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# Essays on Economics of Litigation: an Application to Investor-State Disputes

Duy Vu

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# THÈSE DE DOCTORAT

## Essais en Économie du Litige : Une Application aux Différends entre Investisseurs et États

**Duy VU**

Groupe de Recherche en Droit, Économie et Gestion

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d'Azur**

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# Essais en Économie du Litige : Une Application aux Différends entre Investisseurs et États

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# Essays on Economics of Litigation: An Application to Investor-State Disputes

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## Abstract

International investment treaties often allow the foreign investor to sue the host country before international arbitration in case of breaches of treaty provisions. The number of investor-state disputes is growing so rapidly that some countries expressed their discomfort with the current international investment law regime. The first chapter gives readers a comprehensive view on the effectiveness and spillover effect of international investment arbitration. Based on a vast interdisciplinary literature, we reexamine recent criticisms and identify the root of the crisis faced by international arbitration. We conclude that it is possible for countries to adapt the current regime of international law to new situations without wholesale exit. The second chapter investigates the early settlement of investor-state disputes. Drawing on the rich economic literature and a new dataset related to treaty-based disputes, we find that the host state's experience, the case prospect, the nature of the regulatory measures, the identity of investors and Dutch investment treaties have significant impacts on the probability of early settlement. The third chapter focuses on an institutional dimension of arbitration: the effectiveness of ICSID in solving disputes. The time to resolution and the quality of the final judgment which is measured by the requirement of follow-on proceedings are used as performance indicators. We highlight how arbitrators' biographical and professional characteristics can impact the ICSID effectiveness.

**Keywords:** International investment arbitration, investor-state disputes, foreign investment, economic analysis

## Essais en Économie du Litige : Une Application aux Différends entre Investisseurs et États

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### Résumé

Les traités internationaux d'investissement permettent souvent à l'investisseur étranger de poursuivre le pays d'accueil devant un tribunal d'arbitrage international en cas de violation des dispositions du traité. Le nombre de différends entre investisseurs et États augmente si rapidement que certains pays expriment leur malaise à l'égard du régime actuel du droit international de l'investissement. Le premier chapitre donne aux lecteurs une vue générale sur l'efficacité et les effets de spillover de l'arbitrage international en matière d'investissement. En se basant sur une vaste littérature interdisciplinaire, nous réexaminons les critiques récentes et identifions la cause sous-jacente de la crise relative à l'arbitrage international. Nous concluons qu'il est possible pour les pays d'adapter le régime actuel du droit international à de nouvelles situations plutôt que de le quitter. Le deuxième chapitre étudie le règlement amiable des différends entre investisseurs et États. En nous fondant sur la riche littérature économique et sur une nouvelle base de données de différends relatifs à la violation des traités, nous constatons que l'expérience de l'État hôte, les perspectives du différend, la nature des mesures réglementaires, l'identité des investisseurs et les traités d'investissement néerlandais influencent significativement la probabilité d'un règlement rapide du différend. Le troisième chapitre se concentre sur une dimension institutionnelle de l'arbitrage : l'efficacité du CIRDI dans la résolution des différends. Le délai de résolution et la qualité du jugement final, représentée par la probabilité d'avoir des recours post-sentence, sont utilisés comme indicateurs de l'efficacité. Nous soulignons comment les caractéristiques biographiques et professionnelles des arbitres affectent l'efficacité du CIRDI.

**Mots clés** : Arbitrage international d'investissement, différends investisseur-État, investissement étranger, analyse économique

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# List of Abbreviations

<i>ASEAN</i>	Association of South East Asian Nations
<i>ANASE</i>	Association des Nations de l'Asie du Sud-Est
<i>BIT</i>	Bilateral investment treaty
<i>TBI</i>	Traité Bilatéral d'Investissement
<i>CAFTA</i>	Central America Free Trade Agreement
<i>ALEAC</i>	Accord de Libre-Échange d'Amérique Centrale
<i>CETA</i>	Comprehensive Economic and Trade Agreement
<i>AECG</i>	Accord Économique et Commercial Global
<i>CPTPP</i>	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
<i>PTPGP</i>	Accord de Partenariat Transpacifique Global et Progressiste
<i>ECT</i>	Energy Charter Treaty
<i>TCE</i>	Traité sur la Charte de l'Énergie
<i>EU</i>	European Union
<i>UE</i>	Union Européenne
<i>FDI</i>	Foreign Direct Investment
<i>IDE</i>	Investissements Directs à l'Étranger

<i>FTA</i>	Free Trade Agreement
<i>ALE</i>	Accord de Libre-Échange
<i>GDP</i>	Gross Domestic Product
<i>PIB</i>	Produit Intérieur Brut
<i>ICSID</i>	International Centre for Settlement of Investment Disputes
<i>CIRDI</i>	Centre International pour le Règlement des Différends relatifs aux Investissements
<i>ISDS</i>	Investor-State Dispute Settlement
<i>RDIE</i>	Règlement des Différends entre Investisseurs et États
<i>NAFTA</i>	North American Free Trade Agreement
<i>ALENA</i>	Accord de Libre-Echange Nord-Américain
<i>NGO</i>	Non Governmental Organization
<i>ONG</i>	Organisation Non Gouvernementale
<i>OECD</i>	Organization for Economic Co-operation and Development
<i>OCDE</i>	Organisation de Coopération et de Développement Économiques
<i>OLS</i>	Ordinary Least Squares
<i>MCO</i>	Moindres Carrés Ordinaires
<i>PCA</i>	Permanent Court of Arbitration
<i>CPA</i>	Cour Permanente d'Arbitrage
<i>RCEP</i>	Regional Comprehensive Economic Partnership
<i>PERG</i>	Partenariat Économique Régional Global
<i>SCC</i>	Stockholm Chamber of Commerce



<i>CCS</i>	Chambre de Commerce de Stockholm
<i>TRIPS</i>	Agreement on Trade-Related Aspects of Intellectual Property Rights
<i>ADPIC</i>	Accord sur les aspects des Droits de Propriété Intellectuelle qui touchent au Commerce
<i>UNCITRAL</i>	United Nations Commission on International Trade Law
<i>CNUDCI</i>	Commission des Nations Unies pour le Droit Commercial International
<i>UNCTAD</i>	United Nations Conference on Trade and Development
<i>CNUCED</i>	Conférence des Nations Unies sur le Commerce et le Développement
<i>VIF</i>	Variance Inflation Factor
<i>FIV</i>	Facteur d'Inflation de la Variance
<i>WTO</i>	World Trade Organization
<i>OMC</i>	Organisation Mondiale du Commerce

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# General introduction

# **I Subject and approach of the thesis**

## **I.1 Investor-state dispute settlement as the main subject**

In the introduction of many international investment treaties, contracting countries expressed their willingness to protect investments of their nationals in the territory of other countries and recognized that a stable investment framework is a channel to maximize the effective use of economic resources and to improve the standard of living. Moreover, the rights with respect to foreign investment should be enforced not only under national law but also under international law. Therefore, most of international investment treaties include provisions to resolve disputes between the host state and the foreign investor. Accordingly, following the treaty violation, the investor has the right to sue the host country before an international court and settle this kind of dispute by arbitration. Sometimes these arbitration clauses (or clauses on investor-state dispute settlement) also appear in investment contracts or even national laws.

Arbitration is not a new concept but has been widely used in resolving commercial disputes, especially in the context of international commercial transactions. As mediation or negotiation, arbitration is considered as alternative dispute resolution which refers to “any means of settling disputes outside of the courtroom”.<sup>1</sup> By using arbitration, the parties agree that their dispute will be resolved by an impartial third party whose decision will be final and binding. There are many advantages of arbitration. For example, the disputing parties choose their own tribunal, and this is useful when the subject of the dispute is highly technical. With simplified procedural rules, arbitration is expected to be faster than litigation in court. Moreover, the confidentiality and limited grounds for appeal are also other privileges of arbitration.

This thesis explores the topic of the dispute between the host state and the foreign investor. Whereas litigation is chosen as the subject of the thesis, the title “Economics of Litigation” seems to reveal a relationship between two classical scientific fields: economics and law. Are economics and law definitively unrelated to

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1. For more information, see: [https://www.law.cornell.edu/wex/alternative\\_dispute\\_resolution](https://www.law.cornell.edu/wex/alternative_dispute_resolution). Accessed July 25, 2019.

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each other? Where does “economics” stand in the analysis of investor-state dispute settlement? To answer these questions, we first introduce a historical view of the relationship between law and economics. We then conclude that these two fields interact with each other. To a certain extent, the legal system is no longer the environment covering economic activities (as in the old approach to law and economics) but becomes the true object of study in which economic analysis plays an important role (in the new approach). Choosing an appropriate approach to this thesis, we agree with Posner’s that economic approach to law is “an especially apt tool” (Posner 1971) and “has enormous potential [...] for increasing our knowledge about the legal system” (Posner 1975, p.768).

## **I.2 From the old to the new approach to law and economics: a subtle change**

The link between law and economics was not in itself new. It was recognized in both academic circles and the legal practice. However, legal rules or institutions may or may not be considered as the main object of study. In the first approach, focusing on the economy and the economic system, Coase said: “What economists study is the working of the social institutions which bind together the economic system: firms, markets for goods and services, labour markets, capital markets, the banking system, international trade, and so on” (Coase 1978, p.206), and “I think economists do have a subject matter: the study of the working of the economic system, a system in which we earn and spend our incomes” (Coase 1998, p.73). Economics is thus characterized by its subject matter that determines when the use of economic tools is suitable. In this approach, legal rules have their place in the economic analysis, but only to the extent that they have an impact on the economic system. A brilliant example of this “old” approach is the analysis of antitrust policy conducted by Aaron Director, who according to Priest (2005, p.354), “had no interest in the law or, for that matter, in legal problems”, [...] but “looked to antitrust cases as sources of evidence of industrial behavior”. Director and Coase had also “major influences” on Posner’s early works (Harnay and Marciano 2009). But “Judge Posner is (also) the person who has made the greatest contribution” (according to Coase in Baird 1997, p.1138) to the “new” law and economics, or more precisely the economic analysis of

law.

What is new in the economic analysis of law? The answer lies in the object of study: legal rules are not simply an “environment” that affects economic activities but become an object to study with economic analysis tools (Marciano and Ramello 2019). Posner’s law and economics approach has changed since he met Gary Becker (Harnay and Marciano 2011). He said in his famous work dated 1975 that “a list of the founders of the new law and economics would be seriously incomplete without the name of Gary Becker” (Posner 1975, p.760). Under this new approach, economics should not limit its analysis to economic activities or the functioning of the market. Its theory should be applied to market decisions as well as non-market ones (Becker 1976; Posner 1993a) to analyze any kind of behaviour constrained by scarce resources. An economist is no longer someone who analyzes some identified problems that researchers in other social sciences do not analyze. She can also adopt a certain tool or approach that other social scientists do not employ, e.g. empirical method, to a large array of issues, including non-economic ones (Harnay and Marciano 2009). To be sure, other scholars predated Posner in the use of economic approach to better understand legal problems, but very few of them are “as clear as Posner in signaling his approach as economic” (Harnay and Marciano 2009) or can “reach the world of jurists” as Posner’s publications do (Deffains 2007; Deffains and Langlais 2009).

From a brief historical analysis, we can see how the focus of law and economics has evolved. Thanks to economic theories and methods such as economic modelling, statistical tools, and econometrics, it is now possible to analyze the functioning of courts as an economic problem (for instance, see Di Vita 2010; Dimitrova-Grajzl et al. 2012) and the behaviour of disputing parties or of judges as an economic behaviour (see Boyd and Hoffman 2013). From national judicial system to international tribunal, the recent explosion of empirical works on legal data has significantly contributed to the development of the economic analysis of law.

### **I.3 Economic analysis of investor-state dispute settlement**

In a neighboring field of international law such as international trade law, the dispute between states brought before the World Trade Organization (WTO) and the WTO’s Dispute Settlement Body have become an object for economic analysis.

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Given the advantages of the “new” law and economics, the economic analysis is the main approach we developed in this thesis. It can be applied to analyze investor-state dispute settlement (ISDS) for three main reasons.

First, an investor-state dispute before international arbitration shares similar patterns with a normal dispute: there is a disagreement between the claimant (a foreign investor) and the respondent (a host country) and both parties go to the tribunal to obtain a final judgment that is recognized and enforced. This means that economic dispute resolution models can be applied to explain the strategic behaviour of the parties. For example, from an economic perspective, a dispute adjudicated by the arbitral tribunal represents not only a disagreement between two parties but also a failure in their negotiations due to asymmetric information. As discussed later, the particular characteristic of the defendant may make the economic analysis of the traditional litigation model even more interesting. Second, ISDS can be studied by economic tools. In addition to modelling (for example Konrad 2017), a large number of arbitration cases published by arbitral institutions<sup>2</sup> and by international organizations<sup>3</sup> makes it now possible to conduct in-depth econometric research on this method of dispute settlement. Third, like the domestic judicial system, international arbitration has a “macroeconomic” effect.<sup>4</sup> Indeed, it plays an important role in stabilizing the national and international investment environment. For example, a well-functioning arbitral institution with self-enforcing judgments can limit the opportunistic behaviour of the host country once foreign investments costs are sunk (Büthe and Milner 2014). If this arbitration system has to be reformed because of certain deficiencies, its reciprocal relationship with economic development will always have to be taken into account in the reform proposals.

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2. Disputes administered by ICSID are published on: <https://icsid.worldbank.org/en/Pages/cases/searchcases.aspx> Accessed July 25, 2019.

3. UNCTAD has also published the content of investor-state disputes on: <https://investmentpolicy.unctad.org/investment-dispute-settlement>. Accessed July 25, 2019.

4. There is an interesting literature that analyzes law from a macroeconomic perspective, for example, the effect of the legal and institutional framework on economic development (La Porta et al. 1997, 2008; Ippoliti et al. 2015).

## **II Reasons to choose this subject**

Investor-state dispute settlement is one of the important components of international investment law. It is closely linked to international law through the formation and development of the network of international investment treaties. We choose to analyze this topic for three main reasons. First, international investment law is becoming an emerging field of study. Together with international trade law, international investment law plays an increasingly important role in the global economy. Second, international investment law in general, and ISDS in particular have been facing new challenges coming from the globalization. The rise of investor-state disputes since the 1990s is responsible for the unease felt by some developed and developing countries. The recent wholesale exit of a number of countries could trigger a domino effect and lead to the systemic collapse of the international investment regime. Third, although the number of scientific works on this topic is increasing over time, their approaches and methodologies are not yet diversified. This thesis contributes to the emerging literature on investor-state dispute settlement and provides elements, with three essays, to the current debate on the reform of the international arbitration system.

### **II.1 International investment law is an attractive field of study**

Alongside the growth of cross-border investments, principles governing foreign investment have also been gradually developed as a separate branch of international economic law. The historical study of international investment can be summed up in two periods (Dolzer and Schreuer 2008). The first period between 1870 and 1914 was characterized by a new dimension of international financial mobility that led to a significant increase in foreign investment. During this period, countries began to tackle their economic barriers, but international investment agreements remained a new concept. This first stage of the process of internationalization was disrupted by the first and second World War. The second period is after 1945. Following the period of reconstruction, foreign investment quickly recovered and came to its new peaks between 1990 and 2000 - a period of technological innovations and reduced

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costs for transportation. The growth of foreign investment at this moment was characterized by the explosion of bilateral investment treaties signed between two countries to protect investments made by nationals of one contracting state in the territory of the other. The first bilateral investment treaty was signed between Germany and Pakistan in 1959. In 2007, with almost 3000 BITs signed, the global foreign investment net inflow reached its historical peak of 3.11 trillion USD.<sup>5</sup>

In principle, these treaties grant investors from a contracting state a number of important guarantees, including protection from expropriation, fair and equitable treatment, free transfer of funds, full protection and security. Why these treaties are necessary for the international investment environment? The answer lies in the nature of foreign investment. In fact, a trade transaction and a foreign investment are different in nature. While a trade transaction often consists in a one-time exchange of good and money, making a foreign investment involves a long-term relationship between the foreign investor and the host state. At the beginning of the investment, a foreign investor sinks significant resources for a long-term project (5-30 years) with the expectation to recover this amount plus a rate of return during the period of investment. Even though the host country was initially keen to attract foreign investment, once the investment process starts, the dynamics in the relationship between the foreign investor and the host state may change in favor of the state. For example, the latter can introduce a new regulatory framework that has a negative impact on the private project. While resources such as machinery and installations have been specifically designed for a particular project, investors cannot reverse their investment decisions in the face of these political risks.

These treaties are “powerful” because they provide not only rules on the treatment of the host country to the foreign investor but also a mechanism to monitor the implementation of these rules: clauses on the settlement of disputes between the host country and the investor. In most investment treaties, investors can bring the dispute to international arbitration. Unlike the WTO, the mechanism to settle international investment disputes is not centralized. This means that the disputing parties have the right to choose any reputable arbitration center to settle their

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5. Data from the World bank: <https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD>. Accessed July 25, 2019.



disputes according to specific arbitration rules, for example, the Convention on the settlement of investment disputes between states and nationals of other states (the ICSID Convention) or the United Nations Commission on International Trade Law (UNCITRAL) arbitration rules. Unlike the UNCITRAL rules, the ICSID Convention is also a multilateral treaty formulated by the Executive Directors of the World Bank to promote international investment, with 163 signatory and contracting states as of December 2018. This Convention is accompanied by the creation of the International Centre for Settlement of Investment Disputes (ICSID). There are two reasons why the ICSID Convention becomes (very) popular in ISDS provisions of many investment treaties. First, an ICSID award “shall not be subject to any appeal or to any other remedy except those provided for in this Convention” (Article 53 of the ICSID Convention). Second, according to Article 54 of the Convention, an ICSID award shall be automatically recognized by all member states of the Convention.

Although the ICSID Convention is a multilateral treaty, it provides only a mechanism to resolve disputes. As described above, the international investment community is adopting a patchwork approach to international investment law: the proliferation of thousands of bilateral investment treaties and the lack of uniform global protection standards. Another trend is the signature of regional treaties such as The North American Free Trade Agreement (NAFTA), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Comprehensive Economic and Trade Agreement (CETA). The “regionalization” of investment agreements shows not only the willingness of countries to achieve international economic integration but also their reluctance to negotiate a global treaty. In summary, these treaties, which are either substantive or procedural, have been creating a backbone for international investment law. This new branch of international law is now considered as a field of study<sup>6</sup> and a specialized area of the legal profession. As Dolzer and Schreuer (2008, p.2) said, international investment law “consists of layers of general international law, of general standards of international economic law, and of distinct rules peculiar to its domain”.

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6. International investment law is the object of special courses offered by many universities around the world.

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## II.2 Development of international investment law: from accession to withdrawal

Since 1990, the field of international investment law has been greatly expanded by the growth of bilateral investment agreements and of case law. Many scientific articles described the positive effect of these treaties on the host country's economy, and the most important impact is the increase in foreign direct investment (FDI) inflows. The fact that a country joins the ICSID Convention or agrees on international arbitration provisions (ISDS provisions) in investment treaties has a similar implication. Sometimes, a country can "follow" its neighbors to sign investment treaties or to include ISDS provisions (Neumayer et al. 2016). The negotiations of investment treaties are also driven by political and diplomatic interests (Poulsen and Aisbett 2016). However, the content of many investment agreements is often sketchy. Perhaps at the time of signing, countries, especially developing ones, are not aware of the unintended consequences of their commitments at the international level. In the case of ICSID alone, foreign investors filed 724 arbitration claims against host countries at the end of 2018 (against 82 cases at the end of 2000).<sup>7</sup> Most of these claims are based on violations of old-generation treaties (signed between 1950-1999).<sup>8</sup>

The current international investment law regime, and especially the system of investor-state arbitration, is experiencing a backlash from a number of countries that have been sued repeatedly by foreign investors and have been obliged to pay millions of dollars of compensation. As a natural reaction, these countries search first for ways including extremes ones, to exit the regime. In 2007, Bolivia became the first state to withdraw from the ICSID Convention, followed by Ecuador which withdrew from the Convention partially in 2007 (by disallowing international investment arbitration from resolving oil and gas disputes) and totally in 2009. In 2012, after being faced with more than thirty arbitration claims, Venezuela exited from the ICSID Convention. Some countries such as Bolivia, South Africa, India also adopted another strategy to negate the investor's right to sue: the exclusion of ISDS provisions in investment agreements or unilateral denunciation of these agree-

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7. Source of data: <https://icsid.worldbank.org/en/>. Accessed July 25, 2019.

8. Source of data: <https://investmentpolicy.unctad.org/investment-dispute-settlement>.

Accessed July 25, 2019.

ments. Perhaps more surprising is the fact that some developed countries which are considered capital-exporting, began to worry about the effects of international investment arbitration. In 2011, the Australian government announced that it would no longer include investor-state dispute settlement provisions in future Australian trade agreements. Much less affected by its neighbor, New Zealand's newly elected government in order to gain more regulatory space stated in October 2017 that no further free trade agreements include ISDS clauses. Although accession to or exit from an international institution may be a strategy, e.g. to advance particular policy preferences, the current (unthinkable) trend is provoking a crisis of confidence in international law. From a pessimistic perspective, the wholesale exit of a number of countries could trigger a "wave" that other countries will follow. The ultimate outcomes behind this domino effect could be the forum shopping and treaty shopping, the panic of investors and finally the systemic collapse of the international investment regime.

The crisis of international investment law is followed by debates on possible reforms of ISDS involving not only countries but also international institutions, non-governmental organizations, law firms and academics (Roberts 2018). Perhaps an international arbitration institution like ICSID is also concerned with this debate because its history and development are closely linked to the current regime. Following the adoption of the first rules in 1968, ICSID launched four rounds of amendments to modernize its rules. The latest process which began in late 2016 invited the public to comment on the proposed amendments.

Our essays coincide with this important milestone in the history of international investment law and with the call for reform. The next subsection is based on an original bibliometric analysis of the field. It will provide an evolution of scientific work on this subject and highlight the need to develop interdisciplinary and empirical research in the literature.

### **II.3 International investment law in academic literature**

To cover publications related to the topic "international investment law", we use data from Scopus.<sup>9</sup> The Scopus (Elsevier) database covers a wide range of

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9. <https://www.scopus.com>. Accessed July 25, 2019.

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peer-review research from many areas such as life sciences, physical sciences, social sciences, health sciences.<sup>10</sup> There are some methodological considerations before the bibliometric analysis. First, we choose the most relevant keywords of the field in consideration such as *investor-state*, *investment arbitration*, *international investment dispute*, *ICSID Convention*, *investment treaty*, *international investment agreement*, *international investment law*. The search returns all documents where these terms appear in the title, keywords, or abstract. Second, we focus on articles that have been officially published by peer-review journals.<sup>11</sup> To further assess the methodologies applied in these articles, we distinguish empirical articles from non-empirical articles. Accordingly, if the terms such as *empirical*, *data*, *evidence*, *estimate*, *econometric*, *statistical*, *quantitative*, *sample*, *regression*, etc., appear in the title, keywords, or abstract of an article, we classify it as empirical research.<sup>12</sup> Finally, we classify academic journals into two categories: *Economics journal* (if the main subject area of this journal is economics, econometrics or finance) and *Law journal* (if the main subject area is law).<sup>13</sup> When the subject area of a journal is not primarily related to economics or to law, we classify it as *Other journals*. In sum, our database consists of 1307 articles published in 308 journals from 1991 to 2018.

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10. This database is widely used in research related to economics of science. For example, see Ayoubi et al. (2019); Seeber et al. (2019).

11. We do not include books, conference papers, and miscellaneous notes.

12. Apart from these keywords, we also try to filter the results by other words, for example, *model*, *hypothesis*, *finding*, *correlation*, *determinant*, *test*. For the purposes of our bibliometric analysis, an article that uses and analyses data from a relatively large sample is considered as “empirical”. This means that our research is not limited to the econometric approach. Following Landes’ (2003) method, we do not consider as “empirical” an article that deals with a few cases or presents anecdotal data. After filtering the “supposedly empirical” studies with keywords, we directly examined the content of each article to confirm that it applied an empirical method. In short, our bibliometric database contains 123 empirical articles.

13. The classification into these two categories is based on the information on the journal’s home page. We consider some journals in law and economics (e.g. the International Review of Law and Economics) as economic journals because the focus of these journals is often either the impact of law and institution on the economic system or the economic theories and methods that explain the functioning of the legal system. If the journal’s home page does not explicitly mention the main area, we will classify it by reading the abstract of its articles published over the past year.

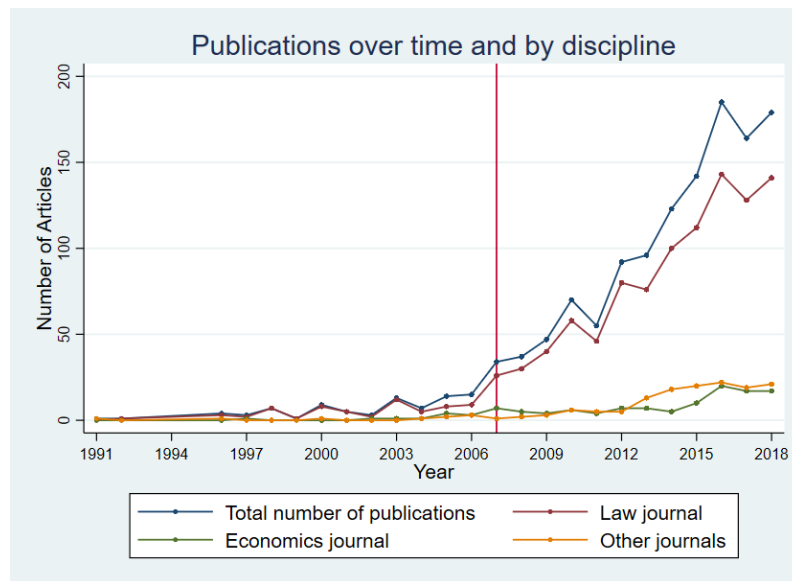


Fig. I: Number of publications in international investment law (1991-2018)

*Source of data: Scopus*

In general, Figure I shows that the number of publications related to international investment law increases significantly since 2007 – year of the first departure from the ICSID Convention (vertical red line). Of these publications, a gap between economics journals and law journals in publishing articles related to this topic can be observed. Not surprisingly, publications in law journals are shaping the growth of academic works (149 law journals). However, the economic analysis of international investment law is attracting the attention of economists: the number of articles related to this topic published in economics journals has increased in recent years (68 economics journals). Journals in other fields such as politics, sociology, health also share this trend.

With respect to research methodologies, Figure II shows that only 9.5% of publications (123 articles) use data analysis. This finding is confirmed by Landes (2003) who also found a small proportion of empirical work in the field of law and economics. The number of empirical articles was almost zero before the 2000s and increased slowly since 2004. Law journals also publish empirical articles. However, the difference in the number of empirical articles published by the two categories of journals over the years is quite clear. Accordingly, 57/120 articles published in

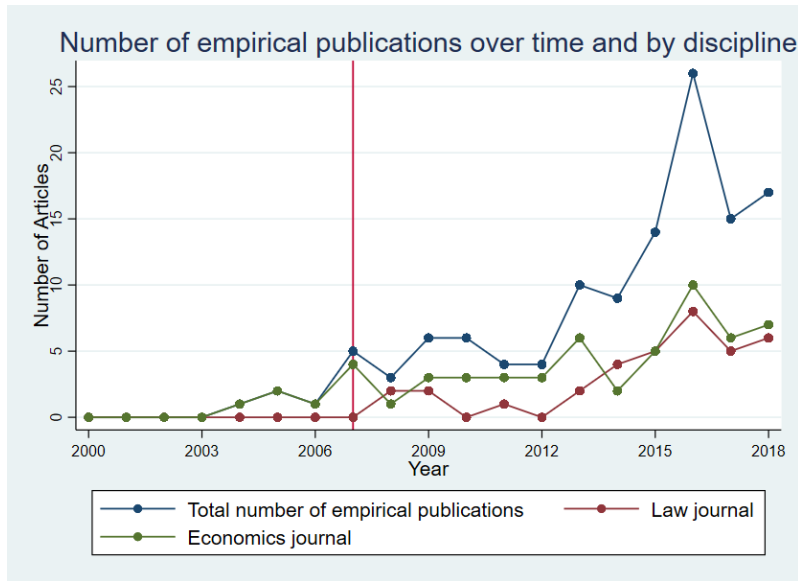


Fig. II: Number of empirical publications in international investment law (2000-2018)

*Source of data: Scopus*

economics journals are empirical works while the proportion for law journals is only 35/1043. Focusing on the details of these studies, we find that the authors have applied empirical methods to explore five major topics in international investment law: the effect of international investment treaties on FDI and on national politics (55%), the formation of international investment treaties (e.g. network analysis, text-as-data analysis) (18%), the outcomes of investor-state arbitrations (e.g. win-lose, treaty interpretation, compensation) (17%), the effect of governance quality on arbitration claims (7.5%) and arbitrator network analysis (2.5%). While data on international organizations, investment treaties, and investor-state disputes are made publicly available and new technologies are changing the nature of foreign investment, we can foresee many interesting paths for economic analysis in this field.

### III Methodologies and research results

To explore this interesting topic, we use two methods in this thesis: an interdisciplinary survey (Chapter 1) and econometric analysis with two unique cross-sectional

datasets (Chapters 2 and 3). Although the main approach developed in this thesis is economics, the support from other related disciplines has often been found. For example, we used articles in political science to explain why countries decided to sign, and then to withdraw from international treaties. In another example, to highlight the economic analysis of the arbitration court's effectiveness, we "borrow" the perspective of the management science to empirically explain the difference in the performance of arbitrator teams. We do not think these theories compete with each other in this thesis. On the contrary, they are supporting the economic theories to clarify the problem under consideration in a multidimensional, objective and exhaustive way.

We present below the methodology of each chapter and summarize the research results. While Chapter 1 introduces a debate on the whole international investment arbitration system, Chapters 2 and 3 deepen this discussion by focusing on the perspective of the main stakeholders in the system: the parties to the dispute and the arbitration institution. The results respond to a social demand to understand the effects of international arbitration in investment treaty negotiations and have some policy implications.

## **Chapter 1**

Chapter 1 talks about the current criticism related to international arbitration. Some argue that developing countries have a higher chance of being targeted by arbitration claims and that the outcomes of international investment arbitration always favor foreign investors. Furthermore, international arbitration has been seen as narrowing the national policy space in certain areas such as the environment and public health. This chapter brings diverse views from neighboring fields such as economics and political science into legal studies, by combining theoretical and empirical research to survey the effectiveness and spillover effects of international investment arbitration. To begin the debate, we briefly explain the motivation for countries to join the international economy by signing treaties or entering international conventions. Of course, this is economically and diplomatically beneficial to countries. However, international rules are more binding than what countries think, and they only recognize that after being themselves hit by arbitration claims. A number of countries, including developed ones, have chosen radical solutions to es-

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cape the current international investment law system. Reviewing empirical results in the literature, we show that the impact of the country's developmental status on the probability of facing investment arbitration remains unclear and that arbitration outcomes do not always favor foreign investors. Although assessing the spillover effects of arbitration outcomes (i.e. losing a dispute) on some dimensions of public interests such as the environment or public health is not empirically straightforward, the uncertainty that leads to arbitrariness and sometimes inconsistencies in tribunal's decision-making exists and needs to be properly identified. To conclude, we argue that the actual crisis in the regime is an opportunity for states to learn and to revise their policies and that the favorable conditions, including aids from international organizations, are sufficient to allow improvements to the regime rather than exit from it.

## **Chapter 2**

Data related to treaty-based disputes (disputes based on violation of international investment treaties) brought to all arbitral institutions from 1996 to 2016 were collected to study why the disputing parties agree on an early settlement. Whether to settle or to fight to the end is a classical question raised in the interdisciplinary literature and has received much scholarly attention. Settlement of disputes between host states and foreign investors has both positive and negative impacts. For example, a settlement sometimes is preferable to reduce time costs. However, early settlement of a treaty-based dispute (or a dispute involving violation of international obligations) can be questionable because in that case, the host state is considered not as an ordinary commercial partner but as a government entity with rights to regulate and protect the public interest. The problem arises when, for example, an environmental policy that has negative impacts on the private project is then repealed to settle the dispute with the foreign investor. To identify theoretical determinants of early settlement, we link settlement/litigation theory which is well developed in the domestic context to empirical work on international adjudicatory systems. The inclusion of these determinants in an econometric model yields many interesting results regarding the probability of early settlement of investor-state disputes. First, we find that a host state lacking previous experience of resolving treaty dispute tends to settle early. Second, if the host state anticipates a favorable out-



come, based especially on observing the outcomes of similar disputes in the same geographic region, it will be less likely to choose early settlement. Third, an extreme regulatory measure which deprives investors of fundamental activities can be a reason for settlement breakdown. Fourth, compared to corporate investors, individual investors are more likely to await a final ruling than to settle early. Finally, there is evidence that the probability of early settlement is higher if the investor invokes the protection of Dutch bilateral investment treaties. This Dutch effect which does not suffer from endogeneity consolidates the finding of the previous chapter on the need to reform the current ISDS system through the renegotiation of sketchy treaties (i.e. ones with a high level of protection for the foreign investor but a narrow policy space for the host country).

### Chapter 3

We build another dataset by collecting all final judgments of investor-state disputes administered by ICSID until May 2018, irrespective of the legal source of violation (e.g. the dispute can be related to violation of an international investment treaty, an investment contract or a national investment law). The purpose of this chapter is to study the effectiveness of the arbitral tribunal (or arbitrator teams) in solving disputes. An arbitral institution such as ICSID plays an important role in stabilizing economic activities at the international level. A well-functioning institution with self-enforcing judgment creates a safe environment for cross-border investment flows. The empirical literature has focused so far on arbitration outcomes, i.e. the decision in favour of the foreign firm or of the host state and neglected the analysis of dispute resolution effectiveness. As suggested in the literature on economic analysis of judicial systems, we choose two indicators of court effectiveness as dependent variables: the time to resolution and the quality of judgment proxied by the probability of having a follow-on proceeding to “rectify” this judgment (e.g. a correction, supplementary decisions or an annulment). As an innovative approach, considering each *ad hoc* tribunal consisting of three arbitrators as a team, we combine the current strand of literature with the knowledge that was well developed in the management science to better understand the effect of arbitrator’s human capital on team performance. Focusing on both biographical and professional characteristics of the arbitrators as determinants of the team performance, we find that

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mixed gender teams and previous team members' collaborations increase the time to resolution, contrary to team members' experience and diversity in professional backgrounds that decrease it. Interestingly, none of the team characteristics considered has an influence on the quality of the final judgment. Finally, we do not find any evidence of a problem of sample selection in our estimations or a quantity/quality tradeoff in case resolution before ICSID. Our findings contribute significantly to the ongoing policy debate on the reform of the international investment arbitration system aiming to increase its effectiveness and transparency.

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# Introduction générale

# **I Objet et approche de la thèse**

## **I.1 Le règlement des différends entre investisseurs et États comme objet de recherche**

Dans l'introduction de nombreux traités d'investissement internationaux, les pays contractants ont exprimé leur volonté de protéger les investissements de leurs ressortissants sur le territoire d'autres pays et ont reconnu qu'un cadre d'investissement stable est un moyen de maximiser l'utilisation efficace des ressources économiques et d'améliorer le niveau de vie. De plus, les droits relatifs à l'investissement étranger devraient être mis en œuvre non seulement au niveau national mais aussi international. Par conséquent, la plupart des traités d'investissement internationaux contiennent des dispositions visant à résoudre les différends entre un État hôte et un investisseur étranger. Suite à la violation d'un traité, l'investisseur a le droit de poursuivre le pays hôte devant un tribunal international pour régler ce type de litige par arbitrage. Parfois, ces clauses d'arbitrage (ou clauses de règlement des différends entre investisseurs et États) apparaissent également dans les contrats d'investissement, voire même dans les lois nationales.

L'arbitrage n'est pas en soi une nouvelle façon de régler les différends. Il a été largement utilisé dans le règlement des différends commerciaux, en particulier dans le contexte des transactions commerciales internationales. Comme la médiation et la négociation, l'arbitrage est considéré comme un mode alternatif de résolution des conflits qui se réfère à "tout moyen de régler les conflits à l'extérieur de la salle d'audience".<sup>1</sup> En utilisant l'arbitrage, les parties acceptent que leur différend soit réglé par un tiers impartial dont la décision sera finale et exécutoire. L'arbitrage présente de nombreux avantages. Par exemple, les parties au différend peuvent choisir leur propre tribunal, ce qui peut être utile si l'objet du différend est très technique. Avec des règles de procédure simplifiées, on s'attend à ce que l'arbitrage soit plus rapide que les litiges devant les tribunaux traditionnels. La confidentialité, ainsi que des motifs d'appel limités sont également d'autres avantages présentés par l'arbitrage.

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1. Pour plus d'informations, voir le site : [https://www.law.cornell.edu/wex/alternative\\_dispute\\_resolution](https://www.law.cornell.edu/wex/alternative_dispute_resolution). Consulté le 25 juillet 2019.

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Cette thèse explore la thématique du différend entre investisseurs et États. Alors que le litige fait l’objet de la thèse, le titre “Économie du litige” semble révéler une relation entre deux domaines scientifiques classiques : l’économie et le droit. Y a-t-il un rapport entre économie et droit ? Où se situe “économie” dans l’analyse du règlement des différends entre investisseurs et États ? Pour répondre à ces questions, nous adoptons tout d’abord une perspective historique dans la relation entre le droit et l’économie. Nous concluons alors que ces deux domaines interagissent l’un avec l’autre. Dans une certaine mesure, le système juridique n’est plus l’environnement couvrant les activités économiques (selon l’ancienne approche de la *law and economics*) mais devient un objet d’étude dans lequel l’analyse économique joue un rôle important (selon la nouvelle approche). En choisissant une approche appropriée pour cette thèse, nous partageons l’avis de Posner selon lequel l’approche économique du droit est “un outil particulièrement approprié” (Posner 1971) et “a un énorme potentiel [...] pour accroître notre connaissance du système juridique” (Posner 1975, p.768).

## **I.2 De l’ancienne à la nouvelle approche de la *law and economics* : un changement subtil**

Le lien entre le droit et l’économie n’est pas nouveau en soi. Il est reconnu tant dans les milieux universitaires que dans la pratique juridique. Toutefois, dans certains cas, les règles juridiques ou les institutions peuvent ne pas être considérées comme l’objet d’étude principal. Dans la première approche, en se focalisant sur l’économie et le système économique, Coase écrivait : “Ce que les économistes étudient est le fonctionnement des institutions sociales qui lient le système économique : les entreprises, les marchés des biens et des services, les marchés du travail, les marchés financiers, le système bancaire, le commerce international, etc.” (Coase 1978, p.206), et “je pense que les économistes ont un objet : l’étude du fonctionnement du système économique, un système dans lequel nous gagnons et dépensons nos revenus” (Coase 1998, p.73). L’économie se caractérise donc par son objet qui détermine quand l’utilisation des outils économiques est appropriée. Selon cette approche, les règles juridiques ont leur place dans les analyses économiques, mais seulement dans la mesure où elles ont un impact sur le système économique. Un

brillant exemple de cette ancienne approche est l'analyse de la politique antitrust menée par Aaron Director, qui selon Priest (2005, p. 354) "ne s'intéressait pas au droit ou, d'ailleurs, aux problèmes juridiques", [...] mais "considérerait les affaires antitrust comme des sources de preuve du comportement industriel". Director et Coase ont également eu des "influences majeures" sur les premières œuvres de Posner (Harnay and Marciano 2009). Mais selon Coase (dans Baird 1997, p.1138) "Posner est (aussi) la personne qui a apporté la plus grande contribution" à la nouvelle *law and economics*, ou plus précisément à l'analyse économique du droit.

Quelles sont les nouveautés dans l'analyse économique du droit ? La réponse réside dans l'objet d'étude : les règles juridiques ne sont plus simplement considérées comme un "environnement" qui affecte les activités économiques mais deviennent un objet d'étude abordé avec des outils d'analyse économique (Marciano and Ramello 2019). L'approche de Posner en matière de *law and economics* a changé suite à sa rencontre avec Gary Becker (Harnay and Marciano 2011). Dans son célèbre ouvrage daté de 1975, Posner souligne que "la liste des fondateurs de la nouvelle *law and economics* serait sérieusement incomplète sans Gary Becker" (Posner 1975, p.760). Selon cette nouvelle approche, la science économique ne devrait pas limiter son analyse aux activités économiques ou au fonctionnement du marché. Sa théorie devrait s'appliquer aux décisions marchandes ainsi qu'aux décisions non marchandes (Becker 1976; Posner 1993a) pour analyser tout type de comportement contraint par la rareté des ressources. Une économiste n'est plus quelqu'un qui analyse certains problèmes que les chercheurs d'autres sciences sociales n'analysent pas. Elle peut aussi adopter un outil ou une approche que d'autres chercheurs en sciences sociales n'utilisent pas, par exemple une méthode empirique, pour un large éventail de problèmes, y compris des problèmes non économiques (Harnay and Marciano 2009). Certes, d'autres chercheurs ont précédé Posner dans l'utilisation de l'approche économique pour mieux comprendre les problèmes juridiques, mais très peu d'entre eux sont "aussi clairs que Posner pour signaler son approche comme économique" (Harnay and Marciano 2009) ou peuvent "rejoindre le monde des juristes" comme le font les publications de Posner (Deffains 2007; Deffains and Langlais 2009).

A partir de cette brève analyse historique, nous pouvons constater comment l'objet de la *law and economics* a pu évoluer. Grâce aux théories et méthodes de

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l'économie comme la modélisation économique, les outils statistiques et l'économétrie, il est maintenant possible d'analyser le fonctionnement des tribunaux en tant que problème économique (par exemple, voir Di Vita 2010; Dimitrova-Grajzl et al. 2012) et le comportement des parties en litige ou des juges en tant que comportement économique (voir Boyd and Hoffman 2013). Du système juridique national au tribunal international, l'explosion récente des travaux empiriques sur les données juridiques a ainsi contribué de manière significative au développement de l'analyse économique du droit.

### **I.3 L'Analyse économique du règlement des différends entre investisseurs et États**

Dans un domaine voisin du droit international, comme le droit commercial international, le différend entre les États porté devant l'Organisation mondiale du commerce (OMC) et l'Organe de règlement des différends de l'OMC sont devenu un objet d'études économiques. Compte tenu des avantages de la "nouvelle" *law and economics*, l'analyse économique est l'approche principale que nous avons développée dans cette thèse. Elle peut être appliquée au cas du règlement des différends entre investisseurs étrangers et États (RDIE) pour trois raisons principales.

Premièrement, le différend entre investisseurs et États partage certains points communs avec un différend normal : c'est un désaccord entre le demandeur (un investisseur étranger) et le défendeur (un pays hôte) et ces deux parties se présentent devant le tribunal pour obtenir un jugement final qui sera reconnu et exécuté. Cela signifie que les modèles économiques de résolution des litiges peuvent être appliqués pour expliquer les comportements stratégiques des parties. Par exemple, sous l'angle des théories économiques, un différend jugé par le tribunal représente non seulement un désaccord entre les deux parties, mais aussi un échec dans leur négociation en raison d'une asymétrie d'information. Notons que la caractéristique particulière du défendeur peut rendre l'analyse économique du modèle traditionnel du litige encore plus intéressante comme nous le présenterons ci-dessous. Deuxièmement, le RDIE peut être étudié par les outils économiques. À côté de la modélisation (par exemple Konrad 2017), le grand nombre de cas d'arbitrage publiés par les institutions ar-

bitrales<sup>2</sup> et par les organisations internationales<sup>3</sup> permet d'effectuer des recherches économétriques approfondies sur ce mode de règlement des différends. Troisièmement, comme le système judiciaire national, l'arbitrage international a des effets très "macroéconomiques".<sup>4</sup> En effet, il joue un rôle important dans la stabilisation de l'environnement national et international de l'investissement. Par exemple, une institution arbitrale qui fonctionne bien et dont les jugements s'imposent d'eux-mêmes peut limiter le comportement opportuniste du pays hôte lorsque les coûts des investissements étrangers sont irrécouvrables (Bütthe and Milner 2014). Si ce système d'arbitrage doit être réformé en raison de certaines imperfections, sa relation réciproque avec le développement économique devra toujours être prise en compte dans les propositions de réforme.

## **II Raisons du choix de ce sujet**

Le règlement des différends entre investisseurs et États est l'une des composantes importantes du droit international de l'investissement. Il est lié au droit international par la formation et le développement du réseau des traités internationaux d'investissement. Nous avons choisi d'analyser ce sujet pour trois raisons principales. Premièrement, le droit international de l'investissement est un domaine d'étude en extension. Avec le droit commercial international, le droit international de l'investissement joue un rôle de plus en plus important dans l'économie mondiale. Deuxièmement, le droit international de l'investissement en général, et le RDIE en particulier, ont été confrontés aux nouveaux défis de la mondialisation. La montée des différends entre investisseurs et États à partir des années 90 est à l'origine des malaises de certains pays développés et pays en développement. La récente sortie massive d'un certain nombre de pays pourrait déclencher un effet domino et entraîner l'effondrement systémique du régime international de l'investissement. Troisième-

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2. Les différends administrés par le CIRDI sont publiés sur : <https://icsid.worldbank.org/en/Pages/cases/searchcases.aspx>. Consulté le 25 juillet 2019.

3. La CNUCED a également publié le contenu des différends entre investisseurs et États sur : <https://investmentpolicy.unctad.org/investment-dispute-settlement>. Consulté le 25 juillet 2019.

4. Il existe une émergence de travaux empiriques intéressants qui analysent le droit sous l'angle de la macroéconomie, par exemple l'effet du cadre juridique et institutionnel sur le développement économique (La Porta et al. 1997, 2008; Ippoliti et al. 2015).



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ment, bien que le nombre de travaux scientifiques sur ce sujet augmente avec le temps, leurs approches et méthodologies ne sont pas encore diversifiées. Cette thèse contribue à la littérature émergente sur le règlement des différends entre investisseurs et États, et fournit des éléments, avec trois essais, au débat actuel sur la réforme du système d'arbitrage international.

## **II.1 Le droit international de l'investissement est un domaine d'étude captivant**

Parallèlement à la croissance des investissements transfrontaliers, les principes régissant l'investissement étranger se sont progressivement développés en tant que branche distincte du droit économique international. L'étude historique des investissements internationaux distingue deux grandes périodes (Dolzer and Schreuer 2008). La première période entre 1870 et 1914 est caractérisée par une nouvelle dimension de la mobilité financière internationale qui a conduit à une augmentation significative des investissements étrangers. Sur cette période, les pays ont commencé à supprimer leurs barrières économiques mais les accords internationaux d'investissement demeuraient un nouveau concept. Cette première étape du processus d'internationalisation a été perturbée par les deux guerres mondiales. La deuxième période est postérieure à 1945. Après la période de reconstruction, les investissements étrangers se sont rapidement redressés et ont atteint leurs nouveaux sommets entre 1990 et 2000 - une période d'innovations technologiques et de réduction des coûts de transport. La croissance des investissements étrangers à ce moment a été caractérisée par l'explosion des traités bilatéraux d'investissement signés entre deux pays pour protéger les investissements des ressortissants d'un État contractant sur le territoire de l'autre. Le premier traité bilatéral d'investissement a été signé entre l'Allemagne et le Pakistan en 1959. En 2007, avec la signature de près de 3000 traités bilatéraux d'investissement, l'afflux net d'investissements étrangers dans le monde a atteint son plus haut niveau historique de 3.11 billions d'USD.<sup>5</sup>

En principe, ces traités accordent aux investisseurs d'un État contractant un certain nombre de garanties importantes, notamment la protection contre l'expropriation,

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5. Selon les données de la Banque mondiale : <https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD>. Consulté le 25 juillet 2019.

le traitement juste et équitable, le libre transfert de fonds, et la protection et la sécurité pleine et entière. Pourquoi ces traités sont-ils nécessaires dans le contexte actuel? La réponse réside dans la nature de l'investissement étranger. S'engager dans une transaction commerciale et effectuer un investissement étranger sont de nature différente. Alors qu'une transaction commerciale consiste souvent en un échange ponctuel de biens et d'argent, un investissement étranger implique une relation de long terme entre l'investisseur étranger et l'État hôte. Dès le début, l'investisseur étranger investit des ressources importantes dans un projet de long terme (de 5 à 30 ans) en espérant récupérer ce montant plus un taux de rendement pendant la période de l'investissement. Même si le pays hôte était initialement désireux d'attirer des investissements étrangers, une fois le processus d'investissement lancé, la dynamique dans la relation entre l'investisseur étranger et l'État peut changer en faveur de l'État. Par exemple, ce dernier peut introduire une nouvelle politique qui a un impact négatif sur la rentabilité du projet privé. Alors que les ressources telles que les machines et les installations ont été spécifiquement conçues pour un projet particulier, les investisseurs ne peuvent pas renverser leurs décisions d'investissement face à ces risques politiques.

Ces traités ont une "puissance" parce qu'ils fournissent à l'investisseur étranger non seulement les règles sur le traitement du pays d'accueil, mais aussi un mécanisme pour surveiller leur application : des clauses sur le règlement des différends entre le pays hôte et l'investisseur. Dans la plupart des traités d'investissement, les investisseurs peuvent soumettre leurs différends à l'arbitrage international. Contrairement à l'OMC, le mécanisme de règlement des différends en matière d'investissement international n'est pas centralisé. Cela signifie que les parties au différend ont le droit de choisir n'importe quel centre d'arbitrage de bonne réputation pour régler leurs différends selon des règles d'arbitrage spécifiques, par exemple, la Convention sur le règlement des différends relatifs aux investissements entre États et ressortissants d'autres États (la Convention CIRDI) ou les règles d'arbitrage de la Commission des Nations Unies pour le droit commercial international (CNUDCI). Contrairement aux règles de la CNUDCI, la Convention CIRDI est également un traité multilatéral établi par les administrateurs de la Banque mondiale pour promouvoir l'investissement international, avec 163 États signataires et contractants aux

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31 décembre 2018. Cette Convention s’accompagne de la création du Centre international pour le règlement des différends relatifs aux investissements (CIRDI). Il y a deux raisons pour lesquelles la Convention CIRDI devient (très) populaire dans les dispositions de RDIE de nombreux traités d’investissement. Tout d’abord, une sentence issue du CIRDI “est obligatoire à l’égard des parties et ne peut être l’objet d’aucun appel ou autre recours, à l’exception de ceux prévus à la présente Convention” (article 53 de la Convention CIRDI). Ensuite, selon l’article 54 de la même Convention, une sentence CIRDI est automatiquement reconnu par tous les États membres de la Convention.

Bien que la Convention CIRDI soit un traité multilatéral, elle ne propose qu’un mécanisme pour résoudre des différends. Comme indiqué ci-dessus, la communauté internationale adopte une approche fragmentaire au droit international de l’investissement : la prolifération de milliers de traités bilatéraux d’investissement et l’absence de normes homogènes de protection au niveau mondial. Une autre tendance est la signature de traités régionaux tels que l’Accord de libre-échange nord-américain (ALENA), l’Accord de Partenariat transpacifique global et progressiste (PTPGP) et l’Accord économique et commercial global (AECG). La “régionalisation” des accords d’investissement a montré non seulement la volonté des pays de s’intégrer dans l’économie internationale, mais aussi leur réticence à négocier un traité multilatéral. En résumé, ces traités, qu’ils soient de fond ou de procédure, ont constitué le fondement du droit international de l’investissement. Cette nouvelle branche du droit international est maintenant considérée comme un domaine d’études<sup>6</sup> et un domaine spécialisé de la profession. Comme l’ont dit Dolzer and Schreuer (2008, p.2), le droit international de l’investissement “se compose de couches de droit international général, de normes générales du droit économique international et de règles distinctes propres à son domaine”.

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6. Ce domaine a également fait l’objet de cours spéciaux dans de nombreuses universités dans le monde.

## **II.2 Le développement du droit international de l'investissement : de l'adhésion au retrait**

Depuis 1990, la discipline du droit international de l'investissement s'est considérablement élargie avec la multiplication des accords bilatéraux d'investissement et des jurisprudences. De nombreux travaux scientifiques décrivent l'effet positif de ces traités sur l'économie du pays hôte, et l'impact le plus important est l'augmentation des flux d'investissements directs à l'étranger (IDE). Le fait qu'un pays adhère à la Convention CIRDI ou accepte des dispositions d'arbitrage international (des dispositions de RDIE) dans ses traités d'investissement a un effet similaire. Parfois, un pays peut "imiter" ses pays voisins pour signer des traités d'investissement ou pour inclure des dispositions d'arbitrage (Neumayer et al. 2016). Les négociations des traités d'investissement ont pu être également motivées par des intérêts politiques et diplomatiques (Poulsen and Aisbett 2016). Cependant, le contenu de nombreux accords d'investissement est souvent très incomplet. Peut-être qu'au moment de la signature, les pays, en particulier les pays en développement, n'étaient pas conscients des conséquences inattendues de leurs engagements au niveau international. Dans le seul cas du CIRDI, les investisseurs étrangers ont déposé 724 demandes d'arbitrage contre les pays hôtes jusqu'à la fin de 2018 (contre 82 cas à la fin de 2000).<sup>7</sup> La plupart de ces plaintes étaient liées à la violation des traités d'investissement de l'ancienne génération (signés entre 1950-1999).<sup>8</sup>

Le régime actuel du droit international de l'investissement, et en particulier le système d'arbitrage État-investisseur, subissent les contrechocs d'un certain nombre de pays qui ont été poursuivis plusieurs fois par des investisseurs étrangers et qui ont été obligés de verser des millions de dollars en compensation. En réaction naturelle, ces pays cherchent d'abord des moyens, y compris extrêmes, pour sortir du régime. En 2007, la Bolivie est devenue le premier État à se retirer de la Convention CIRDI. L'Équateur, suite à son retrait partiel en 2007 (en refusant tout recours à l'arbitrage international dans le domaine pétrolier) s'est retiré dans son intégralité en 2009. En 2012, après avoir été confronté à plus de trente différends, le Venezuela s'est retiré de

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7. Source des données : <https://icsid.worldbank.org/en/>. Consulté le 25 juillet 2019.

8. Source des données : <https://investmentpolicy.unctad.org/investment-dispute-settlement>. Consulté le 25 juillet 2019.

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la Convention CIRDI. Certains pays comme la Bolivie, l’Afrique du Sud, l’Inde ont également adopté une autre stratégie pour nier le droit de l’investisseur de poursuivre l’État hôte : l’exclusion des dispositions de RDIE dans les accords d’investissement ou même la dénonciation unilatérale de ces accords. Plus surprenant, certains pays développés, considérés comme des pays exportateurs de capitaux, ont commencé à s’inquiéter des effets de l’arbitrage international. En 2011, le gouvernement australien a annoncé qu’il n’inclurait plus de dispositions de RDIE dans ses futurs accords commerciaux. Beaucoup moins touché par son voisin, le nouveau gouvernement néo-zélandais a déclaré en octobre 2017 qu’aucun accord de libre-échange ne contiendrait de clauses d’arbitrage afin de maintenir une marge de manœuvre pour des politiques publiques. Même si l’adhésion à ou le retrait d’une institution internationale peut être une stratégie, par exemple pour faire progresser des préférences politiques particulières, la tendance actuelle (assez inédite) provoque une crise de confiance dans le droit international. Dans une vision pessimiste, la “sortie” massive d’un certain nombre de pays pourrait déclencher une “vague” que d’autres pays suivront. Les résultats finaux de cet effet domino pourraient être le forum-shopping et le traité-shopping, la panique des investisseurs et finalement l’effondrement systémique du régime international de l’investissement.

La crise du droit international de l’investissement est suivie de débats sur une éventuelle réforme du RDIE engageant non seulement les pays, mais aussi les institutions internationales, les organisations non gouvernementales, les cabinets juridiques et les académiques (Roberts 2018). Peut-être qu’une institution d’arbitrage comme le CIRDI s’intéresse aussi à ce débat parce que son histoire et son développement sont directement liées au régime actuel. Après l’adoption de premières règles en 1968, le CIRDI a lancé quatre séries d’amendements pour moderniser ses règles. Le dernier processus, qui a débuté à la fin de 2016, invitait le public à commenter les modifications proposées.

Nos essais coïncident avec cette étape importante dans l’histoire du droit international de l’investissement et avec l’appel à la réforme. La partie suivante est fondée sur une analyse bibliométrique originale du domaine. Elle donnera une évolution des travaux scientifiques sur ce sujet et soulignera la nécessité de développer dans la littérature des travaux interdisciplinaires et empiriques quantitatifs.

## II.3 Le droit international de l'investissement dans la littérature académique

Pour collecter les publications liées au thème du droit international de l'investissement, nous utilisons les données de Scopus.<sup>9</sup> La base de données Scopus (Elsevier) couvre un large éventail de recherches évaluées par les pairs dans de nombreux domaines tels que les sciences de la vie, les sciences physiques, les sciences sociales et les sciences de la santé.<sup>10</sup> Quelques considérations méthodologiques devront être soulignées avant l'analyse bibliométrique. Tout d'abord, nous choisissons les mots-clés les plus pertinents du domaine en question, tels que *investor-state*, *investment arbitration*, *international investment dispute*, *ICSID Convention*, *investment treaty*, *international investment agreement*, *international investment law*. La recherche retourne tous les documents dont ces termes apparaissent dans le titre, les mots-clés ou le résumé. Ensuite, nous nous concentrons sur les articles qui ont été officiellement publiés par des revues à comité de lecture.<sup>11</sup> Pour mieux évaluer les méthodologies appliquées dans ces articles, nous distinguons les articles empiriques des articles non empiriques. Si les termes tels que *empirical*, *data*, *evidence*, *estimate*, *econometric*, *statistical*, *quantitative*, *sample*, *regression*, etc., apparaissent dans le titre, les mots-clés ou le résumé d'un article, nous le considérerons donc comme un article empirique.<sup>12</sup> Enfin, nous classons les revues académiques en deux catégories principales : *revue économique* (si le thème principal abordé dans cette revue est l'économie,

9. <https://www.scopus.com> Consulté le 25 juillet 2019.

10. Cette base de données est largement utilisée dans la recherche liée à l'économie de la science. Par exemple, voir Ayoubi et al. (2019); Seeber et al. (2019).

11. Nous n'incluons pas les livres, les papiers de conférence et les notes diverses.

12. En dehors de ces mots-clés, nous essayons également de "filtrer" les résultats par d'autres mots, par exemple *model*, *hypothesis*, *finding*, *correlation*, *determinant*, *test*. Dans le cadre de notre analyse bibliométrique, un article qui utilise et analyse des données d'un échantillon relativement important est considéré comme "empirique". Cela signifie que notre recherche ne se limite pas à l'approche économétrique. Suivant la méthode de Landes (2003), nous ne considérons pas comme "empirique" un article qui traite de quelques cas ou présente des données anecdotiques. Après avoir filtré les études "supposément empiriques" grâce aux mots-clés, nous avons examiné directement le contenu de chaque article pour confirmer qu'il a appliqué une méthode empirique. En bref, notre base de données bibliométriques contient 123 articles empiriques.

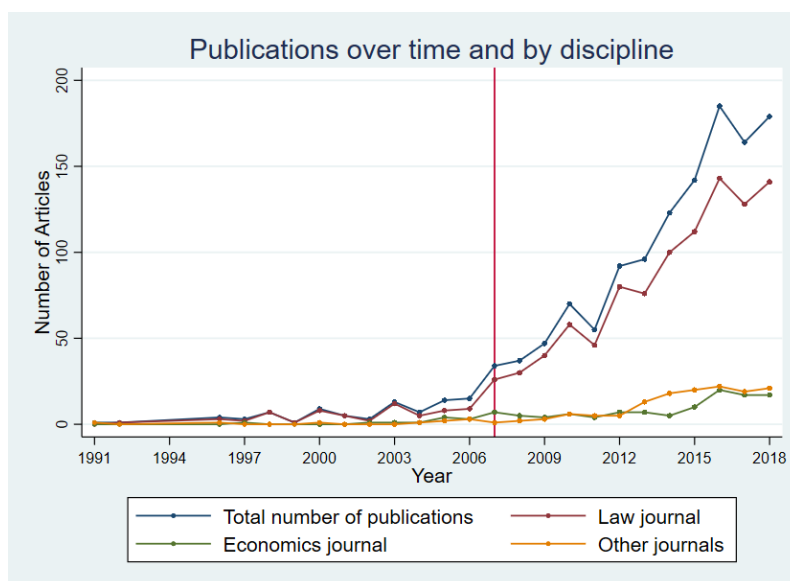


Fig. I: Nombre de publications en droit international de l’investissement (1991-2018)

*Source des données : Scopus*

l’économétrie ou la finance) et *revue juridique* (si le thème principal est le droit).<sup>13</sup> Lorsque le thème d’une revue ne concerne pas principalement l’économie, ni principalement le droit, nous la classons dans la catégorie *Autres revues*. En résumé, notre base de données comprend 1307 articles publiés dans 308 revues entre 1991 et 2018.

En général, la figure I montre que le nombre de publications en droit international de l’investissement a considérablement augmenté depuis 2007 - année du premier retrait de la Convention CIRDI (voir la ligne rouge verticale). Parmi ces publications, on peut observer un écart entre les revues économiques et les revues juridiques en ce qui concerne la publication d’articles sur ce sujet. Il n’est pas surprenant de con-

13. La classification selon ces deux catégories est basée sur les informations sur la page d’accueil de la revue. Nous considérons quelques revues en *law and economics* (par exemple la *International Review of Law and Economics*) comme revue économique parce que le focus de ces revues est souvent soit l’impact du droit et de l’institution sur le système économique, soit les théories et les méthodes économiques qui éclairent le fonctionnement du système juridique. Si la page d’accueil de la revue ne mentionne pas explicitement le domaine principal abordé, nous la classerons en lisant le résumé de ses articles publiés au cours de la dernière année.

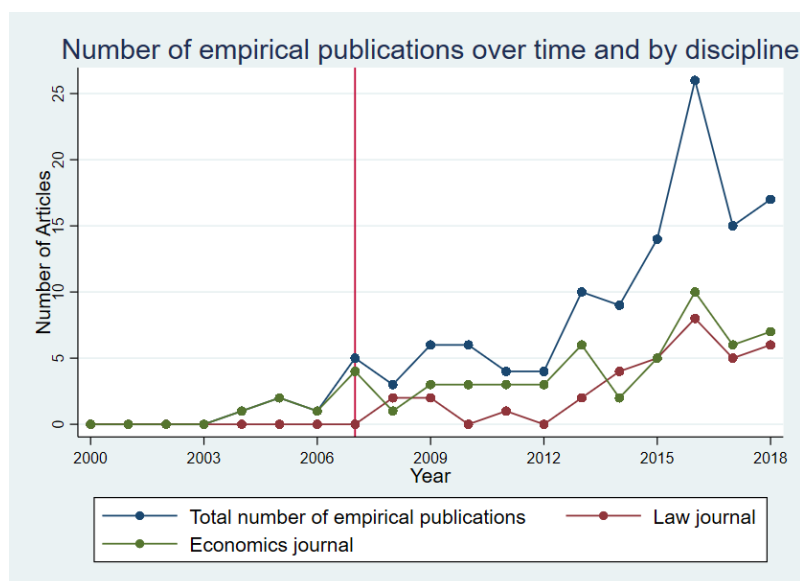


Fig. II: Nombre de publications empiriques en droit international de l'investissement (2000-2018)

Source des données : Scopus

stater que les publications dans les revues juridiques ont contribué à la croissance des travaux académiques en général (149 revues juridiques). Cependant, l'analyse économique du droit international de l'investissement attire également l'attention des économistes : le nombre d'articles relatifs à ce sujet publiés dans des revues économiques a légèrement augmenté, en particulier au cours de ces dernières années (68 revues économiques). Les revues dans d'autres domaines tels que la science politique, la sociologie et la santé partagent également cette tendance.

De la part des méthodologies de recherche, la figure II montre que seulement 9.5% des publications (123 articles) utilisent l'analyse des données. Ce résultat confirme celui de Landes (2003) qui a également trouvé une faible proportion des travaux empiriques dans le domaine de la *law and economics*. Le nombre d'articles empiriques était presque nul avant les années 2000 et a augmenté lentement à partir de 2004. Les revues juridiques publient également des articles empiriques. Cependant, la différence dans le nombre d'articles empiriques publiés par ces deux catégories de revues au fil des ans est assez nette. 57/120 articles publiés dans les revues économiques sont des travaux empiriques tandis que la proportion chez les revues juridiques est



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seulement 35/1043. En se focalisant sur le détail de ces travaux, nous constatons que les auteurs ont appliqué des méthodes empiriques pour explorer cinq grands sujets du droit international de l'investissement : l'effet des traités d'investissement sur les IDE et sur les politiques nationales (55%), la formation des traités d'investissement (par exemple l'analyse de réseau, l'analyse des textes de traités) (18%), les résultats des arbitrages investisseurs-États (par exemple la situation "gagnant-perdant", la façon d'interpréter des traités, les indemnisations) (17%), l'impact de la qualité de la gouvernance sur les différends avec l'investisseur (7.5%) et l'analyse des réseaux d'arbitres (2.5%). Alors que les données sur les institutions internationales, les traités d'investissement et les différends entre investisseurs et États sont rendues publiques et que de nouvelles technologies changent la nature des investissements étrangers, nous pouvons prévoir de nombreuses pistes prometteuses pour les analyses économiques dans ce domaine.

### III Méthodologies et résultats de recherche

Pour explorer ce sujet intéressant, nous utilisons deux méthodes de recherche dans cette thèse : la revue de la littérature interdisciplinaire (Chapitre 1) et l'analyse économétrique avec deux bases de données transversales uniques (Chapitres 2 et 3). Bien que l'approche principale développée dans cette thèse soit l'économie, l'appui sur d'autres champs disciplinaires voisins a souvent été recherché. Par exemple, nous avons utilisé des articles en science politique pour expliquer les raisons pour lesquelles des pays ont décidé de signer et puis de se retirer des traités internationaux. Autre exemple, pour éclairer l'analyse économique de l'efficacité du tribunal arbitral, nous "empruntons" la perspective de la science de gestion pour expliquer empiriquement la différence en termes de performance des équipes d'arbitres. Nous ne pensons pas que ces théories soient en concurrence dans cette thèse. Au contraire, elles soutiennent les théories économiques pour clarifier le problème considéré d'une manière multidimensionnelle, objective et exhaustive.

Nous présentons ci-dessous la méthodologie de chaque chapitre et résumons les résultats de recherche. Alors que le Chapitre 1 introduit un débat sur l'ensemble du système d'arbitrage international en matière d'investissement, les Chapitres 2 et

3 approfondissent cette discussion en mettant l'accent sur la perspective des principaux acteurs du système : les parties en litige et l'institution arbitrale. Les résultats répondent à une demande sociale de compréhension des effets de l'arbitrage international dans la négociation des traités d'investissement et ont certaines répercussions sur les politiques.

## **Chapitre 1**

Le Chapitre 1 traite des critiques actuelles relatives à l'arbitrage international. Pour certains, les pays en développement ont plus de chances d'être la cible de l'arbitrage international d'investissement et les décisions arbitrales favorisent toujours les investisseurs étrangers. En outre, l'arbitrage international a été considéré comme un moyen de réduire la marge de manœuvre pour les politiques nationales dans certains secteurs tels que l'environnement et la santé publique. Ce chapitre ajoute divers points de vue provenant de disciplines voisines telles que l'économie et la science politique aux études juridiques, en combinant la recherche théorique et empirique pour étudier l'efficacité et les effets de spillover de l'arbitrage international relatif aux investissements. Pour commencer le débat, nous expliquons brièvement les raisons qui motivent les pays à participer à l'économie internationale en signant des traités et des conventions internationaux. Certes, c'est un avantage économique et diplomatique pour les pays. Cependant, les règles internationales sont plus contraignantes que ne le pensent les pays, et ils ne le reconnaissent qu'après avoir été eux-mêmes frappés par des demandes d'arbitrage des investisseurs étrangers. Un certain nombre de pays, y compris des pays développés, ont choisi des solutions radicales pour échapper au système actuel du droit international de l'investissement. En examinant les résultats empiriques de la littérature, nous montrons que la corrélation entre le niveau de développement d'un pays et la probabilité de faire face à l'arbitrage demeure incertain et que les résultats de l'arbitrage ne favorisent pas toujours les investisseurs étrangers. Bien que l'évaluation des effets de spillover de la sentence de l'arbitrage (par exemple, une perte en arbitrage) sur certaines dimensions d'intérêts publics comme l'environnement ou la santé publique ne soit pas empiriquement vérifiée, l'incertitude qui mène à l'arbitraire et parfois au manque de cohérence dans des décisions des tribunaux existe et doit être bien élucidée. En conclusion, nous affirmons que la crise actuelle du régime est une occasion pour les États

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d'apprendre et de réviser leurs politiques et que des conditions favorables, y compris des supports des organisations internationales, sont suffisantes pour permettre d'améliorer le régime actuel du droit international au lieu de le quitter.

## Chapitre 2

Les données relatives aux différends fondés sur des traités (ou les différends concernant la violation des traités internationaux d'investissement) portés devant toutes les institutions arbitrales entre 1996 et 2016 ont été collectées pour étudier les raisons pour lesquelles les parties sont d'accord pour régler leur différend à l'amiable. La question de savoir s'il faut accepter ou refuser un tel arrangement est une question classique soulevée dans la littérature interdisciplinaire et a reçu beaucoup d'attention académique. Le règlement amiable des différends entre investisseurs et États pourrait avoir des effets à la fois positifs et négatifs. Par exemple, un règlement amiable est parfois préférable pour réduire les coûts du temps du litige. Cependant, une telle solution coopérative pour un différend fondé sur un traité (ou un différend portant sur la violation des obligations internationales) peut être contestable car, dans ce cas, l'État hôte est considéré non pas comme un partenaire commercial ordinaire mais comme une entité gouvernementale ayant le droit de réglementer et de protéger l'intérêt public. Ce problème se pose lorsque, par exemple, une politique environnementale qui a des impacts négatifs sur le projet privé est ensuite abrogée pour régler le différend avec l'investisseur étranger. Afin d'identifier les déterminants théoriques du règlement amiable, nous associons la théorie économique du litige, qui est bien développée dans le contexte national, aux travaux empiriques sur le système juridictionnel international. L'inclusion de ces déterminants dans un modèle économétrique permet d'obtenir de nombreux résultats intéressants concernant le règlement amiable des différends entre investisseurs et États. Premièrement, nous constatons qu'un État hôte qui n'a pas l'expérience préalable du règlement d'un différend a tendance à le régler rapidement par un arrangement. Deuxièmement, si l'État hôte prévoit une conclusion favorable, en se basant en particulier sur l'observation des résultats de différends similaires dans la même région géographique, il sera moins susceptible de choisir un règlement amiable. Troisièmement, une mesure réglementaire extrême qui prive les investisseurs de leur activités fondamentales peut être un motif de rupture de négociation. Quatrièmement, par rapport aux en-

treprises, les investisseurs individuels sont plus susceptibles d’attendre un jugement final plutôt qu’un règlement amiable. Enfin, il apparaît que la probabilité d’avoir un règlement amiable sera plus élevée si l’investisseur invoque la protection des traités bilatéraux d’investissement néerlandais. Ce dernier effet, qui ne souffre pas de biais d’endogénéité, consolide la conclusion du chapitre précédent sur la nécessité de réformer le système actuel de RDIE par la renégociation de traités lacunaires (c’est-à-dire ceux qui offrent un niveau de protection élevé à l’investisseur étranger mais une marge de manœuvre étroite pour des politiques nationales).

### **Chapitre 3**

Nous construisons une autre base de données en collectant tous les jugements définitifs des différends entre investisseurs et États administrés par le CIRDI jusqu’en mai 2018, quelle que soit la source juridique de la violation (par exemple, le différend peut être lié à la violation d’un traité international, d’un contrat ou d’une loi nationale d’investissement). Le chapitre a pour objet d’étudier l’efficacité du tribunal arbitral (ou des équipes d’arbitres) dans la résolution des différends. Une institution arbitrale comme le CIRDI joue un rôle important dans la stabilisation des activités économiques au niveau international. Une institution qui fonctionne bien et dont le jugement s’impose de lui-même va créer un environnement sûr pour les flux d’investissements transfrontaliers. Jusqu’à présent, la littérature empirique s’est concentrée sur les résultats de l’arbitrage, c’est-à-dire la décision du tribunal en faveur de l’investisseur étranger ou de l’État hôte, et a négligé l’analyse de l’efficacité du règlement des différends. Comme suggéré dans la littérature sur l’analyse économique des systèmes judiciaires, nous choisissons deux indicateurs de l’efficacité comme variables dépendantes : le délai de résolution et la qualité du jugement, représentée par la probabilité d’avoir des recours post-sentence pour “rectifier” ce jugement (par exemple, la demande de correction, les décisions supplémentaires ou la demande d’annulation). Comme une méthode originale, en considérant chaque tribunal *ad hoc* composé de trois arbitres comme une équipe, nous combinons la littérature actuelle avec les connaissances bien développées dans la science de la gestion pour mieux comprendre l’effet du capital humain de l’arbitre sur la performance de l’équipe. En nous concentrant sur les caractéristiques biographiques et professionnelles des arbitres comme déterminants de la performance de l’équipe, nous constatons que

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les équipes mixtes en termes de genre et les collaborations antérieures des membres d'une équipe augmentent le délai de résolution, contrairement à l'expérience et à la diversité professionnelle des membres qui le diminuent. Il est intéressant de noter que la qualité du jugement n'est pas affectée par ces caractéristiques. Enfin, nous ne trouvons pas de preuve de biais de sélection dans nos estimations ni de *trade-off* quantité/qualité dans la résolution des cas devant le CIRDI. Nos conclusions contribuent de façon significative au débat politique en cours sur la réforme du système d'arbitrage international d'investissement visant à accroître son efficacité et sa transparence.

## Chapter 1

# Reasons not to *Exit*? A Survey of the Effectiveness and Spillover Effects of International Investment Arbitration

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This chapter is based on a publication entitled “Reasons not to Exit? A Survey of the Effectiveness and Spillover Effects of International Investment Arbitration” in the *European Journal of Law and Economics* (2019) 47:291–319.

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## Abstract

One of the most important characteristics of an investment treaty is that often it grants aggrieved investors access to international arbitration. This arbitration system does not require a foreign investor to petition his home state in order to bring claims against a host state, and provides an alternative to resolving disputes in the host state's local court. Although international investment arbitration is beneficial for countries in terms of foreign direct investment, it has been accused of not being transparent or effective especially in relation to environment or public health cases. Some countries expressed their discomfort with the current international investment law regime by radical exit solutions such as denunciation of the Convention on the settlement of investment disputes between states and nationals of other states, rejection of investor-state dispute settlement provisions and unilateral denunciation of investment treaties. Based on a vast law, economics and political science literature, this paper proposes arguments to examine these criticisms. First, it is argued that investor-state arbitration is currently a concern in both developing and developed countries. Second, although assessing the spillover effects of arbitration outcomes on some dimensions of public interests such as the environment or public health is not straightforward, the uncertainty that leads to arbitrariness and sometimes inconsistencies in arbitral decision-making exists and needs to be properly identified. Finally, this article argues that exit is not efficient at either the national or international levels, and that it is possible for countries to adapt the current regime to new situations without wholesale exit.

**Keywords:** International investment, investor-state dispute settlement, interdisciplinary studies, public interest.

**JEL Classification:** K41, F21, F53

## 1.1 Introduction

A century ago, investment disputes between foreign investors and host states would have been “settled” by diplomatic protection of nationals. At that time there was a threat of assets seizing until debts were settled. The surge in bilateral investment treaties (BITs) was associated to the use of international investment arbitration - a third party to the dispute, for the purpose mainly of depoliticizing investment disputes and maintaining efficient investment flows. Since the mid-1990s, nearly all new BITs have allowed private investors to sue the host state before international arbitration, in accordance with, e.g. the Convention on the settlement of investment disputes between states and nationals of other states (the ICSID Convention) or the United Nations Commission on International Trade Law (UNCITRAL) arbitration rules. Although a comprehensive multilateral investment agreement needs time to achieve a common consensus, the ICSID Convention was signed by more than 160 signatory and contracting states, many of which are developing countries. This multilateral treaty is an important milestone in improved transparency in dispute settlement, and in particular if disputes are related to national interests.

However, in 2007 there was a major protest against the international investment law regime, in particular investment arbitration, when Bolivia withdrew from the ICSID Convention, followed in 2009 by Ecuador and in 2012 by Venezuela. These countries also unilaterally denounced their bilateral investment treaties with many partner countries. Perhaps more surprising is that in 2011 and again in 2017, Australia and New Zealand announced they would no longer include investor-state dispute settlement (ISDS) provisions in future trade agreements. There are many explanations for this radical exit solution, but the main one is that some countries no longer consider international investment arbitration to be effect. There are many critiques of it in the literature on international arbitration, such as the claim that developing countries have a higher chance of being targeted by arbitration claims, and the outcomes of international investment arbitration always favor foreign investors. Furthermore, international arbitration has been seen as narrowing the national policy space in certain areas such as the environment and public health, since host countries are liable for millions of dollars of compensation if they lose an arbitration following their regulatory measures.



Although this article refers to a specific aspect of the international investment law, we believe that the above criticisms deserve examination from other disciplines than only the legal literature. Moreover, in relation to research on international arbitration, Professor Thomas Schultz in an editorial to the *Journal of International Dispute Settlement* (Vol. 6, No. 2, 2015) said that:

We are probably still far behind other legal fields, such as international law, which clearly is no longer the intellectual wasteland that it was said to be 20 years ago. My sense is that arbitration is following a similar route, thanks in part, precisely, to the fact that international lawyers, but also political scientists, economists, and even militant NGOs, have joined the fray.

With the aim of supporting interdisciplinary research on international arbitration, this article brings diverse views from neighboring fields such as economics and political science into legal studies, by combining theoretical and empirical research to survey the effectiveness and spillover effects of international investment arbitration.

The issues outlined above are incorporated in the following survey. Section 1.2 investigates how some aspects of the international investment law regime such as investment treaties and the ICSID Convention can benefit a country in terms of foreign direct investment (FDI). Section 1.3 reviews some radical solutions chosen by states to express their unease with the current regime. To understand states' decisions and provide the reader with a broader assessment, section 1.4 reviews all contentious aspects of international investment arbitration, e.g. risk of exposure, outcomes, and spillover effects of arbitration on national interests. After identifying the problems related to the investment arbitration system, section 1.5 provides a brief discussion of why reformation of the current international investment law is needed but not in the direction of the radical exit solution. This section highlights also how countries can change rules from within. In section 1.6, we draw some conclusions by referring to some recent developments in international investment law. Our main conclusion is that the actual crisis in the regime is an opportunity for states to learn and to revise their policies, and that the favorable conditions are sufficient to allow improvements to the regime rather than exit from it.

## **1.2 International investment law, country credibility and international capital**

This section focuses on the relationship between a country's credibility and international capital, and how countries can benefit from the international investment law regime to build credibility. Theoretically, a country's credibility can be defined in various ways depending on the field being considered. In international finance, national credibility can be revealed by the simple act of government repaying its foreign debts on time (Dreher and Voigt 2011). In international trade, this can be expressed as the state's commitment to avoiding inefficient barriers to trade, or the state's capacity to implement reliable sanitary safety regulation for exported product (see Charlier 2012). In international investment, an important part of the literature refers to the commitments of host states to ensure a secure environment for business and investment, e.g. by avoiding any political risks, in order to define the country's credibility.

### **1.2.1 Relationship between international capital and country credibility**

When investing outside their home country, firms can face major constraints such as small size of the future market, poor infrastructure, macroeconomic instability, and political risk in the host country. According to a survey conducted by the Multilateral Investment Guarantee Agency in 2013 (MIGA 2013), political risk still ranks second (after macroeconomic instability) among the possible impediments to FDI flows. Political violence (war, civil disturbance, terrorism) is of the most concerns in relation to the Middle East and North African countries. Furthermore, the majority of firms in the MIGA survey continue to identify the increased risks related to adverse regulatory changes and breach of contract in this region. The survey emphasized that risk of adverse regulatory changes is generally not covered by the political risk insurance industry although it can result for investors in cancellations or withdrawals of investment or both.

Political risks usually are characterized by economic conditions (e.g. the occurrence of financial crisis) and by governance conditions (e.g. public corruption, lack

## 1.2. INTERNATIONAL INVESTMENT LAW, COUNTRY CREDIBILITY AND INTERNATIONAL CAPITAL

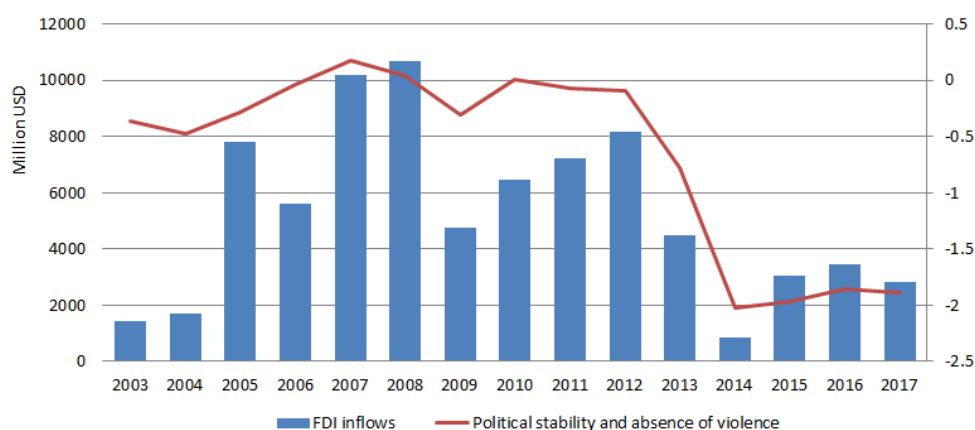


Fig. 1.1: Relationship between political risks and FDI inflows: the case of Ukraine

*Source: Author's calculations based on data from the World Bank*

of respect of rule of law) (Dupont et al. 2016). The notion of political risk is central to the legal, political, and economic literature on international investment. Like the empirical economic literature on trade (Levchenko 2007), the empirical economic literature on FDI stresses especially the negative impact of political risk not only on companies that have invested abroad but also on the host country's investment environment (see Figure 1.1).<sup>1</sup> The fact that a host state breaches its contract with investors can instantly “chill” co-national investors, and reduce both the country's credibility and bilateral FDI flows (Wellhausen 2016b). Using a sample of host developing countries, Busse and Hefeker (2005) and Allee and Peinhardt (2011) show that government stability, absence of internal conflict, and the quality of democracy are important determinants of the investment decisions of multinationals.

Given the advantages to the host state of FDI inflows such as economic growth, development of infrastructure or employment, countries receiving capital are considering “signaling” their international credibility. Subsection 1.2.2 discusses two ways identified in a vast economic literature, to build national credibility: signing and ratifying bilateral investment treaties, and accession to international organizations.

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1. In Figure 1.1, the variable “Political stability and Absence of Violence” uses 4 indicators: government stability, absence of internal conflict, external conflict, and ethnic tension.

## 1.2.2 How to build credibility

### 1.2.2.1 Signing and ratifying bilateral investment treaties

The fundamental purpose of a bilateral investment treaty (BIT) is to encourage investment flows between two countries. Governments likely were motivated to signal their credibility by signing BITs in order to compete for FDI, and therefore the number of BITs signed and ratified exploded in the 1990s – a difficult time for international bank lending following the crisis in the 1980s. However, debate over “BIT or no BIT” seems not to have been concluded. According to Downs and Jones (2002), if an investor is looking only at a BIT in order to make investment decisions (on the basis that the host country will comply with BIT commitments to preserve its reputation), then some caution is recommended because there are numerous theoretical and empirical reasons for believing that the (host) state can no longer be said to have a single reputational function related to all the problems of treaty compliance. It means that defection from an agreement in an area depends on the “size” of the treaty, or otherwise the relative importance that the state assigns to it. This argument appears to make the effect of BIT on the country’s credibility and thus on FDI, somewhat vague. Yackee (2008) is similarly skeptical. He argues that with foreign investors, investment agreements such as BITs cannot be a reliable solution to for credibility problems and that the international investment regime would not and should not collapse in a world without BITs.

Other authors provide empirical evidence confirming the existence of a BIT effect. Leshner and Miroudot (2006) broaden the scope of investment agreements to include regional trade agreements that contain investment provisions. They find that these types of agreements are associated positively not only to trade but also and to a greater extent to investment flows. Kerner (2009) provides interesting evidence that investors not only invest more when they are protected by BITs but also invest more in countries that have ratified more BITs, even though these agreements do not offer the investor additional protection from expropriation. Similar to Busse et al. (2010), Allee and Peinhardt (2011) show that the number of BITs is positively correlated to FDI inflows in the host state, *ceteris paribus*, and that each additional treaty increases FDI inflows by approximately USD 23 million annually.

Why do BITs work? The empirical literature highlights the role of dispute set-

tlement provisions - one of the most important provisions in these treaties - on FDI inflows. Since the mid-1990s, the proportion of international investment agreements that offer pre-consent to international arbitration has grown significantly (Neumayer et al. 2016). The international arbitration system does not require the foreign investor to petition its home state in order to bring a claim against a host state, and provides an alternative to resolution of its disputes in the host state's local court. Furthermore, international investment arbitration clause can give investors "a sense of protection" that can affect their investment decisions (Kerner 2009; Büthe and Milner 2014; Neumayer et al. 2016). However, Yackee (2009) clarified the relationship between BIT and FDI by emphasizing that BITs are statistically significant predictors of FDI only for low-risk countries. The fact that a high-risk country expects to "buy" credibility by signing and ratifying BITs with many countries may not lead to an increase in FDI.

#### **1.2.2.2 Accession to international organizations**

It has been argued that the value of an important government asset such as credibility can be reduced by non-respect of commitments to foreign investors. While the implementation (or at least the announcement) of a commitment can be reversed unilaterally by the host state, a commitment embedded in an international agreement involves higher costs of reversal. E.g. non-respect of commitments could lead to the termination of loans or credit from international financial institutions, or initiation of complaints before the World Trade Organization (WTO) dispute settlement mechanism. Because membership of an international organization can make renegeing on promises costly, foreign investors might expect that accession to international organizations (IOs) such as the WTO, or membership in the ICSID Convention would help governments to build international credibility.

The theoretical literature on the effect of IOs is not straightforward. Pevehouse (2003) states that the governments of some newly democratized countries decided to join selected international organizations for domestic political motives rather than international reasons. E.g. the current government might try to an IO shortly before an election in order to demonstrate its policy preference and be voted in for another term. Some authors (Feldstein 1999; Stiglitz 2002) are doubtful about the

effectiveness of IOs, and emphasize their side effects on the national policy space. However, these side effects of IOs might be due to the negotiation process which does not understand what will be good for the country (Tang and Wei 2009).

Empirical economic studies on the positive effect of IOs on a country's credibility are well developed in the literature. One example is the case of the WTO. In line with a vast theoretical literature which presupposes the importance of the GATT and WTO for trade and economic growth because they enhance a country's credibility by reducing the governments' discretionary barriers with regard to trade policy (Staiger and Tabellini 1987; Bagwell and Staiger 2002), Tomz et al. (2007) show that the estimated effects of the GATT on the substantial growth during the postwar trade are positive and robust across time and regions. Tang and Wei (2009) find an effect of WTO membership on national credibility, arguing that accession to the WTO is associated to significantly increased growth and investment sustained over about five years. Of more interest is their argument that under the "umbrella" of the WTO, policy changes are less discretionary, and thus, WTO accession is beneficial for countries with weak governance. In the case of membership of the International Bank for Reconstruction and Development, it is important for developing countries to have a presence on the Board of Executive Directors not just for the international prestige it brings, but also in order to increase loan commitments for their home countries (Kaja and Werker 2010). In the context of international investment, what about the case of the ICSID Convention? Dreher et al. (2010) argue that membership in IOs can increase inflows of FDI even if the members are countries with high levels of political risk. Accordingly, ratification of the ICSID Convention in the previous year significantly increases FDI inflows in the current year. Dreher and Voigt (2011) propose a clearer explanation of the previous finding by assessing the effect of membership of IOs on a country's risk rating which is based on the three weightiest indicators: political risk, debt indicators, and economic performance. They suggest that membership of the ICSID Convention (as well as the WTO) significantly reduces country risk because accession encourages countries to reform their policies to conform to international standards.

To sum up, the above studies suggest that countries have many ways to build credibility with foreign investors in order to compete for FDI. In addition to the

“traditional custom” of signing and ratifying BITs, accession to the ICSID Convention is also a solution to the problem of credibility, even in high risk countries. Given these effects, we can understand why more than 160 countries had signed the ICSID Convention (as of December 2018) and why the number of BITs has grown rapidly since 1990s. However, the current international investment law regime, and especially the system of investor-state arbitration, is experiencing a backlash from a number of countries that have been sued repeatedly by foreign investors and have been obliged to pay millions of dollars of compensation. As a natural reaction, they search first for ways including extremes ones, to exit the regime.

### **1.3 Unease with investor-state dispute settlement and Exit strategies**

In recent years, investor-state disputes filed before international investment arbitration have increased greatly. In the case of ICSID alone, the number of disputes filed before this institution at the end of 2018 was 724 cases (against 82 cases at the end of 2000). The rise in the number of disputes is responsible for the unease felt by some countries, mostly from Latin America. Those countries claim that the current arbitration system and investment treaties are means to maximize the protection of developed countries’ economic interests while harming developing countries that face economic hardship. Furthermore, this system is seen as narrowing the national policy space in some essential areas such as the environment and public health. International investment arbitration is increasingly widespread and is a hotly debated topic when final awards of millions of dollars of compensation and litigation costs become known<sup>2</sup> (Kawharu and Nottage 2018). In this context, a number of countries have chosen radical solutions to escape the current international investment

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2. UNCTAD data on treaty-based disputes show the top 8 cases where more than USD 1 billion of compensation were awarded to foreign investors as of December 2018: *Oschadbank v. Russia* (USD 1,1 billion), *Unión Fenosa v. Egypt* (USD 2 billion), *Crystallex v. Venezuela* (USD 1,2 billion), *Mobil and others v. Venezuela* (USD 1,6 billion), *Occidental v. Ecuador* (USD 1,7 billion), *Hulley Enterprises v. Russia* (USD 40 billion), *Veteran Petroleum v. Russia* (USD 8,2 billion), *Yukos Universal v. Russia*. More information on: <http://investmentpolicyhub.unctad.org/ISDS/FilterByAmounts> (accessed July 25, 2019).

law system. This article refers to the drastic measures taken by countries in order to remove the jurisdiction of the arbitration centers where investors can sue states, and remove the investor's right to bring a dispute before international arbitration as set out in international investment treaties.

In 2007, Bolivia became the first state to withdraw from the ICSID Convention, followed by Ecuador which withdrew from the Convention partially in 2007 (by disallowing international investment arbitration from resolving oil and gas disputes) and totally in 2009. In 2012, after being faced with more than thirty arbitration claims, Venezuela exited from the ICSID Convention. It is not difficult to justify the decisions of those three states: ICSID at the time was the forum cited in most investment agreements, and the ICSID Convention had been signed and ratified by around 147 countries at the end of 2012.<sup>3</sup> However, these actions represent only the first exit strategy.

The second strategy adopted by states to negate the investor's right to sue was the exclusion of ISDS provisions in investment agreements, or unilateral denunciation of these agreements. At the end of 2018, according to the United Nations Conference on Trade and Development (UNCTAD) data,<sup>4</sup> the list of denounced investment treaties as might be expected involved countries hit by arbitration claims, e.g. Bolivia (14 BITs), Ecuador (23 BITs), South Africa (10 BITs), Indonesia (21 BITs), and India (61 BITs). Perhaps more surprising is the fact that some developed countries which are considered capital-exporting, began to worry about the effects of international investment arbitration, and also took extreme measures to express their discomfort with this system. In 2011, the Australian government announced that it would no longer include investor-state dispute settlement provisions in future Australian trade agreements. In a trade policy statement published by the Gillard Government in April 2011 (Australia Government—Department of Foreign Affairs and Trade 2011), two main reasons were given to justify this decision: to reduce discrimination against domestic investors since they had no access to investor-state arbitration, and to maintain government's ability to regulate in favor of public health. Given that country's long and committed support of inter-

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3. More information on: <https://icsid.worldbank.org/en/Pages/about/Database-of-Member-States.aspx#>. Accessed July 25, 2019.

4. More information on <http://investmentpolicyhub.unctad.org/IIA/>. Accessed July 25, 2019.



national law, its decision stunned the investment community. Much less affected by its neighbor, New Zealand's newly elected government in order to gain more regulatory space stated in October 2017 that "no further free trade agreements include ISDS clauses".<sup>5</sup> Surprisingly, New Zealand's policy shift is not explained simply by reference to its home state and host state experience before international investment arbitration.<sup>6</sup> Thus, the new government of New Zealand's approach may add some complexities to negotiation of the investment chapter in the Regional Comprehensive Economic partnership (ASEAN + 6) – an important free trade agreement between Australia, New Zealand, China, Japan, South Korea, India and member states of the Association of Southeast Asian Nations (ASEAN) (Kawharu and Nottage 2018).

To give readers and policy makers an objective and comprehensive view, the next section reviews all relevant contentious aspects of the investor-state dispute settlement: risk of exposure for the "weak", outcomes that are thought to be beneficial to foreign investors, and the spillover effects of arbitration outcomes on national interests.

## **1.4 Investor-state arbitration: review of the risk of exposure to arbitration claims, determinants of the outcomes and spillover effects of arbitration on national interests**

### **1.4.1 Risk of exposure to arbitration claims**

The first rumor is about potential litigation risks for developing countries: investment arbitration would serve to strengthen the influence and economic interests of developed over developing countries. For this reason, in some cases, local tribunals are preferred over international investment arbitration to settle disputes between

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5. Source: [https://www.beehive.govt.nz/sites/default/files/2017-11/PM%20Press%20Conference%2031%20October%202017\\_0.pdf](https://www.beehive.govt.nz/sites/default/files/2017-11/PM%20Press%20Conference%2031%20October%202017_0.pdf). Accessed July 25, 2019.

6. As of December 2018, according to UNCTAD data, New Zealand has not experienced any treaty-based dispute as respondent state or home state of investors. See <http://investmentpolicyhub.unctad.org/ISDS>. Accessed July 25, 2019.

states and foreign investors. This subsection examines whether the probability of being sued before international investment arbitration varies and depends on both the characteristics of the parties to the dispute as well as the targeted industries. Before answering the main question, some empirical facts related to the choice of international arbitration forum may be of interest to the reader.

In her publication, Franck (2007) reveals an interesting fact about investment arbitration: there is an apparent preference for institutional arbitration (e.g. cases administered at the Permanent Court of Arbitration (PCA), Stockholm Chamber of Commerce (SCC), or ICSID), among 65/82 cases studied that were institutional and 17/82 cases were *ad hoc* (e.g. tribunal organized under the UNCITRAL Arbitration Rules). In a research dated 2014, Simmons finds that countries' economic and democratic conditions can affect the choice of arbitration forum. Indeed, the greater the difference in the levels of development of the two BIT partners, the greater the possibility that the particular BIT will choose an international delegation such as ICSID for the settlement of disputes. Likewise, democratic countries tend to negotiate treaties with ICSID dispute settlement provisions, and avoid concluding agreements that contain neither ICSID nor UNCITRAL provisions.

Besides the BIT partners' choice of dispute resolution forum, many authors show that the identity of the parties to the dispute, e.g. the economic and institutional conditions of the host country, contributes to answering the question of who is likely to be sued before international arbitration. In a 2007 statistical work, Franck shows that 88.9% of investors were from OECD countries while only 30.5% of the government respondents were OECD countries. Dupont et al. (2016) confirm Franck's (2007) finding, emphasizing that "being a Latin American country" may be a good indicator of arbitration claims. In addition to economic conditions, Dupont et al. (2016) investigated the impact of some host state institutional indexes such as corruption and rule of law<sup>7</sup> on the occurrence investment arbitration claims. They find that bad governance (proxied by a high level of corruption or lack of rule of law) significantly increases arbitration claims.

Can we confirm the statement that the weak have a higher chance of being targeted by arbitration claims? Schultz and Dupont (2014), using a sample of arbi-

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7. The authors use Worldwide Governance Indicators (WGI) project data.

#### 1.4. INVESTOR-STATE ARBITRATION: RISK OF EXPOSURE, OUTCOMES AND SPILLOVER EFFECTS

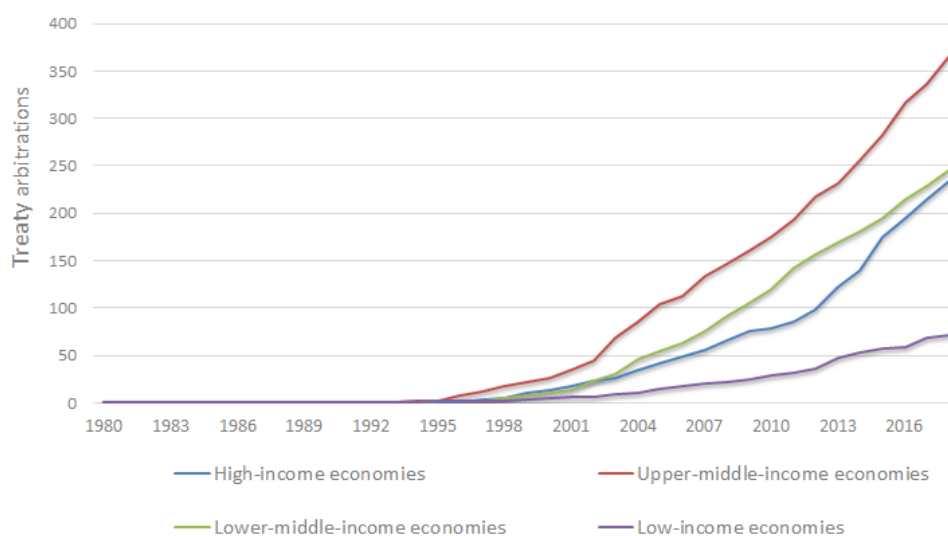


Fig. 1.2: Number of treaty-based arbitration claims filed per year, by World Bank development status of respondent state (1980-2018)

*Source: Author's calculations based on UNCTAD's data*

tration claims between 1972 and 2010, reject the neo-colonial hypothesis and provide an important finding: claims are not systematically filed against developing countries, and in particular since the mid-to-late 1990s. Wellhausen (2016a) confirms this finding, insisting that none of the top 20 respondents in her research is classified by the World Bank as a low-income country (Figure 1.2 depicts Schultz and Dupont's (2014) and Wellhausen's (2016a) results for UNCTAD database of treaty arbitrations). Interestingly, Dupont et al. (2016) state that developing countries that received a recent loan from the International Monetary Fund (IMF) to correct their balance of payments problems and restore the conditions for strong economic growth, have a lower probability of facing investment arbitration compared to the conventional wisdom, because such programs tend to severely limit the discretion of governments. As a result, the country's economic conditions should be interpreted with care in order to assess bias in the distribution of filings. Regarding industry characteristic, according to Franck (2007) and Wellhausen (2016a), the three most targeted industries are energy, water, and waste management. Long established investments in these sectors are vulnerable to regulatory risks since once high investment costs are sunk, it is difficult for investors to pull out of the project. However,

Wellhausen (2016a) confirms that services including broadcasting and media, retail, importers/exporters, finance and banking, aviation services, maritime services, tourism (operation of hotels and resorts) - “a set of industries with traditionally more mobile assets ” as said by the author - account for almost 24% of investment arbitrations.

Although the empirical results for the impact of a country’s economic conditions and type of industry on the probability of facing investment arbitration remain unclear, arbitration in the previous year is a strong predictor of arbitration in any given year (Simmons 2014). Reviewing and improving the institutional and legal frameworks, including regulatory policies, to avoid any abuse of sovereign power that might harm foreign investors would act as a shield against future litigations.

#### **1.4.2 Determinants of the outcomes of international investment arbitration**

If the first claim about the litigation risk of a weak country cannot easily be justified, might the literature tell us more about the “predictability” of the outcomes of international investment arbitration?

It has been argued that the outcomes of arbitration are decided by many “actors”. Arbitrators decide whether an investor or a state wins. They also determine the amount of damages awarded to the injured party. In addition to arbitrators, foreign investor and host state, together with their legal counsel, may also contribute to deciding the outcome of the arbitration. Moreover, the parties can discontinue the proceedings and agree a pre-award settlement which may not be made public.

This subsection identifies the determinants predicting the outcomes of international investment arbitration, what could be called “extra-legal” factors, because they are not related directly to the law (in its strict sense), e.g. the country’s developmental status, the appointment of arbitrators, or the type of industries involved. To simplify, we classify these determinants into three groups: (i) the characteristics of the parties to the dispute, (ii) tribunal-related factors, and (iii) the characteristics of the industries and the investment agreements. For each group, we present the different scholars’ arguments around the outcomes of international arbitration.

### 1.4.2.1 Characteristics of the parties to the dispute

With respect to the effect of the characteristics of the parties to the dispute on the outcomes of international investment arbitration, findings in the empirical literature differ. Some authors show that the outcomes of investment arbitration are independent of extra-legal factors such as the characteristics of the parties to the dispute. E.g. by focusing on the ultimate outcome (win-lose), Franck (2007) confirms that although investors making claims are predominantly from developed states, the percentage of ultimate winners seems not to be meaningfully different between investors and host states. Similarly, Franck (2009) finds no statistically significant relationship between the OECD status and the World Bank status of the host state, and winning a given investment treaty dispute. According to Franck, these two indicators also need not affect the mean damages awarded by the tribunal.

Others, by focusing on the jurisdictional stage of the proceedings, argue that the decision of investment arbitrators may be a function of the economic and institutional variables related to the parties to the dispute. First, in applying descriptive statistics to a ICSID arbitration database, McArthur and Ormachea (2009) emphasize that weak countries experienced greater success in international investment arbitration because cases against host countries scoring low for institutional quality, or include in the most impoverished quartile, are more likely to be denied jurisdiction at ICSID (and then the host state wins) than cases with high host country institutional quality scores, or countries in the richest quartile. However, in contrast to McArthur and Ormachea (2009), other studies provide opposing findings: it appears that host states with higher development status and investors from capital-exporting states have higher chances of success in international arbitration. In an analysis of the content of arbitration awards, Harten (2012) discovered a clear tendency toward expansive approaches<sup>8</sup> frequently used by arbitrators in the resolution

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8. The arbitrator adopts expansive or restrictive approaches to respectively increase or reduce the damage awarded to claimants, and the risk of liability for respondents. E.g. with respect to the concept of “corporate person investor”, a tribunal adopting a restrictive approach would refuse a claim brought by a foreign company owned and controlled by nationals of the host state whereas an expansive approach would be characterized by allowance of this claim. The author notes also that the coding process considers only resolution of an issue which depends largely on the arbitrator’s discretion. This means that if the treaty provides some “guidelines” about how

of jurisdictional issues (e.g. corporate person investor, scope of most favored nation (MFN) treatment), and found also that this tendency was especially strong in disputes concerning claimants from the United States, France, the United Kingdom, and Germany (compared to claimants of other nationalities). Simmons (2014), using data from Harten (2012), concludes that less wealthy respondent states are likely to receive awards in favor of investors at the jurisdictional stage. Schultz and Dupont (2014) agree with Simmons (2014), and stress economic power disparities as a factor of success for the respondent state even at the merits stage of the proceedings.

Other than the relationship between the economic or institutional conditions of countries, and the outcome of arbitration, the literature has benefited from Hafner-Burton and Victor's (2016) research into another special outcome: secret award. Accordingly, respondent states are more likely to hide the outcome of the dispute (e.g. they can settle early before final award or agree not to conceal the outcome of arbitration) if they have past publicized experience of losing. Furthermore, Wellhausen (2016a) finds a descriptive correlation between investor's national origins and the settlement rate. Among 118 concluded arbitrations in which a US investor was a claimant, the respondent state won 36% of the time, and settled 36% of the time. This proportion seems to be no different for British investors. However, in 49 concluded arbitrations in which the claimant was a Dutch entity, the author found that the state won 29% of the time and settled 55% of the time.

#### 1.4.2.2 Tribunal-related factors

It is recognized that for each dispute brought before international investment arbitration, the number of arbitrators is around three per panel, and most decisions follow the majority of the arbitrators. Interestingly, talking about the investment arbitrator network, Puig (2014) describes it as a small, dense and male-dominated group of European and Anglo-American professionals.

Using data on coded investment treaty arbitration awards, Franck (2007, 2009) demonstrates that there is no statistically significant pattern between the OECD

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it should be resolved, the resolution is excluded from the database. The database contains 515 individual arbitrator decisions on the resolution of jurisdictional issues for 115 awards. See Harten (2012), appendix two.

status or the World Bank status of the presiding arbitrator, and winning a given investment treaty dispute and the mean damages awarded. In Franck and Wylie (2015), the authors find even that host states are more likely to obtain a zero-liability award if all the arbitrators on the panel are from high income countries. Kapeliuk (2012) shares Franck's (2007) finding in an investigation of the effect of panel composition, specifically identifying the difference between an experienced arbitrator (appointed to an ICSID panel prior to appointment to the panel in question) and an arbitrator with no prior ICSID arbitration experience, on the outcomes of treaty arbitrations. Kapeliuk shows that there is no statistically significant relationship between panel composition and outcome. More interestingly, party-appointed arbitrators with no prior ICSID experience do not appear to render dissents less often than experienced arbitrators.

Although Franck and Kapeliuk find no reason to take account of either development status or prior experience of the arbitrators, other authors identify the impact of the appointment process of arbitrators on case outcomes, especially when they use legal content analysis of jurisdictional decisions (as opposed to ultimate outcome analysis applied by Franck and Kapeliuk). For instance, if the investors appoint the presiding officer of the arbitration panel, they are more likely to receive expansive decisions to jurisdictional questions (Simmons 2014). The frequency of appointments also matters: Harten (2012) finds that frequently appointed arbitrators are more likely to resolve jurisdictional issues in favor of investors. However, according to Puig (2014), these findings may not be surprising, as firms do not want to take any additional risks when bringing their disputes to international arbitration. As a result, they simply appoint "who may deliver more predictable solutions, even if wrong or imperfect" (Puig 2014, p.423). Harten (2012) confirms also that although his empirical results are less likely to be explained by chance, alternative explanations, in addition to the economic incentives of arbitrators, are always possible.

#### **1.4.2.3 Industry and investment agreement characteristics**

In this subsection, we investigate whether the type of industry and the characteristics of the investment agreement matter for predicting arbitration outcomes.

Regarding industry, Franck (2011) uses treaty-based disputes from 1990 to 2006

to show that there is no statistically meaningful difference between energy sector (representing an immobile industry) disputes and non-energy disputes, and settlement. However, if the scope of “immobile industry” is extended, Wellhausen (2016a) find that the settlement rate is higher for disputes in the following sectors: roads and rail, mining, hydrocarbon and electricity. Hafner-Burton and Victor (2016) confirm also Wellhausen’s (2016a) result.

In relation to the characteristics of investment agreements there seems to be a link to the outcomes of international investment arbitration. First, in the case of the dispute resolution rule, Franck (2011) finds no significant pattern of relations between arbitral decisions (the ultimate winner of a dispute, the amount awarded) and whether disputes were brought under the ICSID or other rules. Although Franck’s (2011) research methodology provides the reader with an overall view, Simmons (2014) by switching to a content analysis method gives more details about the relationship between the rules applied and the outcomes. Accordingly, host states are more likely to win at the jurisdictional stage under the ICSID arbitration rules, but not under the UNCITRAL arbitration rules. Second, given that the scope of an ICSID tribunal’s jurisdiction depends on the specific provisions of the written instruments in which consent to arbitration is expressed, e.g. a BIT, an investment chapter of a regional trade agreement, or an investment contract, McArthur and Ormachea (2009) show empirically that investors will be more likely to succeed at the jurisdictional stage if trade agreements and BITs form the basis of state consent to ICSID jurisdiction. If the basis depends on a contractual agreement, the host state may prevail and end the case by denials of the tribunal’s jurisdiction. Finally, the type of investment agreement also can affect arbitration outcomes. According to Harten (2012), where a claim is brought under a bilateral investment treaty or the Energy Charter Treaty (ECT), jurisdictional issues had a higher probability of being resolved expansively in favor of investors than in cases brought under the North American Free Trade Agreement (NAFTA).

In sum, the literature review shows that arbitration outcomes do not always favor foreign investors. Sometimes, a dispute has been terminated secretly and the public does not know exactly which side actually “won”. The literature suggests also that foreign investors’ success may be predicted by some extra-legal determinants



such as the development status of the parties, appointment of arbitrators, and the characteristics of investment agreements and of arbitration rules. After reviewing the risk of being attacked by arbitration claims and the outcomes of the cases, the next subsection analyzes the spillover effects of these outcomes on important aspects of national interests: national credibility (again), environment, and public health. This is a topical issue highlighted also in the recent negotiation of several economic agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Comprehensive Economic and Trade Agreement (CETA) (Henckels 2016).

### **1.4.3 Spillover effects of international investment arbitration on national interests**

#### **1.4.3.1 International investment arbitration and contingent credibility**

In the previous section, the literature clarified how some aspects of the current international investment law regime can help countries to signal their credibility to potential investors, and thus to compete for FDI. However, Allee and Peinhardt (2011) contend that this is contingent in the sense that the increase in FDI flows depends on states' compliance with the law, and particularly the treaty provisions.

The effect of BITs on FDI flows depends largely on the subsequent behavior of the governments who sign them. This idea is nevertheless not highlighted in the literature because most studies focus on the *ex-ante* informational role of BIT (or the promotion effect mentioned in Section 1.2.2). Accordingly, appearing before the ICSID sends a negative signal about the host state's behavior towards foreign investors. The appearance of a government at an arbitration venue could make potential investors hesitate about future investment in that country. More importantly, losing an arbitral panel ruling provides more precise information (not a noisy signal) to investors about the definitive illegality of the host state's actions. Using a sample of non-OECD countries, Allee and Peinhardt (2011) show empirically that a single ICSID dispute filed against a host state, on average offsets the FDI gains associated to signing two additional BITs, and that each pending case reduces FDI by about USD 55 million annually. In particular, losing an ICSID ruling reduces

the gains produced by a dozen or sometimes more BITs. In Wellhausen (2016b), Allee and Peinhardt's (2011) empirical results are confirmed by adding a nationality effect. Wellhausen finds about a 2% annual decrease in average bilateral FDI flows when a co-national investor brings a public international arbitration against the host state. Allee and Peinhardt's (2011) and Wellhausen's (2016b) results demonstrate that with the monitoring and punishment effect, international investment law, via investor-state arbitration, can make a state's treaty violation more costly than the financial penalties found in arbitral awards. The main question is whether and when the promotion effect of BITs or the ICSID Convention might be outweighed by their monitoring and punishment one?

#### **1.4.3.2 Arbitration and Environmental protection: regulatory chill and chilling arbitrary regulations**

##### ***a. Regulatory chill effect of international investment arbitration***

International law has long recognized a certain *bona fide* (in good faith, without deception or fraud) regulation which can be categorized as the exercise of police power such as non-discriminatory measures enacted and implemented in accordance with due process to protect the environment or public health, need not be compensable.<sup>9</sup> Examples from high-profile disputes concerning the NAFTA or the Central America Free Trade Agreement (CAFTA) introduce the discussion on government's right to regulate in the context of international investment arbitration.

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9. See cases: Emmanuel Too v. Greater Modesto Insurance Associates and USA (award dated December 29, 1989), administered by the Iran-United States Claims Tribunal; Methanex v. USA (award dated August 3, 2005), administered by ICSID; Saluka v. Czech Republic (partial Award dated March 17, 2006), administered by the Permanent Court of Arbitration. In the case of Tecmed v. Mexico, the ICSID tribunal said in the final award dated May 29, 2003 that "the principle that the state's exercise of its sovereign power within the framework of its police power may cause economic damage to those subject to its powers as administrator without entitling them to any compensation whatsoever is undisputable". However, while most international investment treaties provide protection against indirect expropriation or measures tantamount to expropriation, they do not highlight the treatment of the non-compensable governmental regulation. Moreover, the line between indirect expropriation and non-compensable regulatory measures has not been systematically clarified in arbitral jurisprudence, and depends on the facts of each case. See OECD (2004) for more information.

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In 1997, Ethyl, a large US chemical corporation, submitted a claim against Canada following a ban on imports of the gasoline additive methylcyclopentadienyl manganese tricarbonyl (MMT) for use in unleaded gasoline, which is considered as dangerous toxin. Only one year after the Ethyl dispute, the Canadian government faced a challenge to its attempt to ban exports of polychlorinated biphenyl (PCB) wastes from Canada. While this regulation caused alleged economic harm to a US investor (S.D. Myers), the government found that the ban was in line with the Basel Convention on the management of toxic waste. In 2002, Chemtura Corporation, another US-based chemical company, added to this wave of litigation by filing a claim against Canada's measures to restrict production of goods containing lindane, a hazardous persistent organic pollutant. Like Canada, the United States also was challenged by foreign investors following its environmental regulation. In 1999, the state of California issued an executive order banning methyl tertbutyl ether (MTBE), a gasoline additive that was polluting drinking water supplies and the air. This regulation was challenged in the same year by a Canadian investor (Methanex Corporation). The results of all these arbitrations were made public: all claimants' claims were dismissed at the merits stage in the case of Chemtura and Methanex, the state lost in the case of S.D Myers, and settled with the investor Ethyl.

Other CAFTA cases involving developing countries are cited in the legal literature as examples of governments' rights to regulate. E.g. the case of El Salvador when the country put a stop to several "financially lucrative, but environmentally destructive" mining projects in 2009,<sup>10</sup> to prevent severe deforestation and pollution of its major river, the Lempa (Broad and Cavanagh 2015). In 2015, the government of Costa Rica revoked environmental viability permits for a hotel project in order to protect wetlands and forests.<sup>11</sup> Investors in these projects decided to bring their disputes with these two governments before international investment arbitration. As of December 2018, these cases were decided in favor of the host states.

Although the outcomes of these arbitrations are mixed, and even controversial in the view of environmentalists, they can suggest that the right of governments to regulate, despite an environmental protection purpose, may be challenged before

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10. Case Pac Rim v. El Salvador, case Commerce Group v. El Salvador.

11. Case Aven and others v. Costa Rica.

international arbitration if the regulation harms investors' rights. Hence, the true effect of legitimate environmental policies is somewhat contingent on the adjudication of arbitrators. A criticism of the spillover effects of arbitration in this context is related to the claim that international arbitration "chills" national regulation, and that governments may refrain from or alter even legitimate regulation and legislation in order to protect the environment, for fear of costly arbitration: losing a panel ruling can render the host state liable not only for arbitration fees and monetary damages but also millions of dollars of lost FDI due to damage to the state's credibility.

To illustrate the so-called "regulatory chill", Tietje et al. (2014) identify two effects of international investment arbitration which can prevent governments from exercising their sovereignty in certain areas such as environment, health and human rights: an anticipatory effect occurs when government takes into account potential disputes with investors before it begins to draft regulation, and a precedential effect occurs when government stops or changes a regulatory measure already taken, especially after losing an arbitration involving the same kind of regulation, in order to prevent another "bad" precedent. According to Choudhury (2008), the "regulatory chill" effect, or equivalently, the fact that the arbitrators can review national public policies, while limiting public participation in this kind of dispute can imply a democratic deficit. The core of this criticism is deemed to be uncertainty in the arbitration ruling (Mann 2013), which can perhaps be explained in three ways. First, the current regime of investor-state arbitration is not totally based on the system of precedents (Mercurio 2014). Second, the text of investment treaties is heterogeneous, e.g. in terms of definition of investment and investor, and exceptions for environmental regulations (Henckels 2016). Third, several authors such as Reiner and Schreuer (2009) and Brabandere (2011) have expressed doubt about whether the arbitral panel, as currently constituted, is well suited to adjudicate disputes concerning social and environmental matters.

However, Tietje et al. (2014) also add that assessing the "regulatory chill" effect of international investment arbitration in practice is not straightforward for three reasons. First, it is necessary to distinguish a *bona fide* measure to protect the environment and public health, from a discriminatory one. Second, it will be difficult to prove that the tribunal's decisions challenge the legislative acts of government

because in reality, the vast majority of regulatory measures are administrative in nature (pre-existing contract, license, permit). Third, to date, there is no statistical research to studying the effect of arbitral decisions on national public policy choice. While information on arbitral proceedings and ultimate outcomes (liability or amount of damages awarded), in general, are available to the public, we cannot systematically know more about the *ex-post* effect of arbitral awards, or the exact decision to maintain the initial regulatory measures of the respondent state after losing an arbitration. Additionally, evaluating the “regulatory chill” in the case that the parties agreed to a settlement before the final award is also not evident, especially when details of the settlement are not made public. While international arbitration is often “required” to protect the host country’s legitimate interests in debate on the “regulatory chill” effect, from a different perspective, adequate protection of investors’ interests from arbitrary regulations is also a way to mitigate the effects of climate change, especially investors in low-carbon projects.

***b. Low-carbon investment and chilling arbitrary regulations***

Low-carbon investment is one of the best ways to introduce private capital and technology to promote sustainable development. Unlike other forms of investment, low-carbon investments such as renewable energy projects, energy efficiency improvements, and carbon capture and storage depend very much and fundamentally on public support schemes and other regulatory structures of host states (e.g. by creating green certification systems, feed-in-tariffs mechanisms), given the lack of internalization of carbon externalities. Without such supports, the investments could not survive economically. As a consequence, a low-carbon investment is particularly vulnerable to regulatory risk. If these risks are anticipated and perceived by investors, the cost of climate policies will increase compared to expectations when the low-carbon investment was introduced.

The European Union (EU)’s development of renewable energy is an interesting case study in our discussion. Since promoting the production and consumption of green energy has become a high priority for the EU, a series of related binding Directives have been published since 2009 to achieve the relevant targets. These conditions combined with a degree of flexibility related to member states’ imple-

mentation (including initial over-incentivizing), have led to significant growth of renewable energy projects in Europe (Behn et al. 2017). Sadly, recent reports show that member states have changed their policy frameworks fundamentally to respond to the rapid and unsustainable growth of renewable energy, especially during the financial crisis (Marata et al. 2010; Behn et al. 2017).

While many scholars of international arbitration focus on the issue of a “regulatory chill” when talking about the environmental protection, Boute (2009, 2012) suggests that the time has come to switch to the role of investment arbitration in restricting arbitrary regulatory changes harming low-carbon projects, and thus, in reinforcing climate change mitigation policies. However, Boute and also Mann (2013), Mercurio (2014), Behn et al. (2017) find several reasons to justify that in the current context, investors cannot be confident that arbitral tribunals will sufficiently protect their green investments.

First, for low-carbon investors, their right to benefit from support schemes cannot be qualified as an “investment” within the scope of investment treaties, although in some previous cases, the arbitral tribunal accepted that the specific right associated to the principal investment can be seen as an individual “investment”.<sup>12</sup> Second, some arbitrators are reluctant to consider measures that destroy the specific rights associated to renewable energy projects as expropriation, given that these measures did not destroy the economic value of the “basic” investment, nor did they deprive investors of full ownership and control of their assets.<sup>13</sup> Moreover, Boute explains that even if these rights can be considered a key element of an investment, “without which it appears that there would have been no investment at all” according to the *Eureka* Tribunal,<sup>14</sup> the characteristic that some of them cannot be exploited separately from the rest of the investment (e.g. feed-in-tariffs and premium schemes) might limit investors’ benefits from the full protection under the expropriation provision.<sup>15</sup>

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12. Case *Compañía de Aguas del Aconquija v. Argentina*, case *Eureka v. Poland*, case *CME v. Czech Republic*.

13. Case *CMS v. Argentina*, case *Occidental v. Ecuador*.

14. Case *Eureka v. Poland*, partial award dated August 19, 2005, paragraph 145.

15. According to Boute (2012), among green certificates, feed-in-tariffs, and premium schemes, only green certificates qualify as individual investments that could be subject to partial expropriation, because they are usually and independently tradable in a secondary market. Tariff-based mechanisms such as feed-in tariffs or premium schemes usually entitle the operators of renewable

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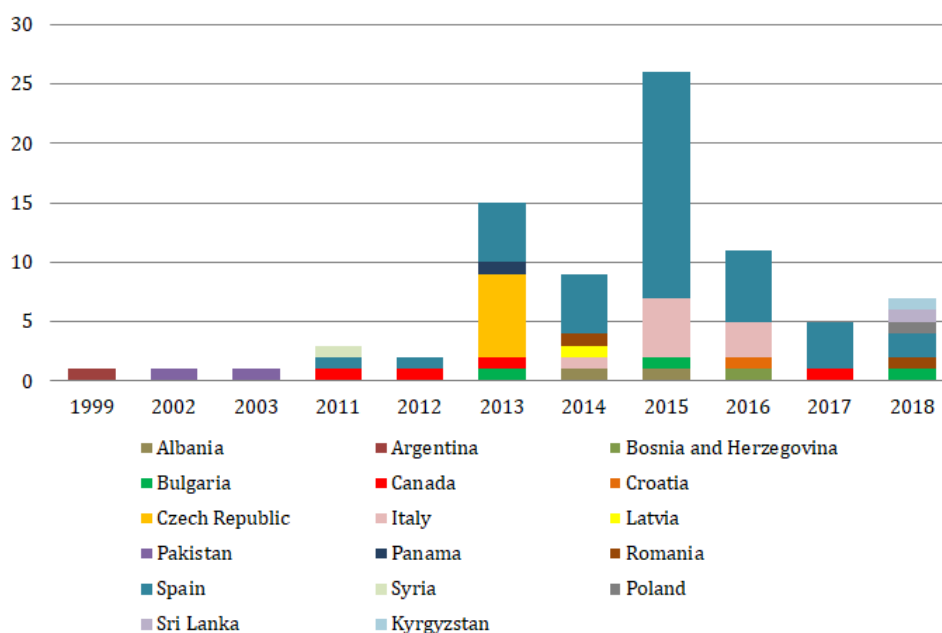


Fig. 1.3: Number of treaty-based renewable energy arbitrations as of December 2018

*Source: Author's calculations based on UNCTAD's data*

Third, in the case especially of projects in Europe, an additional complication that makes the resolution of investor-state disputes more intricate is the European Commission's jurisdictional objection to ECT and BIT disputes brought by an investor from an EU member state against another member state (intra-EU disputes) before international investment arbitration, because of the incompatibility of these legal instruments with the EU law.<sup>16</sup>

To illustrate the difficulty involved in developing low-carbon projects, as of December 2018, there were 81 treaty-based arbitrations in the field of renewable energy (see Figure 1.3) in which the majority of claims were initiated by investors under the ECT. The earliest treaty arbitration was in 1999 against Argentina, and was

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energy installations to fixed prices. Since this fixed support may not be traded independently from the main electricity transaction, it may not easily qualify as an independent investment when the tribunal examines a state interference.

16. More information on: [https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-3735364\\_en](https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-3735364_en). Accessed July 25, 2019. See also case *Blusun v. Italy*, award dated December 27, 2016; case *Charanne and Construction Investments v. Spain*, award dated January 21, 2016.

discontinued in 2001.<sup>17</sup> Among respondent states, it seems that Spain, Czech Republic, and Italy are the most targeted by investor claims following changes to their legal and regulatory frameworks such as taxes on power generators' revenues, and sudden changes to or reductions in subsidies for renewable energy producers (59 cases). Apart from eleven known arbitrations<sup>18</sup> in which the investor obtained some form of recovery in six cases,<sup>19</sup> all other disputes against these three countries in the renewable energy sector are pending to date. Furthermore, recent developments concerning the EU Court of Justice's rejection of the validity of the arbitration clause contained in the Netherlands-Slovakia BIT<sup>20</sup> have a significant impact on low-carbon investors who are and will be bringing their disputes before international investment arbitration. At the time of writing, while intra-EU BITs have not yet been completely terminated, and claims invoking the ECT's protection are still filed against these three EU countries, the question of the legitimate rights of investors in green projects is not adequately answered yet.

#### 1.4.3.3 Tension between public health and intellectual property

The literature on the "regulatory chill" effect states that a *bona fide* regulatory measure targeting foreign investors' assets may be changed or halted for fear of costly arbitrations. These assets may be tangible or intangible, e.g. exploitation license or environmental permit. This subsection focuses on a special kind of intangible asset that recently has been regulated by the host government to protect public health, that is, intellectual property. The emerging literature on the causal link between

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17. Case *Empresa Nacional de Electricidad v. Argentina*.

18. Case *Blusun v. Italy*, case *Greentech and NovEnergia v. Italy*, case *Charanne and Construction Investments v. Spain*, case *Eiser and Energía Solar v. Spain*, case *Isolux v. Spain*, case *Antin v. Spain*, case *Masdar v. Spain*, case *Foresight and others v. Spain*, case *Novenergia v. Spain*, case *JSW Solar and Wirtgen v. Czech Republic*, case *Antaris and Göde v. Czech Republic*.

19. Case *Eiser and Energía Solar v. Spain* (USD 139 million), case *Antin v. Spain* (USD 131 million), case *Foresight and others v. Spain* (USD 44 million), case *Greentech and NovEnergia v. Italy* (USD 13,5 million), case *Masdar v. Spain* (USD 77 million) and case *Novenergia v. Spain* (USD 66 million). All the claimants' claims were dismissed at the merits stage in the other five cases.

20. More information on: <http://curia.europa.eu/juris/document/document.jsf?text=&docid=199968&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=404057>. Accessed July 25, 2019.



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intellectual property and public health demonstrates the difficulties for host states as well as for adjudicators involved in re-balancing the interests of investors with those of the state, because this type of asset in itself is not harmful.

Protecting intellectual property such as a foreign trademark will encourage multinational corporations to invest in developing countries. As a result, many investment agreements protect this as a form of “investment” against unlawful expropriation, and also give trademark owners the right to bring their disputes with host states directly before international investment arbitration (e.g. Korea-US FTA (2007), Japan-Indonesia FTA (2007)). Since intellectual property rights are included in many treaties, these provisions could affect the sovereignty of governments in promoting and regulating public health. In this context, the most common potential claim is expropriation when it applies to the protection of foreign investors from a broad range of regulatory measures such as issuance of a compulsory license for a life-saving pharmaceutical, or invalidation of a patent or restriction on tobacco advertising and packaging (Mercurio 2012). The cases of Philip Morris and Eli Lilly are worth discussing in this context.

Philip Morris, an American global tobacco manufacturer, challenged restrictions applied to tobacco advertising and packaging in Uruguay (2010) and Australia (2011) before international arbitration, while both governments argued that strong tobacco control policies are consistent with a substantial body of scientific literature, and more importantly with the World Health Organization’s Framework Convention on Tobacco Control. In another sector, Eli Lilly, a US global pharmaceutical company incorporated in Indiana, in 2013 filed arbitration claims against Canada for the invalidation of the patents for *Strattera* and *Zyprexa*.<sup>21</sup> According to the Canadian courts, these patents were canceled because the drug companies had failed to sufficiently prove that their products would be useful (i.e. the promise of utility doctrine which is to “prevent the grant of speculative patents that over promise and under deliver - both of which are harmful to society and stagnating to innovation” (see Billingsley 2015, p.31). As of the end of 2018, the ruling in all the above cases was in favor of the state, and in two cases (Eli Lilly v. Canada and Philip Morris v.

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21. Drugs are commonly used to treat attention deficit disorders such as hyperactivity disorder, schizophrenia and bipolar disorder.

Uruguay), all the claimants' claims were dismissed at the merits stage. The fact that international arbitrators ruled in the two tobacco cases in favor of the state is, as the Public Health Association of Australia put it, "the best Christmas present for public health nationally and internationally".

The literature shows that balancing intellectual property and public health is not straightforward and can be a dilemma in the current international investment law regime. To some extent, strong trademark protection usually is associated to positive effects on consumer protection, especially in medicine if it prevents the public from purchasing inferior goods (Vadi 2009). Thus the negative effect of trademark protection on public health would seem illogical but it exists. The three cases cited above suggest an emerging tension between intellectual property rights protection and regulations in favor of public health. The debate on the spillover effects of international arbitration persists with the question of the public participation in cases concerning public interest (Kurtz 2012; Mercurio 2012). However, considering that intellectual property disputes brought before international investment arbitrations so far are relatively rare,<sup>22</sup> it is difficult to assess the arbitrators' legal reasoning and to draw conclusions about the existence of a "regulatory chill" effect of arbitration in this area. Fortunately, the negotiation of new economic agreements such as CPTPP and CETA demonstrates that this issue has been recognized by states and that measures to harmonize private and public interests have also been considered in their texts (Henckels 2016).

To summarize, the survey shows that arbitration outcomes could potentially affect the national interest. E.g. being sued before international tribunals and losing a ruling become signals of the non-commitment of host states, and can affect investors' decisions in the future. Although investor-state arbitration is not always bad for the environment or public health, the main worry is that a *bona fide* regulation in favor of public interests may be challenged by investors and changed to avoid costly arbitral awards. While this concern has yet to be verified empirically, countries, through particular case studies or based on anecdotal evidence, may express doubt about the effectiveness of the current arbitration system, especially if they link ob-

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22. There is also an intellectual property dispute concerning public health regulations between Shell and Nicaragua. However, this ICSID arbitration was discontinued by a pre-award settlement. The details of the settlement deed were not made public.

served trends which are significant in the empirical literature (e.g. the investor's likelihood of winning a dispute) to the rationales for systemic bias in international investment arbitration (Harten 2012; Schultz 2015).<sup>23</sup> The next section provides a short discussion on the root of the crisis faced by international investment arbitration given that it is a system of application of the law. We acknowledge the need for some adequate reforms to address this crisis but not the radical exit solution.

## **1.5 Discussion: Reasons not to exit from the international investment law regime?**

### **1.5.1 Why exit is not efficient at either the national or international level**

The literature suggests that it does not matter whether judges or arbitrators maximize “the same thing everybody else does” (Posner 1993b), because there is an environment which facilitates arbitrary and inconsistent judgments and economic incentives. Identifying “the uncertainties that give rise to reasonably perceived bias”, according to Harten (2011, p.9), is more important than proving or disproving an actual bias.

In fact, some authors argue that the current network of international investment agreements is dense but its contents heterogeneous. E.g. there are agreements that allow foreign investors to bring disputes with the host country before international arbitration, and others that do not, or allow it with many limitations (Neumayer et al. 2016). While some agreements have broadened the scope to cover regulation on environmental protection and other public interests, others have relaxed these requirements (Gordon and Pohl 2011). While some agreements define in detail the concepts of investment and foreign investors in order to exclude shell companies

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23. The law and economics approaches to judicial behavior try to discover how the interaction between the law and non-legal factors influences arbitrators' decision-making. The starting point of this economic analysis is that, like everyone else, arbitrators as well as both parties to the dispute are maximizers of their own utility (financial and non-financial interests including but not limited to arbitral (re)appointments, reputation of the host state, or future investment opportunities for investors).

from protection by the treaties, others define those concepts broadly “as a standard” of BIT (Wellhausen 2016b). The differences in treaty contents are understandable, especially when countries negotiate and sign these agreements in the context of incomplete information and analysis (Poulsen and Aisbett 2013). However, the consequences of incomplete investment treaties - an important source of law - are not only treaty shopping on the part of investors but also inconsistencies in arbitrators’ interpretations and uncertainty of international investment law (Mercurio 2014; Henckels 2016). In this view, international investment arbitration is not at the root of all the criticisms highlighted in the literature. Moreover, researchers remain in some doubt about whether radical exit solutions are achieving their objectives at the national level (Peinhardt and Wellhausen 2016).

At the country level, the departure from the system to fend off future arbitration claims can sometimes be counterproductive, for four reasons. First, the alternative forums, such as tribunals under the UNCITRAL arbitration rules, are now commonly listed in many investment treaties. Second, it is too early and unclear to confirm that a host state which is no longer a member of the ICSID Convention will not be bound to future ICSID arbitrations, because a state’s denunciation, as set out in Article 72 of the ICSID Convention, “shall not affect the rights or obligations under this Convention of that state or of any of its constituent subdivisions or agencies or of any national of that state arising out of consent to the jurisdiction of the Centre given by one of them before such notice was received by the depositary”, as explained by Tietje et al. (2008) and Lavopa et al. (2013).<sup>24</sup> UNCTAD and ICSID data show that after the withdrawal from the ICSID Convention, while Ecuador faces arbitrations using the UNCITRAL arbitration rules, Venezuela and Bolivia still face ICSID claims. Third, given the redundancy in investment agreements, multinational firms may structure their investments through countries that have favorable treaties with the host state to bypass the unfavorable treaty (e.g. treaty

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24. The authors state that under certain conditions, including interpretation of article 72 of the ICSID Convention on the validity of consent to the jurisdiction of the Centre, the wording used in the dispute settlement provisions of investment treaties or the period of 6 months before date of entry into effect of the denunciation, the country’s decision to withdraw from the ICSID Convention may have no impact on the binding consent granted by the host state in its treaties to refer disputes to ICSID arbitration.

## 1.5. DISCUSSION: REASONS NOT TO EXIT FROM THE INTERNATIONAL INVESTMENT LAW REGIME?

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without ISDS provisions) (Peinhardt and Wellhausen 2016). Finally, a significant number of BITs include sunset clauses which extend treaty protection beyond its unilateral termination date (e.g. it can continue to protect investments made before the date of termination, for up to 5 to 20 years). This system of immunity of BITs evidently delays the immediate effects of an unilateral denunciation (Lavopa et al. 2013; Gordon and Pohl 2015).

At the international level, while it will take some time to reach a consensus among countries in a future comprehensive multilateral investment agreement or a future multilateral investment court model devoted to resolve investor-state disputes, the wholesale exit of a number of countries could trigger a “wave” that other countries will follow, and the ultimate outcomes behind this domino effect could be the forum and treaty shopping, the panic of investors and finally the systemic collapse of the international investment regime. Reforms are needed to address countries’ concerns but not to include wholesale exit. The next subsection demonstrates that the current international investment law is not a closed system. In fact, it has allowed and still does allow changes to better adapt to modern issues such as climate change and unsustainable development. More importantly, if some countries choose to stay in the current international law regime to improve it, our survey shows that they will not be alone.

### **1.5.2 How states can change rules without exiting from the international investment law regime**

The literature identifies three major factors which show that it is possible to change the rules of the current system rather than leaving it altogether. The first is willingness. Broude et al. (2016) and Haftel and Thompson (2018) show that states are willing to renegotiate existing agreements even when involved in treaty violation disputes. Renegotiation as opposed to withdrawal from investment treaties or institutions, allows home and host states actively to adjust and clarify their commitments over time by mutual and constructive agreement. Furthermore, such renegotiation could produce immediately desirable effects given the in-built immune system in BITs and the ICSID Convention (Lavopa et al. 2013). The renegotiation of existing treaties is occurring at a rapid rate across the world because both developing

and developed countries (e.g. the United States, Australia, and New Zealand) are very concerned about the impact of liberalization and globalization on sustainable development (Meyer and Park 2018). These arguments could explain why only a few countries are choosing radical means of escaping from the current international investment law regime.

The second factor is possibility. Renegotiation is a feasible solution to calibrate states' long-term commitment under international law because many investment treaties especially new generation ones, include provisions that allow future amendments (UNCTAD 2017). Even if these agreements do not regulate amendment, article 11<sup>25</sup> and article 39<sup>26</sup> of the Vienna Convention on the Law of Treaties (1969) will usually apply (Lavopa et al. 2013).

The third factor is international support. States and especially developing and least developed ones, are not alone because they can profit from the international organization's support to develop their own investment treaty reform roadmaps. As part of the World Investment Forum, UNCTAD's extensive investment and development programs, e.g. Annual High-level International Investment Agreement Conference, Investment Promotion Conference, are becoming reference points for policymakers for formulating national investment policies. For the purposes of placing "inclusive growth and sustainable development at the heart of efforts to attract and benefit from investment" (UNCTAD 2012), reform *à la* UNCTAD focuses not only on negotiating new sustainable development friendly treaties but also on modernizing old generation treaties that still "bite" and which are divergent in their treaty clauses via the many options including renegotiation (UNCTAD 2017).<sup>27</sup>

Renegotiation often takes two forms: countries can focus on a small number of

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25. Article 11 of the Vienna Convention on the Law of Treaties (1969): Means of expressing consent to be bound by a treaty.

26. Article 39 of the Vienna Convention on the Law of Treaties (1969): General rule regarding the amendment of treaties.

27. Among the options, UNCTAD proposes also termination of old investment agreements. However, UNCTAD and Peinhardt and Wellhausen (2016) recommend that this option should apply only when the country's treaty network is too dense and overlapping, and is causing inconsistencies in the application of international law (e.g. regional FTAs overlap with bilateral agreements in the region).

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specific issues which require amendment through a new protocol,<sup>28</sup> or replacement of an old treaty by a new one and addition of a clause to terminate the prior treaty.<sup>29</sup> Many suggestions proposed by UNCTAD to introduce the right to regulate and to ensure responsible investment are generally supported in the literature, e.g. reference to the right to regulate in preambles or introductory provisions of treaties, clarification of the scope of standards of protection (e.g. what does and does not constitute indirect expropriation),<sup>30</sup> calibration of the definition of investment, especially low-carbon investment,<sup>31</sup> and right to invoke international arbitration conditioned on investors' responsibility,<sup>32</sup> among others.

At the end of 2018, 309 investment agreements had been terminated and almost half replaced by new ones.<sup>33</sup> This suggests that many countries want to remain in the current international investment law regime and are looking for ways to reform

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28. This solution can reduce transaction costs significantly and does not alter the overall design and philosophy of the old agreement (UNCTAD 2017).

29. This means also that a BIT can be replaced by a FTA with an investment chapter. E.g. Panama-Mexico BIT (2005) is replaced by Mexico-Panama FTA (2014), Nicaragua-Taiwan BIT (1992) is replaced by Nicaragua-Taiwan FTA (2006), EU-Viet Nam FTA will replace 22 BITs between Vietnam and EU member states.

30. As an illustration, to ease the tension between public health and intellectual property, Vadi (2009) and Mercurio (2012) suggest borrowing the TRIPS agreement language (compulsory license, article 31 of the TRIPS agreement) to allow a government to authorize a third party to "use" intellectual property rights in the public interest and without discrimination, without the consent of the rights holder. See examples in Korea-United States FTA (2007), Australia-Chile FTA (2009), New Zealand-China FTA (2008).

31. According to Boute (2012), an expansive concept of "investment" in the treaty should cover low-carbon investors' rights associated to public support schemes, given the vulnerability of this kind of investment.

32. Peterson and Gray (2003) propose another solution to inject private responsibilities into an investment treaty. Accordingly, a treaty may require investors' compliance with minimum human rights or environmental protection responsibilities, as well as other rights set out in domestic law (e.g. contribution to the host state's economic development) as a condition for invoking international arbitration. See examples in Burundi-Turkey BIT (2017), Ukraine-Turkey BIT (2017), Turkey-Mozambique BIT (2017).

33. As of end 2018, 142 terminated investment agreements had been replaced by new ones, 144 agreements had been denounced unilaterally, 20 agreements had been terminated by mutual consent, 3 agreements had expired. More information on: <http://investmentpolicyhub.unctad.org/IIA>. Accessed July 25, 2019.

it from within. Although there are no comprehensive statistics on the amendment of investment treaties, the evidence in the literature suggests that this form of renegotiation has not been widely exploited by states (Gordon and Pohl 2015; Broude et al. 2016). An example of renegotiation that took place before 2010 (before the crisis in the international investment law regime had peaked) is provided by Broude et al. (2016) which shows that the revised versions of the bilateral investment treaties have changed little in terms of investor-state arbitration provisions. Despite this general trend, the authors recognize that a small but significant number of agreements including those where Canada and the United States are partners, were changed to create more state regulatory space in ISDS provisions, e.g. exclusion of some policy areas from investor-state dispute settlement or allowing public intervention in the form of *amicus curiae* submission.

## 1.6 Conclusion

At the national level, the decision of some countries to exit from the current international investment law regime is understandable because it could reduce the risk of being sued by foreign investors and having to pay millions of dollars of compensation. Sometimes being hit by arbitration claims gives countries an opportunity to learn and to reassess their current policies.

International investment arbitration is an important part of the current international investment law regime. It is suffering public criticism as a biased system that overpowers the interests of foreign investors while not considering the national interests. Although showing that countries may benefit from international investment arbitration in terms of international capital, the literature points out that these criticisms are not irrelevant, especially in the context of the new challenges brought by globalization. Changes to adapt the current system to the new situation are required but where should these changes begin?

There are several ideas for reforming the existing system of arbitration, including the Investment Court model, an entity proposed by the EU in its FTAs with Canada and Vietnam. This model is expected to improve some weaknesses of the *ad hoc* arbitration, e.g. the appointment of standing judges or an appellate tribunal. However,



it is in the testing process, and its success depends largely on the support of other non-EU countries<sup>34</sup> (Vajda 2018; Roberts 2018). Since the current investor-state arbitration system or any other international court model is a system of application of the law, this paper aimed at providing a fundamental solution which seeks to change the content of international investment agreements - an indispensable source of the law used by both arbitrators and judges to resolve investment disputes.

In early 2018, the international community received a promising sign when Ecuador following its wholesale exit in 2007, announced that it was ready to return to the negotiating table for future investment treaties, including treaties unilaterally denounced, on the basis of its new BIT model (which is considered to better protect host state's rights to regulate).<sup>35</sup> Together with strong efforts by the Asia Pacific region in recent years to achieve international economic integration, there is evidence that many countries still see potential gains from international capital. While important conditions are being met to improve the current international investment law regime such as strong support from international forums, self-improvement efforts from arbitral institutions such as the next amendment to ICSID Arbitration rules and the consensus of states on the need for reform, remaining in it and changing the rules seem to be the best option.

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34. FTAs between the EU and Japan were signed in July 2018. However, this instrument does not include the investment chapter or the mechanism for resolving investment disputes between investors and host states, given the divergence between the EU and Japan on the initiative to create a permanent multilateral court. See Roberts (2018). This divergence is found also in the cases of Canada and Mexico. In the new CPTPP agreement, Canada and Mexico agree to maintain the traditional approach to ISDS. By contrast, in their respective agreements with the EU, they favor establishing a permanent investment court (UNCTAD 2018).

35. <https://www.cancilleria.gob.ec/en/ecuador-proposes-new-investment-agreements-that-protect-the-country-and-defend-human-rights/>. Accessed July 25, 2019.

## Chapter 2

### To Settle or to Fight to the End?

### Case-level Determinants of Early

### Settlement of Investor-State Disputes

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This chapter is based on a similar research paper which was presented at the *3<sup>rd</sup> Annual Conference of the French Association of Law and Economics - AFED* (Nancy, October 2018) and the *6<sup>th</sup> International Workshop on Economic Analysis of Litigation* (Granada, June 2019).

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## Abstract

International investment arbitration is a third-party dispute resolution mechanism aimed mainly at depoliticizing investment disputes and maintaining efficient investment flows among countries. Almost one-third of treaty-based investor-State disputes brought before this system are settled before the tribunal's final ruling. Given the classical "Against Settlement" debate in the legal literature, we build an original database of treaty-based arbitrations from 1996 to 2016 to empirically test the determinants of early settlement. We find that the probability of settlement increases if the host State has no experience of resolving those kinds of disputes but decrease if it anticipates a favorable outcome. The nature of the regulatory measures applied by the host State and the identity of foreign investors are additional important determinants of settlement. Interestingly, we find strong evidence of a *Dutch* effect in dispute resolution.

**Keywords:** Investor-State dispute, arbitration, settlement.

**JEL Classification:** F21, F23, K33, K41

## 2.1 Introduction

Globalization has led to many changes in international economic activities, the most evident being the movement of investment and trade flows across countries. Some countries are expanding their markets while others are attracting foreign investors with new technology and knowledge. This change is imposing certain difficulties. On the one hand, capital exporting countries may worry about the security of their investment flows, particularly in emerging markets with potential macroeconomic and political risks. On the other hand, capital receiving countries may need to find ways to implement national public policies (e.g. higher environmental standards for mining-quarrying or energy projects) while also securing the international investment. These issues make the transfer of funds more complex and lengthy in the absence of an agreement on investment protection between the countries (e.g. bilateral investment treaty - BIT). BITs provide the conditions for host countries to both receive the foreign investors and protect their own national interests. They provide a mechanism to resolve disputes between the host state and foreign investors, e.g. access to international investment arbitration such as the International Centre for Settlement of Investment Disputes (ICSID).

International investment arbitration is a third-party dispute resolution mechanism whose main purpose is to depoliticize investment disputes and maintaining efficient investment flows. The system does not require a foreign investor to petition its home state in order to bring claims against the host state, and provides an alternative to resolving investment disputes in the host state's local court. In general, international investment arbitration can resolve any investment disputes where both parties agree to submit to the system e.g. via a contract, a national law or an international investment treaty. The general procedures to resolve a dispute before international investment arbitration can be summarized as: (1) the claimant (generally a foreign investor) files a request for arbitration with the tribunal, (2) the tribunal examines its jurisdiction and ability to hear the claim, (3) if the tribunal has the appropriate competence, it will proceed to examination of the merits of the case to determine the defendant's (generally the host state) liability, and damages/compensation if the defendant is found liable.<sup>1</sup> Although the claim has been

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1. Some proceedings are joint proceedings on jurisdiction and on merits. See Arbitration Rule

filed with the tribunal, both parties can discontinue the case at any time if they reach agreement (in other words, agree to an early settlement).

Whether to settle or to fight to the end is a classical question raised in the interdisciplinary literature and has received much scholarly attention. In 1984, Fiss (1984) outlined his “Against Settlement” opinion. He considers that there are two main reasons against settlement. First, a settlement is simply anticipation of the trial outcome and the settlement terms are the product of this prediction; meanwhile, “justice may not be done” (Fiss 1984, p.1075). Second, settlement is not always true agreement in the sense that there can be disparities in resources of the parties (i.e. coerced consent). However, economists argue that lengthy litigation creates transaction costs that can be avoided by an early settlement, and that is advantageous to both parties. When discussing the social welfare related to a settlement, economists agree also that this kind of consent reduces the social costs considerably because less public money is expended on continuing the lawsuit and more time is available for other activities (Bronsteen 2009).

Settlement of disputes between host states and foreign investors in the context of international investment, reflects both points of view. On the one hand, a settlement sometimes is preferable to reduce time costs of international investment arbitration. Early settlement is a good solution which allows the foreign investor to resume its long-term projects in the host country, and allows the host state to “protect” its credibility for future investors (Allee and Peinhardt 2011). On the other hand, as Fiss (1984) suggests, a secret settlement deprives the tribunal of the opportunity to clarify legal principles. In addition, early settlement of a treaty-based dispute (or a dispute involving violation of international obligations) can be questionable because in that case, the host state is considered not as an ordinary commercial partner but as a government entity with rights to regulate and protect the public interest. This problem arises if a policy that favors the public interest has negative impacts on the foreign investor’s project.<sup>2</sup> Also, some countries such as Argentina, Venezuela,

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41 of the Convention on the settlement of investment disputes between states and nationals of other states (the ICSID Convention).

2. An example of a controversial settlement in the legal literature is that of Ethyl, a large US chemical corporation which in 1997 submitted a high-value claim against Canada following a ban on imports of the gasoline additive methylcyclopentadienyl manganese tricarbonyl (MMT),

Bolivia, Australia, etc., have expressed their discomfort with investor-state disputes by the application of radical exit solutions<sup>3</sup> which could trigger systemic collapse of the international investment regime.

Before addressing the question of whether early settlement of an investor-state dispute should be preferred, it is important to understand the nature of the kind of negotiation involved e.g. its determinants. This is the objective of the present study. We would highlight some methodological considerations that support our arguments.

First, the tribunal's decision-making and the parties' decision to settle or to litigate are two major issues in the law and economics literature on litigation which have so far not been studied in depth at the international level. While a few empirical studies address the first issue in the context of international investment (Franck 2009; Harten 2012; Simmons 2014),<sup>4</sup> the second has been left open for future theoretical and empirical research.<sup>5</sup> Second, our study focuses on alternative dispute resolution (ADR) i.e. arbitration. However, the literature on settlement using ADR is incomplete although the focus on arbitration has increased, especially in the commercial field. Although arbitration and court proceeding are relatively different concepts (Deffains et al. 2017), arbitration perhaps could be considered as a simplified version of litigation before a court, involving simplified procedural rules.<sup>6</sup> For instance, the pattern of the settlement during an arbitral process (occurring

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a suspected neurotoxin. This environmental case terminated with a settlement in which the government repealed the ban and agreed to pay compensation. For more information see: [https://www.huffingtonpost.ca/2015/01/14/canada-sued-investor-state-disputeccpa\\_n\\_6471460.html?guccounter=1](https://www.huffingtonpost.ca/2015/01/14/canada-sued-investor-state-disputeccpa_n_6471460.html?guccounter=1). Accessed July 25, 2019.

3. E.g. denunciation of the ICSID Convention, rejection of investor-state dispute settlement provisions and unilateral denunciation of investment treaties.

4. See Vu (2019) for a brief review of the literature on international investment arbitration.

5. Besides some papers applying descriptive statistics, Hafner-Burton and Victor (2016) is an exception. They address the question of settlement/litigation indirectly by tackling the question of why the contents of disputes (and especially disputes settled early by the parties) are not made public. They study only cases administered by ICSID. In the succeeding sections of this paper, we highlight the main differences, especially in terms of methodology, between our study and Hafner-Burton and Victor's (2016) work.

6. For more details see [https://www.law.cornell.edu/wex/alternative\\_dispute\\_resolution](https://www.law.cornell.edu/wex/alternative_dispute_resolution). Accessed July 25, 2019.

after the dispute is registered but before publication of the panel’s final judgment) is analogous, in terms of the costs and benefits, to a situation of settlement before “trial” in the domestic litigation literature. For all the above reasons, we link settlement/litigation theory which is well developed in the domestic context to empirical work on international adjudicatory systems.

We start our identification of theoretical determinants by drawing on the basic settlement bargaining literature, especially work on informational asymmetry between the parties<sup>7</sup> (Bebchuk 1984; Spier 1992; Che and Yi 1993; Daughety and Reinganum 2002). For example, the “litigation costs” in these models can be generalized by assessing the host state’s arbitration experience, the identity of the investors or the type of treaty being violated by the host state;<sup>8</sup> the estimated compensation can be proxied by observing the nature of the regulatory measures applied by the host state. Further, the law and economics literature predicts the role of legal precedents on parties’ decision-making – a notion that is captured also in our research.

The inclusion of these determinants in a Probit model yields many interesting findings. First, we find that a host state lacking previous experience of resolving treaty dispute tends to settle early. Second, if the host state anticipates a favorable outcome, based especially on observing the outcomes of similar disputes in the same geographic region, it will be less likely to choose early settlement. Third, an extreme regulatory measure which deprives investors of fundamental activities can be a reason for settlement breakdown. Fourth, compared to corporate investors, individual investors are more likely to await a final ruling than to settle early. Finally, there is evidence that the probability of early settlement is higher if the investor invokes the protection of Dutch bilateral investment treaties.

The above aspects are considered in what follows. Section 2.2 reviews the back-

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7. Although it is not always easy in practice to apply all the assumptions of the theoretical models, this literature seems appropriate for application to our context. E.g. asymmetric information is a viable hypothesis because only the host country knows the true purpose of application of its regulatory measure to the investor’s project (an environmental policy to protect the public interest or only a discriminatory measure with commercial effects).

8. E.g. it takes more time and more public money for states to defend breaches of treaties with *pro-investor* provisions.

ground literature and hypothesizes about the determinants. Section 2.3 describes the original database, the econometric strategy and presents the empirical results. We also provide in this section some robustness checks for our findings and address the question of endogeneity. Section 2.4 concludes and discusses directions for further research.

## **2.2 Background literature and hypotheses**

### **2.2.1 Host state and arbitration experience**

In the context of international investment arbitration, respondent (or host) states have the possibility to become skilled players, e.g. the cases of Argentina and Venezuela which attract the most arbitration claims. The number of claims related to Latin American countries has exploded since the 2000s with the result that some countries such as Bolivia, Venezuela and Ecuador decided to leave the international investment arbitration system by denouncing many bilateral investment treaties and the ICSID Convention.

Some studies emphasize that the skills of the parties to the dispute have a substantial effect on their decisions in a dispute. Chopard et al. (2010) develop Bebchuk's (1984) model to explain the probability of settlement. They assume that parties have different skills and abilities (e.g. information technology and evidence production) to predict the outcome of a trial. Using the difference between the defendants' legal expenditures to proxy for differences in litigation skills, the model predicts that cases where the defendants have higher legal expenditures or equivalently, inefficient information technology are likely to be settled early. Other authors insist also on the importance of litigation skills to prevent miscalculation of settlement offers (Cooter et al. 1982).

What makes a skilled party is quite straightforward. It can be argued that legal counsel quality matters. However, in the present article, we investigate a "natural" answer, that is "training" produces a skilled party. Achieving litigation training requires repeated experience of litigation. In this study we are interested in the difference between being a skilled and a non-skilled party, and how this difference affects the settlement of disputes between host states and foreign investors. The



literature proposes two arguments.

First, it has been argued that some countries accumulate experience of dispute resolution from being sued repeatedly by foreign investors. Host countries that have not been targeted by arbitration claims retain their credibility for the foreign investor. A claim filed before arbitration can be considered a noisy signal of non-commitment to international obligations. This evidence of lack of adherence to international obligations is exacerbated if the host state loses a case since this provides more precise information to investors about the definitive illegality of the state's actions (Allee and Peinhardt 2011). A direct effect of arbitration claims on the state's credibility is the behavior of co-national investors which show reluctance to continue to invest in the country (Wellhausen 2016b). Empirically, losing a dispute is equivalent to losing the gains obtained from signing numerous BITs.<sup>9</sup> While winning a case has an ambiguous effect on the country's credibility,<sup>10</sup> it is reasonable to suppose that if the host state has no past experience of resolving an arbitration claim, it may prefer a neutral solution that is early settlement. Given the "advantage" conferred by settlement deeds of disputes brought before international investment arbitration not being made public,<sup>11</sup> one cannot, as Daughety and Reinganum (2002, p.589) suggest, "infer extreme culpability from observing a confidential settlement". The effect of international arbitration on the country's credibility is thus more lenient compared to if all outcomes are made public.

Second, the respondent state with experience of resolving a dispute with a foreign investor is expected to understand how an arbitration proceeding works. This could affect the respondent's overall litigation transaction costs (e.g. the ability to produce and prepare efficiently information and evidence). If arbitration experience helps to

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9. Although these studies focus on the impact on the credibility of developing countries, developed countries are affected also since they are destinations for international investment flows. The majority of respondent states are developing countries, but the database used in this paper includes several developed countries such as Australia, Belgium, Canada, Germany and the United States. The foregoing theoretical framework should apply, irrespective of the status of countries receiving the foreign investment.

10. Allee and Peinhardt (2011) find no statistically significant effect of an increase in FDI following a state win in a dispute with investors.

11. Hafner-Burton and Victor (2016) based on ICSID data found that only 6 percent of settlement deeds were made public.

reduce such transaction costs, an experienced state will be expected more often to wait for a final judgment, *ceteris paribus*. We thus hypothesize that:

***Hypothesis 1:** If the host state has no past experience of resolving treaty disputes, it is more likely to choose early settlement of a given dispute.*

## 2.2.2 Prospect of the case

The host state's experience of resolving investment disputes is expected to be a determinant of early settlement. However, the prospect related to winning the case is also important, and influences the parties' decision to continue to final ruling.

According to Che and Yi (1993) and Daughety and Reinganum (2002), if the respondent state assesses that the prospect of a current dispute is unfavorable for some reason, it might push for early settlement, especially if there are other investors in line for similar disputes. The reason is straightforward: the state will be unwilling to set a series of bad precedents (precedent effect). In addition, the state may want to settle secretly if it anticipates an unfavorable outcome simply because losing a case brought before the tribunal harms the country's credibility (reputation effect). However, Che and Yi (1993) also emphasize setting a favorable precedent, and especially if the disputed issue involves broad public interests. Thus, the prospect of a dispute (or simply the outcome anticipated by the respondent state) is expected to have a substantial effect on the choice of early settlement (Fenn and Rickman 1999) even in the context of international investment arbitration. However, how to observe and measure a case's prospect is not straightforward.

Since alongside the facts of a given dispute precedents also are an important (but not obligatory) source of legal reasoning in arbitral tribunals, it is reasonable to assume that the host state can rely on information from previous disputes to evaluate its chance in a new case (Böckstiegel 2012). As numerous disputes are filed every year, what type of information is important? It is clear that just because a host state has lost in successive previous arbitrations does not mean that the prospect of the present case is necessarily bad since it depends fundamentally on the facts of the case. Perhaps one should consider previous disputes that are similar to the present case, for example previous cases concerning the same kind of regulatory measures applied by the host state. For instance, if a dispute involves the state nationalization

policy, then the state could search for precedents related to this policy to identify the overall “trend” in arbitration. This leads to the following hypothesis:

***Hypothesis 2:** If based on precedents related to the same regulatory measures, the prospect of the case is not favorable, the probability of early settlement with the foreign investor increases. Conversely, if the prospect of the case is favorable, this probability decreases.*

### 2.2.3 Nature of the dispute

Investor-state disputes arise as a result of the regulatory measures applied by the host state. These measures can have impacts on the general execution of the contract between the parties, private property rights or the investor’s production process. However, a closer look at the nature of these measures shows that the severity of their impact on the investor’s project is different. Some measures will have an extreme effect on the investor’s project, for example they might cause the contractual relationship to end, or might deprive the foreign investor of its main production activities. Others may seem less radical, and leave room for the parties to renegotiate. How does the severity of a regulatory measure affect the settlement of a dispute? The literature proposes answers from both sides of the dispute.

First, from the foreign investor’s side, a measure that has extreme effects on the private investment for example contract cancellation or direct expropriation, is expected to lead to high value damages for the investor if it wins the dispute.<sup>12</sup> According to Bebchuk (1984) and Fenn and Rickman (1999), expectation of a high level of compensation will lead to more demands from the investor during the negotiation process and reduce the likelihood of early settlement.

Second, filing a dispute before international investment arbitration can act as a warning signal about the host country’s violations (Hafner-Burton and Victor 2016). Furthermore, if the case involves a measure that is likely to infringe on the investor’s major interests, leading to arbitration rather than consensual settlement

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12. The value of damages following an extreme measure is in comparison with one following a less-extreme measure. Therefore, a high value of damages does not necessarily mean that the value of the project is high. Rather, it means that damages are related to the overall project and the investor’s major interests.

is not only to establish a favorable precedent, but also to create new “rules” that will favor subsequent projects by limiting any repeat violations. This argument is supported by a psychological framework which with some caveats could be extended to our context. According to Korobkin and Guthrie (1994, p.147), relational factors can play a role in settlement failure: if a litigant feels it has been treated badly by its partner, the chances of successful settlement will decrease because the litigant will seek “retaliation or vindication of [its] moral position in addition to monetary damages”. This results in a less risky trial for that litigant. In our case, the notion of “retaliation” may be overstated but the underlying argument is that investors may seek to restore “equity” to an inequitable relationship. Although an extreme regulatory policy could be remedied economically by the host state, it is possible that the investor might behave “irrationally”, and thus, the settlement rate is low.

Third, from the host state’s point of view, it is argued that states are always better off applying less-extreme measures if they do not want to break the relationship with the foreign investor. An extreme measure, that is a measure favoring the public interest, might signal a hardening of the bargaining strategy. For example, the state will require more concessions from the foreign investor during the negotiation process. According to Cooter et al. (1982), a hard strategy can prevent successful negotiation and reduce the probability of early settlement. We thus hypothesize that:

***Hypothesis 3:** Disputes involving extreme regulatory measures are less likely to be settled early.*

## **2.2.4 Identity of foreign investors**

In investor-state disputes, foreign investors are not homogeneous in the sense that they can be big, internationally recognized multinationals or individuals. The existing literature on investor-state dispute settlement focuses only on the identity of states to explain the outcomes of the proceedings, for example development status of the host state (Franck 2009; Schultz and Dupont 2014) and the home state “behind” the foreign investor (Harten 2012; Hafner-Burton and Victor 2016). In particular, this body of work seems to “homogenize” investors from a particular home country despite their wide heterogeneity. For example, an individual investor and a firm

may behave differently in a dispute with the host state. This subsection tries to fill this gap in the literature by exploiting a theoretical model in a domestic litigation context.

Eisenberg and Farber (1997) investigate how the claimants' (and foreign investors in investor-state disputes) characteristics affect the outcome of a case (trial to a verdict, or settlement). One of the most important characteristics is the distribution of litigation costs among claimants. The authors argue that the decision to file a dispute depends not only on the expected monetary value of the claim but also on pecuniary and non-pecuniary costs of the litigation (e.g. emotional and/or psychological costs of confrontation, taste for litigiousness). Interestingly, the model shows that claimants in the high-variance distribution of costs have lower litigation costs on average, than those in the low-variance distribution. Therefore, the trial (or the settlement) rate is expected to be positively (resp. negatively) associated to the claimant's litigation cost distribution variation. So how can these two types of claimants be proxied based on the cost distribution variation criteria? Eisenberg and Farber (1997) refer to whether the claimant is an individual or a corporation.

Accordingly, individuals are utility rather than profit maximizers. There is substantial variation across individuals in terms for example of the non-pecuniary preferences for litigation. The absence of market discipline on individuals leaves them free to make litigation decisions based on their heterogeneous tastes. In the case of corporate claimants, the situation is different. Corporate claimants cannot deviate from profit-maximizing behavior even if they are potential claimants or are deciding to go to the end of a lawsuit. Thus, in these cases it is reasonable to assume that on average their litigation costs include pecuniary costs such as legal counsel fees, value of litigation time, and other pecuniary opportunity costs. Compared to the case of individual claimants, this leaves little margin for non-pecuniary costs. Therefore, Eisenberg and Farber (1997) suggest an empirical test assuming that on average for individuals the cost distribution variation is larger, and the trial rate is higher compared to corporations. We apply this framework to our context to explain why the parties settled early before final award. We hypothesize that:

***Hypothesis 4:*** *The probability of early settlement is lower if the dispute involves only individual investors.*

### 2.2.5 Dutch effect

In theory, the broad purpose of an economic treaty is to remove the “barriers” to international economic transactions. For example, a free trade agreement serves to reduce the tariff and non-tariff barriers to importing and exporting. The aim of a bilateral or multilateral investment treaty is to liberalize cross border investments by reducing the political risks. Moreover, bilateral investment treaties are heterogeneous. The majority but not all BITs provide foreign investors with access to ICSID to resolve investor-state disputes (Neumayer et al. 2016). Also, although the scope of some agreements has been extended to cover regulations on environmental protection and other public interests, others have relaxed these requirements (Jandhyala et al. 2011).

In the context of the liberalization of economics activities, many multinationals are active in cross border investment. Figure 2.1 is an example of FDI net outflow for the main capital exporting countries in which the United States and the Netherlands are very active in overseas investing. Given the treaty heterogeneity and the need to protect assets especially in emerging markets, many firms have adopted the practice of treaty shopping to retain the benefits (e.g. in terms of investment protection) which a host country might not provide. For example, if there is no bilateral investment agreement between the home country A and the host country B, then an investor from the country A can route its investment through a third country C (conduit country) which has a treaty with the host country B. This treaty shopping is not prohibited and has become both popular and problematic in the context of international investment.

While structuring assets via a third country might not be prohibited, the fact that this “activity” targeting a particular country has been revealed in many studies. Using Dutch microdata from De Nederlandsch Bank in cooperation with Statistics Netherlands, Weyzig (2013) finds that the Netherlands is the world’s largest conduit for foreign direct investment (FDI): at the end of 2009, FDI diverted via the Netherlands corresponded to 13 percent of global inward FDI stock. Desai et al. (2002) confirm the Netherlands as the choice for the many US multinationals. So why has the Netherlands become an investment hub for foreign investors?

First, it is argued frequently that the host state’s governance quality is an im-

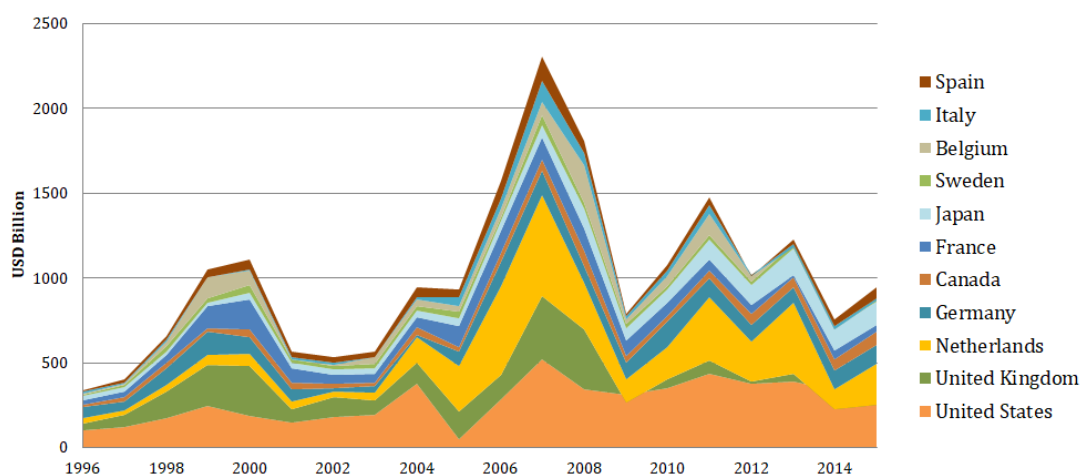


Fig. 2.1: FDI outflows by capital exporting countries (1996-2015)

*Source of data: World Bank*

portant determinant of the investment decisions of multinationals.<sup>13</sup> According to World Bank data for 1996-2015,<sup>14</sup> the Netherlands is an ideal destination for foreign direct and indirect investment (through conduit companies) because the control of corruption, rule of law and political stability index are high and stable across time.<sup>15</sup>

Second, apart from benefits derived from the Dutch favorable corporate tax regimes related to foreign investors investing in and through the Netherlands, Weyzig (2013) and Haberly and Wójcik (2015) find that a large bilateral tax treaty network (over 100 treaties at the end of 2016) and low tax withholding rate commitments are additional reasons explaining FDI diversion via the Netherlands.

Finally, Weyzig (2013), Os and Knottnerus (2011) and Lee (2015) show empirically that Dutch BITs are an important factor in investment diversion, and that the size of the effect of BITs is comparable to the effects of tax treaties. At the end of 2016, the Netherlands had signed more than 100 bilateral investment treaties with partner countries from Africa (30 BITs), Asia (34 BITs), Europe (23 BITs)

13. The negative relationship between FDI inflows and the level of political risk in host countries is highlighted in Busse and Hefeker (2005) and Wellhausen (2016b).

14. Data were collected from: <http://databank.worldbank.org/data/reports.aspx?source=worldwide-governance-indicators>. Accessed July 25, 2019.

15. The Netherlands' average score is almost 2 while 2.5 is the upper limit for good governance.

and Latin America (21 BITs).<sup>16</sup> Skinner et al. (2010) and Wellhausen (2016b) agree that the Dutch BITs program offers among the highest levels of investment protection because alongside principal provisions on investment protection such as expropriation, national treatment, and fair and equitable treatment, they encompass a widely-defined concept of “investment” or “investor”, limit the obstacles to international arbitration, contain very few or no exceptions to the host government’s right to regulate in favor of environmental protection, public health, or essential security. Based on the coding of 104 available Dutch treaty texts,<sup>17</sup> Table 2.3 (Appendix 2.A) illustrates why Dutch BITs are attractive to foreign investors. Alschner and Skougarevskiy (2016) is a novel piece of empirical research on the content of international investment agreements. They map 24,000 articles from more than 2,100 treaties and show that the Dutch treaties’ coherence index (that reflects the similarity among Dutch treaties) is very high. This finding contributes to clarifying a constant and somewhat generous policy in the Netherlands to promote cross-border investments.

There are some cases that provide evidence of the advantage of using Dutch BITs before international investment arbitration. In *Saluka v. Czech Republic*, Saluka Investment BV, a shell company incorporated in the Netherlands and wholly owned by the Japanese Nomura Group, brought a dispute with the Czech Republic before international arbitration following forced administration of a bank in which the investor had interests. While the respondent state argued that this shell company had no real economic activities in the Netherlands, the tribunal was bound by the language in the Dutch BIT to conclude that the investor was eligible for the protection offered by the Dutch BIT. Likewise, in *Rompetrol Group v. Romania*, while the respondent state claimed that the shell company should not be able to bring a claim against Romania following an investigation by the Romanian anti-corruption authority because this Dutch company was owned indirectly by Romanian nationals, the tribunal adopted an expansive approach to the BIT interpretation to qualify Rompetrol as a Dutch investor and allowed it to claim against Romania. According to the *Saluka* tribunal, “the tribunal cannot in effect impose upon the parties a def-

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16. Source of data: <http://www.investmentpolicyhub.unctad.org>. Accessed July 25, 2019.

17. Treaty texts are collected from <http://www.investmentpolicyhub.unctad.org/IIA>. Accessed July 25, 2019.



inition of “investor” other than that which they themselves agreed, [...] and it is not open to the tribunal to add other requirements which the parties could themselves added but which they omitted to add”.<sup>18</sup>

Given a widely-defined-BIT strategy and the possibility that some tribunals focus mainly on the treaty text, it is argued that a Dutch BIT gives foreign investors some forms of advantages before international investment arbitration. In the settlement process, we expect that this kind of BIT may also provide investors with leverage in their bargaining with the host state due to the confidence it gives to the investors whereas awaiting a final award is costly for the host state.<sup>19</sup> The arguments presented above lead to the following hypothesis:

***Hypothesis 5:** The probability of early settlement increases if the investors invoke protection under Dutch bilateral investment treaties.*

## 2.3 Empirical analysis

### 2.3.1 Methodology

#### 2.3.1.1 General description of the database

The database includes known treaty-based disputes filed from January 1, 1996 and ended by December 31, 2016. The chosen time interval seems reasonable since it covers the period of explosion of use of international arbitration (from the 2000s).<sup>20</sup> By definition a treaty-based dispute is based on violation of an international investment agreement, for example: a bilateral investment treaty, an investment chapter in a free trade agreement, the Energy Charter Treaty (1994), the Arab Investment

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18. Partial award dated March 17, 2006.

19. According to a report issued by the international law firm *Allen and Overy*, the average party legal costs (experts, counsel and witnesses expenses) were USD 4.5 million, and the average tribunal cost (arbitrators and institutional administration fees) was USD 0.8 million. The average amount claimed by investors was USD 500 million, and a successful investor was awarded 41 percent of the amount claimed on average. For more information see: <http://www.allenoverly.com/publications/Pages/default.aspx>. Accessed July 25, 2019.

20. UNCTAD’s Investment Dispute Settlement Navigator data show that for the period before 1996, the number of treaty-based disputes filed per year and the information on these cases are very limited; in particular, the number of recorded treaty disputes is zero from 1988 to 1992.

Agreement (1980), the ASEAN Investment Agreement (1987), the Moscow Convention on Protection of the Rights of the Investor (1997), the Agreement on Promotion, Protection and Guarantee of Investments among the Member States of the Organization of the Islamic Conference (1981), or the Southern African Development Community Protocol on Finance and Investment (2006). The database excludes disputes based solely on an investment contract or domestic investment law. There are three main reasons for our decision to analyze treaty-based arbitrations. First, since investment treaties are built on the basis of the rules of international law, a treaty violation is equivalent to a breach of international not domestic level obligations. By focusing on this kind of dispute, we want to explore the conduct of states as government entities and not as ordinary commercial partners in investment contract disputes. Thus, a treaty-based arbitration involves not only resolution of an investment dispute but also a “conflict” between the private interests and public interests of the host country such as environmental protection (and then the tribunal will decide whether there is an abuse of power or simply a legitimate right to regulate as a normal sovereign entity). Second, given the heterogeneity of investment agreements (e.g. in terms of protection scope or exception for public policies), we want to explore whether this becomes a source of bargaining leverage for foreign investors. Third, to our knowledge, there is more information available on treaty-based cases, especially non-ICSID cases, than on contract or domestic law-based cases. The use of treaty-based disputes may mitigate the bias due to missing data.

To construct a comprehensive and representative database, we collected case-level information from various sources. The principal sources of cases and their attached documents (notice of arbitration, award or settlement agreement) are UNCTAD Investment Dispute Settlement Navigator,<sup>21</sup> the ICSID website,<sup>22</sup> the Investment Treaty Arbitration Law (ITALAW)’s website<sup>23</sup> and the ICSID Review. Secondary sources include official announcements about proceedings available on government portals.<sup>24</sup> The third sources are deemed reliable arbitration specific reports from

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21. <http://investmentpolicyhub.unctad.org/ISDS>. Accessed July 25, 2019.

22. <https://icsid.worldbank.org>. Accessed July 25, 2019.

23. <https://www.italaw.com>. Accessed July 25, 2019. This website is constructed and updated regularly by Professor Andrew Newcombe, Faculty of Law, University of Victoria, British Columbia, Canada.

24. In particular, disputes concerning Canada and the United States are updated at:

non-governmental organizations such as International Institute for Sustainable Development,<sup>25</sup> IAREporter,<sup>26</sup> Kluwer Arbitration Blog<sup>27</sup> and law firms. The final sources of data are international and/or domestic media reporting information on disputes.

The unit of analysis is the treaty-based case or dispute which results from a notice of arbitration or a request for arbitration submitted by the claimant. This is different from *claimant-case*<sup>28</sup> which many authors use as the unit applied to analysis of trade disputes.<sup>29</sup> Hafner-Burton and Victor’s (2016) paper also uses *claimant-case* as the unit of analysis to predict the probability of secrecy in investment arbitration. Our choice of unit is based on two main reasons. First, given that international investment arbitrations are costly,<sup>30</sup> the choice to “group” all investors, including individual investors, which have the same interests in a case may be strategic and aimed at reducing transaction costs, compared to the filing of separate claims by all of the claimants. Second, there are some cases involving more than 40 investors.<sup>31</sup> The use of *claimant-case* as the unit of analysis could inflate the true arbitration population and create unexpected outliers. According to Eisenberg and Schwab (1987, p.656), “a certain arbitrariness exists in designating a *case*”. In this context, we agree with Eisenberg and Schwab (1987, p.656) that “the study probes no deeper than the court records”, and our choice of analytical unit is expected to minimize the degree of arbitrariness.

### 2.3.1.2 Model and variables

Our main dependent variable is *Settlement* which is coded one if the parties to the dispute conclude the case by an early settlement and zero if it goes to formal award in the original arbitration proceedings. Although early settlement represents

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<http://www.international.gc.ca> and <https://www.state.gov>, both accessed July 25, 2019.

25. <https://www.iisd.org>. Accessed July 25, 2019.

26. <https://www.iareporter.com>. Accessed July 25, 2019.

27. <http://arbitrationblog.kluwerarbitration.com>. Accessed July 25, 2019.

28. E.g. if a case involves 3 claimants there are 3 claimant-cases.

29. See Busch and Reinhardt (2000).

30. More information on ICSID arbitration fees is available at: <https://icsid.worldbank.org/en/Pages/icsiddocs/Schedule-of-Fees.aspx>. Accessed July 25, 2019.

31. Case *Abaclat and others v. Argentina* (180000 claimants), case *Bayview v. Mexico* (46 claimants), case *Canadian Cattlemen v. USA* (109 Claimants).

discontinuance of a dispute, not all discontinuances are due to settlement. Focusing on the negotiation between the parties, we exclude from our data the following cases: (i) discontinuance of a dispute because of failure of the parties to act, for example non-payment of arbitration fees, (ii) discontinuance in order to shift the dispute to another arbitration forum, (iii) discontinuance for unknown reasons. The final cross-sectional dataset includes 450 treaty-based disputes during the period 1996-2016.

To evaluate the probability of early settlement, we estimate a Probit model which is an appropriated model if the dependent variable is binary:

$$\begin{aligned} \text{Settlement}_i = & \beta_0 + \beta_1 \text{No Experience}_i + \beta_2' \text{Case Prospect}_i + \beta_3 \text{Extreme}_i \\ & + \beta_4 \text{Individual}_i + \beta_5 \text{Dutch BIT}_i + \zeta X_i + \eta_i + \epsilon_i, \end{aligned} \quad (2.1)$$

where  $X$  is a vector of the variables controlling for economic conditions, quality of host state governance and other aspects of the dispute;  $\eta$  is a vector of industry, filing year, region and institution fixed effects, and  $\epsilon$  is the error term.

### ***a. Independent variables***

The first variable of interest is host state's treaty arbitration experience. Since we are interested in the difference between an inexperienced and an experienced state, we code *No Experience* as 1 if the host state has not concluded a case prior to the given dispute. We use concluded case to proxy for the host state's experience because it helps to capture possible learning effects based on the host state's knowledge of the full costs of at least one previous dispute.

Second, to proxy for the dispute prospect (or the outcome anticipated by the state), we argue that previous cases related to the same regulatory measure (similar precedents) may be useful. If the number of similar cases where the state won is not higher than the number of similar cases where the state lost or settled, then the prospect of the actual case is expected to be relatively unfavorable to the host state, and as predicted by the literature, the probability of settlement will increase, and vice versa. Since arbitration cases are heterogeneous, another question is which source of precedents should be used to proxy for the case prospect.

Clearly, the state cannot scrutinize all previous cases concerning “nationalization” in all countries in order to anticipate the outcome of a nationalization claim. To estimate a direct effect of precedents, it would be reasonable to consider similar cases concerning states in the same geographic region<sup>32</sup> since they could be expected to have some similarities in their physical geography (natural resources, climate conditions), ideology, economies, and/or social spillovers, for instance. Many regional cooperation agreements have been negotiated to profit from such similarities. Therefore, we expect that the dispute resolution of “neighbors” will affect a state’s decision. *Case Prospect* captures the prospect of a given dispute and this categorical variable is coded as:

- *Good prospect* if the number of similar precedents where states in the same geographic region<sup>33</sup> won<sup>34</sup> is higher than the number of similar precedents where states lost and settled;
- *Bad prospect* if the number of similar precedents where states in the same region won is not greater than the number of similar precedents where states lost and settled;
- *No info* if there is no similar precedent at the region level.

The third variable is *Extreme*. Based on an original coding of the nature of the treaty disputes, we identify 14 types of regulatory measures that can be sources of treaty violations<sup>35</sup> (Table 2.4 - Appendix 2.B). These 14 types include some

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32. 90 percent of the cases in our database have less than 1 similar precedent at the state level (and 50 percent of cases have zero similar precedents). Thus, information on each state’s previous cases is not sufficient to assess the prospect of a current dispute. However, at the region level, the 90<sup>th</sup> percentile of the similar precedents distribution is 8, and the 50<sup>th</sup> percentile is 1.

33. In this paper, we use the list of geographic regions defined by the United Nations Statistics Division: Northern Africa, Sub-Saharan Africa, Latin America and the Caribbean, Northern America, Central Asia, Eastern Asia, South-eastern Asia, Southern Asia, Western Asia, Eastern Europe, Northern Europe, Southern Europe, Western Europe, Australia and New Zealand, Melanesia, Micronesia, Polynesia. More information is available at: <https://unstats.un.org/unsd/methodology/m49/>. Accessed July 25, 2019. From here on “region” and “geographic region” are used interchangeably.

34. If all investors’ claims are dismissed at merits stage (no breach by the state), or state is found liable but compensates nothing, or if the tribunal declined to apply its jurisdiction to the investors’ claims, we code the outcome as a state win.

35. Almost all information on the regulatory measures are collected from the section “Factual

measures which have direct and extreme effects on the investor's project such as unilateral cancellation and termination of contract, revocation or denial of licenses, permits and authorizations, public tender regulations, direct expropriation, failure to enforce an award issued in favor of the investor,<sup>36</sup> trade regulations and production regulations.<sup>37</sup> All of these regulatory measures in addition to "Failure of the host state to protect investments from political violence", have a dispossessing effect on the projects, and thus are considered as *Extreme* and coded one.

In addition to measures that limit investor' activities radically (and their motivations to continue such operations), there are measures that have less-extreme effects e.g. supplementary obligations to contractual ones, suspension of non-tariff obligations, non-honoring of payment obligation, tax and subsidy issues, currency inconvertibility and restrictions on currency transfer. *Extreme* is coded zero for the existence of these measures in addition to "Failure of the host state to supervise the operation of state-owned entities".<sup>38 39</sup>

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background" (or similar) in an award, decision or notice of arbitration. Where these primary sources were not available, the secondary sources already mentioned in the general presentation of the database were used.

36. We classify "Failure to enforce an award" as an extreme measure if such award is considered an "investment" claimed by investors. Non-respect of this award may be considered similar to the host state's direct expropriation of the investor's assets.

37. We classify production regulations (see details in Table 2.4 - Appendix 2.B) as extreme measures because they have direct effects on foreign firms whose main activity is production. E.g. imposition of production quota that is considerably lower than the initial capacity of the plant is considered as a direct and extreme measure because compared to taxation it limits directly the ability of the foreign investor to utilize its investment (e.g. case *Cargill v. Poland*). The same reasoning applies to an enforced labeling method applied to a tobacco company whose activities and products are related absolutely and negatively to public health (e.g. case *Philip Morris v. Uruguay*). To check the robustness of the results, we recoded the variable *Extreme* excluding production regulations from the list of extreme measures and reran the model. The results (not reported) remained consistent with the baseline model.

38. "Failure of the host state to supervise the operation of state-owned entities" is classified as an indirect and less-extreme measure within the state's supervisory role, and it is this omission (not a direct action) that results in losses for the investor.

39. We acknowledge that some disputes involve more than one regulatory measure. E.g. case *İçkale v. Turkmenistan* between Turkmenistan and a Turkish investor involves 2 types of measures: non-honoring of the payment obligation under the contract (less-extreme), and unilateral cancellation and termination of contract (extreme). For convenience, if there is at least one extreme

To capture variation in the litigation cost distribution among two types of investor (individual and corporate investors) and its effect on the probability of early settlement, we create the fourth variable *Individual*. If the claimant is an individual investor, *Individual* is coded one; if a corporate is filing the claim against the host state, *Individual* is equal to zero.<sup>40</sup>

Finally, because Dutch BITs are attractive to investors due to their wide scope of protection and few exceptions to regulatory power, we capture the possible effects of Dutch BITs, especially on the investor's bargaining power, by including the binary variable *Dutch BIT*. This is equal to one if a dispute invokes protection from a Dutch BIT.

***b. Control strategy***

To exclude the possibility of spurious correlation, we control for confounding factors that may impact the relationship between the independent and dependent variables. In the first step, we account for characteristics of the host state that might affect its decision to settle. We control first for host state's international economic position or trade dependence using information on its goods and services exports as a percentage of gross domestic product (GDP) (*Export host (% of GDP)*). Trade

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regulatory measure, we code *Extreme* one. The rationale is that extreme measures are the main obstacle to negotiation between the parties.

40. In our database, there are 57 disputes with only individual investors, 366 disputes involving only corporate investors and 27 disputes involving both types of investor (e.g. case *Trinh Vinh v. Vietnam* or case *RSM v. Grenada*). In particular, the majority of individuals involved in these 27 cases have interests (e.g. as shareholders or owner) in the mentioned corporations. Therefore, it is reasonable to assume that in these cases, the litigation decisions are issued on behalf of corporations represented by these individual claimants. We expect that the effect of the claimant's characteristics on the probability of early settlement in these cases is no different from cases involving only corporations. Among these 27 cases, there are 2 cases *Abaclat and others v. Argentina* (with more than 180,000 investors) and *Bayview v. Mexico* (with 46 investors) where the available information was insufficient to assess whether the individual investors were actual shareholders or owners of the mentioned corporations or were independent of the firms. However, even in class actions, it is possible that corporate investors may be considered "pillars", e.g. they can reassemble individual investors that have same interests in a lawsuit, hire law firms, pay advance lodging fees and represent all the claimants to participate in a hearing. Thus, litigation decisions may be driven by corporate investors. For convenience, if a dispute involves at least a corporation, we code the variable *Individual* zero.

dependence is expected to have positive effect on the probability of settlement because awaiting final award can be risky in terms of time, cost and country credibility, and in particular if the national economy is dependent on other country partners. Second, we use *GDP growth host* to measure the host state's GDP growth rate.<sup>41</sup> This indicator is intended to capture economic changes or the economic "health" of the host state. If the national economy shows positive growth, negative information from lawsuits with foreign investors could be detrimental to the economy, and we would expect in that case that the probability of early settlement would increase. In addition, host state's governance quality can be an indicator of arbitration claims (Dupont et al. 2016) and its decision-making during an arbitration (Hafner-Burton and Victor 2016). We introduce *Rule of law host* in the model and expect that if the law governs social behavior and contractual relationships, government can be confident that its regulatory measures are legally justified. This will reduce negotiations "in the shadow", and the probability of early settlement. All these economic and institutional variables are based on World Bank data for year of filing.

To come closer to understanding the true effect of our main variables on the likelihood of early settlement, we include the variable *Case strength* which is coded one if the dispute is based on violation of more than one international investment treaty, or if many investors are involved in a lawsuit. According to Kucik and Pelc (2016), this can be seen as evidence of a weak case and of claimants being less confident in the merits of each separate case, and thus, the probability of early settlement with the host state may increase. We also introduce the variable *G7 Investor* to capture any effect of investors coming from high-income countries, more precisely the Group of Seven.<sup>42</sup>

The second step is to further control for possible estimation biases by including fixed effects (FE). First, following the suggestion in Wellhausen (2016a), we add

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41. The rate of GDP growth from the previous year to the filing year.

42. Members of this Group are major industrial countries: Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. We choose the G7 Group for two reasons. First, this creates a difference in the development status of the home country because the majority of investors in our database come from "developed" countries. Second, according to Harten (2012), the international investment arbitration system also applies a "less restrictive approach" to claims submitted by investors from G7 countries than investors from all other states. It is thus interesting to observe the behavior of these investors during the negotiation with the host country.



industry (or economic sector) dummies because differences across industries (e.g. long-lived industries<sup>43</sup> tend to have higher levels of sunk costs) can be indicators of early settlement. Moreover, industry characteristic can somewhat capture the value of the claim.<sup>44</sup> Second, while controlling for host country fixed effects is not efficient,<sup>45</sup> we control for regional effects by introducing host country's region dummies. In addition to specific natural and geographic conditions (e.g. natural resources), the region dummies capture possible ideological effects spilling over the region level such as attitude to the international investment arbitration system. Third, as each arbitral institution (e.g. ICSID, The Stockholm Chamber of Commerce (SCC) or The Permanent Court of Arbitration (PCA)) has its own rules to administer disputes, we further capture the effect of administrative rules on the early settlement by adding institution dummies. We expect that a long and complicated procedure to administer a dispute may "encourage" the parties to settle early. Finally, we add time fixed effects (filing year dummies) to control for any global shocks in a given year.

## 2.3.2 Empirical results

### 2.3.2.1 Descriptive analysis of data

The cross-sectional database includes 450 treaty-based disputes between host states and foreign investors from 1996 to 2016. Among these 450 cases, 28 percent were settled early during the original proceedings. Table 2.1 presents the statistics of all the main variables.<sup>46</sup>

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43. E.g. Energy, mining and quarrying, construction.

44. While we do not have sufficiently information about the exact value claimed by foreign investors, it is reasonable to think that this value may be correlated to the characteristic of the sector involved. For example, the energy sector often requires a high level of sunk costs on the part of investors and thus a high value claimed for the investment project in case of a dispute.

45. There are two reasons to justify this control strategy. First, since some countries appear a few times in this cross-sectional database, it is possible that the outcome variable (settlement) will not change along certain country dummies. As the Probit model is used to estimate, including host country fixed effects may reduce the sample size. Second, there are more than 90 respondent states in the database. Putting too many parameters may overfit the model.

46. For more information about the correlation matrix and collinearity diagnostics of variables used in the main regression, see Tables 2.5 (Appendix 2.C) and 2.6 (Appendix 2.D).

Table 2.1: Descriptive statistics

	Obs	Mean	Std.Dev	Min	Max
<i>Settlement</i>	450	0.28	0.45	0	1
<i>No Experience</i>	450	0.30	0.46	0	1
<i>Bad prospect</i>	450	0.47	0.50	0	1
<i>No info</i>	450	0.35	0.48	0	1
<i>Extreme</i>	450	0.64	0.48	0	1
<i>Individual</i>	450	0.13	0.33	0	1
<i>Dutch BIT</i>	450	0.11	0.31	0	1
<i>G7 Investor</i>	450	0.55	0.50	0	1
<i>Case strength</i>	450	0.34	0.47	0	1
<i>Export host (% of GDP)</i>	450	36.31	18.36	0.54	121.31
<i>GDP growth host</i>	450	0.11	0.16	-0.64	0.58
<i>Rule of law host</i>	450	-0.24	0.87	-2.02	1.89

NOTES: The model includes dummies for *Bad prospect* and *No info*, corresponding to 2 levels of the categorical variable *Case Prospect*. The base level is *Good Prospect*.

With respect to the industries involved in foreign investors' projects, the majority of disputes are related to energy, mining and quarrying (see figure 2.2). This is plausible because in these industries, investments are usually long-term and require relatively high levels of investor sunk costs. However, apart from these two immobile industries, there are a large number of foreign investors in mobile industries such as finance and insurance, transport, retail services, etc., which filed claims against the host states.

The respondent states involved in investor-state disputes come from all geographic regions. The two most frequent regions for arbitration claims are Latin America and the Caribbean, and Eastern Europe. The most frequent in the former region are foreign investors in Argentina and Venezuela. However, claims occur not just in developing but also in developed countries such as Australia, Belgium, Canada, Germany and the United States. With respect to investment treaties, the majority of investors invoke BIT protection, with some claiming the Energy Charter Treaty (ECT) protection in the case of energy projects. North American Free Trade Agreement (NAFTA) and other free trade agreements with investment chapters are

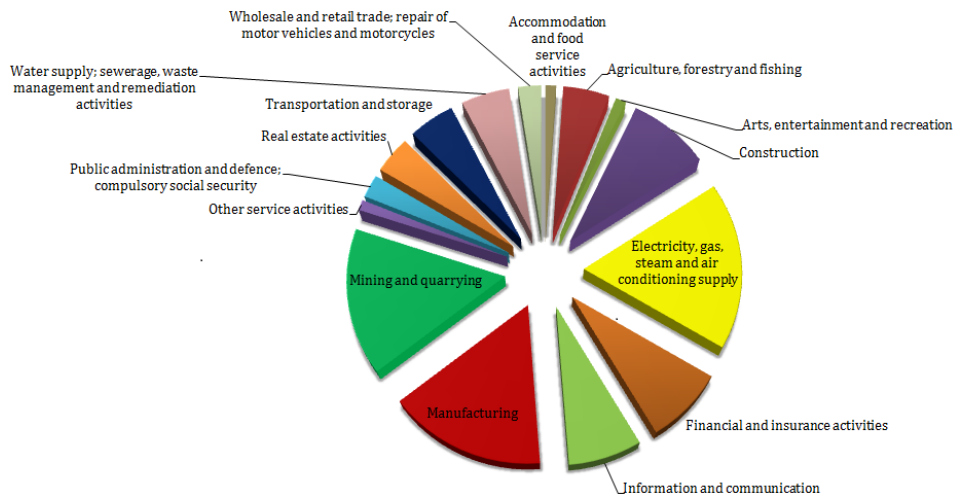


Fig. 2.2: Distribution of disputes over industries

*Source of data: Author's calculation*

also used by investors to invoke jurisdiction of arbitral tribunals, and especially investors from the United States and Canada.

### 2.3.2.2 Econometric analysis

We present a series of models to check the robustness of our findings (Table 2.2).<sup>47</sup> Column 1 includes the variables of interest. We add control variables in Column 2 and industry, filing year, region and institution dummies in Column 3 to control for fixed effects. For convenience, these dummies are not reported in all the tables. The results commented in the rest of the subsection are those reported in Column 3 of Table 2.2.

47. Since we are interested in determining the sign of the estimated coefficients, we choose to display the coefficients from the Probit regression and not the marginal effects. However, for the interpretation of the empirical results (see below), we combine both the qualitative assessment (the sign of the coefficient) and the quantitative assessment (the marginal effect).

Table 2.2: Results of the baseline model (Probit estimation)

	(1)	(2)	(3)
	Probit	Probit	Probit
	Settlement	Settlement	Settlement
No Experience	0.294** (0.144)	0.297** (0.146)	0.473** (0.193)
Case Prospect (Base= <i>Good prospect</i> )			
<i>Bad prospect</i>	0.615*** (0.198)	0.524** (0.204)	0.556** (0.238)
<i>No info</i>	0.526** (0.210)	0.437** (0.214)	0.546* (0.280)
Extreme	-0.528*** (0.137)	-0.528*** (0.140)	-0.577*** (0.168)
Individual	-0.661*** (0.245)	-0.620** (0.245)	-0.764*** (0.243)
Dutch BIT	0.633*** (0.199)	0.646*** (0.213)	0.822*** (0.247)
G7 Investor		-0.126 (0.147)	-0.096 (0.175)
Case strength		0.056 (0.137)	0.203 (0.168)
Export host (% of GDP)		-0.008* (0.004)	0.002 (0.006)
GDP growth host		0.697 (0.428)	2.497*** (0.766)
Rule of law host		0.007 (0.080)	-0.302* (0.161)
<i>FE</i>	No	No	Yes
Intercept	-0.861*** (0.203)	-0.543* (0.287)	1.295 (1.096)
Observations	450	450	450
Pseudo $R^2$	0.095	0.107	0.289
Log likelihood	-240.713	-237.353	-189.058
Prob>Chi2	0.000	0.000	0.000
Hosmer–Lemeshow test (p-value)	0.58	0.56	0.71
Area under the ROC curve	0.70	0.72	0.84

NOTES: The sample consists of 450 treaty-based disputes brought before international investment arbitration from 1996 to 2016. The unit of analysis is *dispute* or *case*. The binary dependent variable is *Settlement*. *Case Prospect* means the outcome anticipated by the host state. The base level of this 3-level categorical variable is *Good prospect*. The full model 3 which includes industry, filing year, region and institution fixed effects is used to calculate the marginal effects. Hosmer–Lemeshow goodness-of-fit tests (p-value) (Lemeshow and Hosmer 1982) and the area under the receiver operating characteristic (ROC) curve (Tilford et al. 1995) are used to assess model performance: a higher p-value or a larger area under the ROC curve (> 0.50) indicates a better fitting model. Robust standard errors are in parentheses. \* indicates  $p < .10$ , \*\* indicates  $p < .05$  and \*\*\* indicates  $p < .01$ .

In general, the main model has significant power in explaining the probability of early settlement (see results of post-estimation analysis). The coefficient of *No Experience* as expected is positive and statistically significant (at the 5 percent level). In the probability metric,<sup>48</sup> the full model 3 shows that if the host state has no previous experience of resolving treaty arbitration, the probability of early settlement increases by 13.3 percentage points based on all the predictors set at their mean values.<sup>49</sup> This result implies that generally a country is more likely to choose settlement in initial lawsuits.

The base level of the 3-level categorical variable *Case Prospect* is *Good prospect*. Thus, *Bad prospect* and *No info* should be interpreted relative to the base level. The coefficient of *Bad prospect* is positive and highly significant which means that compared to *Good prospect* cases, the host state as expected will be more likely to choose early settlement, with an increase of 13.4 percentage points in the probability. Interestingly, *No info* can be a specific form of information. The model shows that compared to *Good prospect* cases, cases where the host state finds no similar precedent at the region level are also more likely to be settled early, with an increase of 13.1 percentage points in the probability.

Other case-level determinants show significant effects on the probability of early settlement. The empirical results support our hypothesis about the effect of extreme regulatory measures on settlement breakdown. If a dispute involves a measure that radically limits private activities and the motivation to continue the project (*Extreme* equal to one), the probability of settlement decreases by 16.3 percentage points.<sup>50</sup>

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48. The Probit model “is a model for binary responses where the response probability is the standard normal cumulative distribution function (cdf) evaluated at a linear function of the explanatory variables” (Wooldridge 2015, p.766). Theoretically, it is not easy to interpret directly the Probit model coefficient. Therefore, it is better to use the marginal effect. The marginal effect is a way to interpret results in terms of differences in probability. This effect, by definition, is the change in outcome probability that results from changing an independent variable by a small amount.

49. When assessing the marginal effect of a variable on the probability of early settlement, we set all other predictors at their mean value.

50. Since the correlation between the 3-levels categorical variable *Case prospect* and the variable *Extreme* is not huge (see the correlation matrix and VIF values in Appendices), we cannot find a multicollinearity problem in our estimations. To further check the robustness of the results, we excluded each variable from the main regression to see any change in the estimation. All results

If an individual investor is filing against the host state (*Individual* equal to one), the probability of early settlement decreases significantly by 21.6 percentage points. This empirical result supports Eisenberg and Farber (1997) hypothesis about the effect on lawsuits of claimants' characteristics. Again, we would emphasize that this result does not mean that individual investors are more tenacious or more wealthy than corporations. Rather, it means that the market discipline on corporations in general allows them to choose optimally between settlement or waiting for a final judgment. Although early settlement with the host state is supposed not to be the first-best deal (i.e. investors cannot extract a higher value of compensation), it is always not too bad in terms of pecuniary litigation costs, especially if corporations have parallel projects in other countries.

Finally, Table 2.2 shows that use of Dutch BITs (*Dutch BIT* equal to one) is significantly and positively associated to the probability of early settlement. Based on the marginal effect, the fact that investors invoke the protection of Dutch BITs increases the probability of settlement by 23.3 percentage points. This result is in line with our hypothesis that Dutch BITs give foreign investors favorable terms as well as a favorable bargaining position with host states. Our finding confirms Wellhausen's (2016a) descriptive result and the *Dutch* effect highlighted in the political science literature on international investment.

With respect to control variables, *GDP growth host* has a positive and significant effect on the probability of early settlement when including fixed effects. The national economic position which is captured by *Export host (% of GDP)*, has initially a negative impact which contrasts with the conventional wisdom that a "dependent" economy could make concessions during negotiations with foreign investors. However, when controlling for fixed effects, trade dependence becomes statistically insignificant and of very small size. As expected, the probability of early settlement decreases when the host country's governance quality, proxied by *Rule of law host*, is better. Investors from G7 countries seem more litigious than from other states, but this effect is not statistically significant. Similarly, we find no evidence to confirm that a weak case (*Case strength* equal to one) is more likely than a strong case to be settled early.

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(not reported) are still very consistent.

### 2.3.3 Robustness checks

In this part, we include additional regressions to confirm the robustness of our main findings. First, we apply different estimation methods (Logit<sup>51</sup> in Column 2 and Ordinary Least Squares (OLS)<sup>52</sup> in Column 3) to determine whether the results are sensitive to the choice of estimation. Second, given that Argentina and Venezuela are the “targets” of the most arbitration claims, we try to exclude all cases concerning these two countries, and rerun the model to determine whether the findings are driven by respondent state frequency in the database (Column 4). All the models are presented in Table 2.7 (Appendix 2.E).

In general, these additional models show that almost all the estimates of the main variables are still consistent with the baseline model. There is only a small change of the 3-level categorical variable *Case Prospect* when we exclude cases involving Argentina and Venezuela (Columns 4). In this case, there is little evidence that compared to cases with *Good prospect*, cases where the host state finds no similar precedent at the region level (*No info*) are more likely to be settled early.<sup>53</sup> If we employ an OLS estimation (Columns 3), *No info* becomes statistically significant at the 5 percent level. Despite the lack of statistical evidence in Column 4, the sign of the coefficient *No info* does not change across models. To some degree this still indicates estimation stability. Meanwhile, the difference in probability of early settlement between *Good prospect* and *Bad prospect* cases is highly significant after the robustness checks. Therefore, the second hypothesis about the dispute prospect is supported empirically.

Finally, a potential source of endogeneity is worth investigating in this paper. Although many aspects related to the host country and to the dispute have been included in the model, we are not able to control sufficiently for unobservable factors related to foreign investors, for example, negotiation skills, litigation experience or

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51. As the Probit model, the Logit model is another method that uses a non-linear function to model the conditional probability function of a binary outcome variable. However, for Logit, the response probability is the Logit function and not the standard normal cdf (Wooldridge 2015, p.763).

52. When applied to a binary outcome variable, OLS is known as a linear probability model that can be used to describe conditional probabilities.

53. The marginal effect of *No info* compared to *Good prospect* is also statistically insignificant.

the effect of third-party financing (see Deffains and Desrieux 2015).<sup>54</sup> Nevertheless, these unobserved factors might affect both our dependent and independent variables and become the main source of endogeneity. Since the problem of endogeneity gives some difficulties in identifying causality, it is important to consider which variable might suffer from endogeneity.

First, the host country's experience is exogenous to this source of endogeneity. We see less reason for the fact that the current investor's characteristics can impact the occurrence of disputes in a country in the past. According to Dupont et al. (2016), the occurrence of investment claims rather depends on the host country's governance quality that has been controlled in the model.

Second, the prospect of the case, by construction, is based on previous precedents over regions. The number of legal precedents is clearly independent of the current investor's characteristics, but it can depend on the host country's geographic region. For example, the number of investment disputes (and then legal precedents) in Latin America is higher than in Western Europe. This difference was captured by region fixed effects in the model.

Third, we follow Guzman and Simmons (2002), in a similar context, to treat the nature of the dispute (or the rigidity of regulatory measures) as an exogenous variable. Indeed, this variable depends on the government's behaviour and the urgency of the policy. For example, the termination of a harmful project is due to its negative environmental externalities, irrespective of the status of the investor.

Fourth, as suggested by Eisenberg and Farber (1997), we control for the differences across case categories in trial/settlement rate by adding industry fixed effects and consider the identity of investors as an exogenous variable.

For the last variable of interest *Dutch BIT*, it is reasonable to suspect that the choice of "investing" through the Netherlands (or through a Dutch legal entity) to benefit from the protection of Dutch treaties - a practice that could be called "treaty-shopping" - is probably not random. In fact, it might be endogenous to the investor's

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54. Although we include the variable *G7 Investor* to control for the effect of investors coming from major industrial countries, this might not be enough to capture the investors' unobservable characteristics. Moreover, identifying the nationality of investors in the context of international investment is difficult due to the complexity of the ownership structures of multinational firms. See Peinhardt and Wellhausen (2016) for an interesting discussion.



unobserved characteristics (Os and Knottnerus 2011; Weyzig 2013). For example, anticipating a potential dispute with the host country, a large multinational firm, with efficient negotiation skills and litigation experience, might strategically choose to route a part of its investments through the Netherlands to benefit from a treaty with a high level of protection. Also, this type of firm is more likely to negotiate successfully with the host state, and thus, the probability of early settlement increases. A possible correlation between these unobserved factors and the regressor *Dutch BIT* might raise the identification problem, especially when we assess the content-related effect of Dutch investment treaties on the probability of early settlement (see part 2.2.5). This claim is valid in principle, but we believe that such concerns will play only a limited role for many reasons. First, in the current context of the globalization of investment activities, foreign firms can restructure assets in many countries through their subsidiaries without high transaction costs (e.g. by transfer of shares). Second, legal services, including assisting in treaty planning, are often provided by many law firms. Therefore, treaty-shopping for investment protection should be considered as an “insurance” for firms to fully protect their foreign business operations rather than as the strategic choice of a subset of investors (e.g. only big firms). This reasoning is also confirmed in the Two-stage Least Squares regression analysis and the regression-based *Hausman* test, as presented in Table 2.8 (Appendix 2.F), in which we cannot find statistical evidence of bias caused by endogeneity issue.

## 2.4 Discussion and Conclusion

A dispute is the sign of some kind of “war” between the parties. This could sever an individual relationship, or destroy the economic and diplomatic relationship between two countries. While continuation of a dispute harms both parties at least in terms of the time spend in court, settlement would alleviate the tension between them. We agree in part with Fiss (1984) that settlement is not simply agreement to terminate a dispute. In particular, in the context of international investment arbitration, a dispute can involve the implementation of a policy favoring the public interest but which has negative impacts on the foreign investor’s project. In a

context where the majority of settlement deeds are not made public, society has a right to be suspicious about the “true” outcome of a settlement, for example whether or not an environmental regulation is withdrawn by the host state based on the settlement terms. There remain many (and curious) questions related to international investment arbitration which require further research.

The present research extends preliminary work conducted by a few scholars (Franck 2009; Harten 2012; Hafner-Burton and Victor 2016) to try to make the dispute resolution process in international arbitration more transparent. We collected data on all treaty-based disputes between 1996 and 2016, and focused on the early settlement before the final judgment. We complement Hafner-Burton and Victor’s (2016) study by working with a larger and more comprehensive dataset. To identify theoretical determinants of early settlement, we drew on the rich literature on dispute settlement in national systems. In general, we found strong evidence that the host state’s experience, the case prospect based on similar disputes, the nature of the regulatory measures, the identity of investors and Dutch investment agreements have significant impacts on the probability of early settlement. Our results both address public curiosity about the hidden international investment arbitration world and have some implications for policy.

First, as argued in the previous chapter, investor-state dispute is a current concern in both developing and developed countries. To mitigate litigation costs, countries that have signed or are negotiating international agreements on investment protection should review their legal investment frameworks to fend off arbitration claims, and consider plans to deal with possible lawsuits. Second, early settlement should be considered carefully, especially if the case affects the public interest. According to Che and Yi (1993, p.401), “setting a favorable precedent is more effective than fighting against an unfavorable one already set”. Therefore, if the host state has carefully prepared evidence, documentation and legal assistance, it may resist early settlement or agree to it only if it is not detrimental to the public interest and details are made public. Third, the legal content of many bilateral investment treaties is sketchy e.g. Dutch BITs. They work in part to encourage investors from third countries to use them as instruments to sue host countries before international arbitration. Incomplete treaties can be disadvantageous for states negotiating

with foreign investors over a dispute, and before arbitral tribunal. Thus, reform of the current international investment law regime is required and should begin with renegotiation of existing investment agreements.

Despite our careful data collection and modelling efforts, this study has a limitation: it focuses only on settlement of treaty-based arbitrations. Due to the secrecy surrounding arbitration, we were unable to obtain data on all other disputes based on investment contracts or national law to complete the picture. We do not underestimate this limitation, but believe that our research contributes significantly to the relatively new stream of work on international investment arbitration, by applying and empirically testing the widely acknowledged settlement bargaining theory on international dispute resolution practice. Moreover, our policy implications based on robust results are extremely timely in the context of the deep divisions among countries on reform of the international arbitration system (Roberts 2018). Given the increased attention from the public over recent years (Meyer and Park 2018) and the efforts of arbitral institutions including ICSID to improve their effectiveness and transparency, we are hopeful that important data on investor-state disputes will be made publicly available. Taking account of the emergence of new empirical methods, we believe that future research could refine our approach and consider the concern that we state above.

Finally, another aspect of settlement that is worthy of more theoretical and empirical research is the compliance with the settlement terms. Further research could also investigate the most popular form of non-pecuniary settlement. Is stopping the implementation of public policies a solution to settle disputes with the foreign investor? Further research could add to our results and provide readers and policy makers with a more objective view of the international investment arbitration system.

# Appendix

## 2.A Characteristics of Dutch bilateral investment treaties

Table 2.3: Characteristics of 104 Dutch bilateral investment treaties

BIT provisions	Statistics
<b>Preamble</b>	
BITs do not refer to government right to regulate, sustainable development, social investment aspect or environmental aspect	91/104
<b>Scope and Definition</b>	
BITs use asset-based definition to define an investment or there is no definition	103/104
BITs have no limitation on the definition of investment (e.g. they did not exclude other specific assets or contain “ <i>in accordance with host state law</i> ” requirements)	92/104
BITs exclude dual nationals as “investors”	0/104
BITs require substantial business activity of corporate investors	3/104
<b>Denial of benefits (DoB) <sup>1</sup></b>	
BITs include DoB clauses	1/104
<b>Temporal scope of the treaty</b>	
BITs apply to both pre-existing and post-BIT investments	89/104
<b>Exceptions</b>	
BITs allow the contracting parties to derogate from treaty obligations in order to protect essential security, public health, environment, cultural heritage, public order and for prudential reasons	3/104
<b>Investor-state Dispute Settlement (ISDS)</b>	
BITs include ISDS mechanism	100/104
BITs allow to submit to ISDS any dispute relating to investment	92/104
BITs have limitation to the scope of ISDS (e.g. excluding certain provisions, certain economic sectors)	6/104
Continued on next page	

1. The purpose of *Denial of benefits* clauses is to exclude from the scope of treaty protections mailbox or shell companies from a third state that does not have a bilateral treaty with the host state.

**Table 2.3 – continued from previous page**

<b>BIT provisions</b>	<b>Statistics</b>
BITs provide express or implied consent to arbitration	95/104
BITs provide at least ICSID or UNCITRAL as ISDS forum options	93/104
BITs include no reference to the relationship between forums (e.g. on whether the same dispute can be submitted simultaneously to several forums, including domestic court)	79/104
<b>Amendment, renegotiation and termination</b>	
BITs include modalities for amendment or renegotiation	4/104
“Survival” clause <sup>2</sup> length is more than 10 years	90/104

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2. The aim of this clause is to extend the treaty protection beyond its expiration or termination.

## 2.B Descriptions of regulatory measures

Table 2.4: Descriptions of regulatory measures.

Regulatory measures	Descriptions	Examples
Unilateral cancellation and termination of contract	The investment contract is cancelled early and terminated by the host state.	Gelsenwasser v. Algeria; Rumeli v. Kazakhstan
Revocation or denial of licenses, permits and authorizations	Revocation of administrative license, permit and authorization necessary to conduct a project, including environmental permits.	RSM v. Grenada; Methanex v. USA
Public tender regulations	Any change in public tender procedures which limit the investors' rights to participate in the project or sign the contract.	Bosca v. Lithuania; InterTrade v. Czech Republic
Direct expropriation	Nationalization or outright physical seizure of the private property in general.	Eni Dación v. Venezuela; Miminco v. Congo
Failure to enforce an award issued in favor of the investor	Failure by the host state to enforce in its territory an award issued by a previous tribunal in favor of the investor.	National Gas v. Egypt; GEA v. Ukraine
Trade regulations	Any regulation involving a ban on export and import.	Nusa Tenggara v. Indonesia; Apotex v. USA (III)
Production regulations	Any regulation concerning ban or quantitative restriction on production, coerced production methods such as enforced labeling about public health or a ban on profit.	Cargill v. Poland; Philip Morris v. Australia
Failure of the host state to protect investments from political violence	Failure on the part of the host state to protect private investment from politically motivated acts of war or civil disturbance.	Pantechniki v. Albania; LESI v. Algeria
Continued on next page		

Table 2.4 – continued from previous page

Regulatory measures	Descriptions	Examples
Supplementary obligations to contractual ones	Any obligation outside the scope of the contract required by the host state during execution of the contract.	Mobil and Murphy v. Canada (I); Jan de Nul and Dredging International v. Egypt
Suspension of non-tariff contractual obligations	The host state does not fulfill its contractual obligations e.g. failure to deliver materials, sudden change to purchase of electricity.	Renco v. Peru; HEP v. Slovenia
Non-honoring of the payment obligation under the contract	The host state does not fulfill payment obligations under the contract (including payment of sovereign bonds).	SCB v. Tanzania; SGS v. Paraguay
Tax and subsidy issues	The nature of the dispute is tax-related measures (tax assessment, tax exemption), subsidies or state-aid measures.	Micula v. Romania (I); Goetz v. Burundi (I)
Currency inconvertibility and currency transfer restriction	The host state's action or omission concerning inconvertibility from local currency into hard currency (capital, interest, principal, profits, royalties) or transfer restrictions of hard currency outside the country.	Impregilo v. Argentina (II); Pioneer v. Argentina
Failure of the host state to supervise the operation of state-owned entities	The claim is based on the supervisory role of the host state. E.g. failure to prevent bankruptcy of the investor's company, to protect investors from irregular transactions, to supervise the activities of the domestic court system which resulted in adjudication delay or mishandling of lawsuits.	Chevron and TexPet v. Ecuador (I); Anderson v. Costa Rica

## 2.C Correlation matrix



Table 2.5: Correlation matrix of independent variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) No Experience	1.000										
(2) Bad prospect	-0.161	1.000									
(3) No info	0.251	-0.691	1.000								
(4) Extreme	-0.021	0.169	-0.214	1.000							
(5) Individual	0.030	0.019	-0.030	0.061	1.000						
(6) Dutch BIT	-0.005	0.110	-0.120	0.033	-0.067	1.000					
(7) G7 Investor	-0.057	-0.087	0.125	-0.105	-0.006	-0.325	1.000				
(8) Case strength	-0.050	0.048	-0.063	-0.048	-0.049	0.069	-0.065	1.000			
(9) Export host (% of GDP)	-0.046	-0.047	-0.108	0.091	0.073	0.112	-0.120	-0.001	1.000		
(10) GDP growth host	-0.034	0.097	-0.010	0.052	-0.038	-0.073	-0.005	0.010	0.040	1.000	
(11) Rule of law host	0.053	-0.163	0.092	-0.039	0.052	-0.004	0.103	-0.041	0.149	-0.129	1.000

NOTES: The sample consists of 450 treaty-based disputes brought before international investment arbitration from 1996 to 2016. The unit of analysis is *dispute* or *case*. The binary dependent variable is *Settlement*. *Case Prospect* means the outcome anticipated by the host state. The base level of this 3-level categorical variable is *Good prospect*. Correlation coefficients of industry, filing year, region and institution dummies are not reported.

## 2.D Multicollinearity Diagnostics

Table 2.6: Multicollinearity Diagnostics

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
<i>No Experience</i>	1.53	0.65
<i>Bad prospect</i>	2.42	0.41
<i>No info</i>	3.07	0.33
<i>Extreme</i>	1.26	0.80
<i>Individual</i>	1.22	0.82
<i>Dutch BIT</i>	1.34	0.75
<i>G7 Investor</i>	1.47	0.68
<i>Case strength</i>	1.24	0.81
<i>Export host (% of GDP)</i>	1.92	0.52
<i>GDP growth host</i>	2.07	0.48
<i>Rule of law host</i>	3.13	0.32
<b>Mean VIF</b>	<b>5.66</b>	

NOTES: The sample consists of 450 treaty-based disputes brought before international investment arbitration from 1996 to 2016. The unit of analysis is *dispute* or *case*. The binary dependent variable is *Settlement*. *Case Prospect* means the outcome anticipated by the host state. The base level of this 3-level categorical variable is *Good prospect*. *VIF*, *1/VIF* values of industry, filing year, region and institution dummies are calculated but not reported. A *VIF* value that is higher than 10 indicates a multicollinearity problem.

## 2.E Robustness checks

Table 2.7: Robustness checks

	(1)	(2)	(3)	(4)
	Probit	Logit	OLS	Probit
	Baseline			Exc.ARG-VEN
No Experience	0.473** (0.193)	0.862** (0.347)	0.114** (0.050)	0.428** (0.206)
Case Prospect (Base= <i>Good prospect</i> )				
<i>Bad prospect</i>	0.556** (0.238)	1.002** (0.445)	0.118** (0.051)	0.575** (0.252)
<i>No info</i>	0.546* (0.280)	1.009* (0.525)	0.130** (0.064)	0.447 (0.295)
Extreme	-0.577*** (0.168)	-1.004*** (0.312)	-0.150*** (0.045)	-0.475** (0.193)
Individual	-0.764*** (0.243)	-1.281*** (0.444)	-0.127*** (0.049)	-0.729*** (0.252)
Dutch BIT	0.822*** (0.247)	1.357*** (0.440)	0.208*** (0.077)	0.965*** (0.278)
G7 Investor	-0.096 (0.175)	-0.180 (0.332)	-0.031 (0.046)	-0.050 (0.189)
Case strength	0.203 (0.168)	0.364 (0.303)	0.048 (0.046)	0.149 (0.189)
Export host (% of GDP)	0.002 (0.006)	0.002 (0.011)	0.001 (0.001)	0.007 (0.006)
GDP growth host	2.497*** (0.766)	4.541*** (1.477)	0.592*** (0.158)	2.056** (0.940)
Rule of law host	-0.302* (0.161)	-0.496 (0.312)	-0.071* (0.037)	-0.505*** (0.188)
FE	Yes	Yes	Yes	Yes
Intercept	1.295 (1.096)	2.349 (1.855)	0.816*** (0.288)	1.309 (1.122)
Observations	450	450	450	387
Pseudo $R^2$ or $R^2$	0.289	0.288	0.294	0.322
Prob>Chi2 or F	0.000	0.000	0.000	0.000

NOTES: The sample consists of 450 treaty-based disputes brought before international investment arbitration in 1996 to 2016. The unit of analysis is *dispute* or *case*. The binary dependent variable is *Settlement*. *Case Prospect* means the outcome anticipated by the host state. The base level of this 3-level categorical variable is *Good prospect*. Models (1), (2) and (3) are estimated on the full sample. Model (4) excludes cases in which Argentina and Venezuela are respondent states. Robust standard errors are in parentheses. \* indicates  $p < .10$ , \*\* indicates  $p < .05$  and \*\*\* indicates  $p < .01$ .

## 2.F Endogeneity

We suspect that the variable *Dutch BIT* might suffer from endogeneity. A possible example is that anticipating a potential dispute with the host country, a large multinational firm, with efficient negotiation skills and litigation experience, might strategically choose to route a part of its investments through the Netherlands to benefit from a treaty with a high level of protection. This type of firm is more likely to negotiate successfully with the host state, and thus, the probability of early settlement increases. A possible correlation between the investor's unobserved characteristics and the regressor *Dutch BIT* might raise the identification problem. To deal with it, we need to find a suitable instrumental variable (IV) that is not correlated with the error term in the settlement equation (i.e. the investor's unobserved characteristics) (Condition 1) but correlated with the choice of Dutch treaties (Condition 2).

### *a. Instrumental variable*

Although a Dutch BIT seems to be investor-friendly, it has not been without challenges. For example, arbitral tribunals may have different manners to interpret the violation of a treaty (including a Dutch treaty), hence the problem of inconsistency in the international arbitration regime (Lee 2015; Vu 2019).<sup>3</sup> Therefore,

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3. One example is the dispute between Philip Morris and Australia. In 2010, the Australian government announced the implementation of new legislation concerning tobacco packaging to protect public health. In 2011, Philip Morris Asia Limited in Hong Kong, a shareholder of an Australian subsidiary engaged in the tobacco industry, filed an expropriation claim against Australia to international arbitration (PCA) following this new legislation. Since there was no BIT between Switzerland and Australia at that moment, shortly before filing the claim, the ownership of Philip Morris Australia had been transferred from Philip Morris Brands Sàrl – a Swiss company, to Philip Morris Asia Limited – a Hong Kong-registered company. The claim was thus based on the protection of the BIT signed between Hong Kong and Australia. However, in the final award dated December 17, 2015, the tribunal confirmed an “abuse of rights” of the claimant, because the Australian subsidiary has been acquired for the “principal, if not sole, purpose” of bringing claims against Australia. Therefore, the tribunal declined its jurisdiction over this dispute. In another dispute between Phoenix Action Ltd and Czech Republic, the tribunal also applied a restrictive approach to the treaty-shopping question. See the final award dated April 15, 2009 for more information.

a foreign investor could mitigate the risk of being a pioneer by observing other investors. Observing the overall trend in the claimant’s use of Dutch nationality in the arbitration system might induce the investor in the current case to engage in treaty-shopping. Since structuring investments through the Netherlands to gain the treaty protection often happens before filing the given dispute,<sup>4</sup> we use the prevalence of the claimant’s Dutch nationality in international arbitration one year before the current dispute as an instrumental variable candidate for the regressor *Dutch BIT*.

The investor’s unobserved factors, e.g. negotiation skills, might relate to the specific economic sector or the specific country in which they invested. For example, an investor often needs to prepare feasibility studies before starting a project in a country. These studies include investment strategies to reduce risks and any potential issues that may occur in this sector or in this country (e.g. including negotiation plans in case of disagreements with the host country). In an econometric perspective, to satisfy Condition 1, the instrumental variable should not be correlated with both country- and sector-specific factors. In other words, to construct a valid instrument, we do not count cases that relate to the same country or the same economic sector with the dispute under consideration.

In sum, the choice of invoking a Dutch treaty to protect the investor’s interests in a given dispute is only correlated with the instrument through aspects which by construction are independent of the investor-specific factors (or the error term). These aspects include, for example, other firms’ preference for Dutch nationality, global policy trends favoring the capital diversion through the Netherlands, or other firms’ strategy given the riskiness of the investment environment.

### ***b. Two-stage Least Squares estimation***

We use linear probability models for both stages of estimation for the sake of simplicity. Linear probability model has also been used in a similar application with endogenous binary regressor.<sup>5</sup> We first estimate the reduced-form equation (or the

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4. See also case *Mobil and others v. Venezuela*, award on jurisdiction dated June 10, 2010.

5. See, for example, Guasch et al. (2007). Talking about a model with a binary outcome and an endogenous binary variable, Angrist (1991, p.21) argues that “linear instrumental variables estimators perform nearly as well as the correctly specified maximum likelihood estimators, especially

first-stage equation - Equation 2.2) in which the dependent variable is *Dutch BIT*. The list of variables in the right-hand side includes the instrumental variable and all exogenous variables found in the settlement equation (Equation 2.1). We include all exogenous variables in the reduced-form equation to see some partial correlation between the instrument and the endogenous variable after partialling out the effect of other variables (Wooldridge 2010, p.90).

As expected, the results of the first-stage regression in Table 2.8 show that the stronger the past trend in the “use” of Dutch nationality in international arbitration, the higher the likelihood that the claimant in the current dispute invokes the protection of a Dutch treaty. This effect is statistically significant at the 0.1% level. The robust first-stage F-statistic (13.23) testing the hypothesis that the coefficient on the instrument is equal to zero exceeds the rule of thumb proposed by Staiger and Stock (1997) (i.e. the instrument is said to be weak if the first-stage F statistic is less than ten). In general, our instrument has significant explanatory power for the endogenous variable *Dutch BIT* and Condition 2 is satisfied.

$$Dutch\ BIT_i = \alpha_0 + \alpha_1 Instrument_i + \alpha_k Exogenous\ variable_i^k + v_i, \quad (2.2)$$

In the next step, we perform a test to examine whether *Dutch BIT* can be treated as exogenous. The main reason behind this test is the loss of efficiency by using Two-stage Least Squares (2SLS) estimation for the sake of consistency. Wooldridge (2015, p.467) highlights “an important cost of performing instrumental variables estimation when [the regressor] and [the error term] are uncorrelated: the asymptotic variance of the instrumental variables estimator is always larger, and sometimes much larger, than the asymptotic variance of the OLS estimator”. Since heteroskedasticity-robust standard errors are considered in the regression, we use a regression-based *Hausman* test (Wooldridge 2010, p.131). This test simply consists in running the settlement equation (Equation 2.1) augmented by the residuals of the first-stage equation ( $v_i$ ). Under the null hypothesis, the endogenous variable *Dutch BIT* in large samples”. While any attempting to generate first-stage predicted value from the Probit or Logit regressions is unnecessary and may do some harm, the consistency of the instrumental variables estimates does not require consistent first-stage functional form (Angrist 2001; Angrist and Krueger 2001).

*BIT* can be treated as exogenous and there is no need to use 2SLS. If the coefficient on the residuals is statistically different from zero, the null hypothesis is rejected.

According to the results presented in Table 2.8, we cannot reject the null hypothesis of the exogeneity of the regressor *Dutch BIT*: in the *Hausman* test, the p-value is 0.13. In the second stage, the estimates of our main variables are still consistent. However, the standard error of the IV estimate (0.367) is very large in comparison with OLS (0.077). Based on these results, there appears to be no definitive evidence supporting that endogeneity is a serious problem in our context.<sup>6</sup> This gives confidence in the findings discussed in the previous parts.

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6. One may argue that an investor restructures his investments through the Netherlands to benefit from the treaty signed between the Netherlands and the host country. If such a treaty does not exist, the probability of treaty shopping is zero. We re-estimate the first-stage equation excluding from the database cases in which the host country does not have a bilateral investment treaty with the Netherlands at the filing year. The results are very similar. First, the coefficient on the instrumental variable is 0.056 and it is statistically significant at the 0.1% level. The robust first-stage F-statistic on the excluded instrument is 14.74. This indicates that our instrument has some explanatory power. Second, the regression-based *Hausman* statistic is 1.25 (and p-value is 0.27). While the standard error of the IV estimate is too large, we cannot reject the null hypothesis that *Dutch BIT* is exogenous.

Table 2.8: Instrumental variables estimation

	(1)	(2)
	2SLS	OLS
	Settlement	
<b>First stage</b> ( <i>Dep. var.=Dutch BIT</i> )		
Instrumental variable	0.045*** (0.012)	
<b>Second stage</b> ( <i>Dep. var.= Settlement</i> )		
No Experience	0.105** (0.048)	0.114** (0.050)
Case Prospect (Base= <i>Good prospect</i> )		
<i>Bad prospect</i>	0.092* (0.054)	0.118** (0.051)
<i>No info</i>	0.129** (0.062)	0.130** (0.064)
Extreme	-0.162*** (0.046)	-0.150*** (0.045)
Individual	-0.099* (0.056)	-0.127*** (0.049)
Dutch BIT (IV)	0.739** (0.367)	0.208*** (0.077)
Control variables	Yes	Yes
FE	Yes	Yes
Intercept	0.826*** (0.293)	0.816*** (0.288)
Observations	450	450
F-statistic on the excluded instrument	13.23	
Regression-based Hausman statistic ( <i>p-value</i> )	2.27 (0.13)	

NOTES: The sample consists of 450 treaty-based disputes brought before international investment arbitration from 1996 to 2016. The unit of analysis is *dispute* or *case*. The binary dependent variable is *Settlement*. *Case Prospect* means the outcome anticipated by the host state. The base level of this 3-level categorical variable is *Good prospect*. The first-stage regression includes the instrumental variable and all exogenous variables in Equation 2.1 (for convenience, the estimates for these variables are not reported). To test the strength of the instrument, we compare the F-statistic on the excluded instrument with Staiger and Stock's (1997) rule of thumb (10). The regression-based *Hausman* statistic is used to test the hypothesis that the coefficient on the first-stage residuals is zero. Robust standard errors are in parentheses. \* indicates  $p < .10$ , \*\* indicates  $p < .05$  and \*\*\* indicates  $p < .01$



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## Chapter 3

# Arbitrator Teams and International Investment Dispute Resolution: An Empirical Analysis

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This chapter is based on a joint research with Michele Pezzoni (Université Côte d'Azur, CNRS, GREDEG, France and ICRIOS, Bocconi University, Milan, Italy)

### Abstract

This paper investigates, in the context of international investment disputes, how arbitrator team characteristics affect the team performance in solving disputes between a host country and a foreign investor. Our data include 277 judgments issued by the arbitrator teams at the International Centre for Settlement of Investment Disputes at the World Bank from 1972 to 2018. The time to resolution and the quality of the final judgment, as measured by the requirement of a follow-on proceeding to rectify mistakes, are used to measure the team performance. We consider both biographical and professional characteristics of the arbitrators as determinants of the team performance. We find that mixed gender teams and previous team members' collaborations increase the time to resolution contrary to team members' experience and diversity in professional background that decrease it. None of the team characteristics considered has an impact on the quality of the final judgment. Our findings talk to the current policy debate on the reform of the international investment arbitration system aiming to increase its effectiveness and transparency.

**Keywords:** Investor-state arbitration, dispute resolution effectiveness, team performance, team composition.

**JEL Classification:** F21, F53, K33, K41

## 3.1 Introduction

International investment arbitration is a legal procedure to solve disputes between a host country and a foreign investor. It was introduced in dispute settlement clauses of many bilateral treaties signed between two countries to protect investments made by an investor of one contracting state in the territory of the other. This procedure is often preferred to the host state's local court by the foreign investors because it is expected to shorten litigation time and it allows the information resulting from the dispute to remain confidential. Most of these arbitrations take place at the International Centre for Settlement of Investment Disputes (ICSID at World Bank) and are managed by teams of three arbitrators who are appointed by the parties to resolve the dispute.

A widely known example of an investor-state dispute is the dispute between Philip Morris and Uruguay. In 2010, Philip Morris, an American-based global tobacco manufacturer, challenged restrictions applied to tobacco advertising and packaging in Uruguay (ICSID Case No. ARB/10/7). The Uruguay government argued that strong tobacco control policies were consistent with a substantial body of scientific literature and with the guidelines of the World Health Organization's Framework Convention on Tobacco Control. This case was resolved in favour of Uruguay by a team of arbitrators composed of three male members, with heterogeneous professional backgrounds and arbitration experience. The case took more than five years to reach a final judgment costing more than 27 million USD of fees and expenses.<sup>1</sup> The final judgment, however, was subject to a follow-on proceeding required to rectify some mistakes.

As the national judicial institution, an arbitral institution such as ICSID plays an important role in stabilizing economic activities, in particular at the international level. A well-functioning arbitral institution with self-enforcing judgment creates a safe environment for cross-border investment flows, e.g. by limiting the opportunistic behaviour of the host country once foreign investments costs are sunk (Büthe and Milner 2014). Both parties to the dispute can evidently benefit from a shorter duration to resolve an investment dispute and a higher quality of justice. Moreover, the effectiveness of ICSID can also become an important determinant of the investment

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1. Final award dated July 8, 2016, p.167.

decision of potential investors from other countries.<sup>2</sup>

In this paper, we study the determinants of the ICSID arbitrator teams' performance or, equivalently, of the effectiveness of ICSID.<sup>3</sup> In particular, we investigate how arbitrator team characteristics affect the team performance in solving the dispute as represented by the time to resolution and the quality of the final judgment. Considering arbitrators as a team, the current legal literature cannot provide sufficient theoretical framework to explain the effect of human capital on performance. Therefore, an interdisciplinary approach from both law and management literature is applied in this article. Doing so, we contribute both to the management literature on teams and to the relatively new stream of work on international investment arbitration.

Extant empirical works on team performance consider teams where members have convergent individual goals: surgeons' teams aim to save patients' lives (Elbardissi et al. 2013), team of startup entrepreneurs' aim to create profitable firms (Delmar and Shane 2006), fruit pickers' aim to collect the largest quantity of fruit (Bandiera et al. 2009), team of scientists applying for funding aim to obtain re-

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2. In the context of international tribunal, economic agents (e.g. host countries, multinational firms) are primarily affected by the time to resolution. Longer resolution means higher (non) pecuniary litigation costs, disruptions in contract execution, uncertainty about the justice and the business environment. In addition to the time to resolution, the enforceability of the tribunal's judgment is also another concern. If an award issued by the tribunal does not satisfy the parties, they will delay its enforcement by asking for an annulment proceeding. Time and quality are two important performance areas of ICSID. Marciano et al. (2019) provide an interesting discussion about different measures of judicial performance. In particular, the authors insist on the use of two terms that have often been confused in previous literature: *efficiency* and *effectiveness*. While *efficiency*, mainly used in the domestic context, refers to the optimal use of public resources to obtain a given outcome, *effectiveness* (or *efficacy*) refers to the capacity of a system to respond quickly to demand for justice (e.g. without delay). Dakolias (1999, p.97) also classified *quality* (e.g. client satisfaction, appeal rate) in the category *effectiveness*. In this paper, we follow the approach proposed by Dakolias (1999) and Marciano et al. (2019) and use the term *effectiveness* when studying the time to resolution and the quality of the final judgment of ICSID.

3. Since ICSID is a host institution with proper arbitration rules to manage the resolution of investment disputes, its effectiveness in resolving dispute is rather observed through the performance of arbitrator teams. In this paper, the effectiveness of ICSID or arbitrator team performance are used interchangeably.

sources for their research (Ayoubi et al. 2019). We contribute to the team literature by analyzing the performance of teams where members appointed by the parties to the dispute are likely to have conflicting individual goals (Lovell et al. 2001; Deshon et al. 2004; Pearsall and Venkataramani 2015). In the context of international investment arbitrations, the legal empirical literature has focused so far on the arbitration outcomes, i.e. the decision in favour of the foreign firm or of the host state (Harten 2012; Simmons 2014; Franck and Wylie 2015; Donaubaue et al. 2018), neglecting the analysis of dispute resolution effectiveness. This paper fills the gap by focusing on the performance of arbitrators in dispute resolution.

In our empirical analysis, we consider two indicators of team performance: the time passed between the constitution of the team of arbitrators and the final judgment, i.e. time to resolution, and the quality of the final judgment as measured by the probability that the final judgment requires a follow-on proceeding to “correct” mistakes. We investigate the impact of the gender composition of the team, team members’ professional background, members’ previous collaborations and experience on performance indicators.

Based on an original database of ICSID judgments from 1972 to 2018, we find that the time to resolution decreases significantly when the team includes experienced arbitrators or team members having diverse professional backgrounds (e.g. academic arbitrators and lawyers in the same team), while increases significantly when arbitrators have already worked together in other cases and when one of the team members is a female arbitrator. Interestingly, the quality of the judgment is not affected by the team’s characteristics.

Since October 2016, ICSID launched the fourth process in its history to modernize ICSID rules and invited the public to comment on the proposed amendments. This time, the amendment mainly focuses on the duration, costs and the transparency of arbitration.<sup>4</sup> Our analysis has thus strong policy implications suggesting to ICSID and the disputing parties the levers that might be used to create more effective teams of arbitrators. Our findings also talk to the current policy debate on the reform of the international investment arbitration system aiming to increase

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4. For more information, see: <https://icsid.worldbank.org/en/amendments/Pages/About/about.aspx>. Accessed July 25, 2019.

its effectiveness and transparency (Vu 2019). The rest of this paper is organized as follows. Section 3.2 provides a brief literature review on the effectiveness of tribunal in solving disputes and introduces four main hypotheses to test. Section 3.3 presents the empirical strategy and Section 3.4 describes the original dataset as well as the dependent and explanatory variables. Section 3.5 presents the main results. Section 3.6 provides additional robustness checks for our empirical findings. Section 3.7 concludes and discusses the implications of the results for ICSID and the parties to the dispute.

## 3.2 Background literature and hypotheses

The effectiveness of the judicial system of a country, often referred as “court delay”, is a relevant issue not only for the parties involved in a dispute but also for the whole economic system (Ramello and Voigt 2012; Ippoliti et al. 2015; Voigt 2016). So far, the law and economics literature has studied national courts effectiveness in resolving disputes and neglected the cross-country comparison of judicial effectiveness and the study of international courts (Voigt 2016). Nonetheless, international disputes between host countries and foreign investors are growing at a rapid clip and foreign investors often prefer to bring the case in an international court rather than relying on the host state’s local court (Meyer and Park 2018). Figure 3.1 shows the increase of the number of cases filed and solved at ICSID over the period 1972-2018.

ICSID is the acknowledged world leader institution that can settle investment disputes via arbitration between foreign investors and host countries (ICSID 2017). This institution was established in 1966 by the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (the ICSID Convention) signed by more than 160 countries as of end 2018. According to its statute, ICSID is not affiliated, nor serves the interests of any country. The general procedure to resolve a dispute by arbitration at ICSID is in five main steps: (1) the claimant (foreign investor) files a request; (2) ICSID registers the request that respects the formal criteria to enter the procedure; (3) each party selects a co-arbitrator and the president of the tribunal is appointed as result of an agreement between the parties; (4) the tribunal is constituted and the proceeding begins: the tribunal holds the first

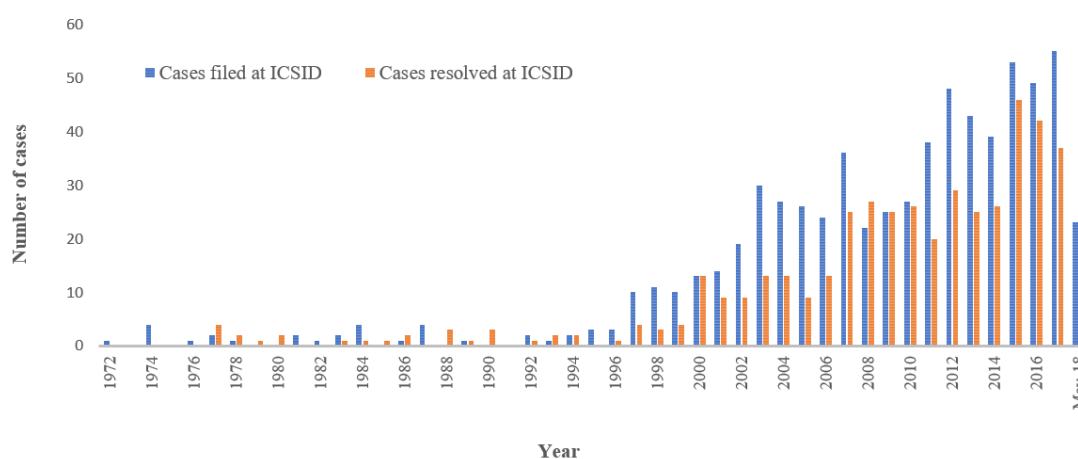


Fig. 3.1: Cases filed and resolved at ICSID (1972-2018)

*Source of data: Authors' calculations based on ICSID's data*

session with the parties, then written and oral procedures; (5) the tribunal deliberates and issues its final judgment. This final judgment, however, can be subject to some follow-on proceedings (e.g. correction, annulment, etc.).

The foreign investors often consider the international investment arbitration model as a convenient way to depoliticize their disputes with the host state (Simmons 2014). The host countries, after the initial enthusiasm when the ICSID Convention was signed, are nowadays questioning on ICSID's work for at least three reasons.

The first reason is the presumed lack of impartiality in cases where many final judgments lead to large compensations to foreign investors (Poulsen and Aisbett 2013). Second, the transparency is questionable where several cases involving the public interest of developing countries (e.g. disputes associated with the implementation of national environmental policy) are conducted confidentially by arbitrators from developed countries introducing a possible bias in their judgment (Harten 2012). Finally, and more importantly, host countries claim that the international arbitration system has become costly and time-consuming (Allee and Peinhardt 2011; Hodgson and Campbell 2017). This lack of effectiveness has led to a negative impact on the contract execution between the parties and to a loss of the host country's credibility and ability to attract future FDI flows (Allee and Peinhardt 2011). Some countries such as Argentina, Venezuela, Ecuador expressed their dis-

comfort with the current arbitration system by renouncing to the ICSID Convention membership, rejecting the investor-state dispute settlement provisions and applying unilateral cancellations of investment treaties. Others are urgently asking for a substantial reform to improve the ICSID effectiveness. Responding to these challenges, since October 2016, ICSID launched the fourth process in its history to modernize arbitration rules and invited the public to comment on the proposed amendment.

Scholars studying national tribunals have sought to measure empirically the dispute resolution effectiveness by using various indicators such as the clearance rate,<sup>5</sup> the time to resolve a case (Dakolias 1999; Christensen and Szmer 2012; Dimitrova-Grajzl et al. 2012; Bielen et al. 2015), the reversal rates,<sup>6</sup> the citations to judicial opinions and the length of the text of the judgment (Higgins and Rubin 1980; Choi et al. 2011, 2012; Epstein et al. 2011; Dimitrova-Grajzl et al. 2016). They have identified as determinants of the court performance the procedural aspects (Bielen et al. 2017; Boyd and Hoffman 2013), the characteristics of parties participating to the dispute (Bielen et al. 2018), the complexity of the national legal system (Di Vita 2010, 2012) and pay little attention to the judges involved in the legal procedure.<sup>7</sup> However, as legal realists have long highlighted, litigation outcomes may also be shaped by judges' characteristics (Posner 1993b; Peresie 2005; Stephenson 2009).

In the case of ICSID tribunal, in general, there are three arbitrators involved in the production of the final judgment. Arbitrators are appointed by the parties to the dispute or by an agreement between them. In case of lack of such an agreement, the ICSID Secretary-General or the president of the World Bank can intervene to appoint the missing arbitrator(s). The choice of arbitrators is flexible and often based on the arbitrators' profound knowledge of international law, high moral characters,

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5. The clearance rate is the number of outgoing cases as a percentage of the number of incoming cases during a specific period (e.g. year). The purpose of this indicator is to assess whether a tribunal is keeping up with its incoming caseload.

6. The reversal rate, according to Eisenberg (2004, p.663), is "the proportion or percentage of appeals that reach a decisive outcome and that emerge as reversed rather than affirmed".

7. Some studies focus on the judge-level characteristics directly (as variables of interest) and indirectly (as control variables). The judge's gender is an important variable in these studies. However, there is a mixed evidence of the effect of the judge's gender on adjudicatory outcomes. A few authors also consider the judge's education background as a determinant. See Choi et al. (2011); Christensen and Szmer (2012); Dimitrova-Grajzl et al. (2012) and Bielen et al. (2018).



language proficiency, and manageability of their current caseload. In this paper, we consider the arbitral tribunal as a team composed of three members who work together aiming to achieve an unappealable judgment on a case in a short time. Although the three arbitrators work in the same team, they might have “divergent, and sometimes even conflicting, interests in a given situation, while still possessing a shared team objective” (Pearsall and Venkataramani 2015, p.735). Especially, the two members appointed by foreign investors and by the host country may work for an outcome of the dispute favourable to the appointing party (Donaubauer et al. 2018).<sup>8</sup> However, there are three reasons supporting the idea that the team’s common goal of resolving efficiently the disputes prevails.

First, the arbitrator team is institutionally constituted under the ICSID rules.<sup>9</sup> It means that arbitrators are bounded by some institutional requirements and cannot intentionally delay the proceeding. Second, even though co-arbitrators that were appointed by the parties might have divergent interests, the market-driven demand for qualified arbitrators induces them to be always proactive and efficient in resolving a dispute. For example, disputing parties often consider the manageability of the current caseload as an important condition when appointing an arbitrator. Therefore, the backlog of work due to mismanaging previous cases may have a negative impact on the arbitrator’s career. Third, from the institution’s point of view, ICSID is the world’s leading institution providing services to resolve investor-state disputes. In particular, its work is under the scrutiny of many countries, especially during the current crisis of the international investment law regime. Therefore, the delay in handling disputes at ICSID not only becomes an issue at the international level

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8. There is a fascinating debate in the literature about how judges (and arbitrators) reach a decision. While classical legal theorists answer that judges apply the law and only the law to the fact of the case, the law and economics scholars studying judicial behavior try to understand how the interaction between the law and non-legal factors (e.g. reputation, personal preferences, political biases) may impact the judges’ decision-making. The starting point of this economic analysis is that judges (and arbitrators in our context) maximize “the same thing everybody else does” (Posner 1993b). See Schultz (2015) for more information. In this paper, we do not add much reinforcement to this discussion, but leave open a possibility of having conflicts among appointees of a team.

9. For example, see Sections 2, 3 of the ICSID Convention, Chapter 1 of the Arbitration Rules on the constitution, powers and functions of the tribunals.

that the Center needs to consider, but also affects its reputation in the arbitration market.

In this original context, the biographical and professional characteristics of the team members are expected to play a crucial role in determining the teamwork performance and the capability of achieving consensus among team members. Among the characteristics of the team members which might influence the team performance proxied by the duration of the procedure and by the quality of the final judgment, we consider the team gender composition, the professional background of the members, the previous teamwork experience between team members, and the arbitrators' experience.

### **Gender composition of the team**

The arbitrators' world is a "dense white, male group" (Puig 2014, p.387). The unbalance between the presence of female and male arbitrators is not surprising, since it might reflect the gender imbalance in favor of men in law schools and during the apprenticeship (Guinier et al. 1994; Garth and Sterling 2009). In male-centric contexts, the presence of women might increase team performance in terms of quality of the final judgment (Ivanova-Stenzel and Kübler 2005; Boyd et al. 2010). Empirical research shows that women tend to be significantly less selfish than men and that they tend to choose cooperative strategies that contribute to the interest of the whole team (Gilligan 1982; Eckel and Grossman 2001). Being cooperative in a team of arbitrators consists of balancing alternative points of view and arguments of other team members with the aim of drafting a high-quality judgment.

Another strand of empirical research also shows that women are more risk-averse than their male counterparts (Powell and Ansic 1997). In the context of international investment arbitration, being risk-averse might mean taking a long time to reach a final decision in order to minimize the probability of errors that could jeopardize the reappointment in other cases and cause a loss of professional reputation within the arbitrator's community (Dammann and Hansmann 2008).

Therefore, we expect a positive effect of the presence of women in the team on the quality of the final decision due to their attitude to cooperate and to their

propensity of adopting risk-averse behaviors. Nonetheless, we expect also that risk-averse behaviors might lead to a longer time taken to solve the dispute.

***Hypothesis 1:** The presence of a female arbitrator in the team increases the quality of the judgment and increases the time to resolution.*

### Professional background

International investment arbitrators have mainly two professional backgrounds: either they are professors of law or they are professional lawyers working in the private sector.<sup>10</sup> Arbitrators with an academic background are expected to have a broader and more diversified knowledge of the international laws, that might be helpful in solving complex cases such as international investment disputes. In comparison with their academic counterparts, professional arbitrators working in law firms, tend to be more effective in conducting and managing the legal proceedings (Tucker 2016). The combination of academic and professional arbitrators' knowledge, skills, and expertise in the same team is expected to increase the team performance by producing a diversity of ideas useful to resolve a case (Ancona and Caldwell 1992). Diversity contributes to a more complete understanding of the case by requiring members to delve more deeply into criticized aspects and to find rapidly alternative solutions (Tjosvold 1986; Pelled 1996). As a result, the likelihood of overlooking important details is expected to be lower and the quality of the final judgment issued higher (Eisenhardt et al. 1997).

The literature also shows that the similarity in the professional background may facilitate the communication and the interaction among team members by tackling communication barriers (Triandis 1960). It is thus not surprising that the professional similarity may encourage longer discussions among team members.

Therefore, we expect teams composed of members with diverse professional backgrounds to produce judgments of higher quality in a shorter time.

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10. In practice, many professors of law have practiced as lawyers. However, not all professional lawyers have an academic background, i.e. working at the university. We consider this difference by distinguishing between arbitrators with and without an academic background.

***Hypothesis 2:*** *A team with diverse professional backgrounds increases the quality of the judgment and decreases the time to resolution.*

## **Previous collaborations**

The pool of arbitrators is relatively closed to outsiders (Langford et al. 2017). It is not unfrequent that arbitrators which are appointed in the same team have already worked together in previous cases. The past teamwork experience leads to a reciprocal knowledge of individual skills and competencies. From a psychological perspective, members that are familiar with each other are expected to be more productive, because previous collaboration experience may lower the costs in information exchange (Bercovitz and Feldman 2011). For instance, individuals who already collaborated need less time to understand each other and are more likely to interpret correctly the others' opinions.

However, lower transaction costs in exchanging information can encourage more information exchange. In fact, members of a team that are familiar with each other are more likely to express alternative and controversial perspectives and are less anxious to gain social acceptance (Edwards 2003). These alternative perspectives might lead to a longer time needed to take the decision due to the plurality of the opinions proposed.

Therefore, we expect previous collaborations of team members to positively affect the quality of the final judgment. Concerning the effect of previous collaborations on the time to resolution, we expect either a negative effect due to the lower costs of exchanging information or a positive effect due to the increase in the likelihood of discussing alternative perspectives (Goodman and Leyden 1991).

***Hypothesis 3:*** *A team of arbitrators with previous collaborations increases the quality of the judgment while the effect on the time to resolution can be either positive or negative.*

## **Arbitrators' experience**

The individual experience of the team members is a critical factor explaining

team performance. The importance of individual experience emerged in several contexts including the teams launching start-ups (Delmar and Shane 2006), teams managing established firms (Huckman et al. 2009), surgeons' teams (Elbardissi et al. 2013), and sport teams (Cairns et al. 1986). In our context, experienced arbitrators might have better information on the legal norms and practices that are important in an international dispute resolution. Thus, individual experience is expected to increase team performance reducing the time to resolution and decreasing the probability of errors in writing a final judgment.

Alternatively, the opposite effect of experience is possible. Experienced individuals tend to act routinely when they make decisions or when they elaborate on strategies (Langfred 2004). Arbitrators' experience might limit their willingness to adopt unconventional strategies that lead to more effective solutions for the disputes. Nonetheless, in the highly regulated context of international arbitration, unconventional approaches are limited by the stringency of the law (Parra 1998). Then, we expect positive aspects of having better information on the legal norms and practices to prevail.

Therefore, high levels of experience are expected to decrease the time to resolution and to increase the quality of the final judgment.

***Hypothesis 4:** A team of experienced arbitrators increases the quality of the judgment and decreases the time to resolution.*

### 3.3 Empirical strategy

In this empirical analysis, we consider two models where the dispute is the level of observation. The first model estimates the impact of the team characteristics on the time to resolution of a dispute (Equation 3.1). Among the team characteristics, we consider both biographical and professional characteristics of the arbitrators. Specifically, the vector of team characteristics includes four variables: mixed gender team, team with diverse professional backgrounds, team previous collaborations and team experience. To obtain unbiased estimates of the team characteristics, we include four vectors of controls: host country characteristics, claimant characteristics, institution characteristics, and case characteristics. To further control for possible

estimation biases due to omitted variables, we include also industry fixed effects (FE) and Secretary-General fixed effects. Although the first outcome variable is a measure of duration, we do not use a duration model (e.g. survival analysis) because our data is not right-censored. Since each dispute has a distinct conclusion date, there was no need to artificially censor any observation.<sup>11</sup> The model in Equation 3.1 is estimated using the Ordinary Least Squares (OLS) method.

$$\begin{aligned} \textit{Time to resolution}_i = & \beta_0 + \beta_1 \textit{Team characteristics}_i + \beta_2 \textit{Host country characteristics}_i \\ & + \beta_3 \textit{Claimant characteristics}_i + \beta_4 \textit{Institution characteristics}_i \\ & + \beta_5 \textit{Case characteristics}_i + \beta_6 \textit{Industry fixed effects}_i \\ & + \beta_7 \textit{Secretary fixed effects}_i + \epsilon_i, \end{aligned} \tag{3.1}$$

The second model estimates the impact of the team characteristics on the probability of having a follow-on proceeding (Equation 3.2). Both the team characteristics and the vectors of controls remain the same as those included in Equation 3.1. For the sake of simplicity in the interpretation of the coefficients, we estimate the impact of the team characteristics with a Linear Probability Model.<sup>12</sup>

$$\begin{aligned} \textit{Follow-on proceeding}_i = & \alpha_0 + \alpha_1 \textit{Team characteristics}_i + \alpha_2 \textit{Host country characteristics}_i \\ & + \alpha_3 \textit{Claimant characteristics}_i + \alpha_4 \textit{Institution characteristics}_i \\ & + \alpha_5 \textit{Case characteristics}_i + \alpha_6 \textit{Industry fixed effects}_i \\ & + \alpha_7 \textit{Secretary fixed effects}_i + v_i, \end{aligned} \tag{3.2}$$

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11. See Christensen and Szmer (2012) for the same argument.

12. We confirm the robustness of our results by applying an estimation method for binary dependent variables, i.e. Probit. See Column 2 of Table 3.4 in Appendix 3.B. The main reason to use a Linear Probability Model is that coefficients can be interpreted directly as marginal effect without any further calculation as required by the Probit model.

## 3.4 Data and Variables

### 3.4.1 Data

The increasing popularity of international investment arbitration is connected to the effort of this system to promote transparency in dispute resolution by disclosing the information related to investor-state disputes. As a result, we were able to collect 277 final judgments issued in the original proceeding of the corresponding arbitrations administered by ICSID until the 31<sup>st</sup> of May 2018.<sup>13</sup> To code team characteristics variables, we rely on the ICSID's website that provides a useful database on biographical and professional information of arbitrators.<sup>14</sup> We complemented the data concerning 277 cases with other public sources of information such as the Investment Dispute Settlement Navigator of The United Nations Conference on Trade and Development (UNCTAD),<sup>15</sup> the Investment Treaty Arbitration's (ITALAW)<sup>16</sup> and the International Arbitration Institute (IAI)'s website.<sup>17</sup>

### 3.4.2 Dependent variables

We measure the ICSID dispute resolution effectiveness using two indicators. The first indicator is the number of days passed between the constitution of the tribunal and the final judgment during the original proceedings, i.e. *Time to resolution*. We count the days passed since the constitution of the tribunal, and not since the date of registration of the case because a case belongs to the competence of a tribunal only after the tribunal is constituted. Parties may take some time to constitute the tribunal and delay the start of the procedure. Therefore, aiming to measure the ICSID arbitrator team's performance, we decided to neglect the time

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13. As the purpose of this article is to investigate the effect of arbitrator team on the dispute resolution performance, we exclude the following cases from the main dataset: (1) cases resolved by a sole arbitrator, (2) cases in which the parties to the dispute decided to settle early before the final judgment.

14. A searchable database on ICSID arbitrators (with curriculum vitae) can be found at: <https://icsid.worldbank.org/en/Pages/arbitrators/CVSearch.aspx>. Accessed July 25, 2019.

15. <https://investmentpolicy.unctad.org>. Accessed July 25, 2019.

16. <https://www.italaw.com>. Accessed July 25, 2019.

17. <http://www.iaiparis.com>. Accessed July 25, 2019.

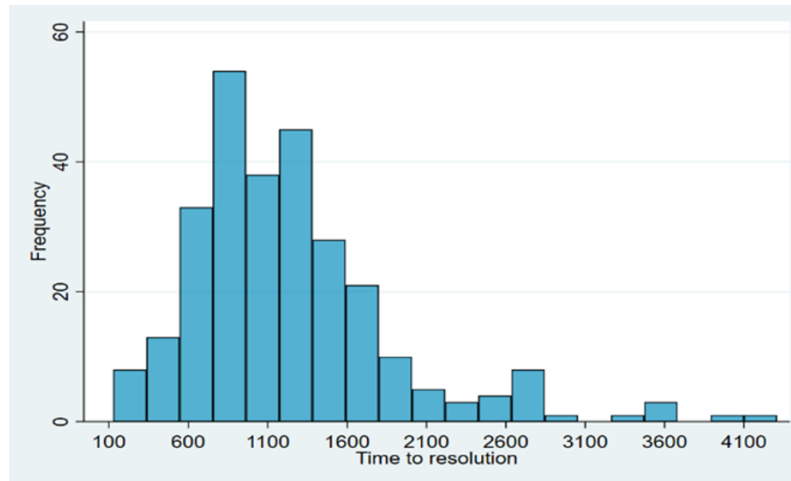


Fig. 3.2: Time to resolution by ICSID arbitrator teams (days)

*Source of data: Authors' calculations based on ICSID's data*

passed between the date of registration of a case and the constitution of tribunal.<sup>18</sup> Figure 3.2 shows the distribution of the variable *Time to resolution*. Accordingly, many cases are resolved within 3.5 years from the date of constitution of tribunal. However, the time to resolution exceeds 5 years in almost 13 percent of cases. In particular, the longest dispute recorded in our database is between Suez, Interagua and Argentina (12 years).

The second indicator of team performance is a dummy that equals one when the case requires a follow-on proceeding, zero otherwise (i.e. *Follow-on proceeding*). A judgment can be subject to this kind of proceeding to correct minor mistakes (in 14 percent of the follow-on proceedings) such as a change in the amount of com-

18. Also, we do not prioritize the use of the time between the parties' final submissions (whether written or by hearing) and the final judgment, i.e. *Time to produce the final judgment*, to measure the effectiveness for three reasons. First, the increasing criticism about the effectiveness of the international arbitration system over recent years requires a relatively general assessment of the duration of the whole proceeding rather than only the duration of the award phase. Second, besides disputing parties, the arbitrators have significant discretion in conducting and managing the proceeding and this fact needs to be considered when assessing the ICSID's effectiveness. Third, the measure *Time to produce the final judgment* might suffer from missing data due to the confidentiality in arbitration. Therefore, this measure is only introduced in the Section 3.6 for reference.



pensation, a change in the distribution of costs between the parties, a correction in the interpretation of the law, or a supplementary decision. In particular, a follow-on proceeding can also be asked to annul partially or entirely a judgment (in 86 percent of the follow-on proceedings). We follow other studies in the law and economics literature which considered the probability of appeal (or equivalently the probability of follow-on proceedings in our context)<sup>19</sup> as a proxy for the quality of the tribunal’s decision.<sup>20</sup> Nonetheless, we acknowledge that the probability of having a follow-on proceeding is at best an imperfect proxy for the quality of the judgment, since the decision to request such a proceeding might depend on various factors, including the parties’ estimated probability of successfully “correcting” the judgment (even through an annulment request) and the costs they bear in this process (Coviello et al. 2015; Dimitrova-Grajzl et al. 2016). Challenging the original judgment may also be a strategy to delay its enforcement (Smuda et al. 2015).

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19. There is a slight difference between an annulment and an appeal. See Caron (1992) for an interesting discussion about the use of these terms. For example, the author insists that while an appeal can lead to some modifications of the final judgment, an annulment proceeding can only void it (in whole or in part). While an appeal focuses on both the substantive correctness of the judgment and the legitimacy of the proceeding, an annulment is rather based on the second ground. However, the line to distinguish between these two post-judgment remedies remains vague in some contexts (e.g. an illegitimate process can lead to incorrect decisions). Without referring to the lexical difference, a common point between an appeal and an annulment is that the disputing parties are not satisfied with the results conveyed via the final judgment.

20. Another proxy for the quality of the judgment is the number (or the rate) of cases that are truly “rectified” (i.e. the outcome of post-judgment remedies). Unfortunately, comprehensive data on such cases is unavailable to us. Moreover, the number of cases rectified (even through an annulment proceeding) is also an imperfect proxy for two reasons. First, in many cases, the arbitral tribunal constituted to consider the request for a “soft” follow-on proceeding (e.g. rectification, supplementary interpretation or supplementary decision) is the same as in the original proceeding. Second, although in a “hard” proceeding to annul the judgment an *ad hoc* committee (with different members) is constituted, it is highly possible that members of this committee have some previous collaborations with ones of the original tribunal. Therefore, a small number of cases that were “rectified” might simply reflect the fact that arbitrators were not willing to correct judgments issued by themselves or by their colleagues. See Shavell (1995) for more information.

### 3.4.3 Arbitrator team characteristics

Our first explanatory variable is the gender composition of the team. We define the dummy *Mixed gender team* as a variable that equals one if there is at least one female arbitrator in a team. As the second explanatory variable, we consider the professional profile of the team members. We define *Team with diverse professional backgrounds* as a dummy that equals one if, for year of constitution of tribunal, that team is composed of at least a member with an academic background and a member without an academic background (i.e. a professional lawyer working in the private sector). We consider an arbitrator as having an academic background if she holds a tenured position at the university.<sup>21</sup> The third regressor we consider is the dummy variable *Team previous collaborations* that equals one if at least two members of the team have previously collaborated in other ICSID teams, irrespective of the type of proceeding (i.e. original or follow-on proceeding). Finally, we measure the experience in resolving investment disputes of the whole team by calculating the variable *Team experience*. This variable equals the total number of ICSID proceedings conducted by three team members (or equivalently, the average experience of each member), including original and follow-on proceedings.

### 3.4.4 Control variables

To measure the unbiased effects of the variables of interest, we include in our regression controls for the host country characteristics, claimant characteristics, institution characteristics, and case characteristics.

Among the claimant characteristics, we consider the dummy *Claimant is an individual*. According to Eisenberg and Farber (1997), time until the final judgment is shorter when the claimant is an individual. This variable is coded one for individuals and zero for firms. For the host country characteristics, it is argued that high-income countries are more resistant and more likely to prolong the case until expected outcomes are achieved. Therefore, we consider its market power as measured with the GDP (*Host country log(GDP)*). We add also the dummy *Host country has lost at least one dispute* to control for the reputation effect. The idea is that experience

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21. This means that we do not count visiting and adjunct positions, as many professional arbitrators were appointed to the university as practitioners rather than as legal academics.

of having lost a dispute before the current case (and the dummy equals one) has a negative impact on the host country reputation, e.g. it provides to future investors a precise information about illegality of the host state's actions (Allee and Peinhardt 2011). Any lengthy proceeding could exacerbate this situation and the resolution of the current dispute is thus expected to be shortened. We also consider the number of law firms representing the party before the tribunal (or party representatives). The number of representatives might proxy for the uncertainty about the case outcome or for the party's litigation resources – factors that can impact the time to resolution.<sup>22</sup> The dummy *Host country (or claimant) multiple representatives* is coded one if the disputing party is represented by more than one law firm during the original proceeding.

We control also for the case characteristics. The complexity of the dispute might be a key factor influencing the time to resolution and the probability of mistakes. We use two dummy variables to proxy for case complexity: *Case with multiple claimants or legal bases* and *Arbitrators require external experts*. The former dummy variable equals one if many investors are involved in a lawsuit or if the dispute is based on violation of more than one legal basis (e.g. both investment contract and international treaty). The latter dummy variable, *Arbitrators require external experts*, captures the legal complexity and is coded one if external expert assistance is required during the proceeding to address aspects that may be outside of the tribunal's expertise. As suggested by Epstein et al. (2011), we control for the level of collegiality among team members by observing dissenting opinions. Disagreement among team members is certainly a reason for a longer discussion and gives the disputing parties a “signal” to appeal. The dummy *Arbitrators have dissenting opinions* equals one if

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22. We suppose that a party needs more than one representative before the arbitral tribunal (i) when it anticipates very well a positive outcome of the dispute (i.e. multiple representatives have a complementary effect on the positive outcome) or (ii) when it is unsure of the outcome (i.e. multiple representatives can serve as substitute for uncertainty). If the second hypothesis is true, the time to resolution is expected to be longer for both parties, because they may need more time to produce and find suitable documents and evidence. If the first hypothesis holds, two scenarios may happen. If the investor (the claimant) thinks that he will win the case, the duration of the proceeding may increase because he bears the burden to prove the validity of his claims (see Brower 1994; Bielen et al. 2015). In contrast, if the respondent state anticipates a favorable outcome, the duration of the proceeding may decrease.

at least one arbitrator issues a dissenting opinion attached to the final judgment.

Finally, we include two ICSID control variables. The first one is *ICSID productivity* that measures the ability of the Center to handle disputes. This can be good indicator for the ICSID Secretary-General as well as the parties to the dispute at the outset of a proceeding. It is coded as the number of disputes resolved divided by the number of disputes filed for year of filing the current dispute. The second variable is *Reform 2006*, a time-dimension dummy that equals one if the current case is registered after the 2006 ICSID reform on dispute resolution.<sup>23</sup> In all our regression models we add industry fixed effects to measure the unobserved industry-specific value of the investments<sup>24</sup> and Secretary-General fixed effects to capture the dispute management skills and influence over the formation of arbitrator teams of different Secretaries-General.<sup>25</sup>

Table 3.1 shows descriptive statistics of our dependent and independent variables. The average time to resolve a dispute is 1247 days. It shows also that in half of the cases included in our sample one party asked to “rectify” the final judgment leading to a follow-on proceeding.<sup>26</sup> As for the team characteristics variables, we observe

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23. The 2006 Rule amendment is the third rules amendment process in the history of ICSID. The first two amendment processes in 1984 and 2003 result in relatively modest changes. In contrast, the 2006 amendment process brought some significant changes, for example disclosure requirements for arbitrators, the participation of non-disputing parties in the proceeding, improving transparency provisions to favour the publication of the final award. For more information, see: <https://icsid.worldbank.org/en/amendments/Pages/About/about.aspx>. Accessed July 25, 2019.

24. For example, long-lived cases related to the energy and mining sector often require a relatively high level of sunk costs for investors. Therefore, they may be scrutinized and resolved slowly. Hafner-Burton and Victor (2016) also use the type of industry to proxy for the value of investment project in the same context.

25. During the study period we observe 10 different Secretaries-General - the legal representative as well as the principal officer of ICSID. It is important to include Secretary-General fixed effects because she has considerable impacts on the resolution of disputes administered by ICSID (e.g. the registration of new cases, the appointment of missing arbitrators when the parties disagree on the choice of arbitrator candidates). For more information, see: <https://icsid.worldbank.org/en/Pages/about/Secretariat.aspx>. Accessed July 25, 2019.

26. This rate is relatively high, in comparison with the average appeal rate found in the domestic context (e.g., see Eisenberg 2004). There are some possible explanations for this high rate. First, the host country is a sovereign respondent with international credibility and the claimant often has high value claims. Given the fact that follow-on proceedings (i.e. annulment) are allowed, the

Table 3.1: Descriptive statistics

277 observations	Mean	Std.Dev	Min	Max
<b>Dependent variables</b>				
Time to resolution	1247.43	661.40	127.00	4308.00
Follow-on proceeding	0.50	0.50	0.00	1.00
<b>Independent variables</b>				
<i>Team characteristics</i>				
Mixed gender team	0.24	0.43	0.00	1.00
Team with diverse professional backgrounds	0.75	0.43	0.00	1.00
Team previous collaborations	0.36	0.48	0.00	1.00
Team experience	11.57	12.16	0.00	62.00
<i>Host country characteristics</i>				
Host country log(GDP)	24.92	1.91	19.52	30.41
Host country has lost at least one dispute	0.42	0.49	0.00	1.00
Host country multiple representatives	0.68	0.47	0.00	1.00
<i>Claimant characteristics</i>				
Claimant multiple representatives	0.41	0.49	0.00	1.00
Claimant is an individual	0.10	0.30	0.00	1.00
<i>Institution characteristics</i>				
ICSID productivity	0.65	0.30	0.00	3.00
Reform 2006	0.53	0.50	0.00	1.00
<i>Case characteristics</i>				
Case with multiple claimants or legal bases	0.42	0.49	0.00	1.00
Arbitrators require external experts	0.16	0.37	0.00	1.00
Arbitrators have dissenting opinions	0.27	0.44	0.00	1.00

that women are underrepresented among ICSID arbitrations. Only 24 percent of cases are resolved by mixed gender teams. Interestingly, about 75 percent of the cases are managed by a team with diverse professional backgrounds. Given the closeness of the network of investment arbitrators, it is likely that arbitrators have previously worked together before the current dispute. In our database, 36 percent of disputes are conducted by a team in which at least two arbitrators have already collaborated. Finally, on average, a team member shows experience of 4 proceedings conducted before the current case.

### 3.5 Results

Table 3.2 shows the results of the OLS estimates of the two models presented in Section 3.3. Specifically, Columns 1 and 3 present the models with arbitrator team determinants, while Columns 2 and 4 include the other control variables. Industry and Secretary-General fixed effects are included in all models. The results commented in the rest of this subsection are those reported in Columns 2 and 4 of Table 3.2. Multicollinearity diagnostics of independent variables are also presented in Table 3.7 in Appendix 3.E.

We find that the variable *Mixed gender team* has a positive and statistically significant impact on the time to resolution. Coherently with our hypothesis, a mixed gender team spends, on average, 308.74 days more than a male team to reach the final judgment. Surprisingly, the probability of having a follow-on proceeding to rectify the judgment is higher in a mixed gender team than in a male team (9.8 percentage points) although this effect is not statistically significant. This positive effect might be related also to the discriminatory behaviour of the disputing parties. Szmer et al. (2010) provide an explanation for similar results stating that the presence of

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parties are always trying to reverse the unwanted outcome, even though it is highly possible that some errors are neglected but some correct decisions are appealed (Shavell 1995). Second, choosing international investment arbitration to resolve a dispute means agreeing on the “law” to be bound by the parties. Evidently, they are free to choose the way they will be bound, e.g. by refusing to enforce an award because what was called “award” is the result of an illegitimate process of decision making (Caron 1992). As mentioned, the probability of follow-on proceedings should not be considered as a perfect proxy for the quality of decisions issued by the tribunal.

Table 3.2: Determinants of the time to resolution and of the probability of having a follow-on proceeding (OLS estimations)

	(1)	(2)	(3)	(4)
	Time to resolution	Time to resolution	Follow-on proceeding	Follow-on proceeding
<b>Team characteristics</b>				
Mixed gender team	293.207*** (95.935)	308.744*** (88.851)	0.086 (0.076)	0.098 (0.072)
Team with diverse professional backgrounds	-209.474** (96.850)	-245.317*** (92.957)	0.095 (0.069)	0.074 (0.071)
Team previous collaborations	298.739*** (92.069)	292.074*** (87.603)	0.084 (0.069)	0.087 (0.069)
Team experience	-12.059*** (3.811)	-11.908*** (3.564)	-0.002 (0.004)	-0.002 (0.003)
<b>Host country characteristics</b>				
Host country log(GDP)		8.270 (20.436)		0.014 (0.018)
Host country has lost at least one dispute		-25.607 (71.998)		0.008 (0.067)
Host country multiple representatives		-185.598** (79.354)		-0.239*** (0.068)
<b>Claimant characteristics</b>				
Claimant multiple representatives		111.601 (75.310)		0.024 (0.064)
Claimant is an individual		-57.688 (93.283)		0.086 (0.107)
<b>Institution characteristics</b>				
ICSID productivity		19.780 (90.149)		-0.035 (0.109)
Reform 2006		-335.187 (209.965)		-0.202 (0.152)
<b>Case characteristics</b>				
Case with multiple claimants or legal bases		71.197 (73.115)		0.007 (0.062)
Arbitrators require external experts		280.052** (117.466)		0.094 (0.088)
Arbitrators have dissenting opinions		382.289*** (90.205)		0.203*** (0.066)
Secretary-General FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Intercept	1332.463*** (199.473)	1257.876** (504.803)	0.301* (0.161)	0.186 (0.475)
Observations	277	277	277	277
$R^2$	0.244	0.367	0.095	0.189

Standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

a woman might lead to questioning the final judgment of the team if one of the parties involved in the dispute applies a discriminatory behaviour being skeptical of the women's judgment abilities. Therefore, only half of our first hypothesis is confirmed, namely, mixed gender teams take longer to reach a final judgment. This result is in line with a subset of the empirical studies that have found the effect of the judge's gender on performance (Peresie 2005; Boyd et al. 2010).

We find also that a team with diverse professional backgrounds (i.e. team of at least an academic arbitrator and a professional lawyer) spends less time to resolve a dispute than a team with a homogeneous background (three academic arbitrators or three professional lawyers), i.e. -245.32 days. This effect is significant at the 1 percent level. Moreover, it is more likely that the parties require a follow-on proceeding when the award is issued by a team with a heterogeneous background. This result is not in line with our hypothesis and the estimated relationship is not statistically significant. Therefore, the results of the regressions partially confirm our second hypothesis on the impact of the team members' background, namely teams with diverse backgrounds take less time to reach a final judgment.

Coherently with our third hypothesis, teams characterized by previous collaborations take significantly longer time to reach the final judgment than newly formed teams, i.e. 292 additional days. When considering our second measure of performance, i.e. the probability of having a follow-on proceeding, we find little evidence of a decrease of the quality of the judgment, as shown by the positive but not significant coefficient estimated in Column 4 (0.087).

Finally, we find strong evidence that experience can help the arbitrator team better conduct and manage a proceeding. According to our results, for each additional proceeding in the past, the time to resolution decreases significantly by 12 days. This result differs from the one of Bielen et al. (2018) who find no effect of the judge's experience. Meanwhile, we find no support for the effect of team experience on the quality of the judgment, i.e. the coefficient is negative but not statistically significant. Therefore, our fourth hypothesis is only partially confirmed.

Our control variables yield also interesting effects on both performance indicators. First, we find that the host country's number of representatives is negatively associated with the time to resolution and with the probability of having a follow-on



proceeding. The time to resolution is shorter when the host country has multiple representatives probably because it might anticipate very well a favourable outcome.<sup>27</sup> As the representative is allowed to act and to make a decision during the proceeding on behalf of the party, multiple representatives are expected to better provide arguments to the tribunal. Therefore, the quality of the final judgment in this situation might be higher. Second, we find a strong positive effect of dissenting opinions on the time to resolution. According to Epstein et al. (2011), a dissenting opinion issued during the proceeding is a sign of disagreement among arbitrators. The dissenting arbitrator discusses more to persuade the other team members to change their vote. Moreover, this kind of disagreement may also impose the cost on the majority because the latter is likely to revise the final judgment to address the concerns raised by the dissenting arbitrator. As expected, we find that the presence of a dissenting opinion urges the parties to fill a request for a follow-on proceeding. Third, when an expert assisted to the proceeding to address aspects that may be outside of the tribunal's expertise, the time to resolution is significantly longer. This assistance helps the tribunal better deal with complex cases and issue judgments of higher quality. Therefore, we find no evidence of the impact of external experts on the quality of the judgment. Finally, we find that the 2006 Reform seems not to have a significant effect on both performance indicators.<sup>28</sup>

## 3.6 Robustness checks

In this section we consider five robustness checks of the empirical findings. In Table 3.3 (Appendix 3.A), the first, second and third robustness checks concern the estimation method of the model explaining the time to resolution (Equation 3.1). In Column 1 we estimate the impact of the explanatory variables in terms of semi-elasticities, i.e. considering the logarithm of the time to resolution. In Column 2,

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27. See Note 22. Also, the effect of claimant's multiple representatives on the time to resolution is positive and becomes statistically significant in some models in Table 3.3 (Appendix 3.A).

28. We find a little evidence that a dispute registered after 2006 has a shorter time to resolution or a lower probability of follow-on proceedings (see Tables 3.3 and 3.4 in Appendices 3.A and 3.B). As confirmed in the main regressions, these effects become less robust to different specifications of the models.

since time to resolution is a dispersed count variable, we use the negative binomial regression to generate the estimates.<sup>29</sup> As a third robustness check, we consider the sensitivity of the data to a truncation of our study sample. Specifically, in Column 3, we consider a study sample including only disputes registered after 2000 – the period since when arbitration became a very popular tool in resolving international investment disputes.<sup>30</sup> In Column 4, we recalculate an alternative dependent variable: *Time to produce the final judgment*. This new variable measures the days passed between the parties' final submissions (whether written or by hearing) and the official issuance of the final judgment (or equivalently, the deliberation phase). This is a part of the whole process that should be less concerned by the procedural complexity of the case, but it should be affected by the performance of the team. In other words, *Time to produce the final judgment* concerns only the tasks of taking the final decision and writing the final award. Since these details are not made public for some cases, for this last robustness check we have only 252 cases.

In general, the findings in Columns 1, 2 and 3 of Table 3.3 confirm our results reported in Table 3.2 for the regression explaining the time to resolution. Specifically, the parameters estimated keep the same sign and the level of significance as the ones presented in Table 3.2 (Column 2).

Concerning the robustness check reported in Column 4 where the dependent variable *Time to produce the final judgment* is used, we find that the sign and the significance of the effect of mixed gender team, team previous collaboration and team experience are unchanged in comparison to Table 3.2 (Column 2). However, a team with diverse professional backgrounds, in comparison with a team with a homogeneous background, issues the final judgment less rapidly, with 8.7 additional days. While the correlation between *Time to produce the final judgment* and *Team*

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29. Negative binomial regression is useful to model over-dispersed count outcome variable, i.e. when the conditional variance exceeds the conditional mean (or in other words, an *extra-Poisson* variation).  $\ln\alpha$  is the log-transformed over-dispersion parameter. Remember that in a Poisson model, the  $\alpha$  value is constrained to zero. The larger  $\alpha$ , the greater over-dispersion. See Wooldridge (2010, p.725-736).

30. We also checked the robustness of our findings concerning the probability of having a follow-on proceeding for disputes registered after 2000 (See Columns 3-4 of Table 3.4 in Appendix). Similar to results reported in Table 3.2 (Column 4), we find that team characteristics considered have no impact on the outcome variable.

*with diverse professional backgrounds* is only -0.0047, the fact that the estimated coefficient is statistically insignificant is not surprising.

Finally, we conducted an additional robustness check considering the possibility of the presence of bias in the sample selection as suggested in the law and economics literature: the cases terminated by a final judgment are a “selected” subsample of all cases brought to ICSID. Indeed, parties who receive final judgment are those who decided to proceed to the litigation instead of agreeing on an early settlement. It is reasonable to suspect that a proceeding with the litigation is a random choice, while it is likely that the parties self-select to enter in our study sample (see Chapter 2). In Appendix 3.C we report the results of applying the Heckman (1979) selection model and test for the presence of selection bias. According to Table 3.5, we find no evidence of a problem of sample selection in our estimations.

### **3.7 Discussion and Conclusion**

International investment arbitration is an interesting research topic over recent years in the legal field. The disclosure of information related to investor-state disputes is one of the efforts of the international investment arbitration system to promote transparency in the dispute resolution process. This has allowed researchers to empirically assess the arbitration outcome. Like the domestic court system, an international tribunal such as ICSID needs empirical research on its effectiveness in resolving disputes. This is the main purpose of our study.

Since the nature of international investment arbitration is different from the traditional national judicial system, this paper can investigate the impact of the arbitrators’ biographical and professional characteristics on the arbitrators’ performance in resolving disputes. The database used in this study includes 277 final judgments issued during the original proceeding for disputes between private foreign investors and host states at ICSID from 1972 to 2018. Considering the three arbitrators as members of a team, we use two indicators to measure the ICSID’s team performance. The first indicator is the time taken by a team of arbitrators to resolve a case. The second indicator concerns the quality of the final judgment issued by a team, proxied by the presence of a follow-on proceeding to “rectify” mistakes

and inaccuracies.

After controlling for other relevant factors and checking the robustness of empirical results, we find that the time to resolution decreases significantly when the team includes experienced arbitrators or arbitrators with diverse professional backgrounds, while it increases significantly when arbitrators have already worked together in other teams. We show also that a mixed gender team resolves a dispute slower. While we can rule out the possibility that (female) arbitrators in the actual pool are less competent,<sup>31</sup> any interpretation of this finding should consider the low percentage of women involved in ICSID disputes. The lack of female arbitrators might generate gender conflicts in the dispute resolution process.<sup>32</sup> Interestingly, the quality of the final judgment is not affected by the composition of the team.

Our results suggest that the formation of a team of arbitrators has a crucial impact on team performance in solving the case. How to create an effective arbitrator team? Since arbitrators with no previous collaboration may resolve the disputes faster, a suggestion is that we should promote the reshuffle of the composition of the existing teams or the entry of new arbitrators lowering the barriers for the new entrants. Moreover, considering the results highlighting the role of arbitrator's individual experience and professional background, a team should also be composed of experienced arbitrators recruited both from the academic and private sector.

After incorporating important improvements through the 2006's amendment, in October 2016, ICSID launched another amendment process to continue to modernize its rules. The main purpose of the current amendment project is to make the dispute resolution process more time and cost effective while maintaining due process and a balance of interests between states and foreign investors. However, a survey<sup>33</sup> of the

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31. There are good intuitive reasons for this assumption. First, the disputing parties are always rational and choose arbitrators of high quality. Second, the arbitrator market is competitive, and its barriers keep less competent arbitrators out of the network.

32. A long-term suggestion, as supported by Szmer et al. (2010), is that only when women are not a minority in a system, gender barriers will be more likely to be removed and the cooperation, given a gender diversity, becomes then more equal and effective. However, some institutional rules should be established to follow this agenda (Puig 2014).

33. See *Proposals for Amendment of the ICSID Rules – Working Paper*, available at: <https://icsid.worldbank.org/en/amendments/Pages/Proposals/Working-Paper.aspx>. Accessed July 25, 2019.

current proposed amendments shows that ICSID, states and other stakeholders of the international investment law regime are making significant efforts to improve the procedural rules (e.g. electronic filing of arbitration requests, organization of the case management conference, etc.) to achieve time and cost efficiency but leave open the question of how to manage arbitrator’s human capital. A possible explanation could be that since international arbitration allows the disputing parties to choose flexibly arbitrators, mandatory rules involving the appointment of arbitrators will be difficult to implement. Fortunately, there are still “soft” channels to incorporate our above suggestions on creating effective arbitrator teams into arbitration rules and practice. The first way is through the arbitrator designation procedure. As specified in Section 4 of the ICSID Convention, the Panel of arbitrators is designated by Contracting States of the ICSID Convention and the Chairman of the Administrative Council.<sup>34</sup> Since this Panel list is an important reference when the disputing parties select their arbitrator candidates, states and ICSID may consider our suggestion, e.g. to promote the entry of new arbitrators from different fields in the Panel. The second and more direct way is through the disputing parties’ appointment practice. To be sure, policies related to arbitrator’s human capital to control the time to resolution do not have detrimental effects on the quality of arbitrators’ decision-making.<sup>35</sup>

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34. According to Article 13 of the ICSID Convention: “(1) Each Contracting State may designate to each Panel (panel of arbitrators and panel of conciliators) four persons who may but need not be its nationals”, and “(2) The Chairman may designate ten persons to each Panel. The persons so designated to a Panel shall each have a different nationality”. Also, Article 38 of the ICSID Convention indicates that if the parties fail to agree on appointing arbitrators, the Secretary-General (or the Chairman of the Administrative Council) of ICSID can intervene to appoint the missing arbitrators from that Panel of arbitrators.

35. See also Table 3.6 in Appendix 3.D for the partial correlation between the quantity (proxied by *Time to resolution*) and the quality (proxied by *Follow-on proceeding*). Accordingly, we find no quantity – quality tradeoff in case resolution before ICSID.

# Appendix

### 3.A Robustness checks 1

Table 3.3: Robustness checks 1

	(1)	(2)	(3)	(4)
	OLS	NBREG	OLS	OLS
	Time to resolution(log)	Time to resolution	Time to resolution after 2000	Time to produce the final judg.
<b>Team characteristics</b>				
Mixed gender team	0.230*** (0.069)	0.208*** (0.060)	313.400*** (90.056)	54.732** (23.961)
Team with diverse professional backgrounds	-0.137** (0.068)	-0.163*** (0.062)	-230.974** (98.729)	8.689 (26.260)
Team previous collaborations	0.198*** (0.072)	0.218*** (0.060)	265.452*** (95.294)	61.923** (25.640)
Team experience	-0.009*** (0.003)	-0.008*** (0.003)	-10.046*** (3.741)	-2.651** (1.204)
<b>Host country characteristics</b>				
Host country log(GDP)	0.013 (0.021)	0.018 (0.018)	22.482 (25.744)	7.566 (6.772)
Host country has lost at least one dispute	0.039 (0.066)	-0.008 (0.057)	12.160 (78.824)	16.513 (24.596)
Host country multiple representatives	-0.108 (0.067)	-0.115** (0.054)	-205.541** (92.373)	-22.172 (25.250)
<b>Claimant characteristics</b>				
Claimant multiple representatives	0.136** (0.058)	0.119** (0.053)	97.662 (79.099)	7.836 (21.818)
Claimant is an individual	0.005 (0.079)	-0.046 (0.071)	32.212 (106.602)	-18.501 (29.695)
<b>Institution characteristics</b>				
ICSID productivity	0.030 (0.089)	0.048 (0.070)	85.914 (209.433)	-115.374** (53.716)
Reform 2006	-0.274** (0.137)	-0.249* (0.127)	-334.672 (211.549)	25.319 (66.250)
<b>Case characteristics</b>				
Case with multiple claimants or legal bases	0.021 (0.059)	0.020 (0.051)	73.944 (78.550)	-1.866 (21.954)
Arbitrators require external experts	0.214** (0.086)	0.190** (0.076)	197.384 (123.142)	48.200 (32.835)
Arbitrators have dissenting opinions	0.272*** (0.062)	0.275*** (0.056)	407.552*** (98.452)	84.681*** (26.800)
Secretary-General FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Intercept	6.816*** (0.508)	6.836*** (0.419)	796.235 (650.580)	210.707 (182.383)

## Chapter 3

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<b>lnalpha</b>		-1.836***		
		(0.100)		
Observations	277	277	234	252
$R^2$	0.331		0.389	0.262

Robust standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



## 3.B Robustness checks 2

Table 3.4: Robustness checks 2

	(1)	(2)	(3)	(4)
	OLS	Probit	OLS	Probit
	Follow-on	Follow-on	Follow-on	Follow-on
	proceeding	proceeding	proceeding after 2000	proceeding after 2000
<b>Team characteristics</b>				
Mixed gender team	0.098 (0.072)	0.285 (0.203)	0.101 (0.074)	0.306 (0.215)
Team with diverse professional backgrounds	0.074 (0.071)	0.244 (0.194)	0.036 (0.080)	0.137 (0.217)
Team previous collaborations	0.087 (0.069)	0.227 (0.189)	0.071 (0.074)	0.190 (0.210)
Team experience	-0.002 (0.003)	-0.005 (0.009)	0.000 (0.003)	0.001 (0.010)
<b>Host country characteristics</b>				
Host country log(GDP)	0.014 (0.018)	0.063 (0.049)	0.013 (0.021)	0.038 (0.060)
Host country has lost at least one dispute	0.008 (0.067)	0.016 (0.189)	0.048 (0.071)	0.174 (0.209)
Host country multiple representatives	-0.239*** (0.068)	-0.661*** (0.187)	-0.291*** (0.075)	-0.890*** (0.219)
<b>Claimant characteristics</b>				
Claimant multiple representatives	0.024 (0.064)	0.097 (0.172)	-0.001 (0.067)	-0.014 (0.190)
Claimant is an individual	0.086 (0.107)	0.286 (0.284)	0.099 (0.120)	0.314 (0.339)
<b>Institution characteristics</b>				
ICSID productivity	-0.035 (0.109)	-0.246 (0.278)	0.323 (0.196)	0.866 (0.555)
Reform 2006	-0.202 (0.152)	-0.637 (0.468)	-0.243 (0.157)	-0.993** (0.500)
<b>Case characteristics</b>				
Case with multiple claimants or legal bases	0.007 (0.062)	0.056 (0.169)	-0.043 (0.065)	-0.123 (0.185)
Arbitrators require external experts	0.094 (0.088)	0.246 (0.244)	0.034 (0.092)	0.085 (0.267)
Arbitrators have dissenting opinions	0.203*** (0.066)	0.615*** (0.185)	0.267*** (0.070)	0.828*** (0.214)
Secretary-General FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Intercept	0.186 (0.475)	-1.438 (1.294)	0.084 (0.581)	-1.012 (1.659)

## Chapter 3

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Observations	277	277	234	234
$R^2$	0.189		0.226	
Pseudo $R^2$		0.140		0.178

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Robust standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### 3.C Heckman selection model

To address the issue of sample selection, we apply the Heckman's (1979) selection model estimated with the two-step method. The first stage (selection equation) is a Probit regression where the dependent variable *Litigation* equals 1 if the parties enter in the litigation process and 0 if the dispute is terminated by an early settlement. In the second stage (outcome equation) we consider two OLS regressions, one having as dependent variable *Time to resolution* and one having *Follow-on proceeding*. In both outcome equations, we include the inverse Mills ratio as a covariate in order to control for the sample selection. If the coefficient of the inverse Mills ratio is statistically significant, it is clear evidence of sample selection and we need to apply the Heckman's method to reduce selection bias. While the outcome equations include all above-mentioned variables, we borrow the set of independent variables found in Chapter 2 to explain the probability of litigation (selection equation). In particular, to obtain more precise estimates, we estimate this model using as exclusion restriction<sup>1</sup> the variable *Extreme measure*. Intuitively, an extreme regulatory measure is a reason for the negotiation breakdown and the parties' motivation to go to trial, but it should not affect the time to resolution as well as the quality of the judgment issued by the tribunal. The results of two-stage estimations are presented in Table 3.5. Since the results of the litigation equation have been discussed in the previous chapter, we focus on the outcome equations. First, the magnitude of the estimated parameters in these two outcome equations is almost identical to one found in Table 3.2. Second, although the selection equation is fully explained by that set of covariables, the inverse Mills ratio is statistically insignificant. Equivalently, we find no evidence that unobserved factors driving the parties' decision toward litigation affect the length of a proceeding and the quality of the judgment issued at the end of that proceeding. Therefore, there is no significant bias in the second stage according to the Heckman model and OLS applied to the second stage is the preferred technique.

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1. An exclusion restriction is a variable that affects the selection mechanism but not the outcome.

Table 3.5: Heckman selection model

	(1)	(2)	(3)
	Outcome equation	Selection equation	Outcome equation
	OLS	Probit	OLS
	Time to resolution	Litigation	Follow-on proceeding
<b>Team characteristics</b>			
Mixed gender team	304.722*** (81.566)		0.094 (0.070)
Team with diverse professional backgrounds	-240.211*** (75.721)		0.080 (0.065)
Team previous collaborations	285.258*** (75.557)		0.083 (0.065)
Team experience	-11.724*** (3.852)		-0.0019 (0.003)
<b>Host country characteristics</b>			
Host country log(GDP)	8.136 (19.915)		0.014 (0.017)
Host country has lost at least one dispute	-24.059 (74.840)		0.007 (0.064)
Host country multiple representatives	-182.361** (72.812)		-0.238*** (0.063)
<b>Claimant characteristics</b>			
Claimant multiple representatives	110.886 (67.757)		0.021 (0.058)
Claimant is an individual	-67.613 (115.016)	0.078 (0.30)	0.080 (0.098)
<b>Institution characteristics</b>			
ICSID productivity	10.939 (125.329)		-0.038 (0.108)
Reform 2006	-306.707 (199.784)		-0.190 (0.172)
<b>Case characteristics</b>			
Case with multiple claimants or legal bases	78.479 (68.899)	-0.10 (0.160)	0.0088 (0.059)
Arbitrators require external experts	282.561*** (96.659)		0.0970 (0.083)
Arbitrators have dissenting opinions	386.188*** (75.372)		0.206*** (0.065)
<b>Other selection variables</b>			
Extreme measure		1.276*** (0.170)	
Dutch BIT		-0.731*** (0.251)	
Inexperienced Host country		-0.379* (0.221)	
Average time to final judgment		-0.111** (0.054)	

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<i>Inverse Mills ratio</i>	-133.624 (114.583)		-0.068 (0.098)
Secretary-General FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Host country's region FE	No	Yes	No
Intercept	1281.196** (535.861)	4.462** (2.118)	0.208 (0.459)
Observations	277	410	277
Number of cases settled early	133	133	133

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Robust standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### 3.D Quantity-Quality tradeoff in case resolution

Recent literature on the economic analysis of court delays highlights the presence of a quantity-quality tradeoff in dispute resolution (Coviello et al. 2015; Dimitrova-Grajzl et al. 2016; Bielen et al. 2018). That is the implementation of policies aimed at reducing the time to resolution may come at the expense of the quality of decisions. To answer this question, we follow the approach suggested by Dimitrova-Grajzl et al. (2016) and Bielen et al. (2018). In the following regression, we use *Follow-on proceeding* (quality) as dependent variable and *Time to resolution* (quantity), as well as other variables in the right-hand side of Equation 3.2, as independent variables. If the coefficient on *Time to resolution* is negative, longer case resolution will improve the quality of decisions. Therefore, policies to increase in the speed of case resolution should be implemented carefully, because they may come at the cost of lower quality of decisions. Since both *Time to resolution* and *Follow-on proceeding* are two dependent variables that are explained by two sets of explanatory variables, we cannot rule out the situation that some unobserved determinants of the parties' decision to require post-judgment remedies are also correlated with the duration of the proceeding. As mentioned in Bielen et al. (2018), the finding should be viewed as partial correlation instead of causality. Results of the linear probability regression are presented in Table 3.6. Controlling for other factors, the coefficient on *Time to resolution* is positive and significant at the 5 percent level.<sup>2</sup> A positive correlation between *Time to resolution* and *Follow-on proceeding* means that longer duration to conclude a case does not improve the quality of arbitrators' decisions. This result resonates with some conclusions in the literature. Rosales-López (2008) and Dimitrova-Grajzl et al. (2016) find no significant association between the productivity of judges (in terms of speed) and the appeal or reversal rate. Coviello et al. (2015) share the same finding with our research. Bielen et al. (2018) find a negative relationship between time to reach a verdict and the reversal rate.<sup>3</sup>

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2. All Team variables (not reported) keep the same sign and are not statistically significant.

3. We also check the robustness of the quantity/quality correlation by using the variable *Time to produce the final judgment* which reflects the deliberation phase, instead of *Time to resolution*. The results (not reported) are very similar. Longer time to produce the final judgment does not improve the quality of decisions. This effect, after controlling for other variables, is significant at the 5 percent level.

Table 3.6: Quantity-Quality tradeoff in case resolution

	(1)	(2)
	OLS	OLS
	Follow-on proceeding	Follow-on proceeding
<i>Time to resolution</i>	0.00019*** (0.000043)	0.00013** (0.000056)
Team characteristics	No	Yes
Host country characteristics	No	Yes
Claimant characteristics	No	Yes
Institution characteristics	No	Yes
Case characteristics	No	Yes
Secretary-General fixed effects	No	Yes
Industry fixed effects	No	Yes
Intercept	0.265*** (0.060)	0.024 (0.469)
Observations	277	277
R-squared	0.063	0.208

Robust standard errors in parentheses

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### 3.E Multicollinearity Diagnostics

Table 3.7: Multicollinearity Diagnostics

Variable	VIF	1/VIF
<i>Team variables</i>		
Mixed gender team	1.23	0.81
Team with diverse professional backgrounds	1.08	0.92
Team previous collaborations	1.32	0.75
Team experience	2.20	0.45
<i>Control variables</i>		
Host country log(GDP)	1.45	0.69
Host country has lost at least one dispute	1.37	0.73
Host country multiple representatives	1.16	0.86
Claimant multiple representatives	1.12	0.88
Claimant is an individual	1.19	0.84
ICSID productivity	1.45	0.69
Reform 2006	9.83	0.10
Case with multiple claimants or legal bases	1.14	0.88
Arbitrators require external experts	1.26	0.79
Arbitrators have dissenting opinions	1.12	0.89
<i>Mean VIF</i>	<i>2.35</i>	

NOTES: VIF, 1/VIF values of Industry and Secretary-General dummies are calculated but not reported.



# General conclusion

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# I Main contributions of the thesis

This thesis consisting of three essays extends extant work conducted by a few scholars (Franck 2009; Harten 2012; Hafner-Burton and Victor 2016) to uncover the controversial aspects of investor-state dispute settlement (ISDS) and to make the international arbitration system more transparent. Since the past few years, ISDS is increasingly widespread and becomes a research topic explored by diverse methodologies in different scientific fields.

The main methodological contribution of this thesis is the use of an economic approach to explain legal issues concerning ISDS. Interestingly, economic analysis is often combined in this thesis with knowledge from related fields such as political science or management science. Economic theories and tools (e.g. econometrics) have been used to answer questions such as why countries decide to become members of the international law regime, why the disputing parties cannot achieve an early settlement, or which factors may affect the arbitration court's performance. In particular, to answer the last two questions, we built two original cross-sectional datasets of updated investor-state disputes. The first dataset includes all disputes based on violation of international treaties. The second dataset includes all final judgments of investor-state disputes administered by ICSID, irrespective of their legal basis. To find and code explanatory variables, we not only rely on the basic information published at public portals but also delve into the content of arbitral awards. The estimation methods such as Ordinary Least Squares or Probit were used to test theoretical hypotheses. Since the research outcomes have some implications for the public policy, they were carefully checked to reduce estimation bias.

In addition to methodological contributions, this thesis also addressed three different themes in the emerging literature on international investment law in general and on ISDS in particular.

In chapter 1, we discuss the current crisis of international investment law. Why do countries decide to become a part of international law and then try to exit from it? What is the "truth" about international investment arbitration? At the national level, the decision of some countries to exit from the current international investment law regime is understandable because it could reduce the risk of being sued by foreign investors. However, we make three claims in this chapter to prove that

countries should not be “afraid” of international arbitration. First, ISDS is currently a concern in both developing and developed countries (e.g. Australia, the United States, and Canada). The latter are also in the process of revising their investment treaties to control the unintended consequences of international arbitration. Second, we find that criticisms of spillover effects of arbitration outcomes on some dimensions of public policy such as the environment or public health are not systematically and sufficiently justified by scientific works. Third, it is important to focus on the environment that facilitates arbitrariness and inconsistency in arbitral decisions rather than on the bias of arbitrators as such. Indeed, the current network of international investment treaties is dense, but the content of these treaties - an important source of law for arbitrators - is heterogeneous and sometimes incomplete. For example, while some agreements have recognized the legitimacy of non-discriminatory regulations to protect the environment and other public interests (i.e. so that such regulations cannot constitute expropriation), others have relaxed these requirements. After identifying the pathology, we suggest that the “exit” is not efficient at either the national or international level, and that it is possible for countries to adapt the current regime to new circumstances without wholesale exit. If some countries choose to stay within the current regime of international law to improve it, our research shows that they will not be alone because international organizations often support them to develop their own reform plans.

Following the idea of the “regulatory chill” effect analyzed in the previous chapter, we wonder whether early settlement of an investor-state dispute should be preferred. On one hand, an early settlement is preferable to reduce arbitration costs. On the other hand, in our context, the host state is considered not as an ordinary commercial partner but as a government entity with rights to regulate and protect the public interest. Before addressing this question, it is important to understand the nature of the kind of negotiation involved e.g. its determinants. Chapter 2 contributes significantly to the relatively new stream of work on international investment arbitration by applying and empirically testing the widely acknowledged settlement bargaining theory on international dispute resolution practice. In general, we find that the host state’s experience, an extreme regulatory action or state’s anticipation of a favourable judgment may reduce the likelihood of settling early a dispute. The

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same effect may occur when the claimant is an individual investor. However, if the dispute is based on violation of a Dutch bilateral treaty, the probability of early settlement will increase. These findings offer the host state some suggestions to make the dispute resolution and the renegotiation of investment treaties more effective.

Finally, chapter 3 fills the gap in the literature on international investment arbitration by concentrating on an institutional dimension. The empirical literature has focused so far on the arbitration outcomes, i.e. the decision in favour of the foreign firm or of the host state, or decision to settle early as described in chapter 2. Meanwhile, international disputes between host countries and foreign investors are growing at a rapid clip and foreign investors often prefer to bring the case in an international court rather than relying on the host state's local court. Many countries claim that the current international arbitration system has become costly and time-consuming. This lack of effectiveness has led to a negative impact on the contract execution and to a loss of the host country's credibility and ability to attract future FDI flows. Inspired by empirical studies on the functioning of the national court system, we conduct original research on the effectiveness of ICSID – an important arbitral institution in international investment law. In this chapter, we investigate the effect of the biographical and professional characteristics of arbitrators on two indicators of effectiveness: the time to resolution and the quality of the judgment, which is measured by the probability of having follow-on proceedings. By considering three arbitrators who judge a dispute as a team, we find that members' experience and the professional diversity in a team can reduce the time to resolution while gender heterogeneity and previous collaborations between members increase it. Moreover, all these variables do not have a significant effect on the quality of judgment. Our results on the impact of the characteristics of an arbitrator team on its performance respond well to the current demand for reform of the international arbitration system.

After studying the current state of international investment law, the remaining part of the conclusion will be devoted to discussing the future of this field. How will investor-state dispute settlement develop in the next few years? What are the promising paths for future research? The reader can find below answers to these questions.

## II Future of investor-state dispute settlement

As shown in previous chapters, many countries expressed doubt about the legitimacy and accountability of international investment law in ensuring a fair environment. Some experts view the current system as facing a crisis, while others remain optimistic that the recent developments could stimulate renewed focus on reforms of the system. However, reform options are currently being discussed among countries.

The most extreme option to reform is to abolish any system that has been allowing investors to sue the state. This view which is shared by Brazil and South Africa is built on the fact that ISDS is creating an unfair treatment for domestic investors because only foreign investors have the right to sue the host country.<sup>1</sup> So, is there any solution to solve an investment dispute? According to this option, disputes related to a foreign investor should be resolved in the local court system or by state-to-state arbitration.

The second reform option is less harsh than the first one, but also requires a systemic reform. Accordingly, investors still have the right to sue the local state in the event of a dispute. However, the dispute is not resolved by the current investor-state arbitration system, but instead by a multilateral investment court (MIC) with professional and independent adjudicators appointed for long terms of office by state members and an appeal mechanism. The main reason behind this initiative is the unpredictability of the *ad hoc* arbitration decisions due to inconsistent treaty interpretation. The European Union has recently proposed this court model in its economic agreements signed with Vietnam and Canada.

The third option is that the current investor-state arbitration system should still be retained. Some criticisms of the current system are overstated, and the investor-state arbitration is still the best option available. However, proponents of this reform (e.g. Chile, Japan, Russia, and the United States) acknowledge that this system has certain limitations that can be addressed through targeted solutions (Roberts 2018). For example, they argue that the inconsistency in treaty interpretation is inevitable because international investment treaties vary widely in terms of protection standards. An optimal solution to this problem is to renegotiate treaties to balance the

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1. For more information, see: <https://www.ejiltalk.org/uncitral-and-isds-reforms-moving-to-reform-options-the-politics>. Accessed July 25, 2019.

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interests and obligations of the state and the foreign investor. Chapter 3 of this thesis also suggested an alternative solution whereby the effectiveness of the arbitral tribunal could be improved through the selection of arbitrators. The third reform option, which does not require systemic change as the first two, may maintain some of the key advantages of the international arbitral tribunal such as finality, ready enforceability of awards, and depoliticization of investment disputes.

In the context of the thesis, we find that the first option seems to be contrary to the spirit of the current international investment law regime by re-politicizing disputes with the foreign investor. At the same time, an ambitious project such as a new Convention on establishing a multilateral investment court is expected to improve the performance of the international tribunal. However, two important points must be considered before the implementation of this initiative. First, it should be noted that the MIC will only deal with procedural issues because substantive matters are subject to the underlying investment treaties to be applied. Therefore, renegotiating treaties to make them more “complete” will be a preferred approach. Second, multilateral rules should contain a flexible mechanism for updating to reflect the modern global economy. Otherwise, they will again become the target of criticism from member states.

Although the Working Group of The United Nations Commission on International Trade Law (UNCITRAL) has been very active in shaping the direction of the reform of ISDS at the international level, it also acknowledges a great divergence among countries, especially in the establishment of a multilateral investment court.<sup>2</sup> In this thesis, we are (very) cautious in comparing the current investor-state arbitration model with the multilateral investment court because everything has its pros and cons. However, the conclusion of recent investment treaties shows that the inefficiencies of international arbitration have been partially “fixed” by concrete solutions. For example, according to UNCTAD (2019), many innovative provisions directly related to sustainable development have been introduced into the content of new investment treaties concluded in 2018. Although investor-state arbitration is

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2. On the UNCITRAL debates over ISDS reforms, see the Blog of the European journal of international law at <https://www.ejiltalk.org>. For example, the discussion on the multilateral investment court can be found here: <https://www.ejiltalk.org/uncitral-and-isds-reforms-the-divided-west-and-the-battle-by-and-for-the-rest>. Accessed July 25, 2019.

still a controversial issue, the most frequently used approaches to ISDS in 2018 were “limited ISDS” (e.g. limiting treaty provisions or areas subject to ISDS) and “improved ISDS procedure” (e.g. ISDS is still allowed, but the ISDS provisions include certain important modifications to improve the transparency and the efficiency of the proceeding). In particular, “No ISDS” was only the choice of few treaties concluded with Brazil.

We believe that ISDS remains important in practice because countries are taking advantage of this well-established system to stabilize the international investment environment. After massive integration at the beginning of the globalization and then the discontent with new challenges of the global economy (Poulsen and Aisbett 2013), international investment law stakeholders (including countries) began to learn to “use” ISDS more safely and effectively (Haftel and Thompson 2018). On the academic level, there are still many interesting topics related to ISDS that can be explored not only by legal scholars but also by economists. A typical example is the impact of new technologies that can revolutionize the world of investment arbitration. In the future, the availability and abundance of data regarding economic treaties, trade or investment disputes, international judgments, will change the way we conduct empirical studies. It will be difficult to exploit massive amounts of information by traditional methods, hence the recourse to computing power (e.g. Big Data, artificial intelligence, and machine learning). These new technologies can be used by courts,<sup>3</sup> disputing parties and law firms to manage cases, to forecast arbitration costs and even to select arbitrators. In addition, the Blockchain technology will change the nature of foreign investments. Crypto ventures and assets (or digital assets) may also be protected by international investment treaties (e.g. as financial instruments or intangible assets). We hope that these promising paths will be fully explored by new methods in future research.

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3. An example of the use of artificial intelligence by courts: <https://www.nytimes.com/2017/05/01/us/politics/sent-to-prison-by-a-software-programs-secret-algorithms.html>. Accessed July 25, 2019.

# Conclusion générale



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# I Contributions principales de la thèse

Cette thèse, composée de trois essais, élargit les travaux existants menés par quelques chercheurs (Franck 2009; Harten 2012; Hafner-Burton and Victor 2016) pour éclairer certains aspects controversés du règlement des différends entre investisseurs et États (RDIE) et rendre le système de l'arbitrage international plus transparent. Depuis quelques années, le RDIE est largement utilisé et devient un sujet de recherche exploré à l'aide de diverses méthodologies dans des domaines scientifiques différents.

La principale contribution méthodologique de la thèse est l'utilisation d'une approche économique pour mieux comprendre le droit sur la question du RDIE. Il est intéressant de noter que l'analyse économique est souvent jointe dans ce travail à des connaissances provenant de domaines voisins tels que la science politique ou la science de gestion. Les théories et les outils économiques (par exemple l'économétrie) ont été utilisés pour répondre aux questions telles que pourquoi les pays décident de devenir membres du régime du droit international, pourquoi les parties au différend ne peuvent pas parvenir à un règlement amiable, ou quels facteurs peuvent influencer sur l'efficacité du tribunal d'arbitrage. Pour répondre aux deux dernières questions en particulier, nous avons créé deux bases de données transversales originales relatives aux différends entre investisseurs et États. La première base de données comprend tous les différends concernant la violation des traités internationaux. La deuxième base de données couvre tous les jugements définitifs des différends administrés par le CIRDI, quelle que soit leur base juridique. Pour trouver et coder les variables explicatives, nous nous appuyons non seulement sur l'information de base publiée sur les portails publics, mais aussi sur le contenu des sentences. Les méthodes d'estimation telles que les moindres carrés ordinaires ou probit ont été appliquées pour tester les hypothèses théoriques. Étant donné que les résultats de recherche ont certaines répercussions sur la politique publique, ils ont été soigneusement vérifiés afin de réduire le biais d'estimation.

Au-delà des contributions méthodologiques, cette thèse a également traité de trois thèmes différents dans la littérature émergente du droit international de l'investissement en général et du RDIE en particulier.

Dans le chapitre 1, nous discutons de la crise actuelle du droit international de

l'investissement. Pourquoi les pays décident-ils de faire partie du droit international et puis essayent d'en sortir ? Quelle est la "réalité" de l'arbitrage international d'investissement ? Au niveau national, la décision de certains pays de se retirer du régime actuel du droit international de l'investissement est compréhensible car elle pourrait réduire le risque d'être poursuivi par des investisseurs étrangers. Cependant, nous avançons trois arguments dans ce chapitre pour montrer que les pays ne devraient pas "avoir peur" de ce système d'arbitrage. Tout d'abord, le RDIE est aujourd'hui une préoccupation tant dans les pays en développement que dans les pays développés (par exemple l'Australie, les États-Unis et le Canada). Ces derniers sont également en train de réviser leurs traités d'investissement afin de contrôler les conséquences inattendues de l'arbitrage international. Deuxièmement, nous constatons que les critiques sur les effets de spillover des sentences arbitrales sur certaines politiques publiques concernant l'environnement ou la santé publique ne sont pas systématiquement et suffisamment étayées par les travaux scientifiques. Troisièmement, il importe de se focaliser sur l'environnement qui facilite l'arbitraire et l'incohérence dans les décisions arbitrales plutôt que sur le biais des arbitres en tant que tel. En effet, le réseau actuel de traités d'investissement internationaux est dense, mais le contenu de ces traités - une source importante de droit pour les arbitres - est hétérogène et parfois incomplet. Par exemple, alors que certains accords ont reconnu la légitimité des réglementations non discriminatoires sur la protection de l'environnement et d'autres intérêts publics (de sorte que de telles réglementations ne puissent pas être considérées comme expropriatrices), d'autres ont assoupli ces exigences. Après avoir identifié la pathologie, nous suggérons que la "sortie" n'est efficace ni au niveau national ni au niveau international, et qu'il est possible pour les pays d'adapter le régime actuel à de nouvelles circonstances sans s'en retirer complètement. Si certains pays choisissent de rester dans le régime actuel du droit international pour l'améliorer, notre recherche montre qu'ils ne seront pas seuls car les organisations internationales les soutiennent souvent pour élaborer leurs propres plans de réforme.

Suivant l'idée de l'effet de "refroidissement réglementaire" analysée dans le chapitre précédent, nous nous demandons si l'arrangement rapide d'un différend entre investisseurs et États devrait être encouragé. D'une part, un règlement amiable est

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préférable pour réduire le coût de l'arbitrage. D'autre part, dans notre contexte, l'État hôte n'est pas considéré comme un partenaire commercial ordinaire, mais comme une entité gouvernementale ayant le droit de réglementer et de protéger l'intérêt public. Avant d'aborder cette question, il est important de comprendre la nature du type de négociation en question, par exemple, ses déterminants. Le chapitre 2 contribue de manière significative à la nouvelle littérature de l'arbitrage international d'investissement en appliquant et en testant empiriquement la théorie de la négociation largement reconnue dans la littérature économique au contexte international. D'une manière générale, nous trouvons que l'expérience de l'État hôte, sa mesure réglementaire extrême ou son anticipation d'un jugement favorable peuvent réduire la probabilité de régler un différend à l'amiable. Le même effet peut se produire quand le plaignant est un investisseur individuel. Cependant, si le différend est fondé sur la violation d'un traité bilatéral hollandais, la probabilité de règlement amiable augmentera. Ces résultats suggèrent aux États hôtes quelques pistes pour rendre la résolution des différends et la renégociation des traités d'investissement plus efficaces.

Enfin, le chapitre 3 ajoute à la littérature de l'arbitrage international d'investissement une dimension institutionnelle. Les articles empiriques se sont focalisés jusqu'à présent sur les résultats de l'arbitrage, c'est-à-dire la décision en faveur de l'investisseur étranger ou de l'État hôte, ou la décision de régler rapidement le litige comme décrite dans le chapitre 2. Les différends internationaux entre pays d'accueil et investisseurs étrangers se multiplient rapidement et ces derniers préfèrent souvent porter l'affaire devant un tribunal international plutôt que devant un tribunal local de l'État hôte. Cependant, les parties prennent beaucoup de temps pour résoudre leur différend devant le système d'arbitrage international actuel. Ce manque d'efficacité a un impact négatif sur l'exécution du contrat et sur la crédibilité et la capacité d'attirer de futurs flux d'IDE du pays hôte. Inspirés par des études empiriques sur le fonctionnement du système judiciaire national, nous menons une recherche originale sur l'efficacité du CIRDI - une institution arbitrale importante du droit international de l'investissement. Dans ce chapitre, nous étudions l'impact des caractéristiques biographiques et professionnelles des arbitres sur deux indicateurs de l'efficacité : le délai de résolution et la qualité du jugement qui est mesurée

par la probabilité d'avoir des recours post-sentence. En considérant trois arbitres qui jugent un différend comme une équipe, nous trouvons que l'expérience et la diversité professionnelle des membres d'une équipe peuvent réduire le délai de résolution tandis que l'hétérogénéité en termes de genre et les collaborations antérieures l'augmentent. De plus, toutes ces variables n'ont pas d'effet significatif sur la qualité du jugement. Nos résultats sur l'impact des caractéristiques d'une équipe d'arbitres sur sa performance répondent bien à la demande actuelle de réforme du système d'arbitrage international.

Après avoir étudié l'état des lieux du droit international de l'investissement, la dernière partie de la conclusion sera consacrée à la discussion du futur de ce domaine. Comment le règlement des différends entre investisseurs et États va-t-il évoluer dans les prochaines années ? Quelles sont les voies prometteuses pour les prochaines recherches ? Le lecteur trouvera ci-dessous les réponses à ces questions.

## **II Futur du règlement des différends entre investisseurs et États**

Comme le montrent les chapitres précédents, de nombreux pays ont exprimé leur doute quant à la légitimité et à la responsabilité du droit international de l'investissement pour garantir un environnement équitable. Certains experts estiment que le système actuel est confronté à une crise, tandis que d'autres restent optimistes sur le fait que les développements récents pourraient stimuler une nouvelle focalisation sur les réformes du système d'arbitrage d'investissement. Cependant, les options de réforme sont actuellement débattues entre les pays.

L'option de réforme la plus extrême est d'abolir tout système qui a permis aux investisseurs de poursuivre l'État. Ce point de vue, soutenu par le Brésil et l'Afrique du Sud, est fondé sur le fait que le RDIE a créé un traitement injuste pour les investisseurs nationaux puisque seuls les investisseurs étrangers ont le droit de poursuivre l'État hôte.<sup>1</sup> Existe-t-il donc une solution pour résoudre un différend relatif aux investissements étrangers ? Pour cette option de réforme, la réponse est que les

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1. Pour plus d'informations, voir : <https://www.ejiltalk.org/uncitral-and-isd-reforms-moving-to-reform-options-the-politics>. Consulté le 25 juillet 2019.

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différends devraient être réglés par le système judiciaire local ou par une procédure arbitrale entre les deux États.

La deuxième option de réforme est moins radicale que la première, mais elle demande également une réforme systémique. Les investisseurs ont toujours le droit de poursuivre l'État hôte en cas de litige. Toutefois, le différend n'est pas résolu par le système d'arbitrage investisseur-État, mais plutôt par un tribunal multilatéral des investissements (TMI) composé de juges professionnels et indépendants nommés par les pays membres pour de longues périodes et d'un mécanisme d'appel. La principale raison derrière cette initiative est l'imprévisibilité des décisions des arbitres à cause de l'interprétation incohérente des traités d'investissement. L'Union Européenne a récemment proposé ce modèle de tribunal dans ses accords économiques signés avec le Vietnam et le Canada.

Dans la troisième option de réforme le système d'arbitrage actuel devrait être maintenu. Certaines critiques à l'égard du système sont exagérées et l'arbitrage investisseur-État demeure la meilleure option possible. Toutefois, les défenseurs de cette réforme, dont le Chili, le Japon, la Russie et les États-Unis, reconnaissent que le système d'arbitrage actuel a certaines limites qui peuvent être éliminées par des solutions ciblées (Roberts 2018). Par exemple, ils trouvent que l'incohérence dans l'interprétation des traités est inévitable parce que les traités internationaux d'investissement varient considérablement en termes de normes de protection. Une solution optimale à ce problème est la renégociation des traités pour équilibrer les intérêts et les obligations de l'État hôte et de l'investisseur étranger. Le chapitre 3 de la thèse a également suggéré une autre solution selon laquelle l'efficacité du tribunal arbitral pourrait être améliorée grâce à la sélection d'arbitres. Cette troisième option de réforme, qui ne demande pas de changement systémique comme les deux premières, pourra maintenir certains des principaux avantages du tribunal arbitral international, par exemple l'impossibilité de faire appel de la sentence, l'exécution rapide de la sentence et la dépolitisation des différends relatifs aux investissements.

Dans le cadre de la thèse, nous trouvons que la première option semble contraire à l'esprit du régime du droit international de l'investissement actuel en re-politisant des différends avec l'investisseur étranger. En même temps, un projet ambitieux tel qu'une nouvelle Convention pour établir un tribunal multilatéral des investisse-

ments devrait améliorer l'efficacité du tribunal international. Toutefois, deux points importants doivent être pris en compte avant la mise en œuvre de cette initiative. Premièrement, il convient de noter que le TMI ne traitera que des aspects procéduraux parce que les aspects de fond sont subordonnés aux traités d'investissement sous-jacents qui doivent être appliqués. Par conséquent, la renégociation des traités pour qu'ils puissent être plus "complets" sera une option privilégiée. Deuxièmement, les règles multilatérales devront contenir un mécanisme de mise à jour flexible pour refléter l'économie mondiale moderne. Dans le cas contraire, elles redeviendront la cible de critiques de la part des États membres.

Bien que le Groupe de travail de la Commission des Nations Unies pour le droit commercial international (CNUDCI) ait joué un rôle très actif dans la détermination de la direction des réformes du RDIE au niveau international, il reconnaissait également une grande divergence entre les pays, notamment en ce qui concerne la création du TMI.<sup>2</sup> Dans cette thèse, nous sommes (très) prudents en comparant le modèle d'arbitrage investisseur-État avec le futur tribunal multilatéral des investissements car tout a ses avantages et ses inconvénients. Cependant, comme le montre la conclusion des traités d'investissement récents, les inefficacités de l'arbitrage international ont été partiellement "corrigées" par des solutions concrètes. Par exemple, selon UNCTAD (2019), de nombreuses dispositions innovantes directement liées au développement durable ont été introduites dans le contenu de nouveaux traités d'investissement conclus en 2018. Même si l'arbitrage entre investisseurs et États demeure une question controversée dans le contexte actuel, les approches les plus souvent utilisées à l'égard du RDIE en 2018 étaient "un RDIE limitée" (par exemple la limitation des dispositions du traité ou des secteurs économiques assujettis au RDIE) et "une procédure améliorée pour le RDIE" (par exemple, l'arbitrage international d'investissement est toujours autorisé, mais les dispositions concernant le RDIE comprennent certaines modifications importantes visant à améliorer la transparence et l'efficacité de la procédure). En particulier, "Non au RDIE" n'était que le choix de quelques traités conclus avec le Brésil.

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2. Au sujet des débats de la CNUDCI sur les réformes du RDIE, voir le Blog du *European Journal of International Law* : <https://www.ejiltalk.org>. Par exemple, la discussion sur le tribunal multilatéral des investissements se trouve à l'adresse suivante : <https://www.ejiltalk.org/uncitral-and-ids-reforms-the-divided-west-and-the-battle-by-and-for-the-rest>. Consulté le 25 juillet 2019.

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Il nous semble que le RDIE joue encore un rôle important dans la pratique, car les pays continuent à profiter d'un système bien établi pour stabiliser l'environnement international de l'investissement. Après l'intégration massive au début de la mondialisation et ensuite le mécontentement face aux nouveaux défis de l'économie mondiale (Poulsen and Aisbett 2013), les parties prenantes du droit international de l'investissement (dont les pays) ont commencé à apprendre à "utiliser" le RDIE de manière plus sûre et efficace (Haftel and Thompson 2018). Sur le plan académique, il y a encore beaucoup de sujets intéressants liés au RDIE qui pourront être explorés non seulement par les juristes mais aussi par les économistes. Un exemple type est l'impact de nouvelles technologies qui pourront révolutionner le monde de l'arbitrage d'investissement. Dans l'avenir, la disponibilité et l'abondance des données concernant les traités économiques, les différends en matière de commerce ou d'investissement, les jugements internationaux modifieront notre façon de mener des études empiriques. Il sera difficile d'exploiter de grandes quantités d'information par des méthodes traditionnelles d'où le recours à la puissance de l'informatique (par exemple le Big Data, l'intelligence artificielle et l'apprentissage automatique). Ces nouvelles technologies pourront être utilisées par les tribunaux,<sup>3</sup> les parties au différend et les cabinets d'avocats pour gérer les cas, prévoir les coûts et même choisir les arbitres. En outre, la technologie Blockchain modifiera la nature des investissements étrangers. Les entreprises blockchain et les crypto-actifs (ou les actifs numériques) pourront faire également l'objet de protection des traités internationaux d'investissement (par exemple, comme des instruments financiers ou des biens immatériels). Nous espérons que ces pistes prometteuses seront explorées par de nouvelles méthodes dans les prochains travaux de recherche.

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3. Un exemple de l'utilisation de l'intelligence artificielle par les tribunaux : <https://www.nytimes.com/2017/05/01/us/politics/sent-to-prison-by-a-software-programs-secret-algorithms.html>. Consulté le 25 juillet 2019.

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## Essais en Économie du Litige : Une Application aux Différends entre Investisseurs et États

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**Résumé :** Les traités internationaux d'investissement permettent souvent à l'investisseur étranger de poursuivre le pays d'accueil devant un tribunal d'arbitrage international en cas de violation des dispositions du traité. Le nombre de différends entre investisseurs et États augmente si rapidement que certains pays expriment leur malaise à l'égard du régime actuel du droit international de l'investissement. Le premier chapitre donne aux lecteurs une vue générale sur l'efficacité et les effets de spillover de l'arbitrage international en matière d'investissement. En se basant sur une vaste littérature interdisciplinaire, nous réexaminons les critiques récentes et identifions la cause sous-jacente de la crise relative à l'arbitrage international. Nous concluons qu'il est possible pour les pays d'adapter le régime actuel du droit international à de nouvelles situations plutôt que de le quitter. Le deuxième chapitre étudie le règlement amiable des différends entre investisseurs et États. En nous fondant sur la riche littérature économique et sur une nouvelle base de données de différends relatifs à la violation des traités, nous constatons que l'expérience de l'État hôte, les perspectives du différend, la nature des mesures réglementaires, l'identité des investisseurs et les traités d'investissement néerlandais influencent significativement la probabilité d'un règlement rapide du différend. Le troisième chapitre se concentre sur une dimension institutionnelle de l'arbitrage : l'efficacité du CIRDI dans la résolution des différends. Le délai de résolution et la qualité du jugement final, représentée par la probabilité d'avoir des recours post-sentence, sont utilisés comme indicateurs de l'efficacité. Nous soulignons comment les caractéristiques biographiques et professionnelles des arbitres affectent l'efficacité du CIRDI.

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**Mots clés :** Arbitrage international d'investissement, différends investisseur-État, investissement étranger, analyse économique

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## Essays on Economics of Litigation: An Application to Investor-State Disputes

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**Abstract:** International investment treaties often allow the foreign investor to sue the host country before international arbitration in case of breaches of treaty provisions. The number of investor-state disputes is growing so rapidly that some countries expressed their discomfort with the current international investment law regime. The first chapter gives readers a comprehensive view on the effectiveness and spillover effect of international investment arbitration. Based on a vast interdisciplinary literature, we reexamine recent criticisms and identify the root of the crisis faced by international arbitration. We conclude that it is possible for countries to adapt the current regime of international law to new situations without wholesale exit. The second chapter investigates the early settlement of investor-state disputes. Drawing on the rich economic literature and a new dataset related to treaty-based disputes, we find that the host state's experience, the case prospect, the nature of the regulatory measures, the identity of investors and Dutch investment treaties have significant impacts on the probability of early settlement. The third chapter focuses on an institutional dimension of arbitration: the effectiveness of ICSID in solving disputes. The time to resolution and the quality of the final judgment which is measured by the requirement of follow-on proceedings are used as performance indicators. We highlight how arbitrators' biographical and professional characteristics can impact the ICSID effectiveness.

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**Keywords:** International investment arbitration, investor-state disputes, foreign investment, economic analysis