dynamic Application of the IBA Guidelines on Conflicts of Interest, KLUWER ARB. BLOG (June 19, 2018), http://arbitrationblog.kluwerarbitration.com/2018/06/19/relationship-arbitrators-law-firm-case-dynamic-application-iba-guidelines-conflicts-interest/; see also LCIA Reference No. 91305, Decision Rendered 4 March 2011, LONDON CT. OF INT'L ARB., https://www.lcia.org/challenge-decision-database.aspx (last visited Sept. 13, 2021). See generally Challenge Decision Database, LONDON CT. OF INT'L ARB., https://www.lcia.org/challenge-decision-database.aspx (last visited Sept. 7, 2021); LCIA Reference No. 101642, Decision Rendered

By contrast, advancing the independence and impartiality of arbitrators was not seen as much of an advantage behind appointing a more gender-diverse tribunal.²⁴

Another potential advantage of reinstating more non-lawyer professionals and academics in the world of international arbitration is an improvement in decision-making due to the avoidance of "groupthink" and the promotion of viewpoint diversity. However, there may be some trade-offs between cohesiveness and associated efficiencies within the tribunal. Considerable viewpoint diversity is inherent in much arbitration due to each party typically nominating an arbitrator to a three-person tribunal, with such party-nominated arbitrators expected to be at least able to appreciate better the party's situation and perspective on the dispute - while ideally maintaining impartiality and independence.

In addition, it may be beneficial in promoting wider legitimacy for arbitration to have arbitrators and other key stakeholders appear more "representative" of the wider society, even if those individuals are experts compared to the general public. Doing so could also enhance the legitimacy of international arbitration, given that in some societies, the status of lawyers is reportedly declining or not necessarily high compared to that of other professionals or academics.²⁷

Lastly, restoring professional diversity among arbitrators and other key stakeholder groups in international arbitration could also help promote other forms of diversity. For example, recent concerns have emerged over the relative lack of women representation amongst arbitrators. This paucity is particularly noticeable regarding appointments by parties or through their nominated co-arbitrators, as well as when arbitral institutions make default appointments, despite recent significant improvements by some institutions.²⁸ Yet one significant reason for persistent

³¹ January 2011, LONDON CT. OF INT'L ARB., https://www.lcia.org/challenge-decision-database.aspx (last visited Sept. 13, 2021).

^{24. 2021} International Arbitration Survey: Adapting Arbitration to a Changing World, QUEEN MARY UNIV. OF LONDON, https://arbitration.qmul.ac.uk/research/2021-international-arbitration-survey/ (last visited Sept. 7, 2021).

^{25.} See Kim & Greineder, supra note 2, at 1-2; see generally The Problem We Face, HETERODOX ACADEMY, https://www.heterodoxacademy.org/about/ (last visited Sept. 7, 2021) (discussing the importance of viewpoint diversity).

^{26.} Effective leaders even in small groups, especially perhaps with members from more diverse backgrounds, need to find ways to build trust, manage interpersonal conflict, and generate commitment, accountability, and a focus on results. See PATRICK LENCIONI, THE FIVE DYSFUNCTIONS OF A TEAM: A LEADERSHIP FABLE (20th Anniversary Edition 2002); GRETCHEN ANDERSON, MASTERING COLLABORATION: MAKE WORKING TOGETHER LESS PAINFUL AND MORE PRODUCTIVE (1st ed. 2019); DAWNA MARKOVA & ANGIE MCARTHUR, COLLABORATIVE INTELLIGENCE: THINKING WITH PEOPLE WHO THINK DIFFERENTLY (2015).

^{27.} UGO DRAETTA, COUNSEL AS CLIENT'S FIRST ENEMY IN ARBITRATION? (2014); Max Walters, *Trust in Value of Lawyers Declining, LSB Business Study Claims*, THE L. SOC'Y GAZETTE (2018), https://www.lawgazette.co.uk/law/trust-in-value-of-lawyers-declining-lsb-business-study-claims/5064808.article.

^{28.} See ICCA, The ICCA Reports No. 8: Report of the Cross-Institutional Task Force on Gender Diversity in Arbitral Appointments and Proceedings, 17-19 (2020), https://cdn.arbitrationicca.org/s3fs-public/document/media document/ICCA-Report-8-Gender-Diversity 0.pdf; See

gender gaps is arguably the increasing dominance of lawyers among arbitrators, as well as the centres and arbitration groups closely linked to them. This follows because the legal profession, like finance and some other sectors, tends to involve what Harvard University Professor Claudia Goldin identifies as "non-linear compensation."²⁹ Under such workplace regimes, if two lawyers decide to take off time for childcare or other family responsibilities, and both drop to a half position, their combined household income drops more than half because the profession disproportionately rewards a full-time position. This incentivizes them to have one suspend work completely while the other keeps working full-time. The former will suffer in terms of professional development, for example, by having to suspend opportunities to develop experiences and networks that are helpful to be appointed to arbitral tribunals, especially sole or chairperson arbitrators. By contrast, in the educational services sector, if two professors take half positions to share new family responsibilities, their combined income is more likely to drop simply by half, and each can keep building significant professional development opportunities.

Accordingly, this article empirically examines the extent to which those who are not lawyers (solicitors, barristers, or ex-judges), such as academics, but also, for example, other "non-legal professionals" (NLPs, such as engineers) retain influence in the world of international arbitration. Because there is little comprehensive data on arbitration cases and the main backgrounds of those serving as arbitrators, especially in international commercial arbitration (ICA, where confidentiality obligations largely apply), our analysis focuses mainly on their role relative to lawyers (broadly defined, as detailed below) in various associations (Part II) and institutions or centres engaged in arbitration (Part III), as well as in influential publication venues (Part IV).

ICC DISPUTE RESOLUTION 2020 STATISTICS (Aug. 3 2021), https://www.nyiac.org/wp-content/uploads/2021/09/ICC-Dispute-Resolution-2020-Statistics.pdf.

^{29.} See Marina N. Bolotnikova, Reassessing the Gender Gap, HARV. MAG., May-June 2016, https://www.harvardmagazine.com/2016/05/reassessing-the-gender-wage-gap and CLAUDIA GOLDIN, CAREER AND FAMILY: WOMEN'S CENTURY-LONG JOURNEY TOWARD EQUITY (2021).

^{30.} For the analysis in Parts II-IV, we adopted the following categories for our coding: 'lawyer', with subcategories of 'lawyer', working most of their time in law firms, 'in-house lawyer', 'barrister', and 'judge', for retired judges working as lawyers and/or arbitrators; 'judge', for those actually working as judges; 'academic', with full-time 'professor', 'lecturer', 'researcher', 'fellow', and 'student' sub-categories; 'international or arbitral organisation' (mostly comprising those working in arbitration institutions, who nowadays typically have lawyer backgrounds); 'government', with 'politician' and 'official' sub-categories; 'non-legal professional', including 'engineer', 'business executive', 'surveyor' and 'architect' sub-categories; 'litigation finance', with 'non-legal professional' and 'lawyer' subcategories; 'publisher' (such as editors for Investment Arbitration Reporter and Arbitrator Intelligence); 'arbitrator', although we then also noted which of the other main category a person declared to be an arbitrator fell into; and 'mixed' (where it was not feasible to determine the most significant category for a person who fell into more than one category. The full methodology for the analysis is set out in the Appendix in our longer online paper: LUKE NOTTAGE ET AL., LAWYERS AND NON-LAWYERS IN INTERNATIONAL ARBITRATION: DISCOVERING DIMINISHING DIVERSITY 8, 13, 18-21, 26. 33-35, 40 (2021),https://www.ssrn.com/abstract=3926914.

This type of quantitative analysis of arguably diminishing professional diversity in international arbitration, therefore, is most revealing about the world of ICA. However, it is also highly relevant to investor-state dispute settlement (ISDS) arbitration, which is attracting growing attention as foreign investors bring claims against host states - mostly nowadays under investment treaties or Free Trade Agreements. For ISDS, more public data about arbitrator appointments exist and, therefore, emerging empirical research that can be parsed directly for professional backgrounds. Nonetheless, even in this sub-field of investment treaty arbitration, not much focus has been addressed on professional backgrounds, so our present analysis should hopefully encourage further empirical research into this aspect of diversity.

For example, in a pioneering study of the most influential (networked) investment treaty arbitrators, Puig notes from International Centre for the Settlement of Investment Disputes (ICSID) data that "[w]hile mostly lawyers act as arbitrators, non-lawyers, including two architects, two maritime experts, and one economist, have been appointed in a few instances." He also remarked as follows:

[D]efining characteristics and historical developments [of the ICSID arbitration system] have also allowed international lawyers, especially business lawyers, to become dominant actors in the field ... Indeed, since Dezaley and Garth documented the emergence of a transnational elite of arbitrators dominated by business law practitioners, some of the arbitrators mentioned in the seminal study have become arbitrators frequently appointed in ICSID proceedings.³²

Our further investigation of the leading 25 ICSID arbitrators identified that 12 arbitrators were, or had been, primarily full-time professors.³³ However, the proportion of primarily practicing lawyers has kept growing among highly networked arbitrators.³⁴ This is despite the tendency towards path dependence and repeat appointments, as indicated by some other empirical data on arbitrators and our analysis in Parts II-IV below, covering other key aspects of the international arbitration world.

In a survey of attendees at the 2014 International Council for Commercial Arbitration (ICCA) conference in Miami, Franck also did not code 262 respondents for professional background but noted that 260 had served as ICA arbitrators, while 67 had been investment treaty arbitrators - and that only two of the latter 'had never served on an ICA case. This provides evidence that serving as an "ICA arbitrator may be a 'gateway' experience or pre-requisite for serving as an ITA arbitrator." Because the average and mean numbers of cases arbitrated were quite high for both

^{31.} Sergio Puig, *Social Capital in the Arbitration Market*, 25 EUR. J. INT'L L. 387, 397 (2014) (footnote omitted).

^{32.} Id. at 402.

^{33.} Id. at 415.

^{34.} Id. at 402.

^{35.} Susan D. Franck et al., *The Diversity Challenge: Exploring the "Invisible College" of International Arbitration*, 53 COLUM. J. TRANSNAT'L L. 429, 451 (2015).

categories, especially for ICA cases, a reasonable inference is that these arbitrators attending a premier arbitration event (discussed further in Part III below) were more likely practising lawyers.

Pauwelyn's snapshot of ICSID arbitrators (1972-2014) found that 99.6% had legal qualifications (compared to only 56% of adjudicators in World Trade Organization disputes over 1999-2014) and 76% came from "private practice" (compared to 88% with substantial government background, 18% with academic backgrounds and 15% from private law backgrounds). Another survey of arbitrators listed in major institutions, roughly contemporaneously by Puig and Strezhnev, quite similarly found that 69% of the 188 ICSID arbitrator subset had private sector employment, compared to 92% of the total 240 arbitrator respondents (presumably all or mostly involved in ICA cases).

Thus, some empirical research into arbitrator backgrounds suggests that the predominance of practicing lawyers in ICA is spreading to investment treaty arbitration,³⁸ and that there is significant overlap in arbitrators dealing with both types of cases. These arbitrators are also key influencers in the overall world of international arbitration. More broadly, our complementary quantitative analysis below shows that those with backgrounds as practising lawyers have become overwhelmingly influential in major arbitration organisations (Part II), centres (Part III), and publication venues (Part IV), largely displacing academics and other professionals such as engineers. Our conclusions (Part V) and observations above about the potential merits of generating greater professional diversity in international arbitration are, therefore, very relevant to investment treaty arbitration as well as ICA. Hopefully, the analysis will prompt further empirical research focusing on this factor, complementing studies that have mostly focused on (lack of) nationality or geographical and gender diversity.³⁹

^{36.} Joost Pauwelyn, *The Rule of Law Without the Rule of Lawyers? Why Investment Arbitrators Are from Mars, Trade Adjudicators from Venus*, 109 AM. J. INT'L L. 761, 774-75, 783 (October 2015).

^{37.} Sergio Puig & Anton Strezhnev, Affiliation Bias in Arbitration: An Experimental Approach, 46 J. LEGAL STUD. 371, 392 (2017).

^{38.} Michael Waibel & Yanhui Wu, Are Arbitrators Political? Evidence from International Investment Arbitration, ASIL RSCH. F. WORKING PAPER (2017), https://www.yanhuiwu.com/documents/arbitrator.pdf.

^{39.} See, e.g., Andrea K. Bjorklund et al., The Diversity Deficit in International Investment Arbitration, 21 J. OF WORLD INV. & TRADE 410 (2020) [hereinafter Diversity Deficit], (Partly, the focus on these two types of diversity may arise because researchers "have the most data on them"); see Andrea K. Bjorklund et al., The Diversity Theft, ISDS ACAD. F. WORKING GRP. 5 PAPER 4 (PRELIMINARY DRAFT -30 MARCH 2019) [hereinafter Diversity https://www.cids.ch/images/Documents/Academic-Forum/5 Diversity - WG5.pdf; see Daniel Behn et al., Empirical Perspectives on Investment Arbitration: What Do We Know? Does It Matter?, 21 J. OF WORLD TRADE 188-250 (2020) (another recent summary of empirical research into investment treaty arbitrators which concentrates on those two types, with some mention of their work experience and education).

II. ASSOCIATIONS AND INSTITUTIONS PROMOTING ARBITRATION

Our empirical analysis first examines groups that have been influential in the world of international commercial and investor-state arbitration but without themselves administering cases. These organisations therefore comprise important "value providers" (rather than "essential actors" like) parties and arbitrators, or even other "services providers") according to the "sociology of international arbitration" proposed by Emmanuel Gaillard. 40

A. International Council for Commercial Arbitration (ICCA)

The ICCA was one of the earliest such associations, established in 1961. It remains arguably the premier organisation through its Yearbooks of country reports and other influential publications and events. Our empirical analysis below confirms the growing dominance of lawyers over time. This is particularly noticeable within the "Young ICCA" group, established in 2010 after leading arbitral institutions such as the International Chamber of Commerce (ICC) created groups to develop the "next generation" of arbitration experts. Accordingly, the "lawyerfication" of Young ICCA provides a leading indicator of future trends.

1. ICCA Board, Taskforce, and Young-ICCA Leaders Members (and Authors)

For ICCA, we first examine the current composition of its Board, representing the most prestigious positions and, therefore, influence in the international arbitration world. Then, we consider memberships of ICCA Taskforces, which are formed to produce reports and guidance on hot-topic issues. We then turn to Young ICCA.

There are many ICCA Board members who identify as the "Lawyer" category (84%). There are also some from "International or Arbitral Organisations" (IAOs) (5%), who are mostly arbitration centre leaders, typically with lawyer backgrounds. Additionally, there are Board Members coded as "Mixed" (5%) due to multiple significant professional engagements (including major academic roles). Yet, there are very few full-time "Academics" on the ICCA Board, and those from the Government (1%) or NLPs (1%) are negligible. 44

^{40.} Emmanuel Gaillard, Sociology of International Arbitration, 31 ARB. INT'L 1, 1 (2015).

^{41.} *About ICCA*, INT'L COUNCIL FOR COM. ARB., https://www.arbitration-icca.org/about-icca (last visited Feb. 2, 2024).

^{42.} About Young ICCA, INT'L COUNCIL FOR COM. ARB., https://www.arbitrationicca.org/about-young-icca (last visited Feb. 2, 2024); Compare Young Arbitrators Forum (YAF), INT'L CHAMBER OF COM., https://www.iccwbo.org/dispute-resolution-services/professional-development/young-arbitrators-forum-yaf/ (last visited Sept. 7, 2021); Compare ACICA, ACICA 45 Webinars, YOUTUBE (2021), https://acica.org.au/acica45-webinars/ [hereinafter ACICA 45 Webinars] (last visited Sept. 7, 2021) (more recent version).

^{43.} NOTTAGE ET AL., supra note 30, at 7-8.

^{44.} *Id.* (showing that there was only one person coded as 'NLP,' who was an engineer and only one person coded as 'Government,' who an official not a politician).

Percentagewise, for example, we see that full-time academics only comprise 4% of all ICCA Board appointments, and the two professors are from the US and Russia. 45

The ICCA Taskforces are newer developments, assembling experts to generate reports of best practices and preferred solutions for topical issues on a project-by-project basis. ⁴⁶ As such, compared to Board membership, we might expect a somewhat greater proportion of younger (mid-career) arbitration specialists.

The Figure below again shows the predominance of Lawyers, with few full-time Academics. There were no NLPs at all on ICCA Taskforces. Instead, there were specialists in Litigation Finance, as the ICCA (combined with Queen Mary University of London), to produce an influential 2018 report on third-party funding in international arbitration, ⁴⁷ but such individuals would often tend to have backgrounds in law rather than finance. Another striking trend from the Figure above is the higher proportion of members from IAOs, who are even more likely to have backgrounds in legal practice. This mainly reflects the Taskforce and 2020 report on gender diversity in international arbitration, where some major arbitration centres are leading the charge. ⁴⁸ Accordingly, the proportion of Lawyer members (including current judges and self-claimed arbitrators) initially looks lower in the Figure below, compared to the ICCA Board itself above, but is indirectly higher because of the main backgrounds of those in IAOs and engaged in Litigation Finance.

^{45.} *Id.* (showing Professor William W. Park of Boston University and Professor Alexander Komarov of the Russian Academy of Foreign Trade as two professors on ICCA Board appointment).

^{46.} ICCA Projects, INT'L COUNCIL FOR COM. ARB., https://www.arbitration-icca.org/icca-projects (last visited Sept. 7, 2021).

^{47.} ICCA, Queen Mary Task Force Report on Third Party Funding in International Arbitration (2018), https://www.arbitration-icca.org/icca-reports-no-4-icca-queen-mary-task-force-report-third-party-funding (last visited Sept. 13, 2021) [hereinafter "Queen Mary"].

^{48. 28}ICCA, *supra* note 28, at 2. Only one full-time professor (Stacie I. Strong) was involved (at v).

ICCA TASKFORCE-PROFESSION FOR ALL YEARS

Lawyer Academic Intl or Arb Org Government Litigation Finance Mixed

7%
18%
61%

Figure 1: ICCA Taskforce-Profession for All Years (Proportions)

This can also be seen in the following Figure, tracking membership of Taskforces and associated reports, where IAO members trend higher in 2020, and high numbers of Lawyers (even narrowly defined) are present in 2018. There are consistently very few full-time Academic members, and sometimes (in 2015) none at all.

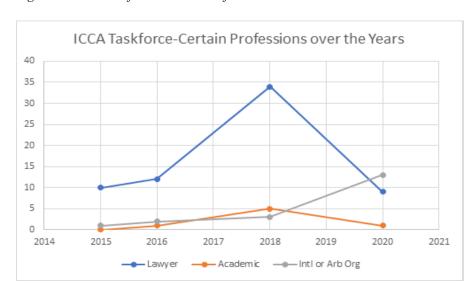


Figure 2: ICCA Taskforce-Certain Professions over the Years

We also conducted an analysis comparing authors of articles in the Young ICCA Blog for entries between 19 October 2010 and 17 February 2021. ⁴⁹ It reveals even more dominance of Lawyers (86%), consistent with the current leadership of Young ICCA. ⁵⁰ Academics form a significant minority (10%) compared with contributors from other professions, such as staff in IAOs (none), and there are also noticeably very few Government (1%) contributors. ⁵¹

Charted over the years from articles we sampled from, we also see, as below, the predominance of Lawyers over Academics on Young ICCA, especially from 2014 onwards.

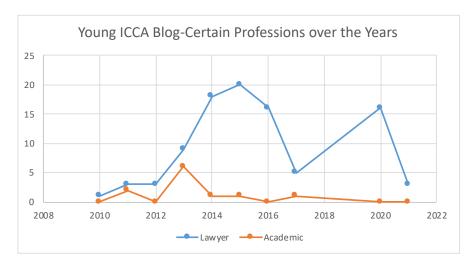


Figure 3: Young ICCA Blog-Certain Professions over the Years

2. ICCA Congress Presentations (and Chapters)

The ICCA's signature event is its Congress, held every two years. Different cities compete for the privilege of hosting, and experts then compete to present (or otherwise attend). This makes the ICCA Congresses like the Olympics of international arbitration, despite conferences and other arbitration events organised by other bodies having proliferated, especially over the last decade or so. Presentations end up as chapters in the authoritative ICCA Congress Series edited by leading experts. Our analysis shows again the dominance of Lawyer presenters/authors (including "Judges" and those self-identifying as "Arbitrators") (60%), although with some Academics (12%) or from IAOs (14%) and Mixed

^{49. 30}NOTTAGE ET AL., supra note 30, at 13.

^{50.} About Young ICCA, supra note 42 (showing that co-chairs, mentoring members, event team members, Young ICCA Blog coordinator, and Young ICCA Blog editors are all lawyers); NOTTAGE ET AL., supra note 30, at 12.

^{51.} NOTTAGE ET AL., supra note 30, at 12.

professions (9%).⁵² There are a few presenters/authors from among Judges and the Government (4%) sector, especially from the host country. Yet, there are almost no NLP presenters/authors (1%), and a few identify themselves as Arbitrators (probably because these highly-regarded Lawyers and others also serve as arbitrators).

When examined over time, at the two-yearly Congress/volume intervals, we find an interesting development (first noticed by one of us in 2012).⁵³ The conferences have become bigger and bigger, rather like the Olympics. This may be as hot topics and developments in international arbitration have burgeoned, but also perhaps as those wishing to present (and consolidate or expand influence) have increased. Accordingly, the total number of presenters/authors has steadily increased. Full-time academics have been among them (up to 10 for each Congress volume, shown by the orange line below). Yet the numbers for Lawyers have increased more (the blue line), so the proportion for Academics has been stable - and sometimes diminishing.⁵⁴

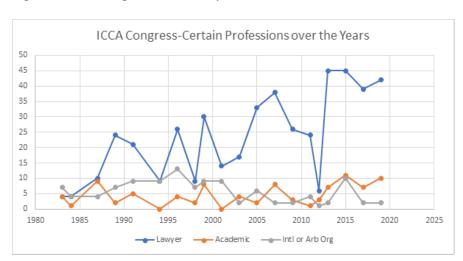


Figure 4: ICCA Congress-Certain Professions over the Years

Breaking down the "Academic" presenters/authors, we can also somewhat note more internal diversity in recent years, with fewer "Professors" and, instead, occasional "Fellows" of universities and research institutions, along with even three

^{52.} Id. at 16.

^{53.} Luke Nottage, Addressing International Arbitration's Ambivalence: Hard Lessons from Australia, in DISCOURSE AND PRACTICE IN INTERNATIONAL COMMERCIAL ARBITRATION 11 (Christopher Candlin & Maurizio Gotti eds., 2012).

^{54.} The reason for the sudden decrease of contributors in 2012 is that the ICCA Congress volume is based on 'ICCA Geneva 2011: 50th Anniversary Conference' -a more ceremonial two-day event, with limited participation.

students in 2015.⁵⁵ This may parallel the tendency to promote a "new generation" of arbitration experts observed above regarding Young ICCA, thus, reflecting more diversity age range, but that makes all the more curious the paucity say of NLP presenters/authors.⁵⁶

B. Chartered Institute of Arbitrators (CIArb)

Established in 1915, the CIArb is another longstanding and influential association that organises conferences and other events, produces "soft law" and other publications, and provides education (including, unlike ICCA, formal accreditation as arbitrator).⁵⁷ It also has a global reach. However, it remains headquartered in London, with larger or more active branches, particularly across Commonwealth jurisdictions, such as Hong Kong and Australia.

Seemingly reflecting an earlier era where non-lawyers served as arbitrators in England for cases involving maritime or trade association matters, the CIArb Board, even today, has significantly more NLP members than, say, the ICCA Board (or Taskforces, let along Young-ICCA).⁵⁸ Most of those NLPs (three out of four) were Surveyors. However, there are also no Academics on the CIArb Board, and the proportion of Lawyers is correspondingly very high. Many of the latter (21 out of 27) are barristers, again reflecting the English tradition behind the CIArb, and there might be a perception at least that barristers (as specialists also in litigation) are likely to take a more formalistic approach to arbitration than say solicitors within law firms (which also engage in transactional work). Quite a few coded as Lawyers (6 out of 21) self-described initially as "Arbitrator," perhaps unsurprisingly since the CIArb has certification courses for that role, but, upon closer analysis, have or had the profession of Lawyer.⁵⁹

Apart from Board membership, it is also useful to check presenters at CIArb events. From July 2020 to March 2021, there were again a significant proportion of NLPs. In addition, among the 43 Lawyers, eight members were inhouse counsel (whereas none served on the CIArb Board). Such in-house lawyers need to interface more closely and regularly with businesspeople and, therefore, may be expected to take a less formalistic approach toward arbitration and dispute resolution in general. There were also ten who self-identified as Arbitrator but were recoded into the Lawyer category after further investigation. Another difference from the CIArb Board was that a significant proportion of Academics were seminar presenters. However, this may be due to the pandemic creating more opportunities

^{55.} NOTTAGE ET AL., supra note 30, at 17.

^{56.} *Id.* There are only 8 NLP presenters across the years we investigated (a chief technology officer, a forensic document examiner, a deputy-director of an energy company, the managing director of Asia Dispute Funding, the senior vice president and senior economist at Compass Lexicon, and a chartered engineer (who appeared twice)).

^{57.} About Us, CIARB, https://www.ciarb.org/about-us/about/ (last visited Sept. 7, 2021).

^{58.} NOTTAGE ET AL., supra note 30, at 18.

^{59.} Training, CIARB, https://www.ciarb.org/training/ (last visited Sept. 7, 2021).

^{60.} NOTTAGE ET AL., supra note 30, at 20.

to present remotely (without incurring travel expenses) and resulting in new issues for arbitration benefitting from academic input. Thus, it will be interesting to see if the contributions of Academics remain at this level in post-pandemic CIArb events.

C. International Bar Association (IBA)

The instruments developed by the Arbitration Committee of the IBA⁶¹ are even more important than sources of contemporary soft law in international arbitration. For example, the 1999 Rules on Evidence-Taking (revised in 2020) quickly established themselves as the main template in practice despite hardly ever being mandated under any Arbitration Rules chosen by parties. However, concerns that these IBA Rules favoured the common law tradition's approach and contributed to excessive costs and delays⁶² resulted in the 2019 Prague Rules on the Efficient Conduct of Proceedings in International Arbitration.⁶³

An analysis of committee membership for such IBA instruments confirms the very heavy dominance of lawyers. This is to be expected, given that the IBA is an international federation of lawyer associations, although committee membership could be extended to those who are not current members of the IBA. Membership is not cheap, and participation on committees and conferences would often also have meant travelling to participate in physical meetings (at least until the COVID-19 pandemic disrupted international travel). It is therefore not surprising that one commentator observed already that members of the committee that developed the 1999 Rules came predominantly from large law firms. The analysis examines those on a sample of IBA's various taskforces, rules subcommittees, and working parties. There are almost none from NLP backgrounds or academia. Among Lawyers (including current judges), 118 were coded as 'standard' lawyers (mostly those working in law firms), three as in-house lawyers, six as barristers, and five as arbitrators whose primary profession we decided was lawyer.

Examining the IBA's key committee for international arbitration as of August 2021, comprising a total of 21 members, 20 were Lawyers, and just one was coded as something else (staff of an IAO, to be specific). In addition, for the sample

^{61.} See IBA Guides and Reports, INTERNATIONAL BAR ASSOCIATION, https://www.ibanet.org/resources (last visited Sept. 7, 2021).

^{62.} TERAMURA, supra note 5, at 3.

^{63.} See PRAGUE RULES, https://praguerules.com/ (last visited Sept. 7, 2021); e.g., Kabir A.N. Duggal & Rekha Rangachari, A Challenger Approaches: An Assessment of the Prague Rules on the Efficient Conduct of Proceedings in International Arbitration, 37 J. OF INT'L ARB. 27 (2020); Kim & Greineder, supra note 2 (Gangnam Principles).

^{64.} NOTTAGE ET AL., supra note 30, at 21.

^{65.} International Bar Association, *About the IBA*, https://www.ibanet.org/About-the-IBA (last visited Sept. 7, 2021).

^{66.} International Bar Association, *IBA Individual Membership*, https://www.ibanet.org/membership/individual-Membership (last visited Sept. 7, 2021) [hereinafter "IBA Membership"].

^{67.} Michael J. Bond, *A Geography of International Arbitration*, 21 ARB. INT'L 99, 105 (2005) https://www.doi.org/10.1093/arbitration/21.1.99; NOTTAGE ET AL., *supra* note 30, at 21.

of IBA webinars we analysed, mostly from 2020 but some from 2021, 94% of those involved were Lawyers, 4% were coded as belonging to an IAO, and only 2% were Academics.

III. ARBITRAL INSTITUTIONS AND THEIR LEADERS

We analyse next the following institutions actually administering arbitration cases. Such arbitration centres represent increasingly important stakeholders, as we can see from ICCA data discussed above as well as publications outlined below in Part IV. We focused on a range of arbitration centres, both old and new, to be able to check, for example, if Academics remain more influential in centres in or originating from civil law or socialist law jurisdictions. We looked at the ICC, London Court of International Arbitration (LCIA), the Swiss Arbitration Centre, the International Centre for Dispute Resolution (ICDR, established for international arbitration out of the American Arbitration Association), the Singapore International Arbitration Centre (SIAC), the Hong Kong International Arbitration Centre (HKIAC), the China International Economic and Trade Arbitration Commission (CIETAC, albeit more often administering arbitrations involving at least one local Chinese party), the Australian Centre for International Arbitration (ACICA), ⁶⁸ the AIAC, the Japan Commercial Arbitration Association (JCAA), ⁶⁹ the Korean Commercial Arbitration Board (KCAB, which now incorporates the Seoul International Dispute Resolution Centre), the Thai Arbitration Institute (TAI, run by seconded judges), and the newer Thai Arbitration Centre (THAC, supported instead by the Thai Ministry of Justice and aiming to be more business-oriented).

A. Leadership of Arbitration Centres

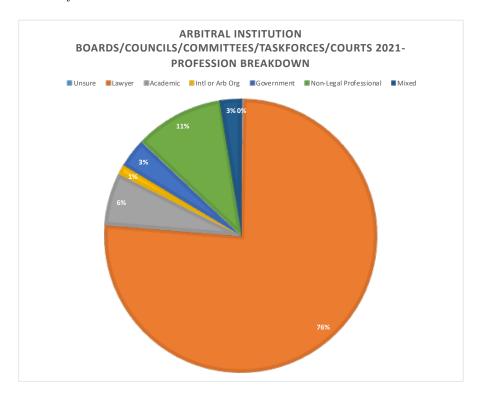
For these arbitration centres, we look first overall at the membership of Boards of various types (including international or other advisory boards), but also Executive Boards or Committees (although expecting those to be mostly of Lawyer background, at least in common law jurisdictions with large legal professions), and some "Courts" which have been sometimes spun off from Boards to perform functions like reviewing arbitrator challenges (e.g., SIAC). This includes, therefore, the longstanding ICC Court, even though it is very large (especially if including the alternate members from some jurisdictions), as the ICC has a federation of chambers of commerce worldwide that seeks and advertises geographical diversity worldwide. We nonetheless include all these bodies to have functional comparability across the selected arbitration centres. For example, ICC Court membership indicates high

^{68.} Luke Nottage & Richard Garnett, *The Australian Centre for International Commercial Arbitration*, in MAX PLANCK ENCYCLOPEDIA OF INTERNATIONAL PROCEDURAL LAW https://opil.ouplaw.com/page/803 (2019).

^{69.} See James Claxton et al., Disruption as a Catalyst for International Dispute Services in Japan: No Longer Business as Usual?, in New Frontiers in Asia-Pac. Int'l Arb. and Disp. Resol. 237 (Luke Nottage et al. eds., 2021) (comparing other new centres for international dispute resolution in Japan).

prestige and social capital and, therefore, influence in the world of international arbitration.

Figure 5: Arbitral Institution Boards/Councils/Committees/Taskforces/Courts 2021-Profession Breakdown



Again, the overall analysis depicted above confirms that Lawyers are predominate. There were comparatively fewer Academics; of the total 11 Academics on the ICC Court (currently comprising 178 executives and members), there were ten professors and one arbitrator whose main profession we decided was academic. In comparison, on both the SIAC and Swiss Court, there were no Academics at all. Nonetheless, below, we confirmed that the arbitration centres in countries following more the civil law tradition (as bolded below for emphasis) rather than common law tradition tended to have more (over ten percent) of the members for their boards selected from among Academics compared to members who were Lawyers.

Table 1: Main Professions of Members of Arbitration Centre Boards/Councils/Courts (2021)

Arbitral Institution	Unsur e	Lawy er	Acade mic	Intl or Arb Org	Gove rnme nt	Non- Legal Profe ssion al	Mixed
ICC	1	174	11	3	1	16	5
CIArb	0	21	0	0	1	4	1
ACICA	0	28	1	1	1	1	1
LCIA	0	13	0	1	0	0	1
SIAC	0	39	0	0	0	1	0
JCAA							
(Japan)	1	18	2	1	2	19	1
HKIAC	0	45	2	0	0	5	1
KCAB							
(Korea)	0	21	2	0	0	0	1
CRCICA	0	21	4	0	3	1	4
(Egypt) Stockhol	U	21	4	U	3	1	4
m	0	14	1	0	0	0	0
DIS							
(German							
y)	0	38	8	1	4	1	2
Swiss	0	8	0	0	1	2	0
AAA/IC							
DR	0	80	6	1	0	19	0
TAI	0	2	0	0	1	0	0
THAC							
(Thailan	0	13	6	1	10	5	0
d) T-4-1	-						-
Total	2	535	43	9	24	74	17

The proportion of NLPs above in Figure 5 initially seems quite high, including some self-described as Arbitrator before we investigated their backgrounds further. However, upon closer inspection, we found these NLPs mostly comprised members we had investigated and coded as "Business Executive," as indicated below.

ARBITRAL INSTITUTION
BOARDS/COUNCILS/COMMITTEES/TASKFORCES/COURTS 2021-'NON-LEGAL
PROFESSIONAL' BREAKDOWN

Engineer aka NLP

Business Executive a ka NLP

Surveyor aka NLP

Architect a ka NLP

**Architect a

Figure 6: Arbitral Institution Boards/Councils/Committees/Taskforces/Courts 2021-'Non-Legal Professional' Breakdown⁷¹

Drilling down even further, we found that such Business Executives were heavily concentrated on boards of a few arbitration centres. ⁷² Specifically, in Asia, one was the THAC (newer and trying to differentiate itself from TAI), and the other was the JCAA. With respect to the latter, the JCAA also functions as a satellite institution of the Ministry of Economy, Trade and Industry (METI) to issue Carnets for international export. By association, it is therefore connected to the Japan Federation of Economic and the Japan Chamber of Commerce and Industry (JCCI), which helps the JCAA promote arbitration clause negotiation and drafting among larger firms and, more recently, SMEs. Outside Asia, we also found quite a few members with backgrounds as Business Executives for the ICC (especially within the 2021 Executive Board) and the AAA/ICDR (especially within the 2021-22 "Board of Directors").

B. Arbitration Centre Conferences and Webinars

As well as formal membership on Boards and the like, speaking or even moderating at webinars and (perhaps especially) larger conferences also indicates influence and impact in the world of international arbitration. Again, our analysis of those who led such events in 2020 and in the first half of 2021 confirmed that Lawyers (including current judges) predominated (80% for 2020, 83% for 2021), even during pandemic-related travel restrictions.⁷³

^{71.} This graph shows the breakdown of 'Non-Legal Professional' for Arbitral Institution Boards/Councils/Committees/Taskforces/Courts 2021.

^{72.} See NOTTAGE ET AL., supra note 30, at 26.

^{73.} Id. at 27-28.

IV. JOURNALS, BOOKS AND BLOGS

Publications are also important for developing influence and social capital, especially as international commercial arbitration remains largely confidential because they can signal the author's skillset and perhaps mindset as an actual or potential counsel, arbitrator, or member of key groups for arbitration. Therefore, we discuss our analysis of the following in this order: journals (creating the most frequent opportunities for publications), a major book series (from Wolters Kluwer), and lastly, the more recently created and widely-read Kluwer Arbitration Blog.

A. Arbitration Journals

We selected the major journals for international arbitration, including a more recent one from and for the vibrant Asian region. These comprise Arbitration International (published by Oxford University Press with its first issue in 1985); Arbitration: The International Journal of Arbitration, Mediation, and Dispute Management (published by CIArb with first issue as early as 1915); Asian International Arbitration Journal (published by SIAC with first issue in 2005); and the Journal of International Arbitration (published by Wolters Kluwer with first issue in 1984). Overall, the predominance of Lawyer involvement nowadays proves again to be striking. This is consistent with some previous empirical research, which further showed the emergence of some new journals related to international dispute resolution - arguably restoring some alternative opportunities for academic writers. ⁷⁴

We first looked at the current editors of these four journals. Despite most of them being Lawyers, there were somewhat more Academics (and those from Mixed backgrounds) than, say, ICCA Taskforce, authors, or Congress presenters/authors, let alone IAO leader membership. This is unsurprising, given that full-time Academics specialise in scholarly writing and are increasingly pressured to "publish or perish" (especially perhaps in common law tradition universities). 75

The above analysis also included some editors who self-described as Arbitrator. However, when we examined their background further, we were able to code them into primary professions, such as Lawyer, generating the following analysis of respective proportions.

^{74.} Nottage, *supra* note 14, at 412-413 (analysing the Journal of International Dispute Settlement, and the Journal of World Investment and Trade).

^{75.} See generally, e.g., Joseph Weiler, Publish and Perish: A Plea to Deans, Faculty Chairpersons, University Authorities, EJIL:TALK! (2018), https://www.ejiltalk.org/publish-and-perish-a-plea-to-deans-faculty-chairpersons-university-authorities/; IMAD A. MOOSA, PUBLISH OR PERISH - PERCEIVED BENEFITS VERSUS UNINTENDED CONSEQUENCES (2018).

JOURNAL EDITORS-PROFESSION FOR ALL JOURNALS

Lawyer Academic Mixed

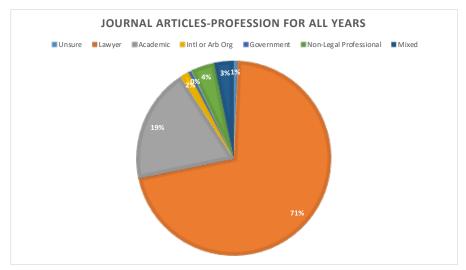
22%

Figure 7: Journal Editors-Profession for All Journals

Turning next to all the articles (excluding book reviews) published across the four selected journals, we counted and coded for various years. ⁷⁶ Overall, we also found mainly Lawyer authors (including current judges), but quite a few articles were written by Academics, as depicted below. There were even some written by NLPs, which will be further broken down later. Again, coding Arbitrator authors for their primary backgrounds gives the following proportions.

^{76.} The years analysed across the 4 arbitration journals 1989, 1994, 1999, 2004, 2009, 2014, 2019, 2020, and 2021. However, the ASIAN INTERNATIONAL LAW JOURNAL is not counted until 2005 because that was when it was first published (whereas 2004 was used for the other three journals), and the 1990 issues of ARBITRATION were examined because 1989 issues were not readily available.

Figure 8: Journal Articles-Profession for All Years (Proportions)



When we analysed the authorship categories over time, ⁷⁷ we found that absolute numbers and proportions of articles written by Lawyers have grown, especially between 2000-2010.⁷⁸ However, these numbers have dropped recently, especially in 2020.⁷⁹ This may reflect legal practitioners becoming busier in their daily jobs - actually resolving disputes triggered by the pandemic and economic dislocation - whereas academics have been stuck at their desks with proportionately more opportunities to write. In addition, the views published by academics presumably have been more influential or welcomed, especially on pandemic-related topics.⁸⁰ Another possible reason for fewer Lawyer publications in 2020 may be that they could no longer travel to conferences or other events where they could typically be expected to present a paper, which might have been submitted to an arbitration journal later. It will be interesting to track whether the proportion of articles published by Lawyers relative to Academics picks up strongly again after pandemic-related travel and workplace impacts diminish.

We also broke down the Lawyer categorisation.⁸¹ We were interested in determining whether there was significant authorship by in-house counsel, who

^{77.} See Nottage et al., supra note 30, at 33.

^{78.} Lawyers include current judges.

^{79.} The 2021 numbers seem low because they only capture articles published by the middle of that year.

^{80.} See, e.g., Klaus Peter Berger & Daniel Behn, Force Majeure and Hardship in the Age of Corona: A Historical and Comparative Study, 6 McGill J. Disp. Resol. 79 (2020); see also Maxi Scherer, Remote Hearings in International Arbitration: An Analytical Framework, 37 J. INT'L ARB. 407 (2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3599814.

^{81.} See Nottage et al., supra note 30, at 33-34.

might adopt a more business- or user-focused approach to arbitration (more focused on reducing costs and delays or promoting settlement) than external counsel. However, we found a very low proportion (1%) of in-house counsel authors. Instead, we found a considerable proportion of authors who were recognisably barristers (9%) within the common law tradition, who, as specialists in more formal procedures for resolving disputes (notably litigation), might adopt different views to in-house counsel (let alone Academics). For the above analysis of proportions, we included Judges within the broad category of Lawyers, as they may be more likely to share their mindset (especially in the common law tradition, where they are likely to have been barristers before becoming judges or revert to being counsel or arbitrator after retirement). However, some judges have been quite robust in criticising the over-formalisation of arbitration. The breakdown shows there was only a small proportion of articles published by either current Judges (5%) or Lawyers who used to be Judges (1%), compared to Lawyers (in the narrow sense) (75%) or Barristers (9%).

Another interesting feature from the breakdown is a significant proportion of authors identifying themselves as "Arbitrator" (9%), which, upon further investigation, we determined were or had been predominantly Lawyers (in our broadest sense, including Barristers). This self-description peaked around 2009, 83 perhaps as more authors moved or wished to move from counsel to arbitrator work. Curiously, the self-description has diminished in recent years despite the continued growth in arbitration case filings worldwide (including from 2020 during the pandemic). 84

^{82.} See, e.g., Menon, supra note 16, at 17-18.

^{83.} See Nottage et al., supra note 30, at 35.

^{84.} There were a record number of cases (and revised rules) at the ICC in 2020: 949 new registered cases and the highest number since 2016 (966); see Adrianne Goins et al., A Record Number of Cases and Revised Rules at the ICC Underscore the Increasing Appeal of Arbitration, JD SUPRA (July 8, 2021), https://www.jdsupra.com/legalnews/a-record-number-of-cases-andrevised-1231620/. The LCIA had 'an exceptional year' with a record of 407 arbitrations referred to the LCIA under the LCIA Arbitration Rules. See Dogan Gultutan & Janek Bednarz, The LCIA 2020 Casework Report -More International Flavour and a First Insight into the Impact of Covid-19 on London Arbitration Market, GLOB. ARB. NEWS (Feb. https://globalarbitrationnews.com/the-lcia-2020-casework-report-more-international-flavour-anda-first-insight-into-the-impact-of-covid-19-on-the-london-arbitration-market/. The HKIAC 'broke a number of its own records this year', including 318 cases, the highest number of new arbitration filings in over a decade. See Simon Chapman et al., Rise in Arbitration Cases in 2020 Despite Reduced Volume of in Person Hearings Due to Coronavirus Pandemic, HSF NOTES (Mar. 3, 2021), https://hsfnotes.com/arbitration/2021/03/03/rise-in-arbitration-cases-in-2020-despite-reducedvolume-of-in-person-hearings-due-to-coronavirus-pandemic/. The SIAC saw 'phenomenal figures': 1,080 new case filings (alongside the establishment of a representative office in New York and a record of 545 American parties arbitrating disputes at SIAC). See Hanna Azkiya, The 2020 SIAC Annual Report: Trends & Questions, PRAC. L. ARB. BLOG (May 28, 2021), http://arbitrationblog.practicallaw.com/the-2020-siac-annual-report-trends-questions/; many appear to be interlinked. See Amanda Lees & Patric McGonigal, SIAC Statistics: Looking Behind the Large Increase in Siac Caseload. KWM PULSE (April

B. Books

Consider next the authors of influential books on international arbitration. We focus on the "International Arbitration Law Library" published by Wolters Kluwer. ⁸⁵ The authoritative Library series is edited by Professor Stavros Brekoulakis from the Queen Mary University of London (QMUL) and Professor Julian Lew, who founded the School of International Arbitration at QMUL in 1985 and has had a lengthy career as a lawyer and arbitrator (generally coded as "Mixed"). ⁸⁶

First, we focused solely on the authors of monographs and the editors of volumes, and we found that a large minority were Academics (37%). This higher proportion compared to journal article authorship is understandable book-length scholarship is important for academic career progression and indeed even helps nowadays to secure an entry-level university position even in most common law jurisdictions. Longer works are also harder for full-time lawyers to publish, given fluctuations in their workloads. Additionally, several articles might have a greater impact in the field (especially when combined with conference presentations and the like).

When analysed over time, in some years, there were significantly more books authored or edited by Lawyers, but mostly there is rough parity with Academics. The patterns are largely similar when we add all the authors of individual chapters in this Library series. Indeed, we start to see some authors coded as having Mixed professions (with those coded as Mixed typically combining being a Lawyer and an Academic, like Professor Julian Lew above), a few authors from IAOs, and even a few NLPs. If we take some authors describing themselves as Arbitrator or Judges and recode them for major professions (typically Lawyer), we get relative proportions as below.

https://pulse.kwm.com/dispute-resolution/siac-statistics-looking-behind-the-large-increase-in-siac-case load/.

^{85.} See Nottage, supra note 14, at 27-32 (emergence of books on international arbitration through some other major publishers).

^{86.} *Members*, QUEEN MARY UNIV. OF LONDON SCH. OF INT'L ARB., https://arbitration.gmul.ac.uk/aboutus/members/, (last visited March 29, 2024).

^{87. 30}NOTTAGE ET AL., supra note 30, at 40

^{88.} Id. at 41.

^{89.} Id. at 40.

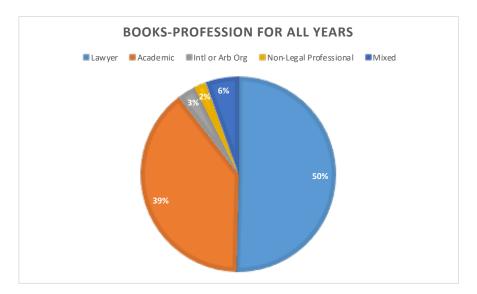


Figure 9: Books-Profession for All Years (Proportions)

Examining editors and authors of the Kluwer books, as well as their individual chapters over time, as provided below, we find again a few years where Lawyer authors (including current judges) stand out (notably in 2013). Nonetheless, they mostly enjoy rough parity with Academic contributors. However, NLP authors are very few. 91

^{90.} This was because of HORVATH & WILSKE, *supra* note 20.; the chapters of which were often written by more than just one (and sometimes two) authors. Not only this, almost all the authors of the book were lawyers.

^{91.} There were 5 NLPs to be precise, one engineer and four business executives; the business executive was in fact the same person, Stephanie Keer, who contributed to various chapters in RICHARD W. NAIMARK & CHRISTOPHER R. DRAHOZAL, TOWARDS A SCIENCE OF INTERNATIONAL ARBITRATION: COLLECTED EMPIRICAL RESEARCH (2005). The engineer was Geoffrey M. Beresford Hartwell, who contributed to a chapter in TONY COLE, THE ROLES OF PSYCHOLOGY IN INTERNATIONAL ARBITRATION (Tony Cole ed., 2017).

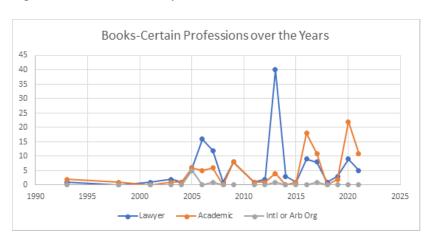


Figure 10: Books-Certain Professions over the Years

C. Kluwer Arbitration Blog (KAB)

Arbitration-related blogs have been proliferating, and we analyse the Young ICCA Blog above, but the KAB is the most well-established (commencing publication in 2009) and widely read. An analysis of its editors and authors is also important because, like Young ICCA, it gives an indication of the "new" generation of influencers in international arbitration and, therefore, provides another key sign of our times. Again, the predominance of Lawyers turns out to be quite remarkable.

1. Associate/Editors

Professor Roger Alford from Notre Dame Law School has long served as the general editor, and Dr. Crina Baltag, a lecturer at Stockholm University, has recently join as an additional Editor. ⁹² However, as more and more postings have been added to KAB over the years, more Associate Editors have been added. We looked at this entire editorial team for August 2021 and 2018 (the latest year for which the Wayback Machine online ⁹³ allowed us to access a snapshot of the list of all editors), finding a fairly stable pattern: Lawyer (80%) and Academic (20%). ⁹⁴

2. Authors

Next, looking at author backgrounds in February, June and November of 2009, 2014, 2019, 2020, and 2021, we found a heavy dominance by Lawyer authors, some Academics, and very occasionally authors from an IAO, "Publisher" (notably the Investment Arbitration Reporter and Arbitrator Intelligence) and self-described

^{92.} KLUWER ARB. BLOG, (last visited Oct. 5, 2018), http://arbitrationblog.kluwerarbitration.com/ (information on editorial team for Kluwer Arbitration Blog).

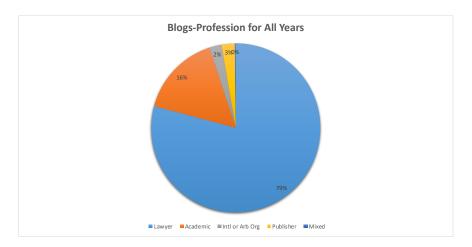
⁹³ Id

^{94.} Lawyer includes current judges.

"Arbitrator" (fewer than say for book chapters or journal articles, perhaps reflecting a younger authorship profile on this online Blog medium).

After recoding the Arbitrator category by primary profession and adding the 'Judge' category to the Lawyer category, we get the following proportions. Interestingly, there were no persons coded as 'NLP,' and within the Lawyer category (which comprised 406 persons), there were five in-house lawyers.

Figure 11: Blogs-Profession for All Years (Proportions)



Next, taking snapshots over the months surveyed as below shows (rather like ICCA Congress presentations/chapters in Part II.A above) that KAB postings by Academics have been quite stable (and indeed increased from around 2019) but at a much lower base, but the proportion of Lawyer postings has grown along with the total number. The impact of Lawyers, therefore, seems to be growing, and professional diversity is diminishing through this important online resource as well.

^{95.} KAB used to have up to one posting each day but during the pandemic sometimes started publishing more each day.

Blogs-Certain Professions over the Years

60

40

30

20

10

Feb-08 Jul-09 Nov-10 Apr-12 Aug-13 Dec-14 May-16 Sep-17 Feb-19 Jun-20 Oct-21 Mar-23

Lawyer Academic Intl or Arb Org

Figure 12: Blogs-Certain Professions over the Years

V. Conclusions

ICA has suffered from resurgent delays and especially costs arguably because of its somewhat artificial comparative advantage of now large global enforceability compared to cross-border litigation or mediation. But that preeminence is being challenged, on the one hand, by the 2005 Hague Convention on Choice of Court Agreements (and older regional treaties for enforcing judgments within the European Union, and even since 2010 between Australia and New Zealand) combined with the recent proliferation of international commercial courts. On the other hand, international commercial arbitration is being challenged by the growing popularity of multi-tiered DR clauses negotiated in advance for cross-border contracts, as well as growing post-dispute mediation, plus easier enforceability, hopefully through the 2018 Singapore Convention on the Enforcement of Mediated Settlement Agreements and the emergence of new international mediation centres. These developments are especially useful as the

^{96.} Luke Nottage & Bruno Jetin, Introduction: New Frontiers in Asia-Pacific Trade, Investment and International Business Dispute Resolution, in New Frontiers in Asia-Pacific International Arbitration and Dispute Resolution 1 (Luke Nottage et al. eds., 2021); Marilyn Warren & Clyde Croft, An International Commercial Court for Australia: An Idea Worth Taking to Market, in New Frontiers, in Asia-Pacific International Arbitration and Dispute 39 (Luke Nottage et al. eds., 2021).

^{97.} Nottage & Jetin, supra note 96, at 13.

^{98.} See, e.g., The Singapore Convention on Mediation, SINGAPORE INTERNATIONAL DISPUTE RESOLUTION ACADEMY (2021), https://www.singaporeconvention.org; S.I. Strong, Promoting International Mediation through the Singapore Convention on Mediation, in New Frontiers in Asia-Pacific International Arbitration and Dispute Resolution 337 (Luke Nottage et al. eds., 2021); see also Anselmo Reyes & Weixia Gu, Multi-Tier Approaches to The Resolution of International Disputes: A Global and Comparative Study (Anselmo Reyes & Weixia Gu eds., 2022).

COVID-19 pandemic led to more disputes, reflected already in rising caseloads for many arbitration institutions and a surge reported anecdotally for cross-border mediation. ⁹⁹ Yet are the lawyers we have confirmed empirically increasingly dominating the world of international arbitration also the most skilled and appropriate individuals for mediation in particular? And are these lawyers, increasingly subjected to the billable hours culture, especially in the growing law firms (even now in Asia), best incentivised to resolve disputes efficiently? In other words, is this diminishing professional *diversity* even in Asia making international arbitration *unsustainable*, or at least far from optimal, as an effective cross-border dispute resolution process? ¹⁰⁰

If there are downsides to this phenomenon, as mentioned in our Introduction, there may be different approaches to reducing this further "diversity deficit." For example, an obvious response might be to encourage more involvement in the leadership and activities of the significant arbitration associations and centres analysed in this article, as well as important publication venues (perhaps less pressingly for some venues, given our statistical analysis in Part IV), and relatedly more appointments as arbitrators. However, as legal academics are arguably more "lawyerly" in general compared to, say, engineers or accountants, promoting the latter could be a higher priority if an aim is to promote more viewpoint diversity or other benefits (as outlined in our Introduction) in at least some of these key nodes in international arbitration.

A further general implication emerges from the confirmed entrenchment of lawyers throughout the world of international arbitration and the corresponding decline in the involvement and influence of full-time academics and NLPs. As mentioned in the Introduction, lawyers comprise a profession where highly nonlinear compensation for workers remains pervasive. This incentivises one person to suspend work completely to assume family responsibility (e.g., bearing and caring for children or others with special needs), thus diminishing opportunities for career

^{99.} See generally, e.g., KLUWER MEDIATION BLOG (Oct. 30, 2020), http://mediationblog.kluwerarbitration.com/; See also Rise in Arbitration Cases in 2020 Despite Reduced Volume of in Person Hearing Due to Coronavirus Pandemic, HERBERT SMITH FREEHILLS, (March 3, 2021) https://www.hsfnotes.com/arbitration/2021/03/03/rise-in-arbitration-cases-in-2020-despite-reduced-volume-of-in-person-hearings-due-to-coronavirus-pandemic/.

^{100.} See generally SUSTAINABLE DIVERSITY IN INTERNATIONAL ARBITRATION (Shahla Ali et al. eds., 2022).

^{101.} Diversity Deficit, supra note 39 (usage of the phrase "diversity deficit" to focus on a lack of diversity in gender and national background in investment treaty arbitration.) Encouraging more academics to serve as arbitrators, for example, may be difficult in practice where academics are already reasonably well remunerated and/or pushed to "publish or perish" (as perhaps in the US, for example). These are context-specific issues that follow from tracking the empirical trend and deciding on normative grounds that there are problems needing addressing. For example, there might be barriers that deter academics from entering the arbitral market: João Ilhão Moreira, Arbitration Vis-à-vis Other Professions: A Sociology of Professions Account of International Commercial Arbitrators, 49 J. L. & SOC'Y 48 (2022) (barriers of entry for the arbitration market).

progression. 102 By contrast, such responsibilities can be more equally split in services sectors without non-linear compensation patterns, such as education and research, with each couple being more able to drop to half positions without such dramatic adverse impacts on household income and career prospects. A plausible implication is that restoring more professional diversity in international arbitration by reinstating more opportunities for full-time academics and some NLPs or those with government or even in-house lawyer positions could promote gender diversity in international arbitration. In turn, this could enhance the broader social legitimacy and, therefore, sustainability of international arbitration, which is under some threat by growing public concerns (rightly or wrongly) about investment treaty arbitration in some parts of the world. 103 It remains to be seen whether the shift towards more remote hearings and e-arbitration following COVID-19 pandemic travel restrictions and experiences from more work from home will translate into significant long-term improvements for gender equality in arbitration. Already, more attention is being paid to restoring professional diversity, which is likely to improve gender diversity in international arbitration.

Some improvements are already evident in overall statistics on appointments of women as arbitrators or other leadership positions in at least some arbitration centres. 104 However, further research could usefully track how these influential women in the world of international arbitration map out in terms of professional diversity, especially the extent and types of their backgrounds as lawyers. This highlights the methodological and practical importance of one aspect of "intersectionality," or what statisticians have long been aware of as possible "interaction effects" among characteristics held within a wider population. 105 Some commentators have further highlighted possible intersections between gender and race or ethnicity, ¹⁰⁶ further complicating the empirical picture. Along those lines, future research could break down further various identity markers for current or emerging leaders identified in important arbitration associations, centres, and publication outlets, on top of the distinction highlighted in the present analysis between lawyers and academics or NLPs. Whether the resultant sub-groups have more or less influence in the overall socio-economic and juridical field of international arbitration would be a further interesting empirical question, which might be quite context-specific. 107 Further research could already drill down into

^{102.} CLAUDIA GOLDIN, CAREER AND FAMILY: WOMEN'S CENTURY-LONG JOURNEY TOWARD EQUITY 6 (Princeton Univ. Press, 2021).

^{103.} See Nottage, supra note 14 (empirical analysis of media reporting on investment and other forms of arbitration in some countries); see also, generally NOTTAGE, supra note 9, at 379.

^{104. 28}See ICCA, supra note 28, at 30-31.

^{105.} Chris Martin, *Intersectionality Is a Political Football—Here's Why It Doesn't Have to Be,* HETERODOX: THE BLOG (Apr. 17, 2017), https://www.heterodoxacademy.org/blog/intersectionality-is-a-political-football-heres-why-it-doesnt-have-to-be/.

^{106.} Joshua Karton & Ksenia Polonskaya, *True Diversity is Intersectional: Escaping the One-Dimensional Discourse on Arbitrator Diversity*, KLUWER ARB. BLOG (Jul. 10, 2018), http://arbitrationblog.kluwerarbitration.com/2018/07/10/true-diversity-is-intersectional-escaping-the-one-dimensional-discourse-on-arbitrator-diversity/.

^{107.} See generally Martin, supra note 105.

whether such sub-populations or even, say, female academics compared to male lawyers tend, for example, to publish on certain topics in arbitration, ¹⁰⁸ as well as possible normative implications from any such patterns. All these questions go beyond the scope of this paper, but we hope it sets a baseline for researchers and practitioners that highlights professional diversity as a significant variable of concern for the international arbitration world.

^{108.} *Cf., generally, e.g.*, Diego Kozlowski et al., *Intersectional Inequalities in Science*, PROC. NAT'L ACAD. SCI., Jan. 4, 2022, at 1, https://www.pnas.org/content/119/2/e2113067119; discussed in Diego Kozlowski et al., The Economist, *How Sex and Race Affect Academic Research*, THE ECONOMIST, Feb. 14, 2022, https://www.economist.com/graphic-detail/2022/02/14/how-sex-and-race-affect-academic-research.