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THE REVOLVING DOOR IN INTERNATIONAL INVESTMENT ARBITRATION

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ABSTRACT

It is often claimed that international investment arbitration is marked by a revolving door: individuals act sequentially and even simultaneously as arbitrator, legal counsel, expert witness, or tribunal secretary. If this claim is correct, it has implications for our understanding of which individuals possess power and influence within this community; and ethical debates over conflicts of interests and transparency concerning 'double hatting'—when individuals simultaneously perform different roles across cases. In this article, we offer the first comprehensive empirical analysis of the individuals that make up the entire investment arbitration community. Drawing on our database of 1039 investment arbitration cases (including ICSID annulments) and the relationships between the 3910 known individuals that form this community, we offer the first use of social network analysis to *describe* the full investment arbitration community and address key *sociological* and *normative* questions in the literature. Our results partly contradict recent empirical scholarship as we identify a different configuration of central 'power brokers'. Moreover, the normative concerns with double hatting are partly substantiated. A select but significant group of individuals score highly and continually on our double hatting index.

I. INTRODUCTION

It is regularly but anecdotally observed that international investment arbitration is marked by a 'revolving door.' Single individual actors play multiple roles as arbitrators, counsel, expert witnesses, and tribunal secretaries within this fragmented and *ad hoc* adjudicative system of investment arbitration. The movement between roles may be *sequential*[1] or even *simultaneous*. The latter practice is often referred to as 'double hatting' and has attracted significant criticism on the grounds of conflict of

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1 For example, an arbitrator may act as legal counsel in a case, then as an arbitrator in another case, an expert witness in a third, and then back to legal counsel work in a fourth case.

interests.[2] However, the nature and extent of the revolving door in international investment arbitration has never been empirical determined and its sociological and normative implications remain largely unexplored.

This article presents the first ever analysis of the entire international investment arbitration community since its inception. It draws on our PITAD[3] database of 1039 international investment arbitration cases and ICSID[4] annulment proceedings in order to first map the identity and relationships of 3910 individuals in their different roles, using social network analysis and various indexes. In addition, we examine sociologically whether the revolving door phenomenon challenges our understanding of who has power within the international investment arbitration community; and we empirically assess normative concerns over double hatting by determining the extent to which it occurs and whether the practice has eased or worsened over time.

In doing so, we seek to advance the existing literature on international investment arbitration in *three* discrete ways. Our first contribution is *descriptive*. By focusing on a broad group of actors, we partly return to Dezalay and Garth's vision of the 'field' as the analytical unit. The focus is less on specific institutional roles (particularly those of the arbitrator), but instead the 'networks and relationships organized' around arbitration and the 'space for positions and struggles'.[5] To be sure, Dezalay and Garth were significantly concerned with arbitrators. After extensive empirical work they observed that a coterie of 'grand old men' dominated the field of international commercial arbitration.[6] Small in number, linked closely, and mostly European, they even referred to themselves as a 'club' or a 'mafia'.[7] After a period of 'generational warfare', these figures were joined and complemented by Anglo-American arbitration technocrats and law firms.[8] Since then scholars have continued to map the field with a focus on gender, nationality, education and employment background.[9] Recent medium-N surveys confirm elite educational backgrounds and male and Western identities of arbitrators,[10] but also the possible rise of a third and

2 See Phillipe Sands, 'Conflict and Conflicts in Investment Treaty Arbitration: Ethical Standards for Counsel', in Arthur Rovine (ed.), *Contemporary Issues in International Arbitration and Mediation: The Fordham Papers* (New York: Brill, 2012), at 28–49; Phillipe Sands, 'Developments in Geopolitics – The End(s) of Judicialization?' 2015 ESIL Conference Closing Speech, 12 September 2015.

3 PluriCourts Investment Treaty Arbitration Database (PITAD) as of 1 January 2017.

4 International Centre for Settlement of Investment Disputes.

5 Yves Dezalay and Bryant Garth, *Dealing in Virtue: International Commercia Arbitrtion and the Construction of a Transnational Legal Order* (Chicago: Chicago University Press, 1996), at 20.

6 Ibid.

7 Ibid, at 10.

8 Ibid.

9 See e.g., Susan Franck, 'Empirically Evaluating Claims about Investment Treaty Arbitration', 86 North Carolina Law Review 1 (2007); Michael Waibel and Yanhui Wu, 'Are Arbitrators Political?' Working Paper (December 2011); Paul Friedland and Stavros Brekoulakis, '2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process' 8 Constitutional Law International 39 (2013); Sergio Puig, 'Social Capital in the Arbitration Market', 25 European Journal of International Law 387 (2014). Susan Franck et al., 'International Arbitration: Demographics, Precision and Justice' ICCA Congress Series No. 18: Legitimacy: Myths, Realities, Challenges 33 (2015); Thomas Schultz and Robert Kovacs, 'The Rise of a Third Generation of Arbitrators? Fifteen Years after Dezalay and Garth', 28(2) Arbitration International 161 (2012).

10 Franck et al., ibid.

more pluralistic generation of managerial arbitrators within commercial, but not investment treaty, arbitration.[11]

However, Dezalay and Garth's work also showed the peculiar symbolic (and legal) capital of those actors that crossed institutional lines. They devoted significant space to the role of legal counsel, law firms, and witnesses and noted implicitly the potential role and power of a revolving door. One vignette is telling: an Anglo-American litigator, with his first case in international commercial arbitration, learnt the importance of appointing distinguished arbitrators as counsel. With the 'combination of Lalive and Goldman' he commented, 'I was a conductor of virtuosos and prima donnas.'[12] Thus, we map the roles of all types of actors in investment arbitration and provide the first quantitative perspective of the field and empirical estimation of the revolving door. In doing so, we also identify key attributes of all actors such as gender and nationality.[13]

Our second contribution is to build on *sociological* work that seeks to identify who has the power in the investment arbitration community and the extent of that power. In Dezalay and Garth's account, power was measured in largely qualitative terms—an actor's symbolic capital. This power was determined by the combination of 'social class, education, career and expertise', which aspiring arbitrators needed to optimally combine in order to project neutrality, competence, and authority.[14] Puig, however, provides an essentially quantitative perspective of power in his recent social network analysis of investment arbitrators. By counting the number of roles and different types of ties between arbitrators, power is measured by an individual's exposure in the system.[15] Tracking all arbitral appointments at ICSID between 1972 and 2014 he identifies a core of approximately 25 arbitrators whom he calls 'power brokers'.[16] Notably, with the exception of a few 'formidable women', Puig found that grand old men from Europe and North America continue to 'dominate the arbitration profession'.[17] He argues that the maintenance of a core over a long period may support Ginsburg's theory that the imbalance in appointments is a result of *strategic* action: that the rapid global spread of arbitration incentivizes insider arbitrators to raise the barriers to keep out new entrants.

Using social network analysis, our study builds on Puig in order to better understand the biographic dynamics of this core group. However, it differs in three important ways. First, we analyze a much larger dataset, which includes non-ICSID cases—roughly doubling the sample size. Second, we expand the actors to include all known legal counsel, expert witnesses, and tribunal secretaries.[18] In our view, Puig

11 Schultz and Kovacs, above n 9.

12 Ibid, at 109.

13 In a companion article, we have analyzed the gender roles and causes of gender segregation in international investment arbitration: see Taylor St. John, et al., 'Glass Ceilings and Arbitral Dealings: Explaining the Gender Gap in Investment Arbitration', *Gender on the International Bench, PluriCourts-iCourts Workshop*, Oslo, 23–24 March 2017.

14 Dezalay and Garth, above n 5, at 20.

15 Puig, above n 9.

16 Ibid.

17 Ibid, at 387. Recent medium-N surveys find similar patterns.

18 The data collected in PITAD is limited by instances where awards and documents listing arbitrators, legal counsel, expert witnesses, and tribunal secretaries are not publicly available. Furthermore, as ICSID

undercounts the importance of legal counsel and expert witnesses in the system. Not only are legal counsel tasked with directing much of the cases, they are also deeply involved in arbitrator appointments—they are the key gatekeepers in the system. This methodological innovation also means we are able to reflect anew on existing explanatory theories of monopolistic behavior in the arbitration market. We can highlight and quantify the role of legal counsel in strategic and (often undervalued) structural explanations.[19]

Third, we weight the different roles of arbitrators. As far as we have determined, Puig has equally weighted presiding arbitrators and claimant/respondent-appointed wing arbitrators. Yet, the president of an arbitration represents the most prestigious role in arbitration, possesses the most responsibility in case management, and exercises the most influence in the final decision as they are usually not appointed solely by one party. In light of this, we weight arbitrators differently and thus introduce a more qualitative measurement of power – recognizing that the symbolic capital of a presiding arbitrator is higher than a wing arbitrator. In doing so, we avoid an anomaly produced by Puig's method, in which some wing arbitrators have a rank that does not intuitively cohere with their actual power in the system.

Our final contribution is to ground *normative* debates on double hatting in an empirical reality. Various scholars have raised concerns with conflicts of interests about arbitrators simultaneously acting as legal counsel and arbitrator in different cases.[20] However, the extent of double hatting has never been measured. It remains the subject of anecdote and casual observation. Furthermore, it is not uncommon to hear claims that the practice is decreasing over time with the implication that the ethical concerns are less sharp today – but no evidence is offered for such assertions.

Determining the nature and extent of double hatting is particularly important in the current political climate. Concern with this practice has strengthened the many contemporary critiques of the investment arbitration system; and will become even more relevant as investment arbitration continues on a growth trajectory (in terms of the annual number of cases filed). Many of these critiques focus on the arbitral system.

provides the most complete and comprehensive publicly available registry on arbitral appointments, legal counsel, and tribunal secretaries, that data on ICSID arbitrations will be more complete than that of all non-ICSID arbitration. In this respect, the study illustrates the benefits of datasets as they grow in size: see discussion by Wolfgang Alschner, Joost Pauwelyn, and Sergio Puig, 'The Data-Driven Future of International Economic Law', [THIS VOLUME].

19 See discussion of the results on power brokers in Section IV.

20 See Sands, 'Conflict and Conflicts', above n 2; Sands, 'Geopolitics', above n 2; Judith Levine, 'Dealing with Arbitrator "Issue Conflicts" in International Arbitration', 61 Dispute Resolution Journal 60 (2006); Ruth Mackenzie and Phillipe Sands, 'International Courts and Tribunals and the Independence of the International Judge', 44 Harvard International Law Journal 271 (2003); Joseph Brubaker, 'The Judge Who Knew Too Much: Issue Conflicts in International Adjudication', 26(1) Berkeley Journal of International Law 111 (2008). Double hatting as an expert witness while at the same time acting as arbitrator or legal counsel in another case may also be problematic, but that requires a more nuanced ethical discussion.

It has been slated for its 'pale, male and stale' character (that arbitrators are overwhelming older white men),[21] lack of transparency in the selection of arbitrators,[22] third party-funders,[23] law firm-driven litigation,[24] excessive collegiality,[25] and high levels of fees and costs.[26] These critiques all share with double hatting a similar concern: the closed nature of the community and its ability to engage in self-dealing.

Moreover, these critiques have all contributed to the so-called legitimacy crisis in investment arbitration. With over 831 known investment treaty arbitrations initiated to date (almost all coming in the past 15 years),[27] and a significant number of instances in which the threat of treaty arbitration has been used, states hosting foreign investors are increasingly finding themselves having to defend their laws and policies before and in the shadow of international arbitral tribunals. In addition to the process of legitimacy concerns above, States and other stakeholder have raising concerns over *outcomes*. Arbitration awards have been perceived as excessively pro-investor,[28] pro-investment,[29] and anti-developing state.[30] Thus, a failure to clarify or address a *process* legitimacy concerns such as double hatting only compounds the sense of crisis.

This article proceeds as follows. In Section II we describe the international investment arbitration regime and present our dataset. In Section III we set out data separately for each of the four types of roles and analyze their relative importance through social network analysis and/or case ranks. In Section IV, we bring the roles together

21 See e.g., Lucy Greenwood and C. Mark Baker, 'Getting a Better Balance on International Arbitration Tribunals', 28 Arbitration International 653 (2012); Susan Franck et al., 'The Diversity Challenge: Exploring the "Invisible College" of International Arbitration', 53 Columbia Journal of Transnational Law 429 (2015); Gus Van Harten, 'The (Lack of) Women Arbitrators in Investment Treaty Arbitration', Columbia FDI Perspectives No. 59 (6 February 2012).

22 See e.g., Chiara Giorgetti, 'Who Decides Who in International Investment Arbitration', 35(2) University of Pennsylvania Journal of International Law 431 (2014); Sergio Puig, 'Blinding International Justice', 56(3) Virginia Journal of International Law (2017), forthcoming.

23 Catherine Rogers, 'Gamblers, Loan Sharks and Third-Party Funders', in Catherine Rogers (ed.), *Ethics in International Arbitration* (Oxford: Oxford University Press, 2014).

24 See e.g., Pia Eberhardt and Cecilia Olivet, 'Profiting from Injustice: How Law Firms, Arbitrators, and Financiers are Fueling an Investment Arbitration Boom', Corporate Europe Observatory (November 2012).

25 Puig, above n 9, at 400.

26 Focusing at least on transparency of costs awards, see Susan Franck, 'Rationalizing Costs in Investment Treaty Arbitration', 88 Washington University Law Review 769 (2011).

27 PITAD, above n 3.

28 For instance, tribunals exhibit a bias that disproportionately favors the interests and rights of individual foreign investors when pitted against the duty of a state to regulate and legislate in the broader public interest. See e.g., Gus Van Harten, 'Arbitrator Behaviour in Asymmetrical Adjudication: An Empirical Study of Investment Treaty Arbitration', 50 Osgoode Hall Law Journal 211 (2012), at 251.

29 For instance, tribunals exhibit a bias that disproportionately favors liberal economic rights and values over other equally important public welfare objectives such as public health, environmental protection, or fundamental human rights. See e.g., Jorge Viñuales, *Foreign Investment and the Environment in International Law* (Cambridge: Cambridge University Press, 2012).

30 For instance, tribunals are disproportionately more likely to rule against less developed respondent states. See e.g., Thomas Schultz and Cedric Dupont, 'Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study', 25 European Journal of International Law 1147 (2014); Daniel Behn, Tarald Berge and Malcolm Langford, 'Poor States or Poor Governance: Explaining Outcomes in Investment Treaty Arbitration', PluriCourts Research Paper No. 16-04 (2016), available at: http://ssrn.com/ abstract=2740516 (visited 15 March 2017).

to analyze the entire field and examine who are the power brokers in the community. In Section V, we analyze the extent to which double hatting is occurring and whether there is real cause for normative concern.

II. THE INTERNATIONAL INVESTMENT ARBITRATION REGIME

The modern international investment regime can be described in multiple ways, but generally includes the international institutions and rules governing the regulation of trans-border investments. Built on a network of more than 3,500 signed bilateral investment treaties (BITs), regional free trade agreements (FTAs),[31] and a handful of plurilateral investment treaties,[32] the regime gives a foreign investor a number of substantive protections and rights,[33] including most importantly, investor–state dispute settlement (ISDS) provisions. While this regime has its roots in the immediate post-World War II period, it was not until the 1990s that the annual number of international investment agreements (IIAs) exploded.

For the purposes of this article, we are focused on the institution of, and networks arising out of, international arbitration between a foreign investor and the state hosting their investments: this prominently includes ITA, but can also include cases arising out of contracts or concessions and/or a host state's foreign investment laws. An ITA case commonly arises when a foreign investor alleges that the beneficiary rights they are granted under an IIA has been breached by the state hosting its investments. Investment arbitration can also occur in cases between foreign investors and host states under arbitration agreements allowing for investor–state arbitration (as embedded in various forms of investment contracts or concessions) or national foreign direct investment (FDI) laws. These particular forms of arbitration are often administered under ICSID. But they can also arise under *ad hoc* procedures or the rules of international commercial arbitration centers.

We have tracked and coded all these cases in our new and first-of-its-kind database (PITAD). It includes all known treaty-based arbitrations, all ICSID contract and FDI law-based arbitrations and all ICISD annulment committee proceedings; and each case is coded for up to 138 different variables. The dataset would ideally include all international commercial arbitrations and all non-ICSID contract-based investment arbitrations, but given the default confidentiality of such processes, the data

31 UNCTAD provides an extensive database on IIAs, available at: http://investmentpolicy hub.unctad.org/IIA (visited 15 March 2017).

32 See e.g., *Energy Charter Treaty* (ECT), *North American Free Trade Agreement* (NAFTA), *Association of South-East Asian Nations* (ASEAN) *Comprehensive Investment Agreement, Central American-Dominican Republic Free Trade Agreement* (DR-CAFTA), as well as, recently concluded or late-round negotiated treaties: *Trans-Pacific Partnership* (TPP) *Agreement, Canada-EU Comprehensive Economic and Trade Agreement* (CETA), *Singapore-EU Free Trade Agreement, Transatlantic Trade and Investment Partnership* (TTIP) *Agreement*, and the Pan-Asian *Regional Comprehensive Partnership Agreement* (RCEP).

33 IIAs typically include: prohibitions against expropriation without adequate compensation, full protection and security, fair and equitable treatment (FET), most-favored nation (MFN) treatment, and national treatment.

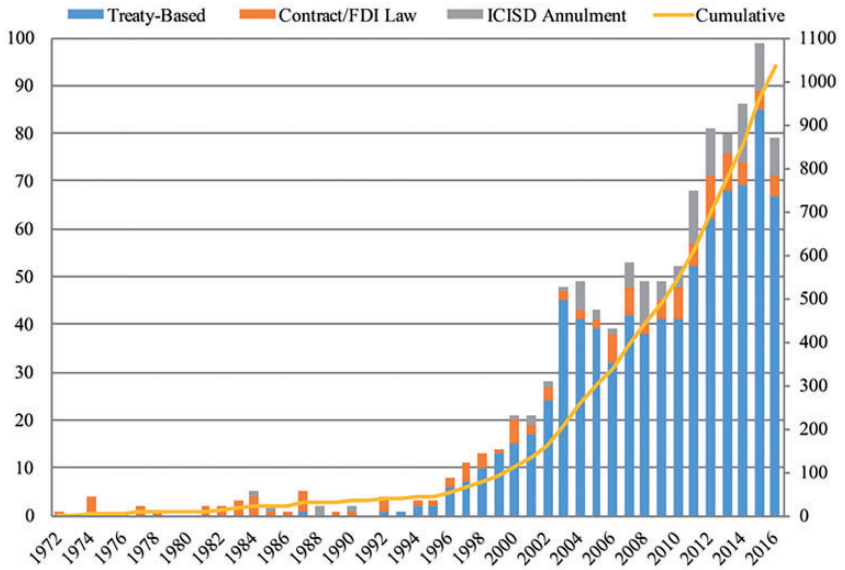

Figure 1. International investment arbitration cases registered by year (1987–2016). PITAD, PluriCourts Investment Treaty Arbitration Database (PITAD) as of 1 January 2017; 831 cases in total through 1 January 2017.

available remains far from complete or accessible.[34] In any case, our dataset has a certain coherence. It covers all known cases whose legal claim is procedurally or substantively based on an international treaty: whether through the ICSID Convention and/or various IIAs. This consequent 'public law' nature of the arbitration arguably heightens concerns around transparency and conflicts of interests raised by the revolving door phenomenon.[35]

However, the number of international investment arbitrations arising out of contracts or FDI laws pales in comparison with the exponential increase in investment treaty-based arbitrations over the past two decades (see Figure 1). In fact, the most distinct feature of this treaty-based regime is the explosion of litigation. It is this meteoric rise in the instances of ITA over the past two decades that has led some to claim there is 'no other category of private individuals' that are 'given such expansive rights in international law as are private actors investing across borders'.[36]

34 Indeed, there is a significant overlap between individuals within the international commercial arbitration community and the international investment arbitration community. See discussion of data limitations in Alschner, Pauwelyn and Puig, above n 18.

35 Stephan Schill, 'Enhancing International Investment Law's Legitimacy: Conceptual and Methodological Foundations of a New Public Law Approach', 52 Virginia Journal of International Law 57 (2012). We have discovered though that our field-based approach to international investment arbitration picks up a number of key actors in international commercial arbitration. Quite a number that play roles as legal counsel, arbitrators, and secretaries in international investment arbitration are also regularly involved in international commercial arbitrations.

36 Beth Simmons, 'Bargaining over BITS, Arbitrating Awards: The Regime for Protection and Promotion of International Investment', 66 World Politics 12 (2014), at 42.

Prior to the year 2000, there were only a small number of ITA cases registered.[37] These cases raised seemingly few concerns and went largely unnoticed by the international legal community. This changed at the beginning of the millennium as the annual number of ITA cases surged, with an average of 40 cases per year in the 2000s, and 50 cases per year in the 2010s. Of the 831 treaty-based cases registered to date, 111 different states have acted as respondents, compared with claimants from 67 different home states;[38] and by the end of the first decade of the 2000s, the use of ITA had become a global, prominent and lucrative area of international adjudication, while at the same time coming under increasing scrutiny from a growing number of states, scholars, and civil society actors.

By comparison, the number of ICSID-based contract or FDI law arbitrations have totaled 118 to date with an average of about five cases registered per year since the first case in 1972.[39] While the initiation of non-treaty based ICSID cases still occurs, these cases only comprise less than 10% of the ICSID caseload today. In addition, there have been 90 ICSID annulment committee cases registered over the past two decades (see also Figure 1). Under Article 53(1) of the ICSID Convention, a party may seek an annulment of their award on one of five narrow grounds: the arbitral tribunal was not properly constituted, it exceeded its powers, it failed to give reasons, it was tainted by corruption, or there had been a serious departure from a rule or procedure. While these annulments concern existing litigation, they are staffed with a new arbitration panels and are thus included as separate cases.

Not all of the cases have been concluded and claimant-investor success rates vary. Of the 949 international investment arbitration cases that have been registered (treaty-based, ICSID contract-based, or FDI law-based) as of 1 January 2017, the outcomes are as follows:[40] 419 have been concluded,[41] 301 remain pending, and an additional 229 were settled or discontinued. Of the concluded cases, claimant-investors have won on the merits in 47% of cases and lost on jurisdiction or the merits in 53%. The remaining 'cases' are the annulment. Of these, 41 have been concluded, 14 remain pending and an additional 25 have either been settled or discontinued. Of the concluded annulments, 32% resulted in a full or partial annulment of the underlying case and 68% in rejection of the annulment request. [42]

III. MAPPING THE ACTORS

In this section, we identify and map the individuals in each actor role in international investment arbitration: arbitrators, legal counsel, expert witness, and tribunal secretary. This mapping is partly done by a simple count of number of cases and an identification of attributes such as nationality, gender, legal role, and/or institutional role.

37 The first treaty-based arbitration to be registered was in 1987: *Asian Agricultural Products Ltd. (AAPL) v Republic of Sri Lanka,* ICSID Case No. ARB/87/3, Award (27 June 1990).

38 PITAD, above n 3.

39 The first ICSID arbitration to be registered: *Holiday Inns S.A. and others v Kingdom of Morocco,* ICSID Case No. ARB/72/1, Settled.

40 PITAD, above n 3.

41 A concluded case is one where the claimant-investor has either won on the merits or lost on jurisdiction or the merits. It does not include discontinued or settled cases.

42 Thus, all combined, 1039 investment arbitrations are analyzed.

In addition, we provide a separate social network analysis for arbitrators. A full social network analysis of the entire community is undertaken in the next section.

Social network analysis constitutes both a theory and a method.[43] Theoretically, social network emphasizes the importance that ties between individuals may have for their behavior and and transmission of 'resources.' This pattern of relations may also provide either opportunities for, or constraints on, individual action, which is especially relevant in the case of a market such as international investment arbitration. Methodologically, social network analysis provides tools and measurements for visualizing and understanding the relationships between individuals and similar individuals. The core of such methods are *nodes* (in our case individual actors) and *edges* (relationships between individual actors participating in the same arbitral dispute). Social network methods also provide the opportunities to measure different aspects of network *centrality*. In this respect, social network analysis theory is an ideal method to analyze the arbitration community: almost all observers note the important role of networks in securing appointments.

To be sure, network analysis is not only relevant to social relations between legal actors. As two other contributions in this volume demonstrate, it can also be used to understand and explain legal citation patterns. However, the underlying theoretical perspectives and methodological approaches remain the same for both types of network analysis and all three papers foreground centrality.[44]

A. Arbitrators

In international investment arbitration, each party to the dispute will customarily appoint one of three arbitrators; and in many cases the parties (or the co-arbitrators) will jointly appoint the presiding arbitrator. However, there is a large degree of variation in the manner of appointment. While the default is that the parties will appoint the two wing arbitrators, the presiding arbitrator can be appointed by the parties, the two wing arbitrators or by the institution hosting the arbitration. For ICSID annulment committee cases, all three annulment committee members are appointed by the Secretary-General of ICSID.

Of all the possible configurations for the appointment of arbitrators in international investment arbitration cases, however, there is an underlying constant: all arbitrators are selected for a particular dispute on an *ad hoc* basis. This structure means that for every arbitration, there are individuals (either the parties, legal counsel representing the parties, arbitral institutions or co-arbitrators) that are making selection decisions for each of the 1039 cases in our dataset.

The top 25 arbitrators by numbers of appointments are listed in Table 1 There is a familiar pattern of well-known grand old men and two 'formidable women' (Stern and Kaufmann-Kohler), as Puig christened them. With the exception of four arbitrators, all those listed are nationals of Western states. Yet, even these four are not

43 Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and. Applications* (New York: Cambridge University Press, 1994); Brian Carolan, *Social Network Analysis and Education: Theory, Methods and Applications* (Thousand Oaks: SAGE Publications, 2014), 3–22.

44 The place of investment awards and WTO decisions in international law: a citation analysis',[THIS VOLUME], at p. XX; Mattias DerlÖn & Johan Lindholm, 'Is it Good Law? Network Analysis and the CJEU's Internal Market Jurisprudence', [THIS VOLUME], at p. XX

Table 1. International investment arbitrators—top 25 by appointments

Rank	Arbitrator	Nationality	Presiding	Claimant-appointed	Respondent-appointed	Annulment committee	Total cases
1	Brigitte Stern	France	4	1	82	1	**88**
2	Gabrielle Kaufmann-Kohler	Switzerland	38	15	2	1	**56**
3	L. Yves Fortier	Canada	24	25	2	2	**53**
4	Charles Brower	US	1	50	0	1	**52**
5	Francisco Orrego Vicuña	Chile	18	27	3	1	**49**
6	Albert Jan van den Berg	Netherlands	15	16	12	1	**44**
7	J. Christopher Thomas	Canada	0	1	42	0	**43**
8	Bernard Hanotiau	Belgium	12	18	5	5	**40**
8	Karl-Heinz Böckstiegel	Germany	26	8	2	4	**40**
9	V.V. Veeder	UK	25	6	6	0	**37**
9	Bernardo Cremades	Spain	14	10	10	3	**37**
10	Piero Bernardini	Italy	11	13	3	**9**	**36**
11	Marc Lalonde	Canada	8	20	7	0	**35**
12	Rodrigo Oreamuno	Costa Rica	15	0	14	5	**34**
13	Stanimir Alexandrov	Bulgaria	3	25	1	3	**32**
14	Phillipe Sands	UK	1	4	25	0	**30**
15	Juan Fernández-Armesto	Spain	21	1	3	4	**29**
16	Jan Paulsson	France	13	12	2	1	**28**
16	Horacio Grigera Naón	Argentina	2	24	2	0	**28**
16	David Williams	New Zealand	10	17	0	1	**28**
17	James Crawford	Australia	12	2	10	3	**27**
18	Pierre Tercier	Switzerland	22	0	3	0	**25**
19	Toby Landau	UK	3	1	20	0	**24**
19	Vaughan Lowe	UK	13	2	9	0	**24**
19	Franklin Berman	UK	10	5	4	5	**24**

particularly representative of the rest of the world. The single arbitrator from Eastern Europe, Alexandrov, has been a resident in the USA for almost three decades—with education and employment experience from US institutions.[45] The other three are from high income Latin American states, and either live or have their professional practice based in the US or Western Europe. Most of these top 25 arbitrators also have a sizeable number of influential and prestigious presiding chair appointments. Only three are consistently appointed by the claimant (Brower, Alexandrov, and Naón) and three consistently appointed by the respondent (Stern, Thomas, and Sands). The number of total appointments of this group is also formidable. The top 25 arbitrators account for 4% of all investment arbitrators (629 in total) but are represented in just over a third of all arbitral appointments (991 of 2676) in our dataset.

We now conduct a social network analysis of this community or investment arbitrators. In Figure 2, we provide a visual representation of this network. This diagram

45 On the importance of converging institutional practices, see Paul DiMaggio and Walter Powell, 'The Iron Cage Revisited: Collective Rationality and Institutional Isomorphism in Organizational Fields', 48(2) American Sociological Review 147 (1983).

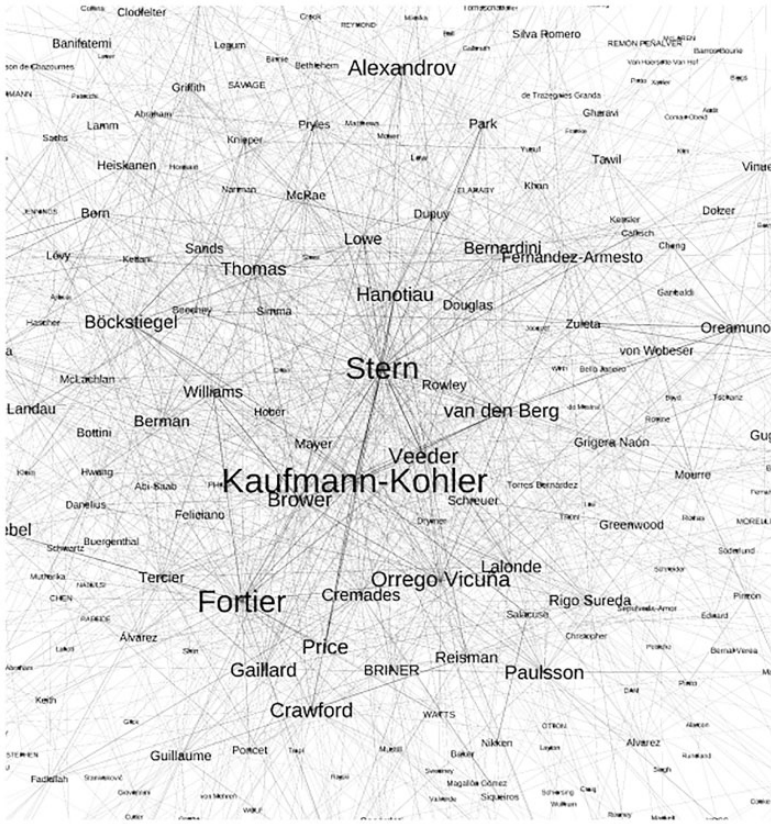

Figure 2. Mapping the international investment arbitrator network.

charts the centrality of the arbitrators according to the number, place, and weight of their edges. As foreshadowed, we have weighted arbitrators slightly differently from Puig. The relationships are weighed according to a relationship matrix where a discount is given depending on the perceived importance of the role in relation to the other nodes, role, and allegiance.

For arbitrators, this weighting is directed so that a single working relationship between two arbitrators will have two unique scores. In the case of a presiding arbitrator and a wing arbitrator, the president's relationship will be given a score of 1 while the wing arbitrators' relationship will be given a score of 0.75, reflecting the perceived discrepancy of power between the roles. These weighted and directed relationships form the basis for the two subsequent scores—Page Rank and HITS Hub.[46] While describing these scoring systems in detail is beyond the scope of this article, both are cumulative ranking systems that use every possible path in the graph to determine

46 Pooja Devil, Ashlesha Gupta and Ashutosh Dixit, 'Comparative Study of HITS and PageRank Link based Ranking Algorithms', 3(2) International Journal of Advanced Research in Computer and Communication Engineering 5749 (2014). We note that Derlén and Lindholm, above n 44 and in this volume, also favour PageRank and Hub scores.

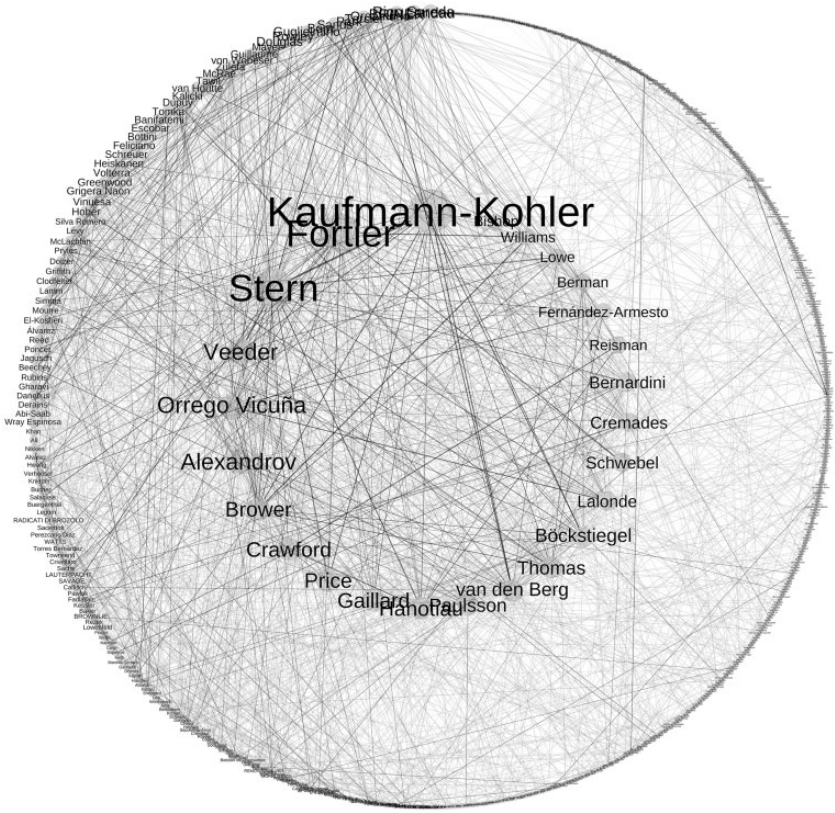

Figure 3. Mapping the international investment arbitrator network.

the relative importance of the node. The HITS Hub score expands on page rank including a measure of consensus between the nodes and ranks it according to the total accumulative value of the relationships that the node owns. The figure maps the community according to the HITS Hub score. This is because it measures the importance of the relationships, and hence the power that any given arbitrator can likely assert.

Eyeballing the map suggests an inner core of influential arbitrators followed by a second ring of arbitrators. We therefore test the presence of a strong core-periphery by presenting an alternative visualization in Figure 3. As with Figure 2, names are scaled according to their HITS Hub score. Each arbitrator is ranked counter-clockwise according to the same ranking. The inner circle compromises of the top 25 arbitrators found in Table 2. The diagram illustrates the substantial weight of relationships between the top 25 arbitrators as well as their consistent dominance of roles in comparison to the rest of the network.

A closer inspection of the figures shows why some international investment arbitrators feature prominently in the network analysis. In Table 2, we rank the top 25 arbitrators according to their spatial influence in the network. The table presents four factors for evaluating an arbitrator's importance; degrees—weighted and unweighted, Page Rank, and HITS Hub score. The table is ranked by the HITS Hub score.

Table 2. Arbitrator network rankings—centrality and influence (top 25)

Rank	Rank (Table 1)	Rank (Puig)	Arbitrator	Nationality	HITS hub	Page rank	Degrees out (Weighted)
1	2	5	Gabrielle Kaufmann-Kohler	Switzerland	1.00000	0.01300	123 (110)
2	1	1	Brigitte Stern	France	0.90342	0.02097	185 (125)
3	9	11	V.V. Veeder	UK	0.71088	0.00994	85 (76)
4	3	8	L. Yves Fortier	Canada	0.63079	0.01531	128 (108)
5	4	6	Charles Brower	USA	0.61830	0.01229	114 (78)
6	NI*	2	Francisco Orrego Vicuña	Chile	0.57162	0.01281	104 (83)
7	6	9	Albert Jan van den Berg	Netherlands	0.51763	0.01225	97 (76)
8	8	13	Bernard Hanotiau	Belgium	0.48508	0.01025	85 (68)
9	8	16	Karl-Heinz Böckstiegel	Germany	0.44687	0.01135	84 (75)
10	19	22	Vaughan Lowe	UK	0.43337	0.00750	57 (49)
11	16	15	David Williams	New Zealand	0.43253	0.00695	61 (47)
12	11	4	Marc Lalonde	Canada	0.42718	0.01011	77 (57)
13	7	17	J. Christopher Thomas	Canada	0.40380	0.01153	96 (65)
14	10	10	Piero Bernardini	Italy	0.39353	0.01027	76 (62)
15	15	18	Juan Fernández-Armesto	Spain	0.36776	0.00827	63 (60)
16	18	7	Pierre Tercier	Switzerland	0.34175	0.00725	55 (53)
17	NI	NI**	Daniel Price	USA	0.33412	0.00307	46 (33)
18	NI	NI	William Park	USA	0.32939	0.00618	47 (39)
19	19	NI	Franklin Berman	UK	0.31241	0.00605	49 (42)
20	9	3	Bernardo Cremades	Spain	0.30521	0.00982	76 (62)
21	12	14	Rodrigo Oreamuno	Costa Rica	0.30327	0.00994	74 (63)
22	NI	NI	Andrés Rigo Sureda	Spain	0.29313	0.00681	51 (50)
23	13	25	Stanimir Alexandrov	Bulgaria	0.28874	0.00826	69 (50)
24	NI	NI	Emmanuel Gaillard	France	0.28640	0.00681	56 (42)
25	16	12	Jan Paulsson	France	0.28262	0.00708	57 (47)

*NI: Not included in the list of top 25 arbitrators by number of appointments (Table 1 above)
**NI: Not included in the list of top 25 arbitrators in Puig's analysis.
Sergio Puig, 'Social Capital in the Arbitration Market', 25 European Journal of International Law 387 (2014), at 415.

Examining the results, the order changes in comparison to the number of appointments (compare columns 1 and 2 in Table 2). Some regularly-appointed arbitrators drop out of the top 25 appointment list completely (see Table 1) while others such as Stern, Brower, Thomas, Paulsson, and Cremades drop down on the rankings. The reason is clear on closer inspection. Arbitrators which predominantly represent one party in arbitration (i.e., they are primarily appointed by either the claimant or respondent) drop down the ranking. Notably, this is only partly a function of the different weightings. It also occurs because wing arbitrators tend to be further out in the network compared to those who have a more even representation in terms of appointments (i.e., those that are appointed as either presiding arbitrator, claimant-appointed arbitrator, *or* respondent-appointed arbitrator). Thus, the pattern of their connections and subsequent connections revealed that predominantly party-appointed arbitrators were not as close to the core.

For the sake of comparison, we also provide the arbitrator's rankings from Puig's analysis (based on the degrees score).[47] This shows the difference gained in adding

47 Puig, above n 9, at 415.

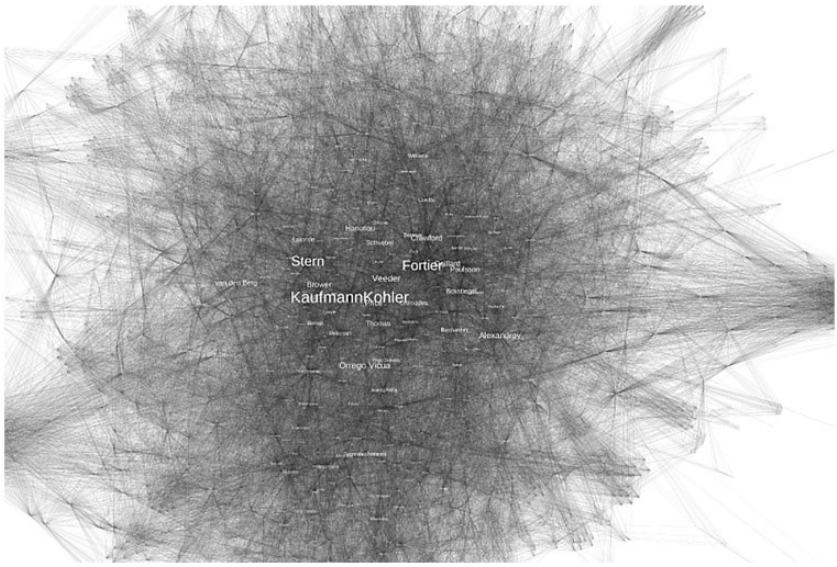

Figure 4. Mapping the full network.

non-ICSID cases and in weighing presiding and wing arbitrators differently. While our general rankings are not totally dissimilar from Puig's unweighted network analysis of ICSID cases,[48] we have uncovered some new and important arbitrators in the top 25, including Price, Park, Riga Sureda, and Gaillard. These arbitrators frequently are chosen to arbitrate in non-ICSID cases. Another interesting distinction is that some arbitrators that rank highly on Puig's scoring, drop down the rankings considerably in our index (compare columns 1 with 3 in Table 2). For example, Cremades, Paulsson, and Tercier are significantly lower in Puig's ranking when compared with ours (largely a function of taking few arbitral appointments in the past two to three years). Contrariwise, Lowe and Veeder jump up nearly a dozen places. These shifts are attributable to differentiated scoring (Lowe and Veeder primarily act as presiding arbitrators) but it is also a function of the increased number of appointments that these arbitrators have received in the past two to three years.[49]

B. Legal counsel

We now turn to the role of legal counsel in the international investment arbitration network. They represent a paradox. On one hand, they are numerous. We have identified 2699 distinct lawyers that have represented claimants and respondents: see Figure 4. On the other hand, there is a core of lawyers who dominate the caseload. Only 14% (382 lawyers) have litigated more than two cases, while only 1% (the top 25) have litigated more than 13 cases: see Table 3. A member of this top 1% of

48 Ibid.

49 Indeed, one challenge of network analysis is that it is often cross-sectional and poorly integrates change over time. See discussion in Charlotin, above n 44.

Table 3. Legal counsel—cases, nationality, and law firm (Top 25)

Rank	Counsel	Nationality	Law firm(s)	For claimant	For resp.	Total cases*
1	Stanimir Alexandrov	Bulgaria	Sidley Austin | Powell Goldstein	13	18	**31**
2	Nigel Blackaby	UK	Freshfields	26	4	30
3	Osvaldo Guglielmino	Argentina	Argentina Ministry	0	25	25
4	Emmanuel Gaillard	France	Shearman & Sterling	14	7	**21**
5	Todd Weiler	Canada	Todd Weiler	20	0	**20**
6	Angelina Abbona	Argentina	Argentina Ministry	0	19	**19**
6	Ronald Goodman	US	Foley Hoag | White & Case	3	16	**19**
7	Stephen Jagusch	New Zealand	Quinn Emanuel | Allen & Overy	12	6	**18**
7	Gabriela Álvarez-Avila	Mexico	Curtis Mallet	0	18	**18**
7	Jan Paulsson	France	Freshfields | Three Crowns | Coudert	7	11	**18**
7	Hamid Gharavi	France	Derains & Gharavi	11	7	**18**
8	Stephen Anway	US	Squire Patton Boggs | Squire Sanders	1	16	**17**
9	Rostislav Pekař	Czech	Squire Patton Boggs | Squire Sanders	2	14	**16**
9	George Kahale	US	Curtis Mallet	0	16	**16**
9	R. Doak Bishop	US	King & Spalding	16	0	**16**
9	Paolo Di Rosa	US	Arnold & Porter | Winston & Strawn	3	13	**16**
9	Robert Volterra	Canada	Latham & Watkins | Volterra Fietta	9	7	**16**
9	Jean Kalicki	US	Arnold & Porter	5	11	**16**
10	Mark Clodfelter	US	US Ministry | Foley Hoag	1	14	**15**
10	Marinn Carlson	US	Sidley Austin	5	10	**15**
11	Barry Appleton	Canada	Appleton & Associates	14	0	**14**
11	Judith Gill	UK	Allen & Overy	10	4	**14**
11	James Crawford	Australia	Matrix Chambers	8	6	**14**
11	Craig Miles	US	King & Spalding	14	0	**14**
12	Daniel Price	US	Sidley Austin | Powell Goldstein	8	5	**13**

*ICSID Annulments counted additionally

litigators has thus appeared on average in every second case in international investment arbitration (530 of 1039).

Examining this group more closely, Western nationals and law firms clearly dominate. Moreover, almost without exception, the non-Western contingent only represent their home state as in-house counsel (i.e., Argentina)[50] or only act as respondent state counsel within their home states' region (i.e., Mexico and Czech Republic).[51] Tellingly, the only two non-Western legal counsel that have represented claimant-investors in international investment arbitration cases are long-term residents of the US (Alexandrov) and France (Gharavi), with elite education from these states. Moreover, a number of top arbitrators also feature on this legal counsel list;[52] and we will return to this important revolving door phenomenon in the next section. The one (slightly) positive sign of diversity in this group concerns women. Compared to the arbitrator cluster, they are better represented with five of the top 25 being women (20%).[53] The final feature worth noting is the role of the law firms of legal counsel. Anglo-American and French laws firms dwarf the list—even for counsel that represent predominantly respondent states. Only four of the top 28 have spent some time as government-employed counsel and only one exclusively so—the last legal counsel on the list.[54]

C. Expert witnesses

Expert witnesses have not been a focus in previous studies of the international investment arbitration community.[55] However, in constructing the PITAD database, we were continually surprised by the regular appearance of familiar names amongst the expert witnesses. Moreover, some of this expert advice addressed rather pedestrian points in international investment law. On its face, it was not why such caliber of expert testimony was required. Our suspicion was that parties were also using leading figures (often other arbitrators) as part of a symbolic strategy, something that Dezalay and Garth also found in their interviews. To be sure, expert witnesses possess more than symbolic power, particularly if they are the only expert witness on a particular point or they are providing valuations for the damages/quantum phase of the arbitration. The material and legal power of these expert witnesses in the system should not be undervalued.

Table 4 ranks the top 25 expert witnesses according to their number of appearances in international investment arbitration cases. It is notable that only five expert witnesses have appeared more than five times and together account for 82 cases (11% of all known expert witness appearances and more than half of the top 25). They appear to play an almost orator-like role in the system. Two of these experts are quantum/industry experts (Kaczmarek and Abdala); and three are international law academics (but also arbitrators: Reisman, Dolzer, and Schreuer). Of these, three have appeared for both claimants and respondents on a relatively regular basis.

50 Guglielmino and Abbona.

51 Pekař and Álvarez-Avila.

52 Crawford, Alexandrov, Paulsson, Gaillard, Gharavi, Volterra, Price, and Kalicki.

53 Abbona, Álvarez-Avila, Kalicki, Carlson, and Gill.

54 Pedroza.

55 Christopher Drahozal makes a similar observation in 'Empirical Findings on International Arbitration: An Overview', in Thomas Schultz and Federico Ortino (eds), *Oxford Handbook on International Arbitration* (Oxford: Oxford University Press, 2017), forthcoming.

Table 4. Expert witnesses—cases, nationality, and roles (top 25)

Rank	Expert	Nationality	Role	For claimant	For resp.	Total cases
1	Brent Kaczmarek	US	Quantum/Industry Expert	**17**	**11**	**28**
2	Rudolf Dolzer	Germany	International Law Expert	13	4	**17**
3	W. Michael Reisman	US	International Law Expert	9	7	**16**
4	Christoph Schreuer	Austria	International Law Expert	11	2	**13**
5	Manuel Abdala	US	Quantum/Industry Expert	5	1	**6**
6	Anne-Marie Slaughter	US	International Law Expert	0	5	**5**
6	Ismael Mata	Argentina	National Law Expert	0	5	**5**
6	James Crawford	Australia	International Law Expert	1	4	**5**
6	James Dow	US	Quantum/Industry Expert	0	5	**5**
6	Joseph Kalt	US	Quantum/Industry Expert	4	1	**5**
6	Nico Schrijver	Netherlands	International Law Expert	2	3	**5**
6	Pablo Spiller	US	Quantum/Industry Expert	4	1	**5**
13	Alberto Bianchi	Argentina	Domestic Law Expert	4	0	**4**
13	Jan Paulsson	France	International Law Expert	3	1	**4**
13	Juan Andrade	Ecuador	National Law Expert	0	4	**4**
13	Lucian Mihai	Romania	National Law Expert	1	3	**4**
13	William Burke-White	US	International Law Expert	0	4	**4**
18	Adnan Amkhan	UK	International Law Expert	2	1	**3**
18	Benedict Kingsbury	Australia	International Law Expert	0	3	**3**
18	David Caron	US	International Law Expert	3	0	**3**
18	Hernán Pérez Loose	Chile	National Law Expert	3	0	**3**
18	José Alvarez	US	International Law Expert	3	0	**3**
18	Kenneth Vandevelde	US	International Law Expert	2	1	**3**
18	Robert Howse	Canada	International Law Expert	3	0	**3**
18	Thomas Waelde	Germany	International Law Expert	2	1	**3**

Moving to the top 25, we see a pattern of almost exclusively Western expert witnesses and only one woman (Slaughter). Given the number of female professors in international economic law and public international law, this low usage of female international law expert witnesses is quite striking. Although, it may not be surprising given numerous psychological studies concerning gender cognitive bias in assessing the reliability of witnesses.[56] The same could be said of the absence of non-Western international law professors. Indeed, the regular selection by legal counsel and law firms of Western male expert witnesses implicitly suggests what international investment arbitrators view as credible. It also may also give credence to the hypothesis (and indirect evidence) of a possible cognitive arbitral bias against less developed states in international investment arbitration.[57]

56 See e.g., Blake McKimmie et al., 'Jurors Responses to Expert Witness Testimony: The Effects of Gender Stereotypes', 7(2) Group Processes and Intergroup Relations 131 (2004).

57 See Behn, Berge and Langford, above n 30.

Table 5. Tribunal secretaries—cases, nationality, and institution (top 25)

Rank	Secretary name	Nationality	Institution	Total cases
1	Gonzalo Flores	Chile	ICSID	**38**
2	Martina Polasek	Czech	ICSID	**30**
3	Eloïse Obadia	France	ICSID	**28**
4	Aurélia Antonietti	France	ICSID	**25**
5	Ucheora Onwuamaegbu	Nigeria	ICSID	**24**
6	Natalí Sequeira	Costa Rica	ICSID	**21**
7	Claudia Frutos-Peterson	Mexico	ICSID	**20**
8	Gabriela Alvarez-Avila	Mexico	ICSID	**19**
9	Mercedes Cordido-Freytes de Kurowski	Venezuela	ICSID	**16**
10	Aïssatou Diop	Senegal	ICSID	**15**
10	Anneliese Fleckenstein	Venezuela	ICSID	**15**
12	Marco Monañés-Rumayor	Mexico	ICSID	**13**
12	Milanka Kostadinova	Bulgaria	ICSID	**13**
14	Paul-Jean Le Cannu	France	ICSID/PCA	**12**
15	Alicia Martín Blanco	Spain	ICSID	**11**
16	Frauke Nitschke	Germany	ICSID	**10**
16	Janet Whittaker	UK	ICSID	**10**
18	Tomás Solís	El Salvador	ICSID	**9**
18	Alejandro Escobar	Chile	ICSID	**9**
18	Ann Catherine Kettlewell	Mexico	ICSID	**9**
21	Margrete Stevens	Denmark	ICSID	**8**
22	Martin Doe	Canada	PCA	**7**
22	Mairée Uran-Bidegain	Colombia	ICSID	**7**
24	Geraldine Fischer	US	ICSID	**6**
24	Katia Yannaca-Small	Greece	ICSID	**6**

D. Tribunal secretaries

Finally, we include tribunal secretaries. While often invisible to the outside world, the role of tribunal secretaries in shaping and influencing international litigation has gained increased scholarly and political attention. While earlier studies indicated that their role was largely confined to the non-substantive parts of award drafting,[58] recent accounts suggest that tribunal secretaries may be more influential.[59]

58 Joint Report of the International Commercial Disputes Committee and the Committee on Arbitration of the New York City Bar Association, 'Secretaries to International Arbitral Tribunals', 17 American Review of International Arbitration 575 (2006), at 585.

59 Taylor St. John, 'Tribunal Secretaries', *PluriCourts Investment Arbitrator Behavior Workshop*, Oslo, 25 May 2016. See also in relation to the WTO: Cossette Creamer, 'Between the Letter of the Law and the Demands of Politics: The Judicial Balancing of Trade Authority within the WTO', Working Paper (2015), available at: http://scholar.harvard.edu/cosettecreamer/publications/between-letter-law-and-demands-politics-balancing-authority-wto-dispute (visited 15 March 2017).

Table 5 ranks the number of tribunal secretaries—in the 568 cases in which we have information. Notably, the top 25 are responsible for administering 68% of these cases. Interestingly, it is only at this point that we see any signs of gender or regional diversity—a majority are women and slightly more than half come from non-Western states.[60]

IV. WHO ARE THE POWER BROKERS?

The previous section mapped the different actors in the system. We now draw this mapping analysis together to analyze the investment arbitration community as a whole, and focus on the issue of power. As discussed in the introduction, we seek to measure power in both quantitative and qualitative terms. *Quantitatively*, we count the number of cases and connections as a measure of institutional power. Thus, individuals who are regularly engaged in international investment arbitration have the opportunity to exercise significant material influence in the system. Moreover, high numbers of appointments in any role usually increasing the chances of future appointment—a sign of symbolic power.[61]

Qualitatively, we are concerned with shading the degree of material and symbolic power that comes with a particular position in arbitration. Thus we further expand our relationship matrix to facilitate the perceived variances of influence between the different roles and the parties they represent. This weighting attempts to normalize and avoid overemphasis of lesser roles in the system. Therefore, we rank arbitrators higher than counsel and counsel higher than tribunal secretaries and witnesses. In addition, we assign further weights for distance between actors, according to the structure of arbitration.

These weightings are of course somewhat arbitrary but we describe and justify them as follows. First, as discussed above, presiding arbitrators are given a weighting of 1 and wing arbitrators (0.75). Second, we weight counsel at (0.5) but introduce also a *distance* weighting. We weight the relationship between a claimant counsel and claimant-appointed wing arbitrator at (1.25); yet for the same claimant counsel and the respondent arbitrator we weight the relationship at (0.75). The former is done because the relationship is close (and one is involved in nominating the other), while the latter is done because the two actors are much further apart. The same logic is applied in reverse to a respondent counsel. Third, we weight tribunal secretaries at (0.375) and witnesses at (0.25). We also apply distance weightings to the expert witnesses. Thus, the relationship between a claimant witness and claimant counsel is weighted at (1.25), but (0.75) for a claimant witness and respondent counsel.

Based on this methodology, we can identify the power brokers in the system. In Table 6, we provide a new and alternative picture of the most powerful actors. For certain actors, there is a clear jump up the ladder. Arbitrators that have worn multiple hats or individuals with other hats constitute this surging group. They have served as

60 It may be that there is a selection bias. Most of the publicly available information about tribunal secretaries comes from ICSID cases, which are hosted by the World Bank. This institution has a partial commitment to regional diversity as an intergovernmental organization. However, we note that women appeared to be well-represented in many arbitration centers along with increasingly a greater number of non-Western nationals. But this is a subject for further investigation.

61 See extended discussion in St. John et al., above n 12.

Table 6. All actors—network rankings (top 25)

Rank	Name	Nationality	Arb.	Counsel	Exp.	Sec.	HITS hub	Page rank	Degrees out (weighted)
1	Gabrielle Kaufmann-Kohler	Switzerland	56	0	0	0	1.00000	0.00373	753 (641)
2	L. Yves Fortier	Canada	53	0	0	0	0.87664	0.00423	761 (655)
3	Brigitte Stern	France	88	0	0	0	0.87278	0.00622	1067 (727)
4	V.V. Veeder	UK	37	2	0	0	0.55004	0.00298	493 (419)
5	Francisco Orrego Vicuña	Chile	49	0	0	0	0.54280	0.00322	542 (428)
6	Stanimir Alexandrov	Bulgaria	32	31	0	0	0.52113	0.00411	781 (424)
7	Charles Brower	US	52	0	0	0	0.48111	0.00314	582 (386)
8	James Crawford	Australia	27	14	5	0	0.48067	0.00394	697 (408)
9	Daniel Price	US	18	13	0	0	0.48031	0.00190	470 (260)
10	Emmanuel Gaillard	France	23	21	0	0	0.47015	0.00344	676 (370)
11	Bernard Hanotiau	Belgium	40	3	0	0	0.44905	0.00304	497 (394)
12	Jan Paulsson	France	28	18	4	0	0.4454	0.00378	662 (363)
13	Albert Jan van den Berg	Netherlands	44	0	0	0	0.44069	0.00324	533 (405)
14	J. Christopher Thomas	Canada	43	3	0	0	0.42114	0.00299	520 (340)
15	Karl-Heinz Böckstiegel	Germany	40	0	0	0	0.41590	0.00273	400 (359)
16	Marc Lalonde	Canada	35	0	0	0	0.39232	0.00258	452 (330)
17	Stephen Schwebel	US	18	9	0	0	0.38389	0.00202	396 (232)
18	Bernardo Cremades	Spain	37	2	0	0	0.37650	0.00249	400 (303)
19	Piero Bernardini	Italy	36	1	0	0	0.37495	0.00234	357 (304)
20	Gonzalo Flores	Chile	0	0	0	38	0.34236	0.00334	662 (251)
21	W. Michael Reisman	US	19	1	16	0	0.33781	0.00298	607 (253)
22	Juan Fernández-Armesto	Spain	29	0	0	0	0.32955	0.00220	325 (308)
23	Franklin Berman	UK	24	0	0	0	0.32912	0.00164	290 (250)
24	Vaughan Lowe	UK	24	1	1	0	0.32573	0.00206	339 (271)
25	Gabriela Álvarez-Avila	Mexico	0	18	0	19	0.32565	0.00330	610 (252)

both legal counsel and arbitrator (e.g., Alexandrov, Crawford, Price, Paulsson, Gilliard, and Schwebel); both expert witness and arbitrator (e.g., Reisman); or frequently as tribunal secretaries (e.g., Alvarez-Avila and Flores).

The existence of a differently configured group of arbitrators allows us also to revisit existing explanatory theories on arbitrator selection. Importantly, our findings highlight the often implicit but under-emphasized role of counsel and others in those explanations. As noted earlier, Ginsburg's theory emphasized *strategic* action and the use of barriers to keep out new entrants. However, it was Roger who noted the role of information asymmetries as a key strategic entry barrier. Information asymmetries are typical of ad hoc systems and benefit all insiders, and she noted the role of counsel and tribunal secretaries.[62] Indeed, one arbitration lawyer recently boasted that their competitive advantage lies in what is 'not written down'.[63] Thus, the existence of a core group of counsel, which includes a significant number that also act as arbitratators, may enhance the maintenance of those information asymmetries.

62 Catherine Rogers, 'The Vocation of the International Arbitrator', 20 American University International Law Review 957 (2004), at 968–9.

63 GAR, *Global Arbitration Review 100: The Guide to Specialist Arbitration Firms 2012* (Geneva: GAR, 2012), at 3, cited in Eberhardt and Olivet, above n 24.

Moreover, Rogers highlighted two structural factors that shape the imperfect competitive nature of the arbitration market. These are the (i) role of insiders in making arbitration appointments[64] and (ii) lack of regulation (with an absence of legal/judicial oversight and little room for reputational sanction).[65] The existence of a strong core group beyond pure arbitrators accentuates potentially both aspects. First, legal counsel and tribunal secretaries are pivotal in making or influencing appointments. They are the clear power brokers in the first phase of an arbitration. Indeed, we might speculate that a revolving door increases incentives for a special form of oligopolistic behavior: making appointments in expectation of a return favor. In future research, we will test the likelihood that counsel nominate arbitrators that may be more likely to appoint them when these arbitrators act as counsel: a reciprocal revolving door. Second, the closeness and ties in the community may not incentivize public reputational sanctions. The power that insider legal counsel hold in appointments may strongly disincentivize critique. In other words, those who are too critical can be quickly subject to exclusion or relegation to a wing arbitrator role.

Thus, by foregrounding the role of the broader arbitration community we can enrich existing theories about the arbitration market. It especially allows us to identify the deeply embedded power brokers who may determine the ability of outsiders to enter and insiders to remain.

V. DOUBLE HATTING

We now turn to the question of whether there is double hatting—the simultaneous fulfillment of two roles, especially arbitrator and counsel. The issue of whether it is acceptable for an individual to sit simultaneously as an arbitrator in one case and act as legal counsel in another case has been the subject of a long-running and heated debate within the international commercial arbitration community;[66] and it moved to center stage with the rise of treaty-based arbitration in the 2000s. Critics of the international investment arbitration regime have continually pointed to the legitimacy concerns that arise when a system of adjudication permits adjudicators to act as arbitrator in one case and as legal counsel in another. One of the interesting points about the legitimacy of this double hatting issue in international investment arbitration is that it is not only subject to criticism from the outside, but is a practice where insiders in the community have remained actively split over the past decade.

Leading the charge against the practice of double hatting from the inside is Sands, who over the past decade has repeatedly written and lectured about the legitimacy concerns tied to double hatting in international arbitration.[67] For Sands, the conflict issues that can arise are relatively clear:

64 'Arbitrator selection is often in the hands of members of the same "club," who are either operating in the institutions or already appointed as party-appointed arbitrators.' Rogers, above n 23, at 12.

65 Ibid, at 970–75.

66 For a summary of the discourse on this issue, see Sebastian Perry, 'Arbitrator and Counsel: the Double-Hat Syndrome', Global Arbitration Review (15 March 2012).

67 See e.g., Luke Eric Peterson, 'Arbitrator Decries "Revolving Door" Roles of Lawyers in Investment Treaty Arbitration', Investment Arbitration Reporter (25 February 2010).

> it is possible to recognise the difficulty that may arise if a lawyer spends a morning drafting an arbitral award that addresses a contentious legal issue, and then in the afternoon as counsel in a different case drafts a pleading making arguments on the same legal issue. Can that lawyer, while acting as arbitrator, cut herself off entirely from her simultaneous role as counsel? The issue is not whether she thinks it can be done, but whether a reasonable observer would so conclude. Speaking for myself, I find it difficult to imagine that I could do so without, in some way, potentially being seen to run the risk of allowing myself to be influenced, however subconsciously.[68]

While acknowledging that many of his colleagues believe that they can effectively separate the different roles that they may play in different arbitrations, Sands articulates that this practice nonetheless is not good for international arbitration. It can never fully shield itself against questions of perceived bias. In terms of legitimacy for the system, it is a practice that should be avoided.[69] Likewise, Judge Thomas Buergenthal of the International Court of Justice, in a 2006 lecture, summarized the issues that can arise when arbitrators act simultaneously or sequentially as counsel:

> I have long believed that the practice of allowing arbitrators to serve as counsel, and counsel to serve as arbitrators, raises due process of law issues. In my view, arbitrators and counsel should be required to decide to be one or the other, and be held to the choice they have made, at least for a specific period of time. That is necessary, in my opinion, in order to ensure that an arbitrator will not be tempted, consciously or unconsciously, to seek to obtain a result in an arbitral decision that might advance the interests of a client in a case he or she is handling as counsel. ICSID is particularly vulnerable to this problem because the interpretation and application of the same or similar legal instruments—the Bilateral Investment Treaties, for example—are regularly at issue in different cases before it [. . .]. These revolving-door problems—counsel selecting an arbitrator who, the next time around when the arbitrator is counsel, selects the previous counsel as arbitrator—should be avoided. *Manus manum lavat*, in other words—you scratch my back and I'll scratch yours, does not advance the rule of law.[70]

While Sands, Buergenthal and others have highlighted why the practice of double hatting is ethically undesirable for arbitrators and legal counsel to practice, it is not uncommon to hear arguments that support the practice, and these arguments draw principally upon structural and economic claims. Firstly, they hold that there is a relatively small pool of arbitrators that can sit in these types of arbitrations and that limiting

68 Sands, above n 20, at 31–32.

69 Some arbitrators have clarified their role in similar terms although on a more individual basis: 'I don't feel the need to stand on the rooftops and preach about my own practice. I have not appeared as counsel in investor-state arbitration or indeed inter-state arbitration . . .. I find it more comfortable to confine my arbitration role to being an arbitrator or member of an ICSID annulment committee.' See Interview with Sir Frank Berman in Sebastian Perry, 'To Be Frank', Global Arbitration Review (21 February 2013).

70 Thomas Buergenthal, 'The Proliferation of Disputes, Dispute Settlement Procedures and Respect for the Rule of Law', 3(5) Transnational Dispute Management (2006).

qualified individuals from sitting as arbitrator due to work as legal counsel would undermine the quality and rigor of the adjudicators acting in the current system.[71] Secondly, they claim that that there is an economic argument for not limiting the practice of double hatting: many legal counsel seeking to become full time arbitrators cannot justify giving up their counsel practice when there is no guarantee that arbitral appointments will come in the future.[72] Therefore, under this scenario, it is inevitable that some double hatting will occur during the transitionary period between the time an individual acts primarily as counsel to the time that they become a full-time arbitrator.

Empirically speaking, the first of these arguments would only hold for the 1990s. Since then, the potential pool of investment arbitrators has expanded significantly. And while there may be a shortage of qualified arbitrators in other fields such as international commercial arbitration,[73] investment arbitration appointments are viewed as highly prestigious.[74] Investment arbitration is a buyer's market not a seller's market. It is also not clear how far the second argument extends temporally. Once counsel has obtained their first or even second arbitrator appointment, they could desist from accepting future counsel appointments as they ease into a new role.

Ethically speaking, however, both of these justifications for the practice are rather unpersuasive, given that, at a minimum, the practice of double hatting can reasonably give raise to questions of potential or perceived bias or conflict. And these appearances of bias or conflict that can arise in this context are not merely hypothetical. There are a number of examples where the double hatting problem has become the subject of formal challenges.

This classic example involves French arbitrator Gaillard and an international investment arbitration case (*Telkom Malaysia v Ghana*[75]), where he was acting as the claimant-appointed arbitrator at the same time that he was also acting as claimant's counsel in an ICSID annulment proceeding in a different case (*RFCC v Morocco*[76]). Even though Gaillard disclosed that he was acting as counsel in the ICSID annulment case, the respondent state (Ghana) in the arbitration where he was acting as arbitrator lodged multiple challenges against him in the Hague District Court[77] (Netherlands was the seat of the arbitration) alleging that his role as arbitrator was incompatible with his simultaneous role as counsel in the ICSID annulment case, especially due to the fact that both cases involved similar legal issues and that Ghana

71 On this point, Barton Legum, a prominent counsel and arbitrator based in Paris, has noted that: 'the pool of qualified arbitrators is already "vanishingly small" and that it would be problematic for the users of the arbitration system if efforts were made to exclude all practicing BIT counsel from this pool.' Peterson, above n 65.

72 'I have a lot of sympathy for those who say you need arbitrators with skill and experience. How on earth does somebody get established as an arbitrator if he or she never gets a chance to start? So I think inevitably there has to be some overlap. But there may be a stage in one's career when it becomes sensible to do one thing or the other.' Ibid, at 2.

73 Ibid, at 2.

74 Franck, above n 9.

75 *Telekom Malaysia Berhad v The Republic of Ghana*, PCA Case No. 2003-03, UNCITRAL, Settled.

76 *Consortium R.F.C.C. v Kingdom of Morocco*, ICSID Case No. ARB/00/6, Decision on Annulment (18 January 2006).

77 *Republic of Ghana v Telekom Malaysia Berhad*, Hague District Court, Challenge No. 13/2004, Petition No. HA/RK 2004.667, 18 October 2004; Challenge 17/2004, Petition No. HA/RK/2004/778, 5 November 2004.

was relying on the case of *RFCC v Morocco* in its submissions. Ghana argued *inter alia*, that Gaillard, 'who in his capacity of counsel opposes a specific notion or approach, cannot be unbiased in his judgment of that same notion or approach in a case in which he acts as arbitrator'.[78] The Hague District Court ordered Gaillard to choose whether to continue as arbitrator or counsel, but not both. Gaillard subsequently resigned from this position as counsel in the ICSID annulment proceedings.

Even if Gaillard was able to separate his different roles in different cases, this example highlights, at a minimum, that an appearance of bias or conflict was reasonable, even if there was no showing of actual bias. Ultimately, this challenge to Gaillard was resolved through his resignation in one of his roles; however, it is important to note that neither the various arbitration rules (i.e., ICSID, SCC,[79] ICC,[80] and UNCITRAL) nor the *IBA Guidelines on Conflicts of Interest in International Arbitration* explicitly prohibit this practice.[81] While the *IBA Guidelines* do not provide bright line rules preventing arbitrators to act simultaneously as counsel, the *IBA Guidelines* are clear on the arbitrator's role in cases where justifiable doubts arise in regard to the arbitrator's independence or impartiality. The *IBA Guidelines* on issues of conflict of interest states:

> (a) An arbitrator shall decline to accept an appointment or, if the arbitration has already been commenced, refuse to continue to act as an arbitrator, if he or she has any doubt as to his or her ability to be impartial or independent; (b) The same principle applies if facts or circumstances exist, or have arisen since the appointment, which, from the point of view of a reasonable third person having knowledge of the relevant facts and circumstances, would give rise to justifiable doubts as to the arbitrator's impartiality or independence [. . .]; (c) Doubts are justifiable if a reasonable third person, having knowledge of the relevant facts and circumstances, would reach the conclusion that there is a likelihood that the arbitrator may be influenced by factors other than the merits of the case as presented by the parties in reaching his or her decision.[82]

In cases where an arbitrator is acting simultaneously in another case as counsel, there are situations—as highlighted in the above example—where an appearance of bias or conflict arises to the degree where a reasonable third person would have justifiable doubts as to the arbitrator's impartiality or independence. Yet, the IBA Guidelines are just that: guidelines. They do not create clear legal obligations on arbitrators that can be sanctioned. As a result, the international arbitration community must rely to a degree on 'self-regulation' or 'self-policing' if the practice of double hatting is to be minimized in the short-term.

Nonetheless, our concern is not to resolve this debate but rather assess empirically the extent to which double hatting actually occurs in international investment arbitration; and to propose some ways in which the practice could be minimized. In

78 Ibid, Challenge No. 13/2004, Petition No. HA/RK 2004.667, p. 3.
79 Stockholm Chamber of Commerce.
80 International Chamber of Commerce.
81 *IBA Guidelines on Conflicts of Interest in International Arbitration*, Adopted by resolution of the IBA Council on Thursday 23 October 2014.
82 Ibid, Part I, Article 2.

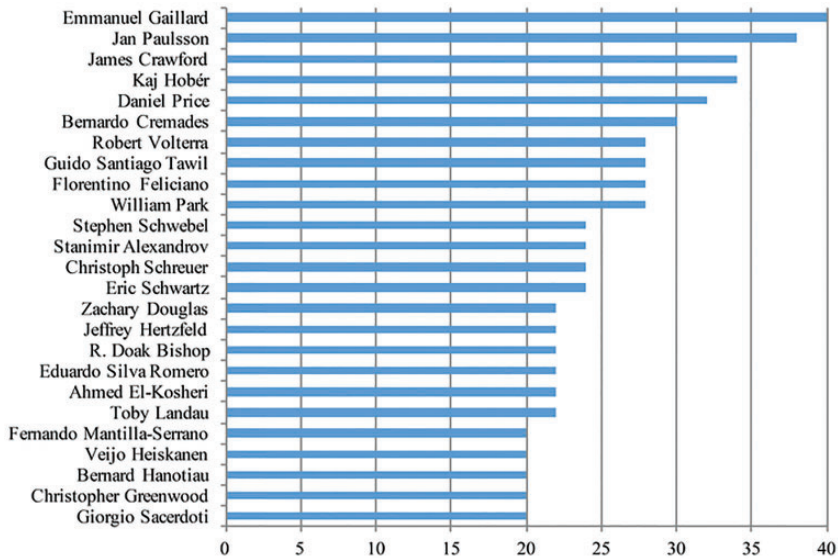

Figure 5. The double hatting index (top 25).

determining the existence of double hatting, we have developed a customized algorithm. Through a multi-factor calculation, we determine an all-time score for each individual and an annual score.

The double hatting index is calculated as follows. If a person in a given year is involved only as either arbitrator or legal counsel, i.e. is wearing only 'one hat', the individual is not assigned any points. If, however, she or he is involved with a minimum of two investment arbitration cases in a minimum of two different roles, then a 'yearly score' of (2) is assigned to that individual for a given year. The score does not attempt to describe the intensity of double hatting within a calendar year, and hence the maximum score an individual can receive for a year is (2). Cases are included in the evaluation from their constitution date and until they are either discontinued, settled or finally resolved through a decision in the form of an award. Cases that are pending as of 1 January 2017 have a concluding date as of 1 January 2017 for the purposes of our analysis. Our double hatting index is a somewhat conservative measure. It does not take into account potentially multiple conflicts of interests (due to appointments in many cases).

Figure 5 lists the top 25 according to those criteria (the full list is set out in Annex I). The top four places go to actors that we have already identified as power brokers in the international investment arbitration community. These are Gaillard, Paulsson, Crawford, and Hobér. This group all has scores over 30, which means considerable double hatting over a long period of time. However, there is a considerable group hot on their heels with 20 arbitrators with scores over 20. Some of these are prominent arbitrators but many also represent a new generation of actors that may be transitioning to full time arbitrator roles (i.e., Silva Romero, Bishop, Heiskanen, and Douglas). It is also interesting to note that those arbitrators which have made

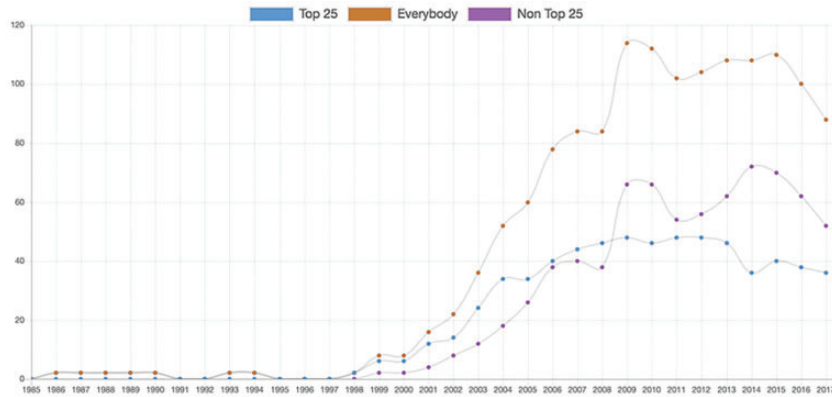

Figure 6. Double hatting over time.

clear statements on the problem of double hatting (e.g., Sands and Reisman) have very low double hatting scores despite being central figures in the network. (see Annex I)

However, it is not uncommon for the international investment arbitration community to claim that the problem of double hatting has been decreasing over time. Our index above is ahistorical and measures cross-sectionally double hatting. Thus, in Figure 6, we have calculated the double hatting index over time for the top 25 arbitrators and for all arbitrators.

The yearly results in Figure 6 suggest that there has not been a significant decrease (or increase) over time. Instead, the phenomenon for the top 25 double hatters appears to have been relatively stable since 2005—hovering between scores of 35 and 50 with only a slight decline over the past decade. It is much less stable for other individuals with a large rise up to 2014 and then a strong fall. Thus, it seems too early to conclude that there has been a dramatic change in the practice. There appears to be a select group of arbitrators that frequently double hat as legal counsel.

In order to make this continuous practice of the top 25 double hatters clear on an individual basis, we have tracked each year of their double hatting (Table 7). What is particularly notable is that those who have ceased double hatting in the last three to four years have largely ceased taking cases new cases as either arbitrator or counsel as they reach retirement age (i.e., Cremades, Schwebel, El-Kosheri, and Hertzfeld). However, in some other cases, the lack of double hatting in the past few years is probably more likely the result of: having a sufficiently large caseload as arbitrator as to preclude the time or economic necessity to act as counsel simultaneously (i.e., Hanotiau), or being appointed as judge to the International Court of Justice (i.e., Greenwood and Crawford), which restricts counsel work during the time that the individual is on the bench. Therefore, it does not appear that the individuals ceasing to double hat over the past few years are making this choice as a response to the ethical or conflict issues that have arisen in the discourse critiquing the practice.

Table 7. Double hatting by year (top 25)

Name/Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Emmanuel Gaillard	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jan Paulsson		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
James Crawford				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Kaj Hobér		X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X
Daniel Price				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Bernardo Cremades				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Robert Volterra							X	X	X	X	X	X	X	X	X	X	X	X	X	X
Guido Santiago Tawil							X	X	X	X	X	X	X	X	X	X	X	X	X	X
Florentino Feliciano							X	X	X	X	X	X	X	X	X	X	X	X	X	X
William Park							X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stephen Schwebel					X	X	X	X	X	X	X	X	X	X	X	X				
Stanimir Alexandrov									X	X	X	X	X	X	X	X	X	X	X	X
Christoph Schreuer									X	X	X	X	X	X	X	X	X	X	X	X
Eric Schwartz						X	X	X	X			X	X	X	X	X		X	X	X
Zachary Douglas										X	X	X	X	X	X	X	X	X	X	X
Jeffrey Hertzfeld						X	X	X	X	X	X	X	X	X	X	X				
R. Doak Bishop										X	X	X	X	X	X	X	X	X	X	X
Eduardo Silva Romero										X	X	X	X	X	X	X	X	X	X	X
Ahmed El-Kosheri						X	X	X	X	X	X	X	X	X	X	X				
Toby Landau										X	X	X	X	X	X	X	X	X	X	X
Fernando Mantilla-Serrano									X	X	X	X		X	X	X		X	X	X
Veijo Heiskanen											X	X	X	X	X	X	X	X	X	X
Bernard Hanotiau						X	X	X	X	X	X	X	X	X	X					
Christopher Greenwood							X	X	X	X	X	X	X	X	X	X				
Giorgio Sacerdoti						X	X	X	X						X	X	X	X	X	X

VI. CONCLUSIONS

The purpose of this article was to present a preliminary assessment of the complete network of actors in the international investment arbitration community to date. Instead of focusing on one group or type of actors within the regime, we have sought to provide a comprehensive map of all relevant actors and their roles in order to identify those actors which move between different roles and even wear multiple hats simultaneously (double hatting).

What we find is that the 1000-plus international investment arbitration cases to date have involved almost 4000 known individuals and that within this select group of individuals there is a prominent core that is both highly influential and powerful within the system. Our social network analysis suggests a deep set of 'power brokers' across the field, as those passing regularly through the revolving door score quite highly on our measures of power. This suggests that an analysis of power cannot be constrained to the arbitral role. As we have highlighted, the key explanatory theories of the uncompetitive nature of the arbitration markets implicitly or explicitly take into account this structural feature.

In terms of double hatting, we find that the practice continues to exist. In reality, it is a very small group but it is constituted by highly influential and well-known individuals. In other words, double hatting is not a common or widespread practice across the entire network of cases (i.e., breadth), it is practiced so consistently by a highly visible and powerful core of some of the most influential actors in the system (i.e., depth). Given that critiques of double hatting focus on the *perceived* bias and lack of impartiality, independence and legitimacy that such a practice can have on the reasonable outside observer, its prevalence amongst influential actors is questionable even if there is a debate on its actual effects on independence.

Turning to reform, if about 10 to 15 individuals agreed to stop double hatting, it is highly probable that the major critiques against its practice would evaporate. While it would be preferable for the legitimacy of the system for top double hatters to self-regulate in this manner, there are potential rule changes that could mandate the termination of this practice. One way would be to include a double hatting ban in new IIAs that have been signed (as for e.g. in the recent CETA[83]) or through a reform or modification of the institutional rules governing the vast majority of these arbitrations.[84]

83 Article 8.30(1) of the *Canada-EU Comprehensive Economic and Trade Agreement* stipulates that members of the Tribunal: '. . . shall be independent . . . In addition, upon appointment, they shall refrain from acting as counsel or as party-appointed expert or witness in any pending or new investment dispute under this or any other international agreement.'

84 For a detailed assessment of the rules governing international investment arbitration and their relation to double hatting, see Nathalie Bernasconi-Osterwalder, Lise Johnson and Fiona Marshall, *Arbitrator Independence and Impartiality: Examining the Dual Role of Arbitrator and Counsel* (Winnipeg: IISD, 2010).