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How Do Bilateral Investment Treaties Work?

Evidence from Highly Regulated Industries

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How do Bilateral Investment Treaties Work? Evidence from Highly Regulated Industries

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Abstract While much has been written on whether signing bilateral investment treaties (BITs) actually leads to greater inward foreign direct investment (FDI), relatively little attention has been paid to understanding the underlying question of *how* BITs attract investment. This thesis helps to fill this gap, both theoretically and empirically. It develops a rational choice account of why a government that has signed many BITs will be incentivized to adopt marginally more investor-friendly regulation, a benefit which will be of particular value to one specific group of investors: those in highly regulated industries that do not have easy access to BIT substitutes, most importantly state contracts. Econometric analysis of the effects of BITs on industry-level FDI provides strong support for this model: BITs are associated with an increase in FDI in finance and business services, but not in other industries.

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Chapter I: Introduction

Toward the end of the 20th century, developing countries embarked on a spree of signing and ratifying bilateral investment treaties (BITs), legal treaties which bind countries to protect the rights of foreign investors. Today almost all developing countries have signed multiple BITs, and some have signed dozens: 67 developing countries have ratified 20 or more BITs, while 25 have ratified 40 or more.[2]

Yet despite their near ubiquity, we continue to know little about whether BITs have actually helped developing countries attract FDI, and even less about how. This thesis helps to fill this gap, by advancing two specific claims. First, during the era of regulatory capitalism, the key benefit foreign investors receive from BITs is a constraint on government regulation. With vague language in the texts of treaties creating legal uncertainty over which regulations are permissible and which are not, BITs introduce a general pro-foreign investor bias into government regulatory systems. Second, this benefit of BITs is especially valued by one group of investors: those in highly regulated industries that do not have easy access to BIT substitutes, most importantly state contracts. It is only from these investors, those for which government policy is highly salient to profitability but that are not in direct business with the state, that BITs induce greater investment.

While the earliest BITs were signed over fifty years ago, the widespread diffusion of investment treaties only began in the late 1980s and early 1990s. This was a period of ascendancy for neoliberal economic thinking, and developing countries were keen to attract private capital to spur growth, particularly as the end of the Cold War presaged decreased flows of foreign aid.

[2] United Nations Conference on Trade and Development (UNCTAD), *Investment Instruments Online: Bilateral Investment Treaties*, (New York: UNCTAD, 2012).

Developing country governments, which by this point had in any case already largely forsworn the outright expropriations witnessed in the early post-Colonial period, were eager to accept the trade-off of greater flows of FDI in exchange for not interfering with the property rights of foreign investors. [3]

The two sides of this trade-off have been studied in distinct strands of the previous academic literature on BITs. On the one hand, a number of researchers, working mostly in Economics and Political Science and using primarily econometric methods, have sought to understand the effects of BITs on FDI. The research question in this literature is generally framed as "do BITs increase FDI?" Definitively answering this question has proven extremely difficult, partially, it will be argued, because much of this research fails to satisfactorily address the issue of *how* BITs increase FDI.

On the other hand, a separate group of researchers, working primarily in International Law, has focused on how BITs constrict the policy space available to sovereign states, and the ensuing effect on government regulatory power. Almost all modern BITs grant foreign investors the right to pursue independent arbitration if they believe a state's actions have violated the investor's treaty-based rights. These rights, however, are imprecisely defined in treaties, leaving much open to interpretation. In recent years, as an ever-wider remit of government regulatory actions have been challenged in arbitration by investors under the terms of BITs, there is a growing concern over how an expansive reading of investors' rights can unduly constrain government regulation.

[3] On the views of developing country policymakers toward BITs during this period, see Poulsen, Lauge, "Bounded Rationality and the Diffusion of Modern Investment Treaties", *International Studies Quarterly,* forthcoming.

This thesis brings together these two distinct lines of research. It draws on the arguments advanced by legal scholars on BITs and regulation to address a key shortcoming in the literature on BITs and FDI, namely a failure to adequately theorize *how* and *from whom* BITs attract FDI. At its heart is a simple premise: to the extent that BITs attract FDI, it is precisely *because* they constrain government regulation.

While there was a time when foreign investors feared outright expropriation, today investors are more likely to worry about policy risk: the possibility that the regulations and legal framework in place at the time of investment will be changed at some point in the future, such that the value of the investment decreases.[4] This may be due to a government attempting to subtly extract a greater share of profits out of a non-perfectly mobile investment through altering tax laws, regulations, tariffs, or other policies. Or it may be due to a government pursuing legitimate regulation in the public interest, which happens to impose costs on a foreign investor. As Büthe and Milner note in discussing policy risk, "any policy action that reduces the profitability and value of the asset may be of concern to the firm."[5]

Policy risk has emerged as a principal concern of foreign investors as norms over the state's proper role in the economy have evolved over the past two decades. The "Washington Consensus" which prevailed during the era when most BITs were signed has since ebbed; the so-called "Post-Washington Consensus", which sees a much broader role for government in regulating and steering the economy, is today more widely accepted.[6] In the aftermath of a global financial crisis widely attributed to overly lax regulation, the trend toward more active

[4] See, e.g., Sornarajah, M., *The International Law on Foreign Investment*, 2nd Ed. (Cambridge: Cambridge University Press, 2004), p. 332-342 and p. 349-352.
[5] Büthe, Tim and Helen Milner, "Institutional Diversity in Trade Agreements and Foreign Direct Investment: Credibility, Commitment, and Economic Flows in the Developing World, 1971-2007", APSA 2011 Annual Meetings Paper, p. 9.
[6] See, e.g., Birdsall, Nancy and Francis Fukuyama, "The Post-Washington Consensus", *Foreign Affairs*, Vol. 90, No. 2, March/April 2011, pp. 45-53.

government intervention in the economy is likely to only accelerate. We live in an age of regulatory capitalism, one marked by a common commitment to the general tenets of capitalism – there is unlikely to be a widespread return to outright expropriations – matched with the conviction that states can and should intervene in the private sector through regulatory policies to shape economic, social, and environmental outcomes for public benefit.[7] To understand how and from whom BITs attract FDI, thus, we must seek to understand how BITs affect policy risk in the era of regulatory capitalism. This is the subject of this thesis.

A key starting point for the arguments advanced in the following pages is the fact that the international investment law community has struggled to precisely and objectively define the distinction between bona fide government regulatory changes pursued in the public interest and illegal government intervention in the market.[8] This imprecision and uncertainty means BITs create costs to states for a wide range of regulatory actions, and thereby introduce a general pro-foreign investor bias into the regulatory regimes of countries that have signed many BITs. Unsure of whether or not a proposed regulation that might harm a foreign investor will be declared illegal, when making the decision of whether or not to enact such regulation a government must consider the costs associated with breaching its investment treaties (weighted by the estimated probability of losing in arbitration). Whenever a government faces a non-zero probability that a proposed regulation will be declared illegal by the terms of its investment treaties, BITs serve to constrain government regulation. Rather than any protection against outright expropriation, then, this is the real benefit foreign investors receive from BITs.

[7] See, e.g., Levi-Faur, David, "The global diffusion of regulatory capitalism", *The Annals of the American Academy of Political and Social Science*, Vol. 598, 2005, pp. 12-32.
[8] See, e.g., OECD, "'Indirect Expropriation' and the 'Right to Regulate' in International Investment Law", OECD Working Papers on International Investment No 2004/4, and Montt, Santiago, *State Liability in Investment Treaty Arbitration: Global Constitutional and Administrative Law in the BIT Generation*, 2nd Ed. (London: Hart Publishing Limited, 2012)

It follows from the premise that the benefit of BITs lies in their ability to decrease policy risk that there is one particular subset of investors that should especially value BITs: those in highly regulated industries that do not have easy access to BIT substitutes, such as state contracts. A foreign investor in a relatively lightly-regulated industry, such as operating hotels, may not be overly concerned about policy risk, because relatively few government policies have a strong effect on her bottom line. A foreign investor in a highly regulated industry such as extracting oil will worry about policy risk, and the threat that future changes to government regulations will decrease the value of her investment. However, she will also almost certainly have a direct contract with the state detailing the terms of the project, likely featuring a recourse to enforceable international arbitration and possibly including a so-called "stabilization clause" restricting virtually any future policy change. For her, then, the protections offered by BITs will be largely redundant to those already received via contracting. An investor in a highly regulated industry who is not in business with the state, however, such as a bank or insurance company, will be concerned about policy risk and will not have easily available alternative legal instruments to constrain any unfavourable government regulation. This is the type of investor who will place the greatest value in BITs.

To test these claims, this thesis presents econometric analysis of the effects of BITs on industry-specific FDI flows. Previous econometric studies have typically focused on aggregate FDI flows, thus implicitly assuming that BITs should have an equal effect on all investors. In order to overcome this shortcoming, and to study not just *if* BITs attract FDI but *how* and *from whom* they do so, we need to analyze more fine-grained data. By looking at the industry level, we can make inferences based on variation in the structural traits of industries. Specifically, given cross-industry differences in the extent of regulation and the propensity to use state contracts, we can identify in which industries the model suggests BITs should have the strongest effect on FDI. Econometric analysis provides strong support for the hypothesis that the benefits provided by

BITs are concentrated in highly regulated industries where state contracts are rare: finance and business services.

The methodological approach adopted in this thesis, then, combines rational choice model building with large-N quantitative analysis. A few words on each are warranted.

Rational choice is ideally suited to rigorously thinking through the causal logics which explain what effect, if any, BITs have on FDI. A central motivation for this thesis is the fact that many previous studies purporting to show a relationship between BITs and FDI present undertheorized accounts of the effect of BITs; the emphasis is on *if* BITs work, rather than *how* BITs work. Rational choice methods allow us to rigorously and parsimoniously identify a series of logical implications that arise from a given set of assumptions to understand how international investment law intervenes in the strategic interaction between foreign investors and governments. Moreover, from the logics identified in the model it is possible to derive clear empirical hypotheses, which can then be compared to observed events.

The empirical section of this research uses large-N regression analysis to test for statistically significant effects of BITs on industry-specific flows of FDI to developing countries. The key advantage of large-N analysis is that it allows for generalizable conclusions; as the theoretical claims advanced here have not been widely tested before, this is an important first step, leaving to future research the task of assessing the extent to which the logics identified are present or absent in particular cases. Furthermore, as the model suggests BITs are likely to have only a marginal effect on FDI, regression analysis is ideally suited to identify and measure such smaller, secondary causes of phenomena, while controlling for other more determinative causes.

There are of course limitations to such a stylized and generalized approach. Neither rational choice nor econometrics are well-suited to providing intensive explanations about particular historical cases. They will never be able to fully address the multi-causal stories behind specific investment and expropriation decisions, which are undoubtedly shaped by a large number of factors. Yet, if the argument that BITs operate by constraining regulation and thereby attract investment in highly regulated industries is convincing, future case study research can fill in these more complex explanations, looking at the national-, industry-, or firm-level.

This thesis contributes to a number of ongoing debates within International Relations. Most immediately, it substantially helps advance our understanding of BITs, moving beyond the simplistic assessments of whether BITs increase FDI which have pre-occupied empirical studies in the field. The more nuanced examination of the effects of BITs developed in the model and supported by the empirical analysis point to a richer, more specific, and more discriminate understanding of investment treaties as legal instruments. At a practical level, this finding has important consequences for developing country policymakers weighing the costs and benefits of ratifying investment treaties.

Additionally, the findings shed light on some larger questions in IR about if and how international law constrains and shapes government behaviour. Most notably, the ideas presented in this thesis have important implications for analyzing the level of (im)precision adopted in legal instruments.[9] Low precision can weaken the effect of legal instruments, as imprecise rules or standards can make it more difficult to demonstrate that any particular action is in fact proscribed, opening a space to redefine levels of commitment downwards.[10] Yet, perhaps less

[9] Abbott, Kenneth W., Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter, and Duncan Snidal, "The Concept of Legalization", *International Organization,* Vol.54 No. 3, Summer 2000, pp. 401–419.

[10] This is an argument which realist scholars skeptical of the power of international law are likely to espouse; see, e.g., George W. Downs, David M. Rocke and Peter N. Barsoom, "Is the good news about

obviously, the experience of investment treaty arbitration illustrates how low precision can in some circumstances also broaden and strengthen the effect of legal instruments, as uncertainty over legality creates constraints on a wider remit of action. As the growing criticisms and frustrations with international investment law suggest, such imprecision may allow legal instruments to constrain governments far beyond their signatories' original intentions, and shift state behaviour in unexpected ways.

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The remainder of the thesis proceeds as follows. Chapter 2 provides an overview of the history, function, and effects of investment treaties. It traces the two key strands of literature on BITs – on whether they attract FDI and whether they constrain government regulation – and lays the foundation for building a more nuanced understanding of *how* BITs attract FDI.

Chapter 3 takes up this challenge. Starting from rational choice underpinnings, the chapter presents a simple model of how BITs can attract foreign investment through constraining government regulation. It is shown that given uncertainty over whether regulations will be deemed illegal, investment treaties can incentivize governments to adopt a pro-foreign investor regulatory bias. It is further argued that this effect of BITs should be particularly valued by one group of investors: those for whom government policy is highly salient to profitability and who do not have ready access to legal instruments capable of substituting for BITs, notably state contracts.

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compliance good news about cooperation?", *International Organization*, Vol. 50 No. 3, Summer 1996, pp. 379-406. See also discussion of the effects of uncertainty about legal rules in Guzman, Andrew, *How International Law Works: A Rational Choice Theory*, (Oxford: Oxford University Press, 2008), p. 93-96.

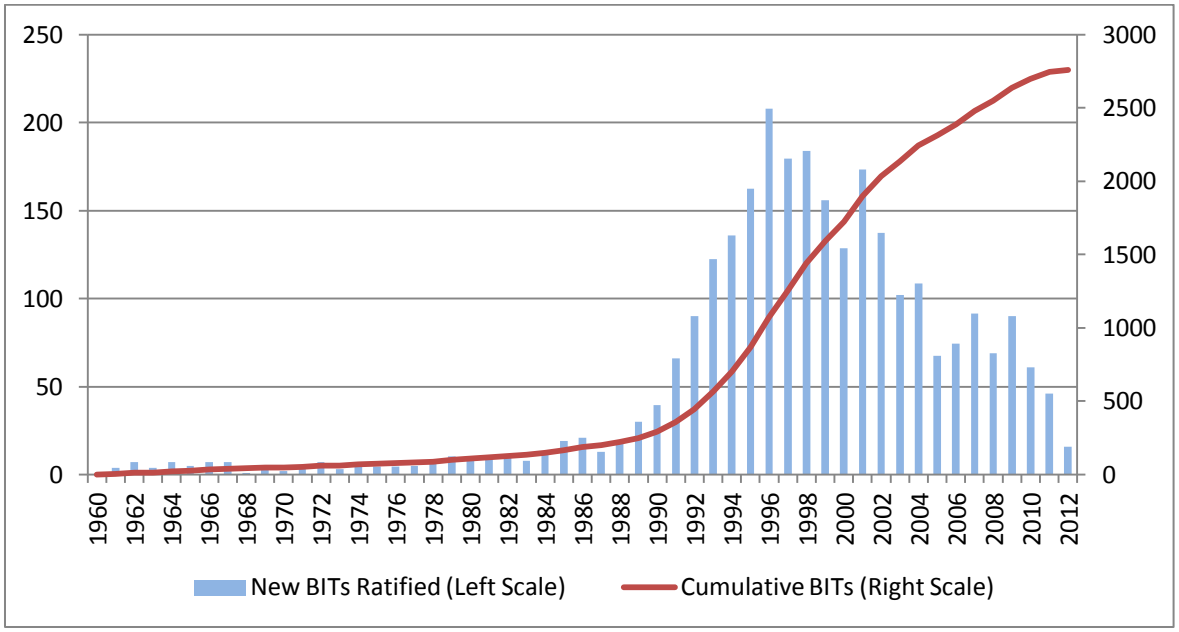
Chapter 4 moves to the empirical record to assess evidence for the central hypothesis suggested by the model in the previous chapter, that BITs should increase investment from highly regulated investors who do not use state contracts. Looking at the industry-level effects of BITs on FDI flows, it is demonstrated that BITs increase investment only in those industries that the model would predict, namely finance and business services.

The final chapter concludes, and considers how the future of international investment law may evolve in light of a broader trend toward more active government intervention in the economy.

Chapter II: Background and Literature Review

There are currently some 2700 bilateral investment treaties in force around the world. While the earliest treaties have been around for over 50 years, it was only in the post-Cold War period, during the heyday of the "Washington Consensus" on neoliberal economics, that they spread rapidly (see Figure 2. 1). Over the last decade the number of new BITs signed each year has slowed considerably (at least partially because there are ever fewer country-pairs which have not already signed a treaty). In the absence of a multilateral agreement on foreign investment, BITs are the most important international regime governing FDI.

Figure 2.1: Number of BITs in Force



Source: United Nations Conference on Trade and Development (UNCTAD), Investment Instruments Online: Bilateral Investment Treaties

BITs were designed and justified as legal instruments which developing countries that lacked strong reputations for protecting the rights of foreign investors could use to attract FDI.[1] At least theoretically, there are a number of reasons why countries – and particularly developing countries – value foreign direct investment (FDI). FDI is a source of capital and formal sector jobs, both of which are typically undersupplied in developing countries. Moreover, foreign investment from more advanced economies utilizes technologically-advanced production methods, allowing, for example, natural resources to be more profitably exploited. And the knowledge and technology which are imported by foreign investors can spill over into the local economy, increasing domestic productivity. While there remains some debate amongst economists on the extent to which FDI actually does promote development, for the most part the belief that foreign investment is valuable continues to be ingrained in the minds of policymakers, and attracting foreign investment is a goal of most developing countries.[2]

Yet governments in developing countries face a central difficulty in attracting foreign direct investment: they must convince foreign investors that their rights will be protected. Foreign investment is an inherently risky endeavour, as it often involves high up-front costs, which after the investment has been made are at risk of expropriation by the host government. Raymond Vernon, in his seminal survey *Sovereignty at Bay*, identified this problem as an "obsolescing bargain": before an investment is made, the foreign investor holds considerable bargaining power relative to the host country government.[3] After the investment has been made, however, the investor has little recourse and is at the mercy of the host government; if the government

[1] See, e.g., Elkins, Zachary, Andrew Guzman, and Beth Simmons, "Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960–2000", *International Organization*, Vol. 60 No. 4, Fall 2006, pp. 811–846.

[2] See, e.g., Moran, Theodore H., Edward Montgomery Graham, and Magnus Blomström, eds., *Does Foreign Direct Investment Promote Development?* (Washington: Peterson Institute, 2005).

[3] Vernon, Raymond, *Sovereignty at Bay: The Multinational Spread of US Enterprises*, (New York: Basic Books, 1971), p. 46.

chooses to expropriate the capital a foreign company has invested, the company would face considerable losses.

The classic example of the logic of the obsolescing bargain and the threat of expropriation comes from the oil industry. Imagine a developing country which is home to land which is believed to contain oil. The country's domestic oil industry is underdeveloped and lacks the advanced technologies of Western oil companies, and thus the state seeks a foreign investor partner to collaborate on the extraction, with the promise of sharing any future profits.

But can the investor trust the government to honour such an agreement? The foreign investor needs to initially spend large sums on the project before any returns will be realized – investments in surveying the land believed to contain oil, identifying the most promising locations to drill, and installing the equipment needed to extract oil. (In the language of economics, the industry is characterized by high sunk costs.) After these investments have been made, however, the investor no longer has any leverage over the government. A rational profit maximizing government would thus promise an investor a large share of future profits to induce investment, and then after investment has occurred rescind these promises and keep all the profits for itself. The government has a time inconsistency problem; its preference for respecting the rights of the foreign oil company in the pre-investment period is not consistent with its preference for expropriating in the post-investment period.[4] Recognizing this inconsistency, the foreign investor will choose not to invest in the first place, and the project will not take place.

This example reveals how the dynamic of the obsolescing bargain can prevent investments from taking place which – if there were a guarantee of no expropriation – would be in both the

[4] On time inconsistency, see Kydland, Finn and Edward Prescott, "Rules Rather than Discretion: The Inconsistency of Optimal Plans", *Journal of Political Economy*, Vol. 85 No. 3, June 1977, pp. 473-492.

government's and the investor's interest. The challenge for governments, then, is how to credibly commit to abide by a strategy of protecting the rights of foreign investors. Simply promising during the pre-investment period to respect the rights of foreign investors will have little effect, as potential investors know this promise is not credible given the government's time inconsistent preferences.

Of course, this logic would appear to suggest that in the absence of international legal protection, foreign investment would never occur. Yet we know this is not the case. Indeed, while a government may have an incentive to expropriate in a single interaction between one government and one investor, in the real world, where there are many governments and many investors making many deals over time, the role of reputation can help offset the obsolescing bargain.[5] Once one extends the analysis to include many different investors making decisions over time, and assumes that investors can observe a state's past behaviour, if the shadow of the future is sufficiently high expropriating a past investment will no longer be the rationally self-interested strategy for a state, even without the threat of any outside punishments. That is, a government will be rationally deterred from mistreating foreign investors out of fear of developing a negative reputation which would hinder future attempts to attract investment. The fact that the frequency of outright expropriations declined dramatically in the 1970s, long before the proliferation of BITs, suggests that reputation concerns do influence government decisions; governments appear to have not needed the threat of being sued by an investor to decide it was not in their interests to expropriate.

Understanding government-investor interaction as a repeated game, in which the government's reputation is at stake, will help to lessen the logic of the obsolescing bargain. But it may not overcome it altogether, and certainly not in all cases. For one, governments may occasionally

[5] In the language of game theory, this is the difference between a one-shot game and a repeated game.

have short time horizons, especially when under crisis or facing the prospect of losing power, and even if it appears a government is future-oriented today an investor will not know if this will last. Furthermore, even if a government is unwilling to take dramatic steps such as outright expropriation, which will clearly harm its reputation, it may still seek to use more subtle moves to marginally capture a greater share of an investment's profits: this is the creeping expropriation which has emerged as a critical concern of investors in recent years.[6] For these reasons, then, foreign investors may still seek reassurance that their rights will be protected in the post-investment period, even if they have little reason to fear outright expropriation.

Investment treaties are designed to provide such reassurance. While the precise stipulations set out by specific BITs vary, the general form and substance are very similar across BITs. The most important provisions of BITs typically include a declaration that foreign investors will receive "fair and equitable treatment" from the host government, and that they will not have their investment expropriated, either directly or indirectly through creeping expropriation. Critically, if the investor believes a BIT provision has been violated, it can then challenge the host government in international arbitration, most frequently through the International Centre for Settlement of Investment Disputes (ICSID), an arm of the World Bank; decisions awarded in these forums are binding.

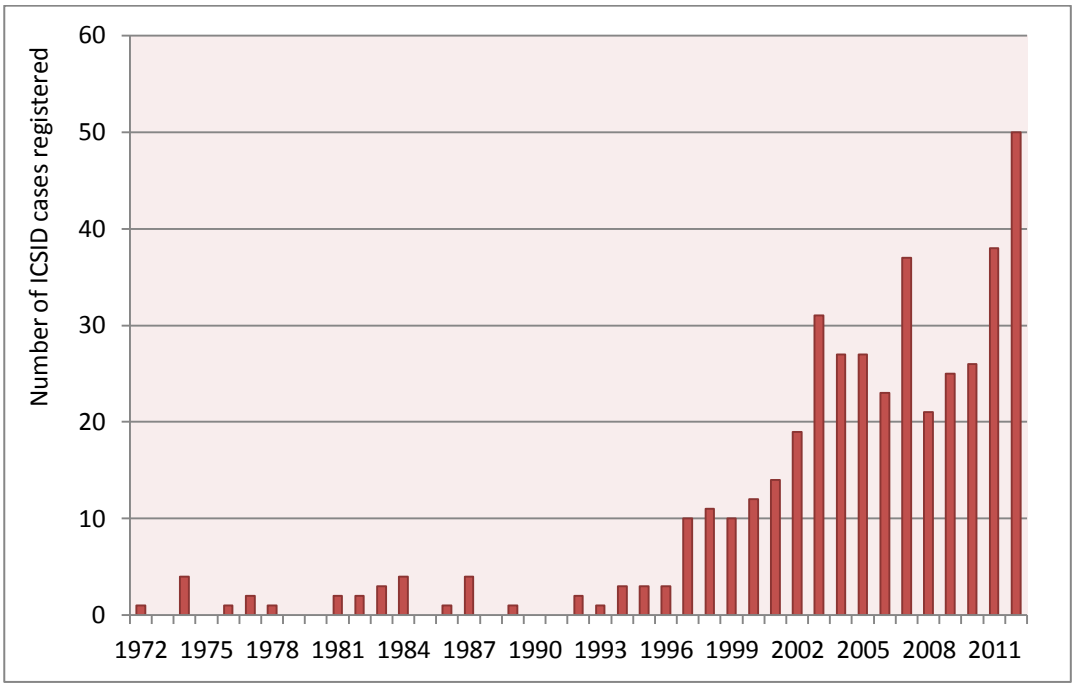
The rapid spread of BITs has been followed by mounting cases of litigation. ICSID has seen its annual caseload increase from just two or three cases 15 years ago to a record 50 cases in 2012 (see Figure 2.2).[7] While some countries are frequent respondents at ICSID – Argentina has been 49 times – being sued by a foreign investor is not a particularly rare occurrence amongst

[6] United Nations Conference on Trade and Development (UNCTAD), *Expropriation*: *UNCTAD Series on Issues in International Investment Agreements II*, (New York: UNCTAD, 2012).

[7] International Centre for Settlement of Investment Disputes (ICSID), *Caseload Statistics – Issue 2013-1* (Washington, DC: The World Bank, 2013).

developing countries: most countries which have signed BITs have appeared in ICSID at least once.[8] With settlements that can exceed $100 million, the stakes are high for governments that are at risk of being found in violation of their treaty obligations.

Figure 2.2: Annual New Arbitration Cases Registered at ICSID, 1972- 2012



Source: ICSID, Caseload Statistics

Moreover, by the standards of international law the enforcement terms in investment arbitration are extremely strong. Two international treaties, the New York Convention[9] and the ICSID Convention[10], govern the execution of arbitration awards, and state that awards are directly executable in any of the 148 contracting states to either convention. In practical terms this means that an investor which has won an arbitration case against a state has the right to seize commercial assets owned by that state located in nearly any country in the world. Thus, for

[8] See the ICSID website for a list of past and present cases.

[9] *Convention on Recognition and Enforcement of Foreign Arbitral Awards* (adopted 10 June 1958, entered into force 7 June 1959).

[10] *Convention on the Settlement of Investment Disputes between States and Nationals of Other States* (adopted 18 March 1965, entered into force 14 October 1966).

example, in one recent case an investor that had won an award against the Russian government was allowed to seize a $40 million Russian-owned apartment complex in Cologne, Germany.[11] While widespread data on the extent to which states comply with award decisions is difficult to come by, the limited evidence available suggests states generally do pay awards, perhaps not surprising in light of the strong enforcement terms available to claimants should they refuse to do so.[12] States that refuse to comply with the terms of ICSID awards are likely to face additional diplomatic costs and sanctions; for example, the United States recently announced it was revoking Argentina's trade benefits under the U.S. Generalized System of Preferences (which cuts import tariffs for developing countries) until Argentina paid arbitration award claims held by American investors.[13]

Given the proliferation of investment treaties over the last several decades, their prominence in the liberal international economic order, and the significant liabilities to which they expose governments, we know surprisingly little about the effects of BITs. Toward the end of the 20th century foreign investment increased dramatically at the same time as BITs spread around the world, but researchers have struggled to untangle correlation from causation in this relationship.

[11] Cited in Yackee, Jason, "Conceptual Difficulties in the Empirical Study of Bilateral Investment Treaties", *Brooklyn Journal of International Law*, Vol 33 No. 2, 2008, pp. 405-462, p. 422.

[12] One notable exception is Argentina, which continues to battle many decisions which have been awarded to foreign investors in cases arising from extreme measures taken during the country's financial crisis in 2001-02. On both the general voluntary compliance with ICSID awards and Argentina's refusal, see Lin, Tsai-Yu, "Systemic Reflections on Argentina's Non-Compliance with ICSID Arbitral Awards: A New Role of the Annulment Committee at Enforcement?", *Contemporary Asia Arbitration Journal*, Vol. 5 No. 1, May 2012, pp. 1-22.

[13] See US Department of State, Embassy of the United States to Argentina, "Factsheet on Generalized System of Preferences", 2013.

Mary Hallward-Driemeier provided one of the first econometric assessments of whether BITs increase FDI.[14] Hallward-Driemeier looked at FDI flows from 20 OECD countries to 31 developing countries over the period 1980 to 2000. She generally finds that BITs have no significant effect on FDI flows, though she does present some evidence that BITs might modestly help countries with already strong domestic institutions attract FDI.

With so many countries so eager to sign BITs, the finding that they appeared to have no effect on FDI flows came as a surprise, and led many scholars to extend and expand upon Hallward-Driemeier's work. While Hallward-Driemeier had analyzed whether a BIT increased FDI specifically between the two countries that were party to the treaty, a number of researchers argued that this missed part of the picture: if BITs are a credible signal of an overall commitment to liberal economic policy, then BITs might increase FDI not only from the covered partner country, but from all countries. Eric Neumayer and Laura Spess consider this issue, finding a positive relationship between the cumulative number of BITs signed by a country and the total FDI it receives.[15] Tim Büthe and Helen Milner adopt a similar approach and also find that the number of BITs a country has signed is a significant predictor of the total FDI it receives, and that BITs with large economies are especially important in attracting FDI.[16]

[14] Hallward-Driemeier, Mary, "Do bilateral investment treaties attract foreign direct investment? Only a bit…and they could bite", World Bank Policy Research Working Paper 3121 (Washington, DC: The World Bank, 2003).

[15] Neumayer, Eric and Laura Spess, "Do bilateral investment treaties increase foreign direct investment to developing countries?", *World Development*, Vol. 33 No. 10, 2005, pp. 1567–1585. The specific explanatory variable they use is the number of BITs signed with an OECD country, weighted by the share of outward FDI from the OECD country amongst total world FDI.

[16] Büthe, Tim and Helen Milner, "Bilateral Investment Treaties and Foreign Direct Investment: A Political Analysis", in Karl Sauvant and Lisa Sachs (eds.), *The Effect of Treaties on Foreign Direct Investment* (Oxford: Oxford University Press, 2009). However, a later study by the same authors considering the effect of trade agreements on FDI included BITs as a control variable in regressions of FDI on trade agreements, and generally found little effect of BITs. See Büthe, Tim and Helen Milner, "Institutional Diversity in Trade Agreements and Foreign Direct Investment: Credibility, Commitment, and Economic Flows in the Developing World, 1971-2007", APSA 2011 Annual Meetings Paper.

A number of other studies, however, have found that BITs have much more modest effects, or are only effective under certain conditions. Jennifer Tobin and Susan Rose-Ackerman, for example, find that BITs have a minor effect but only for countries which already have low political risk, thus suggesting that BITs might give a small additional boost to countries which are already relatively attractive destinations for FDI, but are of no real value to the countries that are most in need of them.[17] The authors also note that as the global population of BITs has increased the value of any single BIT has fallen; as BITs have become increasingly commonplace, they are less important as a signal of a trustworthy government. Meanwhile, Todd Allee and Clint Peinhardt argue that BITs' success in attracting FDI is contingent upon the future actions of the governments that sign them; BITs may increase FDI, but only so long as signatory governments are not subsequently accused of having broken their commitments in an international tribunal.[18] A separate paper from the same authors finds that of the 32 BITs signed by the United States, the world's largest capital exporter, with developing countries, only 4 had a significant effect on bilateral FDI flows.[19] Much of the most recent work on BITs suggests that the potential for treaties to increase FDI was considerably overestimated when BITs were being signed and ratified.[20]

The mixed and conflicting results concerning the central question of whether BITs increase FDI is partially attributable to difficulties in econometrically analyzing foreign investment. To begin with, international investment data are not always measured consistently across countries or

[17] Tobin, Jennifer and Susan Rose-Ackerman, "When BITs have some bite: The political-economic environment for bilateral investment treaties", *The Review of International Organizations,* Vol. 6 No. 1, 2011, pp. 1-32.

[18] Allee, Todd and Clint Peinhardt, "Contingent Credibility: The Impact of Investment Treaty Violations on Foreign Direct Investment", *International Organization*, Vol. 65 No.3, Summer 2011, pp. 401–32.

[19] Peinhardt, Clint and Todd Allee, "Failure to Deliver: The Investment Effects of US Preferential Economic Agreements", *World Economy*, Vol. 35, 2012, pp. 757–783.

[20] On the expectations of developing country policymakers that BITs would lead to greater investment, see Poulsen, Lauge, "Bounded Rationality and the Diffusion of Modern Investment Treaties", *International Studies Quarterly,* forthcoming.

across time, and data coverage is often limited, particularly for developing countries. Such data limitations mean researchers are often using different countries and years to address similar analytical questions. Moreover, as Emma Aisbett argues persuasively, problems of endogeneity in the relationship between BITs and FDI make it extremely difficult to distinguish correlation from causation.[21] And as Jason Yackee points out, there are considerable conceptual problems in most empirical analyses of BITs, including whether and how to address variation in the terms of BITs and how to account for plausible alternative policy instruments which serve a similar function. [22]

Given these inherent difficulties in econometric assessments of the effect of BITs on FDI, some researchers have taken a separate, more direct route: simply asking relevant individuals who are likely to be affected by BITs whether or not they believe they're important. Lauge Poulsen interviewed managers in the political risk insurance industry.[23] Given that these insurance providers (a mix of public and private organizations) have a direct financial stake in accurately estimating what factors affect expropriation risks, they should be expected to have valuable knowledge about the role of BITs in constraining expropriation. He finds that the industry as a whole pays very little attention to BITs; while BITs are designed to decrease the risk of investing abroad, the people who are responsible for pricing such risk place little stock in them.

[21] Aisbett, Emma, "Bilateral Investment Treaties and Foreign Direct Investment: Correlation Versus Causation", in Sauvant and Sachs, *The Effect of Treaties on Foreign Direct Investment*.

[22] Yackee, "Conceptual Difficulties". It should be noted that most empirical analyses make no effort to control for BIT substitutes, nor address the issue at all. The issue of alternative instruments is discussed in greater detail in the following chapters.

[23] Poulsen, Lauge, "The Importance of BITs for Foreign Direct Investment and Political Risk Insurance: Revisiting the Evidence", in Sauvant, Karl (ed.), *Yearbook on International Investment Law & Policy 2009-1010* (Oxford: Oxford University Press, 2010).

In a similar vein, Jason Yackee surveyed in-house counsel of large American corporations, asking whether investment treaties affect their international investment decisions.[24] He finds that senior executives of large companies tend to be not very familiar with the rights provided by BITs, do not particularly trust BITs to protect them against expropriation or regulatory takings, and almost never decide not to make an investment specifically due to the lack of a BIT. Investment treaties thus appear not to weigh very heavily in the minds of corporate executives as they face decisions about where and how much to invest abroad.

What conclusions can be drawn from this collective body of evidence? We must begin with the fact that the stream of econometric research asking "do BITs work?" appears to have run its course, only to reach a rather inconclusive outcome. Whether due to data shortcomings or complexity in the underlying relationship under study (or, more likely, both), it appears unlikely we will ever definitively know whether BITs increase aggregate FDI. At a minimum we can say that the mixed econometric results, combined with the qualitative evidence that professionals involved in evaluating political risk place little stock in BITs, suggests that BITs are not a primary cause of the dramatic increase in FDI to developing countries of the last two decades. Whether or not they are a supporting cause, and to what extent, is difficult to know.

Rather than being viewed as a dead end, however, this fact should drive researchers to ask more nuanced and fine-grained questions about the international investment regime. For even if we may never conclusively link BITs with aggregate FDI, it seems almost certain that at least some BITs matter for at least some investors some of the time (at the very least, they matter at the moment when a company challenges a country in arbitration based on the terms of an investment treaty). Studies looking for a relationship between BITs and total FDI make the

[24] Yackee, Jason, "Do Bilateral Investment Treaties Promote Foreign Direct Investment? Some Hints from Alternative Evidence", *Virginia Journal of International Law*, Vol. 51, 2011, pp. 397-442.

implicit assumption that investment treaties will have an equal effect on all investors. Yet it is certainly the case that the benefits offered by BITs will be worth more to some investors than others, and thus should be expected to have varying weight in the investment decision making processes of different investors. Yet to date few studies have seriously considered how diverse investors might respond differently to BITs, and to use this variation to better understand the effect of BITs.[25] Instead of focusing on "do BITs work?", then, researchers should turn to the more precise questions of how, when, and from whom BITs induce greater investment. These questions remain relatively unexplored in the literature, yet their answers are critical, both for our theoretical understanding of the effects of international law and for the practical purposes of assisting developing country governments in crafting investment policies.

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This thesis presents one such avenue for building a more nuanced understanding not just of *if* BITs work but of *how* BITs work. To do so it draws on a secondary line of research on the effects of BITs, one focused not on whether BITs attract FDI but on how they impinge on the sovereignty of the governments that sign them. Of particular concern is the ability of investment treaty obligations to constrict a state's right to regulate the market. The model and empirical results advanced in this thesis incorporate such thinking into the debates over whether and why foreign investors might invest more in countries that sign BITs, by arguing that it is precisely because BITs constrain regulation that investors value them.

[25] One notable exception is Jandhyala, Srividya and Robert Weiner, "Do International Investment Agreements Protect Investment? Petroleum Evidence", Working Paper, 26 August 2012. This study looks specifically at the effect of investment treaties on transaction-level investments in the oil and gas industry, and notes in the introduction that earlier aggregate-level FDI studies "yield mixed empirical results, which could be due to country-level aggregation, or because the benefits of IIAs apply only under specific circumstances" (p. 3).

A growing body of research argues that investment treaties force governments to sacrifice too much control, and specifically that they place undue restrictions on a government's ability to regulate its economy and enact policies deemed to be in the public interest. Such research includes both abstract theoretical arguments and more practical/empirical work which focuses on the growing scope of investment dispute arbitration.

The basis for many of these claims begins with the fact that the broad language in investment treaties is necessarily open to a wide range of interpretations. As Jason Yackee has noted, "much of the content of international investment law, as it is expressed in investment treaties ... is, by its own terms and with only a bit of exaggeration, objectively indeterminate."[26] The legal language in these treaties is imprecise because it is impossible to specify every possible action a government could take which would unfairly harm foreign investors, a common incomplete contracting problem. But the flipside of this imprecision is an opening for an expansive legal understanding of the rights of foreign investors, one that can come into direct conflict with a state's interest in regulating the economy for the public interest.

It is widely, though not universally, agreed that economic deprivation of a foreign investor is a necessary but not sufficient condition for a policy change to be illegal under the terms of an investment treaty.[27] As the legal scholar Santiago Montt argues, in the modern regulatory state almost any regulatory reform will necessarily harm some group of citizens and investors, and this is perfectly legal (and non-recompensable) according to the constitutions of many Western states.[28] If developing states are to ensure similar rights to regulate their economies, then

[26] Yackee, Jason, "Toward a Minimalist System of International Investment Law," *Suffolk Transnational Law Review*, Vol. 32, 2008, pp. 303-340, p. 313.

[27] UNCTAD, *Expropriation*, p. 63.

[28] Montt, Santiago, *State Liability in Investment Treaty Arbitration: Global Constitutional and Administrative Law in the BIT Generation*, 2nd Ed. (London: Hart Publishing Limited, 2012), especially chapters 4 and 5.

investment arbitration needs to allow for such bona fide public regulation, even that which may cause economic deprivation to certain foreign investors. In other words, investment law must distinguish bona fide government regulatory changes pursued in the public interest which impose costs on foreign investors from illegal government regulatory changes which constitute indirect expropriation or violate a government's obligation to provide "fair and equitable treatment" to protected investors.[29] In practice, however, this has proven extremely difficult. Given the complexity of the legal questions at issue, international arbitration has been forced to draw such distinctions on a case-by-case basis, making it difficult for governments to accurately assess ex ante if proposed regulatory changes are legal.[30] As will be discussed further in the following chapter, this uncertainty means BITs create constraints on any regulatory policy that *might* be declared illegal.

Restrictions on the right to alter regulations in the future can induce socially inefficient outcomes for any society. This problem is likely to be particularly acute, however, for developing countries undergoing political, economic, and social transformations. Altering regulations allows countries to adopt to changing circumstances – the faster the rate of change, the greater the need to revisit regulations which were crafted for an earlier era (and hence the greater the cost of restrictions on altering regulations). Joseph Stiglitz notes that the freedom to regulate is especially important in countries undergoing democratic transitions, as the former ruling elite is likely to have enacted rules and regulations which empower themselves even if they are

[29] See, e.g., OECD, "'Indirect Expropriation' and the 'Right to Regulate' in International Investment Law", OECD Working Papers on International Investment No 2004/4.

[30] For example, United Nations Conference on Trade and Development (UNCTAD), *Fair and Equitable Treatment: UNCTAD Series on Issues in International Investment Agreements II*, (New York: UNCTAD, 2012), notes: "The lack of predictability is further increased by the absence of a clear legal test of fair and equitable treatment. Ultimately, the decision may rest on little more than whether, in the circumstances of the specific case, the tribunal feels that the investor had been treated fairly or not" (p. 11). Similarly, UNCTAD, *Expropriations*, notes that the language distinguishing expropriation from regulation in many modern BITs "typically provide for a case-by-case balancing of factors, which include the economic impact of the measure, interference with distinct and reasonable investment-backed expectations and nature and characteristics of the measure" (p. xii).

economically inefficient for society as a whole; restrictions on regulatory changes in international investment law make it difficult to reverse such patterns, and can thus contribute to entrenching the (inefficient) distribution of power and wealth in society.[31] More broadly, any country undergoing political, economic, and social transformations is likely to see its circumstances and preferences evolve. In light of such evolutions, governments should rationally re-evaluate and update their regulatory policies to reflect new circumstances and preferences. Requirements that compensation be paid for regulatory changes will make such revisions more expensive for governments, and thus less likely to occur.

Such theoretical arguments are given greater urgency by the fact that in recent years arbitration tribunals appear to be addressing an ever-widening scope of government action, likely moving beyond what governments initially intended their role to be. Investment treaties delegate authority to international investment tribunals and, as Kenneth Abbott and Duncan Snidal note, such delegation of authority can sometimes lead to "unanticipated sovereignty costs".[32] As the focus of investment disputes has increasingly moved from clear cut, outright expropriation, into the grey areas of creeping expropriation and regulatory takings, the scope of government activity which potentially falls under the remit of these tribunals has increased considerably: the sovereignty costs of BITs have increased.

The recent surge in investment treaty arbitration has seen foreign investors challenge a broad array of government actions. For example, European mining companies have sued the South African government over that country's Black Economic Empowerment law, claiming that the law's regulations on land ownership designed to redress historical, social, and economic

[31]Stiglitz, Joseph, "2007 Grotius Lecture: Regulating Multinational Corporations: Towards Principles of Cross-Border Legal Frameworks in a Globalized World Balancing Rights with Responsibilities," *American University International Law Review*, Vol. 28, 2008, pp. 451-558.

[32] Abbott, Kenneth and Duncan Snidal, "Hard and Soft Law in International Governance", *International Organization*, Vol. 54 No. 3, Summer 2000, pp. 421-456, p. 438.

inequalities violate the country's BIT obligations.[33] The cigarette maker Philip Morris has claimed that Australia's regulations dictating that cigarettes be sold in plain packaging absent any logos constitutes unjust treatment of the company's intellectual property under BIT provisions.[34] When Slovakia rolled-back liberalization of its health insurance industry in 2007, instituting a law requiring health insurance firms operate on a non-profit basis, a number of foreign investors sued under BITs describing the move as tantamount to expropriation.[35] A French investor in a Peruvian bank pursued BIT litigation after the Peruvian banking regulator took control of the bank when it was unable to meet its payment obligations.[36]

The clauses in BITs which have generally emerged as the most contentious concern the rights of investors to "fair and equitable treatment", which is the most relied upon and most successful basis used by foreign investors in arbitration.[37] What constitutes "fairness" and "equity", and for whom, is of course not a straight forward question. There is little clear consensus on what "fair and equitable treatment" entails; some arbitrators have argued that the clause should extend so far as to compel governments to meet the "legitimate expectations" of foreign investors.[38] With the question of what constitutes fair and equitable treatment underdefined, investors have an incentive to challenge almost any government policy changes which lower expected profitability. As Kyla Tienhaara observes, in some recent arbitration cases "standard BIT provisions have been

[33] *Piero Foresti, Laura de Carli & Others v. The Republic of South Africa*, ICSID Case No. ARB(AF)/07/01, Award 4 August 2010.

[34] *Philip Morris Asia Limited v. The Commonwealth of Australia*, UNCITRAL, PCA Case No. 2012-12. Case pending.

[35] *HICEE B.V. v. The Slovak Republic*, UNCITRAL, PCA Case No. 2009-11. Award 17 October 2011.

[36] *Renée Rose Levy de Levi v. Republic of Peru*, ICSID Case No. ARB/10/17. Case pending.

[37] UNCTAD, *Fair and Equitable Treatment*, p. 1. On the concept of fair and equitable treatment see also OECD, "Fair and Equitable Treatment Standard in International Investment Law", OECD Working Papers on International Investment No 2004/3, 2004, as well as Vandevelde, Kenneth, "A Unified Theory of Fair and Equitable Treatment", *New York University Journal of International Law and Politics*, Vol. 43, 2010, pp. 43-106.

[38] Tienhaara, Kyla, "Once BITten, twice shy? The uncertain future of 'shared sovereignty' in investment treaty arbitration", *Policy and Society*, Vol. 30, 2011, pp. 185–196, p. 189.

interpreted in such a broad manner that it would appear that (at least some) arbitrators believe that it is in their purview to review any state regulatory action, or indeed inaction, that has a negative (not necessarily devastating) impact on a foreign investor or investment."[39]

At issue is not only the question of *what* rights a BIT grants to an investor, but also *who* gains these rights, based on sometimes ambiguous definitions of the terms "investment" and "investor".[40] An investment, for instance, obviously includes large fixed capital investment such as building a factory, but is also generally considered to include less tangible assets such as equity investments in companies, intellectual property, claims to money or claims under contract, and various debt instruments. Debates over the definition of investor are generally centred around how strong a connection an individual or corporation must have to a signatory country. Through the use of shell corporations and complex corporate structuring, multinational corporations will sometimes attempt to route investments through third-party countries in order to gain BIT protection. In one notable case, the American company Bechtel was able to pursue BIT arbitration against Bolivia despite the absence of a US-Bolivia BIT by using a Dutch subsidiary and appealing to the Netherlands-Bolivia BIT.[41] Such practices considerably increase the scope of the liability states face from their treaty obligations.

In light of these issues, there is growing evidence that states – both developed and developing – are beginning to question whether the international investment regime constitutes too great an impingement on sovereignty, and places undue constraints on their ability to pursue policies deemed to be in the public interest. Australia has taken a particularly strong stance against

[39] Ibid, p. 189.

[40] See United Nations Conference on Trade and Development (UNCTAD), *Scope and Definition: UNCTAD Series on Issues in International Investment Agreements II*, (New York: UNCTAD, 2011), as well as Sornarajah, M., *The International Law on Foreign Investment*, 2nd Ed. (Cambridge: Cambridge University Press, 2004), p. 15-18.

[41] *Aguas del Tunari, S.A. v. Republic of Bolivia*, ICSID Case No. ARB/02/3. See especially *Decision on Respondent's Objections to Jurisdiction*, 21 October 2005.

granting foreign investors broad rights to challenge government policies. In a 2011 policy document the Government declared that it would no longer include investor-state dispute resolution procedures in trade agreements with developing countries.[42] The same document noted that "the Government does not support provisions that would confer greater legal rights on foreign businesses than those available to domestic businesses. Nor will the Government support provisions that would constrain the ability of Australian governments to make laws on social, environmental and economic matters in circumstances where those laws do not discriminate between domestic and foreign businesses."[43]

Similarly, a 2011 resolution from the European Parliament on the future of European investment policy explicitly addresses the potential for BIT legislation to constrain regulation. The resolution notes the European Parliament:

> "[e]xpresses its deep concern regarding the level of discretion of international arbitrators to make a broad interpretation of investor protection clauses, thereby leading to the ruling out of legitimate public regulations"; "calls on the Commission to produce clear definitions of investor protection standards in order to avoid such problems in the new investment agreements"; and "[c]alls on the Commission to include in all future agreements specific clauses laying down the right of parties to the agreement to regulate, inter alia, in the areas of protection of national security, the environment, public health, workers' and consumers' rights, industrial policy and cultural diversity."[44]

Even the United States, which has long pursued some of the most demanding and wide-ranging BITs, has more recently moved to include more precise language in its investment treaties, thereby proscribing arbitrators' ability to broadly interpret clauses which might constrain government regulatory action.[45]

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[42] Department of Foreign Affairs and Trade, Australian Government, *Gillard Government Trade Policy Statement: Trading our way to more jobs and prosperity*, April 2011.

[43] Ibid, p. 14.

[44] European Parliament, Resolution of 6 April 2011 on the future European international investment policy (2010/2203(INI)), 2011.

[45] Tienhaara, "Once BITten, twice shy?", p. 191.

Meanwhile a number of developing countries – not surprisingly primarily those who have been challenged in investment disputes – also appear to be rethinking the costs and benefits of the international investment regime. Poulsen and Aisbett provide evidence that developing countries sign and ratify significantly fewer BITs after they have had a claim registered against them in an arbitral tribunal.[46] As developing countries come to better understand the wide-ranging liabilities to which BITs expose them, they are noticeably less eager to sign more treaties. For example, after South Africa was sued over its Black Economic Empowerment law, the country initiated a wide-ranging review of its investment policies, which concluded that the country should no longer sign BITs including strong investor-state arbitration.[47] Ecuador has terminated many of its BITs, and Ecuador's Constitutional Court has declared that the investor arbitration provisions in a number of other BITs are not consistent with the country's Constitution.[48] Both Ecuador and Bolivia have formally withdrawn from ICSID; Nicaragua and Venezuela have publicly considered doing so as well.[49] Though few countries appear likely to take as dramatic a step as withdrawing from ICSID altogether, such actions are indicative of a broader growing disenchantment with the international arbitration system. The appeal of the international investment regime, and particularly BIT clauses granting investors the right to independent arbitration, is noticeably less bright among states today than it was in the heydays of the 1990s.

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[46] Poulsen, Lauge and Emma Aisbett, "When the Claim Hits: Bilateral Investment Treaties and Bounded Rational Learning", *World Politics*, Vol. 65, 2013, pp. 273-313.

[47] Poulsen, "Bounded Rationality and the Diffusion of Modern Investment Treaties".

[48] United Nations Conference on Trade and Development (UNCTAD), "Denunciation of the ICSID Convention and BITs: Impact on Investor-State Claims", UNCTAD IIA Issues Note No. 2, December 2010.

[49] Ibid.

To date, these two discussions – on whether BITs increase investment, and on whether they limit government's regulatory powers – have largely proceeded independently of one another. The constraints on government regulation imposed by a BIT have typically been viewed as an unfortunate (and perhaps unforeseen) side effect of BITs' real purpose of credibly committing not to expropriate investments. To the extent that the two conversations have come together, it has typically been under the framework of BITs as a "grand bargain": developing countries accept limits on their sovereignty and regulatory power in exchange for gaining increased investment.[50] The mixed evidence on whether or not BITs actually do increase FDI calls into question whether the price paid in lost regulatory power is worth it.

This thesis, conversely, makes the case that the questions of do BITs increase investment and do BITs constrain regulation are much more closely connected. In the era of regulatory capitalism, when outright expropriations are rare to nonexistent yet investors may still suffer losses due to government policy and regulatory changes, a constraint on government regulation might be precisely what investors value about BITs. That is, to the extent that BITs increase FDI, it is because they increase the cost to a government of enacting regulations which harm the interests of foreign investors. The following chapter presents a simple rational choice model to further develop this point.

[50] See, e.g., Kaushal, Asha, "Revisiting History: How the Past Matters for the Present Backlash Against the Foreign Investment Regime", *Harvard International Law Journal*, Vol. 50 No. 2, Summer 2009, pp. 491-534.

Chapter III: A Rational Choice Account of How and From Whom BITs Attract Investment

The previous chapter noted that much of the econometric work on the effects of investment treaties has been undertheorized, pointing to the need for a more fine grained and nuanced understanding of how and why BITs attract investment. This chapter adopts a rational choice framework to present such a model.

The theoretical argument is grounded in the works of Abbott et al in conceptualizing legalization and Guzman in building a rationalist explanation for how international law constrains governments.[1] Abbott et al provide three axes on which to measure the extent of the legalization of international relations: obligation, precision, and delegation. Under this framework, BITs have high obligation, weak precision, and high delegation.

The high obligation of BITs means states cannot choose to opt out of certain provisions at certain times, and have a real stake in not violating the terms of the treaties. Having ratified a BIT, a government faces the prospect of being directly challenged by any covered investor in binding arbitration, without the investor needing the support of the home state. Moreover, through the ICSID and New York Conventions investment arbitration has very strong enforcement mechanisms, giving BITs real bite as international legal instruments.

The low precision of BITs means that the terms of investment treaties may be open to debate and their interpretation subject to evolution. The language in BITs is notoriously vague, with

[1]Abbott, Kenneth, Robert Keohane, Andrew Moravcsik, Anne-Marie Slaughter, and Duncan Snidal, "The Concept of Legalization", *International Organization*, Vol. 54 No. 3, Summer 2000, pp. 401–419; Guzman, Andrew, *How International Law Works: A Rational Choice Theory* (Oxford: Oxford University Press, 2008).

great importance placed on terms such as "fair and equitable treatment" and an investor's "legitimate expectations", with relatively little effort to pin down strict definitions. As Montt notes, "investment treaties do not establish concrete *rules*, but only the most abstract and open-ended *standards*" (emphasis in original).[2]

The high delegation of BITs means that the necessary interpretation of this vague language is left to independent arbitration tribunals over which states have no real control. As noted in the previous chapter, in recent years these tribunals have been adopting a more expansive interpretation of the obligations created by BITs, leading to criticism from some governments.

The following model illustrates how this combination of strong obligation, weak precision, and high delegation allows investment treaties to constrain government regulations to the benefit of foreign investors. Inspired by arguments about investment arbitration cases challenging an ever-greater remit of government regulatory actions, the model shows how BITs can create a pro foreign-investor bias in government regulatory systems. The central intuition is very simple: by introducing the possibility that a regulatory change will lead to a challenge from a protected foreign investor, BITs increase the cost to the government of establishing new regulatory measures and incentivize the government to adopt investor-friendly regulations. Since foreign investors value an expectation of stable, investor-friendly regulation, they will respond to BITs by marginally increasing investment.

The subsequent discussion builds on this analysis to address which investors are likely to respond to BITs by increasing investment. From the premise that BITs function by constraining regulation, we then ask, for which investors should this effect be particularly valuable? It is

[2] Montt, Santiago, *State Liability in Investment Treaty Arbitration: Global Constitutional and Administrative Law in the BIT Generation*, 2nd Ed. (London: Hart Publishing Limited, 2012), p. 3.

argued that investors with two specific criteria are likely to value BITs' ability to constrain government regulation. One, stable, investor-friendly regulation will be most valued by investors that are highly regulated and for which government policy is highly salient to profitability. And two, this effect of BITs will be valued by investors that find it costly or impossible to gain similar expectations of stable, investor-friendly regulation through other legal instruments, specifically direct contracts with the state which include the recourse to independent arbitration. It is this particular group of investors that should especially value BITs' ability to constrain government regulation.

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How Do Bilateral Investment Treaties Attract Investment?

Assume that governments are unitary actors which set regulations on the basis of rational cost-benefit analysis.[3] Precisely and parsimoniously defining the preferences of a government is a difficult, if not impossible, endeavour. Thankfully for present purposes it is not necessary to do so. Assume simply that governments seek to maximize a weighted basket consisting of welfare functions for each of its constituents; that is, a government sets policy such that the net benefit to its constituents is maximized, allowing the government to place more value on the welfare of some constituents than others. An autocratic government which relies on the military for support will place a particularly high weight on the welfare of the military; a government which

[3] The assumption that a government can be considered a unitary actor may be problematic, as in some instances in which the terms of BIT treaties are breached it is because one government agency or level of government is acting in a manner inconsistent with the preferences of the central government. Effectively, for the assumption in the model to hold, what matters is that whatever government actor has the power to set regulations fully internalizes the costs paid by the government if these regulations are declared illegal due to the government's BIT obligations. While this may not always be strictly true, it seems likely that if the actions of a government agency create costs for the central government, these costs will in some form be "passed on" to the relevant agency, formally or informally. In any case, further unpacking how different levels of government interact with one another in meeting or breaching BIT obligations may be fruitful for future research and theory building.

relies on certain interest groups for campaign contributions will place particularly high weight on the welfare of these interest groups. Policies are thus chosen through rationally adding up the costs and benefits to constituents of policy options, and selecting policies that maximize the net benefits.

Government policy is optimal when there is no alternative set of policies that would produce greater weighted net benefits to its constituents. Imagine now that a country in which the government is following optimal policies experiences a shock. The shock could be a change in material conditions (such as increased cross-border financial flows), new information (such as the realization that the emission of a certain chemical erodes the ozone layer), or a political change that leads the government to re-weight the value it places on different constituents.

How will the government decide whether to change policies in light of this shock or not? In any of these situations, government policy is no longer optimal, but it doesn't necessarily follow that the government should always change policy. Any change in policy entails costs, both for the government itself, which must negotiate and implement the new policy, and for the government's constituents, which must learn about and adjust their behaviour to the new policy. The question, then, is whether it is more costly to continue following a sub-optimal policy in the post-shock period or to pay the adjustment costs necessary to return to optimal policy.[4] If there is at least one potential policy set for which the additional benefits relative to the status quo exceed the costs of switching policies then the government should change policy. The fact that in practice governments do change regulations (since due to unforeseen shocks past optimal policy quickly becomes sub-optimal) but are not constantly changing regulations (which,

[4] On the whole the country may be better or worse off after the shock, however, it remains the case that there are costs to following policy which was optimized for a previous state of the world rather than current conditions.

if policy changes were costless, would be the optimal strategy) suggests that such a logic is a plausible simplification of government regulatory decision making.

By design in this model, the government will only introduce a new regulatory policy when the net aggregate effect of doing so is positive. Yet while net benefits must be positive, it is entirely plausible – indeed highly likely – that at least some constituents will be made worse off by any change in regulatory policy.[5] Thus, for example, any particular regulatory change may harm consumers of cigarettes, or a producer of a certain chemical, or a bank with high leverage, while still producing public benefits. In principle a foreign investor, like all other constituents, may benefit from or be made worse off by a regulatory change.

Investment treaties enter into this equation by introducing an additional cost to a government of changing one subset of regulatory policies: those that harm foreign investors. No other constituents have the same protections against regulations that damage their interests.[6] BITs thus introduce a general pro-investor bias into government regulatory systems. Foreign investors who worry about policy risk and the possibility that regulatory changes will limit future profits therefore have an incentive to invest more in countries that have ratified many BITs.

To see why, note first that, while the understanding of what constitutes "fair and equitable" treatment continues to evolve in arbitration hearings, it would take a rather extraordinary legal reading to hold a government responsible for action it did not take; sins of commission weigh

[5] This echoes Montt's legal argument that in the modern regulatory state the government has the right to impose non-compensable regulations in the public interest which create costs for certain actors. See Montt, Santiago, *State Liability in Investment Treaty Arbitration*.

[6] Jonathan Bonnitcha and Emma Aisbett discuss the economic efficiency (or lack thereof) of providing investors with this advantage relative to other actors in their economic analysis of investment treaties. See Bonnitcha, Jonathan and Emma Aisbett, "An Economic Analysis of the Substantive Protections Provided by Investment Treaties" in Sauvant, Karl (ed.) *Yearbook on International Investment Law & Policy 2011-2012* (Oxford: Oxford University Press, 2013) as well as Aisbett, Emma, Larry Karp, and Carol McAusland, "Police Powers, Regulatory Takings and the Efficient Compensation of Domestic and Foreign Investors", *Economic Record,* Vol. 86, 2010, pp. 367-383.

much more heavily than sins of omission in international investment law. It is safe to assume, then, that sticking with current policy is highly unlikely to land a government in arbitration.

Any time a government changes policy, however, it is at least theoretically open to a legal challenge from a covered foreign investor. Given the weak precision in investment treaties, it is impossible to neatly proscribe which regulations are likely to be challenged and which are not. With this uncertainty, a government must form an ex ante estimate of the probability of any particular regulatory change being challenged in an arbitration tribunal. That is, there are some widely accepted regulations which face almost no likelihood of being challenged by an investor, some policy changes that are clearly tantamount to expropriation which will almost certainly be challenged by an investor, and some regulations that fall in a grey area in between these two poles.

A government considering the costs of implementing a new regulation, then, must consider the costs of potentially being found in violation of its BIT obligations and needing to pay damages to protected investors. The costs to a government of losing an investment arbitration are both pecuniary and reputational. Pecuniary costs created by the BIT regime are the actual costs governments must pay litigious investors. In weighing whether or not to enact new regulations, the relevant expected value calculation for the government is the (estimated) probability of a regulatory change being challenged multiplied by the (estimated) probability of losing the arbitration multiplied by the (estimated) value of the fine.[7] If a state refuses to comply with awards, they will face other costs in the form of sanctions and diplomatic pressures, as Argentina is now discovering. The greater the number of BITs a government has ratified, the greater the number of protected foreign investors who would have standing to challenge the government in

[7] Note, however, that governments that are risk averse will have an incentive to overestimate the probability of being challenged in arbitration and the probability of losing the case.

arbitration, and hence the greater the number of claimants the government might need to compensate.[8]

In addition to these immediate pecuniary costs, governments who are declared in arbitration cases to have illegally mistreated foreign investors are also likely to suffer reputational costs. As noted earlier, a desire to maintain a reputation for protecting the rights of foreign investors – and thus attract future flows of foreign investment – is a strong constraint on government expropriation. Losing an arbitration case is likely to damage that reputation. (It is worth noting, however, that generally only ICSID awards are publicly announced; the results of arbitrations in other forums are typically kept confidential, largely because neither states nor companies want arbitration decisions to affect their reputations and future business relationships.) Allee and Peinhardt's finding that countries that have signed BITs and are subsequently challenged by a foreign investor in ICSID experience a decrease in FDI suggests that investors do indeed consider a government's record in the BIT system as a measure of its reputation.[9]

Furthermore, reputational costs may spread beyond the narrow issue area of investment protection. A government which is repeatedly found guilty in international investment tribunals may develop a general reputation of being untrustworthy, and, for example, no longer be considered a reliable trading partner.[10] Even more broadly, repeated infractions in the investment treaty system could lead to an all-around reputation for not respecting international law, carrying costs across a wide range of issue areas.

[8] Noting, of course, that BITs with large capital exporters such as the US will be more important than BITs with smaller economies, a point further discussed in chapter 4.

[9] Allee, Todd and Clint Peinhardt, "Contingent Credibility: The Impact of Investment Treaty Violations on Foreign Direct Investment", *International Organization*, Vol. 65 No. 3, Summer 2011, pp. 401–32.

[10] See Guzman, *How International Law Works,* p. 100-111 for a discussion of the compartmentalizing of reputation and the extent to which violations in one issue area may affect reputations in other areas.

The cost to a government of losing an arbitration case against a foreign investor is thus the sum of these pecuniary and reputational costs. The effect of these costs will have a decisive influence on a government's decision to change regulations or not if it exceeds the difference between the benefits and other costs of switching regulations. That is, BITs will alter government behaviour concerning whether to change regulations or not in those cases when the expected costs of losing in arbitration are enough to tip the balance between the costs of operating sub-optimal policy and the adjustment costs of switching policy.

The most interesting implications of this model of BITs and government regulation derive from the uncertainty over what is or is not legal regulation. Consider first a world in which governments know with full certainty which actions are illegal and which are not – the likelihood of losing in arbitration is always either one or zero. In such a world, the BIT regime would only shift government incentives concerning truly illegal regulations and would have zero constraining effect on legal regulatory actions; if the probability of a regulatory action being declared illegal is zero, then the expected-value costs imposed by the BIT regime for this regulation fall to zero. This is, of course, how the BIT regime was designed to function: increase the costs to the government of illegally harming foreign investors, imposing costs which are frequently if not always large enough to tip the balance from expropriation to not, without having any constraining effect on other legitimate government policies.

But the growing debates in legal circles over how to distinguish bona fide legitimate regulation from illegal government interference illustrate that this is not, in fact, how the BIT regime operates in practice. For any policy for which the likelihood of losing an arbitration tribunal is non-zero, then, the BIT regime creates positive costs (in expected value terms) which a rational government must consider when deciding whether to change regulatory policies or not.

In pecuniary terms, uncertainty over the legality of regulation clearly factors into a government's expected value calculation of the cost of enacting new regulation. Perhaps less obviously, uncertainty also plays an important role in understanding how the BIT system creates costs for governments through the reputation channel. When there is widespread agreement over what constitutes illegal interference with the rights of foreign investors, the reputational cost of being found at fault in an arbitration tribunal will likely be minimal; that is, investors are capable of forming opinions on the reputations of governments through media reports and other means of information sharing, and there will be little additional cost of losing an arbitration case above the cost of having enacted the illegal regulation in the first place.

For actions which are arguably illegal, however, the BIT system takes on greater importance. If investors are undecided on whether or not a government has acted improperly (and thus should pay a reputational cost), learning that an international tribunal has found the government at fault is more likely to alter an investor's prior view of the government. In this sense the BIT system not only spreads information relevant to reputations, but also creates it: with uncertainty over what does or does not constitute expropriation or a breach of fair and equitable treatment, tribunal decisions are helping to define some regulatory actions as illegal, and thereby may change investors' perceptions.

Given the above, it follows that there will be scenarios in which, because of the BIT system, governments will choose not to enact new regulations which have small but non-zero probabilities of being declared illegal. Recall that in the absence of any BIT system, the government will enact new regulations following a shock if the costs of following sub-optimal policy exceed the adjustment costs associated with introducing new regulations; this gap is the net gains from new regulation. Whenever the probability-adjusted costs of losing an arbitration tribunal exceed the net gains from new regulation, the BIT regime constrains government

regulation. In cases where the net gains from new regulation are small, the BIT regime could compel governments to avoid enacting new regulations, even if these regulations only have low probabilities of losing in arbitration. Thus regulations that are more likely than not to be considered legal may still be avoided due to the threat of investor litigation.

To this point this discussion has focused on the issue of regulatory (in)stability, that is, government considerations of whether to stick with the status quo or change regulations. It has been shown that BITs can create an incentive for governments to stick with the status quo. Using a similar logic, we now turn to instances where, even after accounting for the greater costs associated with introducing new regulation brought about by the BIT system, the costs of following suboptimal policy exceed the costs of switching policy. While in such cases BITs don't ultimately affect the decision of whether or not to introduce regulations, they may still constrain the content, focus, and intensity of new regulations.

Recall that a government will introduce new regulations when there is *at least one* set of policies for which adjustment costs are less than the costs of following sub-optimal regulation. If there is more than one possible new regulation which meets this criteria, how will the government select which to introduce? Under the cost-benefit framework adopted here, the obvious answer is the government will select the new regulation which produces the greatest net benefits.

Just as the potential cost of losing an investment tribunal influences the government's decision of *whether* to introduce new regulation, so too does this cost generated by the BIT system influence the government's decision of *which* new regulation to introduce. To see why, imagine a scenario in which a government is introducing new regulations to address increased volatility in its financial system. The government is considering two proposals to limit financial volatility, one of which places the greatest burden of adjustment on the commercial banking system,

which is dominated by large foreign firms, the other which places the greatest burden of adjustment on the household banking system, which is dominated by smaller domestic firms. To choose between the two options, the government will weigh the costs and benefits of each, enacting the new regulation which produces the greatest (weighted) net benefits for its various constituents.

As above, the BIT system intervenes in this process by creating greater costs for new regulations which may potentially be declared illegal in international tribunals. In the absence of any BIT agreements, the government may find that the best new regulation imposes the burden of adjustment on the foreign-dominated commercial banking system. With BITs in force, however, the added expected-value costs of possibly losing a tribunal case could incentivize the government to instead adopt regulations which focus on the domestically-dominated household banking system. Thus BITs may constrain and shape government regulatory options not just concerning whether to introduce new regulations but also concerning what form the regulations will take.

The preceding example can be generalized to the statement that BITs incentivize governments to be marginally less inclined to adopt regulations that have a higher likelihood of being declared illegal in an investment tribunal. Put another way, BITs incentivize governments to design regulations such that they are marginally less likely to be declared illegal, even if doing so makes the regulation less effective or creates greater costs for other constituents. The BIT system creates costs for government regulations that might potentially be in violation of treaty terms. A rational government responds to this system by, ceteris paribus, minimizing the expected value of these costs. To minimize the likelihood of losing an arbitration case, governments will adopt marginally more investor-friendly regulatory stances than they otherwise would, including both

fewer regulatory changes and supporting new regulations that minimize the harm to foreign investors.

What does all of this mean for foreign investors? Assume one representative foreign investor, which is one of many constituents toward the government.[11] Recall that a government is willing to adopt a regulatory policy which harms one of its constituents so long as net (weighted) utility for all constituents increases, meaning that in principle for any regulatory change some constituents may be made worse off.

The net effect for a foreign investor of new regulation will be the difference in utility between the status quo and the new regulation – which in principle can be either positive or negative – less the adjustment costs of changing to the new policy. [12] If the net effect of a new regulation for an investor is positive, naturally the investor will not choose to oppose it. If the net effect is negative, an investor protected by a BIT faces the option of pursuing litigation; that is, regulations will only be debated in an international tribunal if they harm the interests of investors. Foreign investors then have a privileged position over other market actors, including domestic investors and consumers. A new regulation that benefits foreign investors but hurts consumers will not be challenged in an investment tribunal; a new regulation that benefits consumers but hurts foreign investors might be.

To focus too closely on which regulations investors actually challenge, however, would be to miss a big part of the picture. While foreign investors' right to take governments to arbitration is the source of their power, the constraining effect of the BIT system on regulation occurs

[11] The model can easily be extended to many foreign investors with no major changes in results.

[12] Note that, while for the government as a whole status quo policy in the post-shock period is, by definition, sub-optimal, it is not necessarily true that status quo policy for an investor is worse following a shock than it was before the shock.

primarily not in arbitration trials but much earlier, when governments avoid enacting regulations because of the *threat* of litigation. Foreign investors do not actually have to challenge every regulation that goes against their interests; the simple fact that they could challenge them will incentivize governments to enact fewer such regulations in the first place. Again, this is a similar logic to how BITs were meant to address outright expropriation: not merely to compensate investors in the event of expropriation, but to change the government's calculus so as to prevent expropriation as well.

Will the effect of constraining regulation of BITs be strong enough to induce greater investment from foreign investors? This deductive model cannot definitively tell us much about this question, however we can form a few suppositions based on its logic. To begin with, the effect is likely to be small and at the margin. If BITs worked by constraining outright government expropriation, then they might be expected to have a transformative effect in attracting FDI, i.e. foreign companies which otherwise would not have invested because they feared expropriation would, due to the protections offered by the BIT, decide to invest. The model suggests the constraint on regulation generated by BITs, conversely, is more likely to have a marginal effect: foreign investors expect countries which have signed many BITs to offer marginally more investor-friendly regulation, and hence will be marginally more likely to choose these countries as hosts for their investments, and to make slightly larger investments when they do.

From Whom Do Bilateral Investment Treaties Attract Investment?

The model above explains how investment treaties could provide a benefit to foreign investors through marginally shifting a government's incentives toward making fewer and more pro-investor regulatory changes. Rationally, then, investors may choose to invest more in developing

countries that have ratified many BITs, because those countries represent marginally greater profit opportunities: foreign investors want to operate in countries in which governments are reluctant to enact regulations that will harm them.

Yet this effect of BITs is likely to matter more for some investors than for others. Specifically, there are two conditions that will influence the extent to which investors value BITs, and thus respond to BITs by increasing investment.

As a starting point, it is logical to assume that the expectation of stable and investor-friendly regulation is of greater value to investors for which regulation and government policy are highly salient to profitability. Government regulations, of course, affect all businesses – all businesses will need to respect the national labour laws and basic corporate tax rates in the countries in which they work, for instance.

But the relevance of government regulatory policy, and especially volatility in government regulatory policy, to profitability varies across companies. As Garcia-Canal and Guillen note, "While regulation has come to affect virtually every sector of the economy, the so-called 'regulated' industries are subject to an unusual degree of intervention and policy risk. In these industries, governments have the ability to dramatically alter the profitability of firms and investment projects."[13]

For example, a banking company must not only respect national labour laws and corporate tax rates, but must also deal with a dense, complex, and evolving set of government financial regulations concerning issues such as how much capital it must hold, what safeguards it must

[13] García-Canal, Esteban and Mauro Guillén, "Risk and the Strategy of Foreign Location Choice in Regulated Industries", *Strategic Management Journal*, Vol. 29, 2008, pp. 1097–1115, p. 1097. The question of which specific industries qualify as 'regulated' is taken up in the following chapter.

put in place when lending funds, and so on. Similarly a mining company may need to adapt to new environmental regulations; if an environmental standard goes from lax to strict, this may instantaneously make an investment project no longer profitable. And in countries where government policy regulates the monopolistic behaviour of utility companies, the profits of a utility company will significantly depend on the rates the company is allowed to charge.

If government policy is more relevant to profitability for some investors than for others, then it stands to reason that these investors will place greater value on an expectation of stable and investor-friendly policy than will others. Thus the first criterion which makes an investor likely to respond to BITs by increasing investment is being highly regulated.

The second criterion relates to whether investors are able to use alternative instruments to achieve similar effects as those of a BIT.[14] To the extent that BITs are substitutable with other legal instruments, BITs themselves are less likely to be of high value to investors. It is argued that a BIT substitute must both include substantive investor protections similar to those of a BIT and include recourse to international arbitration (which rends the substantive protections credible). The possible substitutes for BITs include certain bilateral and multilateral agreements, and, most importantly, project-specific contracts between a state and an investor.[15]

Some preferential trade agreements (PTAs) include investment protection measures, including in some cases investor-state dispute settlement mechanisms which allow them to function very

[14] On the importance for BIT analysts to consider investment treaty alternatives (advice which is almost universally not followed), see Yackee, Jason, "Conceptual Difficulties in the Empirical Study of Bilateral Investment Treaties", *Brooklyn Journal of International Law*, Vol 33 No. 2, 2008, pp. 405-462, p. 437-454.

[15] Political risk insurance (PRI) is not considered a strong substitute for BITs in this study principally because the host state is not a party to a PRI contract, and thus PRI has no influence on the actions of the host state. The model emphasizes how BITs will incentivize states to adopt pro-foreign investor regulatory policies; PRI will not have a similar effect. In other words, while PRI is a strong substitute for BITs' protection against outright expropriation, it is less able to diminish investors' broader concerns surrounding policy risk.

similarly to a BIT. Yet these remain relatively rare: a recent analysis of PTAs found that only a tenth included investor-state independent arbitration.[16] Thus, relative to the 2700+ BITs around the world, there are some 60 PTAs with similar investment protection measures. Of cases registered at ICSID, the basis for invoking ICSID jurisdiction was a trade agreement only six percent of the time.[17] Still, these investment measures in PTAs are becoming increasingly common: the vast majority are from just the last decade.[18] Should the trend of including strong investment protection measures in trade agreements continue, over time they may emerge as important substitutes to BITs.

At the multilateral level, the most important BIT substitute is the Energy Charter Treaty (ECT). It allows signatories to address energy-related issues in investment, trade, transport, and environmental protection (and, like a BIT, includes the right for protected investors to pursue independent dispute settlement). The Energy Charter Treaty is the basis for invoking ICSID jurisdiction in four percent of registered cases at ICSID.[19]

PTAs and the ECT may be important to individual investors who are covered by their investment protection provisions. However, given that there are still relatively few PTAs with strong investment protection, and that the ECT only covers one industry, the total number of investors for which these bilateral and multilateral agreements are relevant is likely small, especially

[16] Baccini, Leonardo, Andreas Dür, Manfred Elsig, and Karolina Milewicz, "The Design of Preferential Trade Agreements: A New Dataset in the Making", Staff Working Paper ERSD-2011-10 (Geneva: World Trade Organization, 2011).

[17] International Centre for Settlement of Investment Disputes (ICSID), *Caseload Statistics – Issue 2013-1* (Washington, DC: The World Bank, 2013). Four percent of cases arise from the North American Free Trade Agreement (NAFTA), one percent from the Oman-U.S. Free Trade Agreement, and one percent from the Dominican Republic-U.S.-Central America Free Trade Agreement (DR-CAFTA).

[18] Baccini et al, "The Design of Preferential Trade Agreements". See also Büthe, Tim and Helen Milner, "Institutional Diversity in Trade Agreements and Foreign Direct Investment: Credibility, Commitment, and Economic Flows in the Developing World, 1971-2007", APSA 2011 Annual Meetings Paper, 2011.

[19] ICSID, *Caseload Statistics*.

compared to the number of investors that have access to project-specific contracts or BITs. For this reason, the remaining discussion focuses primarily on contracts as the main substitute to BITs.

A project-specific contract between an individual investor and a government, known as a "state contract", may be able to serve a similar function for an investor as a BIT.[20] If an investor has a contract with the government that includes BIT-like provisions and recourse to independent, international tribunals in the event of a dispute, then any benefits offered by a BIT will be largely redundant. As Yackee has convincingly demonstrated, such contracts predate the rise of BITs, and have continued to be in use in the BIT era, belying the myth that BITs are the only way governments can credibly commit to investors. [21]

Two features of state contracts may allow them to substitute for BITs: their content and their enforceability. Due to privacy clauses it is extremely difficult for outsiders to know much about the content of such contracts, yet in principle it's worth noting that they could include almost any clause which the two parties found mutually agreeable. Thus anything covered in a BIT could also be addressed in a state contract, in addition, of course, to much more specific clauses related to the details of the project. Of particular importance for the present discussion is the inclusion of so-called "stabilization clauses" in state contracts, which are designed to assure

[20] For an overview of the issues involved, see United Nations Conference on Trade and Development (UNCTAD), *State Contracts: UNCTAD Series on Issues in International Investment Agreements* (New York: UNCTAD, 2004).

[21] See Yackee, Jason, "Pacta Sunt Servanda and State Promises to Foreign Investors Before Bilateral Investment Treaties: Myth and Reality", *Fordham International Law Journal*, Vol. 32 No. 5, 2008, pp. 1550-1613; as well as Yackee, Jason, "Do We Really Need BITs? Toward a Return to Contract in International Investment Law", *Asian Journal of WTO & International Health Law and Policy*, Vol. 3 No. 1, March 2008, pp. 121-146. Yackee was writing primarily against Guzman, Andrew, "Why LDCs Sign Treaties that Hurt Them: Explaining the Popularity of Bilateral Investment Treaties", *Virginia Journal of International Law*, Vol. 38, 1998, pp. 639-688, which argues that in the absence of BITs investors would be forced to rely on the domestic law of host states. Since states could change these laws at their discretion, there was no one to independently enforce contracts between states and foreign investors, and thus states could not create credible contracts with investors.

investors that the policy and regulatory framework in place at the time of investment persists throughout the lifetime of the project.[22] Such clauses demand that governments not change any laws or regulations that would affect the profitability of the project, or ensure that investors receive compensation if they must adapt to new regulations.[23] One study found that 44 out of a sample of 75 contracts between developing countries and foreign investors included some form of stabilization clause.[24] While it is impossible to know how representative this is, it suggests the use of stabilization clauses may be common.[25]

What gives state contracts credibility and effectiveness is their recourse to international arbitration and the enforceability this entails.[26] Contracts can include independent dispute

[22] Stabilization clauses have gained some notoriety as a number of NGOs have argued they prevent developing countries from enacting legitimate environmental and labour regulations. For a discussion of the issues, see International Finance Corporation (IFC), *Stabilization Clauses and Human Rights: A research project conducted for IFC and the United Nations Special Representative of the Secretary-General on Business and Human Rights* (Washington: The World Bank, 2009).

[23] For example, one stabilization clause from a contract for an extractive project in Sub-Saharan Africa read:

> The GOVERNMENT hereby undertakes and affirms that at no time shall the rights (and the full and peaceful enjoyment thereof) granted by it under this Agreement be derogated from or otherwise prejudiced by any Law or by the action or inaction of the GOVERNMENT, or any official thereof, or any other Person whose actions or inactions are subject to the control of the GOVERNMENT. In particular, any modifications that could be made in the future to the Law as in effect on the Effective Date shall not apply to the CONCESSIONAIRE and its Associates without their prior written consent, but the CONCESSIONAIRE and its Associates may at any time elect to be governed by the legal and regulatory provisions resulting from changes made at any time in the Law as in effect on the Effective Date.
>
> In the event of any conflict between this Agreement or the rights, obligations and duties of a Party under this Agreement, and any other Law, including administrative rules and procedures and matters relating to procedure, and applicable international law, then this Agreement shall govern the rights, obligations, and duties of the Parties.

Cited in ibid, p. 6.

[24] Ibid. Interestingly, almost no investor-host contracts in the sample signed by OECD countries included stabilization clauses.

[25] Ibid, p. 13. The study notes at length that its sample should not be considered random or representative of all state contracts.

[26] Not all state contracts include international arbitration clauses; some rely on domestic courts. Without a recourse to independent international arbitration, such contracts would not be strong substitutes for BITs. Many BITs include so-called "umbrella clauses", which demand states abide by all other contractual agreements. The interpretation of such umbrella clauses in international arbitration – and specifically the question of whether or not an investor can challenge a state in international arbitration accusing a state of

settlement provisions very similar to those found in a BIT, allowing for arbitration through ICSID, the International Chamber of Commerce's court of arbitration, or another venue. Thus the strong enforceability provisions discussed above in the context of BIT rulings – notably the right to seize commercial assets in any country which has signed the ICSID or New York Conventions – can also apply to arbitration awards based in state contracts.

How often do investors use such contracts as substitutes for BITs? Unfortunately it is difficult to answer this question, as the contracts are typically confidential, and thus it is difficult for researchers to obtain objective and comprehensive data on their use. Anonymised data reveal that of the 796 requests for arbitration filed with the International Chamber of Commerce in 2011, 10.2% involved a state or parastatal entity.[27] And in a fifth of current cases registered at ICSID , the basis for invoking ICSID jurisdiction is an investment contract between the investor and the host-state.[28] This is, of course, just the tip of the iceberg, as we cannot know how many state contracts proceed without disputes, or which disputes are settled short of formal arbitration.

While it is impossible to precisely know how widely state contracts are used – and particularly whether or not they include stabilization clauses – it is possible to make some general assumptions on which investors are most likely to use state contracts. The intuition, again, is very simple. Some investors are directly involved in business with the state. For example, a

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breaching a contract which itself specified domestic dispute settlement – is an open legal question, with conflicting arbitration decisions. See Voss, Jan Ole, *The Impact of Investment Treaties on Contracts Between Host States and Foreign Investors* (Leiden: Martinus Nijhoff Publishers, 2010). Nevertheless, for the purpose of the model, if an investor requires a BIT to access international arbitration, then it is assumed it has no other substitutes.

[27] International Chamber of Commerce (ICC), *Statistics – ICC Arbitration in 2011* (Paris: ICC, 2012). The majority of cases handled by this arbitration court are between two private parties. It should also be noted that some of the state or parastatal entities involved in arbitration may be state-owned enterprises operating abroad.

[28] ICSID, *Caseload Statistics*.

foreign oil company which is going to drill on publicly-owned land will need a contract with the state, at the bare minimum to determine what price will be paid for the oil (and almost certainly to detail many other aspects of the project). Similarly any foreign investment in an electric or water company which arises out of a process of privatization – as has occurred in many utilities industries in developing countries since the 1980s – will necessarily involve a state contract. Such investors, then, are likely to have the opportunity to request BIT-like clauses, or even stronger stabilization clauses, within a state contract, as the contract will be necessary in any case.

Of course not all foreign investors primarily do business with the state; many will focus exclusively on the private sector. This includes investors in some highly regulated industries, such as finance. A foreign bank likely needs some form of license or official approval to operate, and will be significantly affected by government policies regulating the financial sector, but its interaction with the state may continue to be at arm's length and not detailed in a specific contract.

The value a foreign investor places in BITs' ability to provide stable, pro-investor regulation should be inversely related to the ease with which the investor could obtain similar (or even more favourable) terms through contracting directly with the state. For investors who already require a contract with the state, then adding BIT-like language may not be terribly costly. However, if an investor does not already have a contract with the state, then the transaction costs involved in creating one explicitly for the purpose of achieving BIT-like provisions could be high.

Moreover, incomplete contracting problems may be greater for some investors than for others. For investors in industries with particularly dense regulatory regimes, such as finance, it may be difficult if not impossible for the state and the investor to perfectly specify all possible future

regulatory changes which are permissible or impermissible. And it is particularly in such dense regulatory environments where states may be most reluctant to grant investors catch-all stabilization clauses. The greater the scope of regulations a government agrees not to alter (at least not without compensation), the greater the sovereignty costs entailed in such a stabilization clause.

While contracts are an important alternative to BITs for investors seeking a favourable regulatory environment, it is important to note that they are not perfect substitutes. To begin with, the actual terms in any contract concerning regulatory changes may be more or less strict than those available in a BIT. Additionally, it is possible that both investors and states will view contracts as less legally binding than treaties, if the perceived reputational costs of breaching a treaty are higher than those associated with breaching a contract. Even investors with state contracts, then, may place some benefit in also being protected by a BIT, and, if and when an investor decides to pursue litigation against a state, it may choose to base its claim either in the terms of the contract or those of the BIT. The key analytical point, however, is that the *marginal* benefit an investor with a state contract receives from a BIT – the value it places in a BIT above and beyond the protections it receives from a contract – will be considerably lower than the marginal benefit an investor with no enforceable state contract receives from a BIT.

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In summary, then, a BIT system with wide latitude for what regulations can be challenged in arbitration creates a systemic bias in government regulatory decision making in favour of foreign investors. Governments, which rationally take into account the possible cost of losing an investment tribunal, are incentivized to make fewer regulatory changes that harm investors' interests. This effect of BITs will be most valued by investors for which the regulatory

environment is highly salient to profits, and which find it costly or impossible to use alternate BIT-like legal instruments.

A number of specific empirical hypotheses can be derived from this deductive model. One is that governments that have ratified many BITs should enact fewer regulatory changes, and that these changes should be more investor-friendly. Thus one test of the model would be to use regression analysis to test whether there is a relationship between BITs and regulation. Developing high-quality, cross-country measures of regulation, however, presents a number of challenges. Governments design regulations to address particular issues and market failures in light of their specific country contexts; this fact makes it difficult to compare regulations across countries. The Organization for Economic Cooperation and Development (OECD) has made some advances in creating cross-country regulatory measures for advanced countries, but to date these efforts have not extended to developing countries.[29] Accurately measuring regulations is likely to prove particularly difficult in developing countries, as there is often considerable disparity between de jure regulations officially in place and the de facto regulations which firms actually face.[30] For all of these reasons, large-N econometric studies of BITs and regulation may not prove particularly fruitful, at least until better quantitative measures of regulation are developed. Case studies, however, which look closely at whether and how a particular country or set of countries is influenced by its investment treaties (or lack thereof) in setting regulatory policies may prove a fruitful line for future research.

Given the difficulty in measuring regulation, an alternative approach is to look directly at foreign investment data, as the majority of empirical studies seeking to assess the effects of BITs have

[29] Organization for Economic Cooperation and Development (OECD), *Product Market Regulation Database* (Paris: OECD, 2011).

[30] Hallward-Driemeier, Mary, Gita Khun-Jush and Lant Pritchett, "Deals versus Rules: Policy Implementation Uncertainty and Why Firms Hate It", World Bank Policy Research Working Paper 5321 (Washington: The World Bank, 2010).

done. While there are still challenges in accurately measuring FDI (further discussed in the following chapter), it is far easier to capture than regulatory policies. The model presented here suggests a number of specific empirical hypotheses regarding FDI.

One is that the effect of BITs on FDI is likely to be small. As noted above, BITs' effect in addressing policy risk through constraining regulation is marginal, not transformative. Investors expect governments to adopt marginally more pro-investor regulation, and this is likely to be but one of many factors influencing investors' decisions, and unlikely one of the most important. If, as Yackee has noted, we imagined a world without BITs, we would not see all foreign investment disappear.[31] BITs may help promote FDI at the margin, but it is not the case that investors believe their assets will be expropriated in the absence of a BIT, and thus demand a BIT as a condition for investing. Moreover, since at least some investors face a number of alternatives to BITs, their effect on aggregate FDI should be even lower.

This implication of the model appears to be borne out by the mixed findings of earlier empirical studies. The relatively weak econometric evidence for a positive effect of BITs on FDI is consistent with the expectations of the model. Similarly, survey evidence suggesting investment professionals place little stock in BITs is consistent with the treaties having only a marginal effect on government regulation, rather than an overwhelming effect in preventing government expropriation.

The most interesting aspects of this model, however, point to more specific empirical hypotheses than those which have to date been addressed in the literature. Most importantly, the model suggests that BITs should have the greatest effect for one particular group of

[31] Yackee, "Do We Really Need BITs?", p. 123.

investors: those that are highly regulated and that find it costly or impossible to achieve BIT-like provisions through alternate legal instruments. The following chapter tests this hypothesis.

Chapter IV: Empirical Evidence: BITs and Industry-Specific FDI Flows

The model developed in the previous chapter reveals how investment treaties can incentivize governments to pursue more foreign investor-friendly regulation than they otherwise would. It also suggests that, if this indeed occurs, then we should expect to observe BITs inducing investment from one particular group of investors: those that particularly value investor-friendly regulation and that find it costly or impossible to achieve similar aims through other legal instruments.

How could we test for such a relationship? This chapter presents some original empirical evidence based on the supposition that the value foreign investors' place on BITs varies systematically based on their industry. Specifically, the two criteria the theory suggests should lead an investor to value a BIT – high regulation and a luck of alternative similar legal instruments – vary by industry: some industries are more highly regulated than others, and state contracting is more common in some industries than in others. By combining these two factors, we can identify the industries in which BITs should be expected to increase FDI.

No previous study has looked at the cross-industry differences in the effect of BITs on FDI flows.[1] Yet there is considerable precedent in looking at cross-industry differences in FDI in order to better understand the dynamics and drivers of foreign investment. As Richard Caves notes in his sweeping assessment of multinational enterprises (MNEs), many early empirical studies of FDI

[1] Jandhyala, Srividya and Robert Weiner, "Do International Investment Agreements Protect Investment? Petroleum Evidence", Working Paper, 26 August 2012, which looks at whether BITs increase the price foreign investors pay for oil and gas reserves, is, to the best of the author's knowledge, the only paper to look at the effect of BITs at the industry level. No study has looked at multiple different industries.

looked to exploit variation in the structural traits of industries to assess theories explaining the formation of MNEs; as he describes this line of reasoning, "if attribute x promotes the formation of MNEs, and successful firms in industry A have a lot of x, then MNEs should be prevalent in industry A".[2] For example, if foreign investment is driven by a need to maximize the value of proprietary assets which cannot easily be traded in markets, then industries in which proprietary assets are important – as evidenced by high spending on R&D and advertising – should exhibit relatively greater foreign investment. In a similar vein, more recently, Pinto and Pinto focus on industry-specific FDI data to assess whether the ideological orientation of governments of OECD countries affects the industry allocation of FDI.[3]

Research on the effects of BITs has to date avoided industry-specific data for a simple reason: BIT studies are overwhelmingly interested in FDI into developing countries, and until now industry-specific FDI data has only been available for developed countries.[4] Today, however, thanks to new data from the International Trade Centre, we can now look at industry-specific FDI in developing countries. This more nuanced and fine-grained data allow us to move beyond earlier studies asking "do BITs work?" to exploit variation in the structural traits of industries in order to address the question "*how* do BITs work?".

[2] Caves, Richard, *Multinational Enterprise and Economic Analysis*, 3rd edition, (Cambridge: Cambridge University Press, 2007), p. 8.

[3] Pinto, Pablo and Santiago Pinto, "The Politics of Investment Partisanship: The sectoral allocation of foreign direct investment", *Economics and Politics*, Vol. 20 No.2, 2008, pp. 216-254.

[4] The emphasis on developing countries is founded in the assumptions that BITs are signed (primarily) between an advanced, capital-exporting country and a developing, capital-importing country, and that the purpose of BITs is to increase investment flows to developing countries. See also the discussion on the substitutability of developing countries as destinations for FDI in Guzman, Andrew, "Why LDCs Sign Treaties that Hurt Them: Explaining the Popularity of Bilateral Investment Treaties", *Virginia Journal of International Law*, Vol. 38, 1998, pp.639-688, p. 675.

Data and Model

Data for the dependent variable – FDI by industry – are drawn from the International Trade Centre's (ITC) *Investment Map* database, a recently launched product which has not yet been analyzed in academic research.[5] Unlike other databases of FDI flows typically used in BIT studies, such as those produced by the United Nations Conference on Trade and Development (UNCTAD) and the Organization for Economic Cooperation and Development (OECD), the ITC database disaggregates FDI flows into three sectors (primary, secondary, and tertiary) and 31 industries. This thesis exploits the variation in FDI across industries to provide evidence about how BITs work.

The sample of countries to be analyzed is produced by dropping any country in the ITC database which a) does not have data at the industry level or b) is a high income OECD country. This leaves a sample of 71 developing countries. The ITC database covers the years 2001 to 2010, and thus data exists for a maximum of 10 years for each country, however not every country has data available for every year; the average number of data points per country is 6.5. The data is converted from current US$ to constant (ie inflation-adjusted) 2000US$ using the US GDP deflator.

The data is monadic rather than dyadic, i.e. it does not include information on the country of origin of foreign investment. While dyadic data would allow a more detailed analysis of the effects of BITs on FDI, unfortunately such data is not (yet) available at the industry-level.

Table 4.1 presents some basic descriptive statistics for the dependent variable. On average, countries in the dataset received $4 billion in FDI per year, of which 13 percent was in primary

[5] International Trade Centre, *Investment Map Database* (Geneva: International Trade Centre, 2012).

industries, 37 percent in secondary industries, and 48 percent in tertiary industries. The fifteen industries with the most FDI – collectively accounting for 86 percent of total FDI – are also listed. The fifteen largest industries include two in the primary sector (oil & gas and mining), six in the secondary sector (unspecified secondary; food, beverages & tobacco; chemicals; electronics; vehicles; and machinery & equipment), and seven in the tertiary sector (business services; finance; wholesale & retail sales; transportation, storage & communications; utilities; construction; and hotels & restaurants).

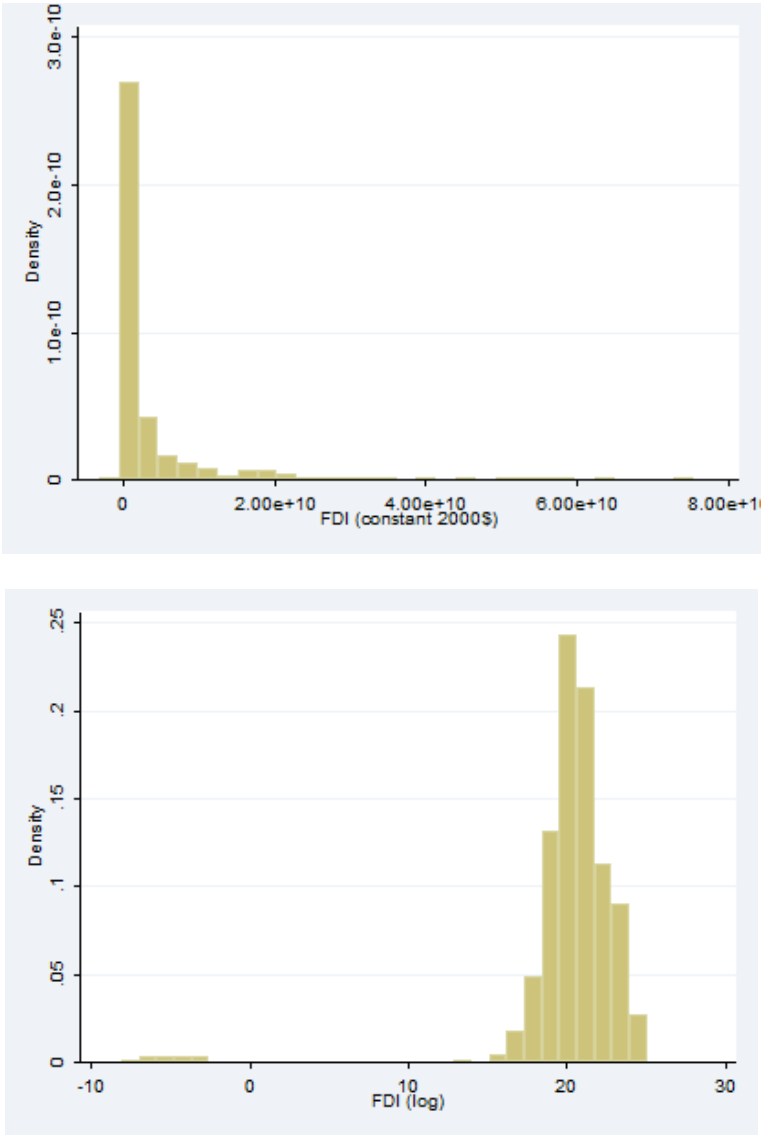
Table 4.1: FDI Descriptive Statistics

	Mean	Standard Deviation
Total FDI	4,002,566,696	9,335,027,350
Sectors		
Primary	502,406,310	1,307,759,181
Secondary	1,469,128,275	4,982,570,318
Tertiary	1,919,025,237	4,207,577,685
Unspecified	113,775,985	436,806,460
Largest Industries		
Unspecified Secondary	734,929,957	3,875,707,073
Business Services	534,118,393	2,092,117,206
Finance	474,582,546	1,347,717,459
Oil & Gas	251,713,641	969,077,935
Wholesale & Retail	241,210,815	582,415,259
Transportation, Storage & Communications	232,221,482	613,425,760
Mining	196,498,914	647,337,767
Utilities	129,596,324	366,009,608
Food, Beverages & Tobacco	121,253,710	519,146,088
Construction	120,219,096	426,138,012
Chemicals	106,529,566	431,056,710
Electronics	94,891,925	587,954,728
Vehicles	79,156,752	364,552,857
Machinery & Equipment	66,721,064	324,400,768
Hotels & Restaurants	61,761,239	343,032,701

Data of FDI flows tend to be highly skewed, partially due to the fact that they are characterized by a few large transactions rather than many small transactions. For this reason, following convention in FDI studies, when running regressions I use a log transformation of the dependent

variable, so that the data more closely follows a normal distribution.[6] Figure 4.1 shows histograms of the untransformed and log transformed data for total FDI.

Figure 4.1: Histogram of Untransformed and Log Transformed FDI



[6] So as to avoid transforming data points which are 0 to missing data (as the log of zero is undefined), I adopt the following formula, following Tobin, Jennifer and Susan Rose-Ackerman, "When BITs have some bite: The political-economic environment for bilateral investment treaties", *The Review of International Organizations,* Vol. 6 No. 1, 2011, pp. 1-32:

$$Log\ FDI = \log(1 + |FDI|)\,, if\ FDI \geq 0$$

$$Log\ FDI = -\log(1 + |FDI|)\,, if\ FDI < 0$$

The key independent variable of interest is the total number of BITs a country has ratified, sourced from the UNCTAD BIT database.[7] In the econometric literature on BITs and FDI there is a divide between scholars who analyze the number of BITs signed or ratified and those who analyze whether specific investments are covered by a BIT.[8] For this study the former approach is adopted, not least because the lack of dyadic FDI data by industry makes it impossible to distinguish which FDI is covered by a BIT and which is not, meaning it is only possible to test the relationship between FDI received from all countries and overall BIT adoption.

The focus on the number of BITs ratified is also substantively justified by the theoretical issues under consideration. Simmons demonstrates that the more BITs a country has ratified, the more likely it is to be appear as a defendant at ICSID.[9] As the theoretical model emphasizes how this potential of being sued affects government regulatory actions, the number of BITs ratified is an appropriate measure of the constraining power of BITs.

Additionally, as BITs have proliferated around the world, they increasingly function as a quasi-multilateral regime, rather than purely bilateral instruments.[10] With most BITs including "most

[7] United Nations Conference on Trade and Development (UNCTAD), *Investment Instruments Online: Bilateral Investment Treaties*, (New York: UNCTAD, 2012).

[8] Those who look at the total number of BITs include Tobin and Rose-Ackerman, "When BITs have some bite"; Büthe, Tim and Helen Milner, "Bilateral Investment Treaties and Foreign Direct Investment: A Political Analysis", in Karl Sauvant and Lisa Sachs (eds.), *The Effect of Treaties on Foreign Direct Investment* (Oxford: Oxford University Press, 2009); and Neumayer, Eric and Laura Spess, "Do bilateral investment treaties increase foreign direct investment to developing countries?", *World Development,* Vol. 33 No. 10, 2005, pp. 1567–1585. Those who look at whether specific FDI flows are covered by a BIT include Jandhyala and Weiner, "Do International Investment Agreements Protect Investment?"; Kerner, Andrew, "Why Should I Believe You? The Costs and Consequences of Bilateral Investment Treaties", *International Studies Quarterly*, Vol. 53, 2009, p 73–102; and Aisbett, Emma, "Bilateral Investment Treaties and Foreign Direct Investment: Correlation Versus Causation", in Karl Sauvant and Lisa Sachs (eds.) *The Effect of Treaties on Foreign Direct Investment*, (Oxford: Oxford University Press, 2009).

[9] Simmons, Beth, "The International Investment Regime since the 1980s: A Transnational "Hands-Tying" Regime for International Investment", paper prepared for the 2011 Annual Meeting of the American Political Science Association, September 2011.

[10] See Schill, Stephan, *The Multilateralization of International Investment Law* (Cambridge: Cambridge University Press, 2009).

favoured nation" clauses, which demand that the signatory receive as favourable treatment as any other BIT partner, and with multinational corporations increasingly "forum shopping" amongst BITs to choose the most favourable treaty through which to pursue litigation, BITs can collectively be understood as an overlapping network of investment protection. Under this view, the total number of BITs a country has ratified is a measure of how deeply countries are enmeshed in the BIT multilateral regime; the more entangled a country is in the BIT regime, the more likely it is to constrain its government.

The number of ratified BITs ranges from 0 to 95, and averages slightly over 23. The greatest increase in the number of ratified BITs under the period studied occurred in India, from 28 to 63. India's experience, however, is far from customary; the median increase in the number of BITs ratified is 4. Countries in Eastern Europe and East Asia tend to have the most BITs in effect; countries in Sub-Saharan Africa and Latin America tend to have the fewest BITs in effect.

Rather than focusing on ratified BITs, an alternative independent variable is the number of BITs a country has signed (but not necessarily ratified). Again, the decision to focus on ratified BITs is driven by substantive theoretical concerns: as the model advanced emphasizes how treaties constrain governments, ratified treaties are a more relevant indicator.[11] In any case, regressions using the signed BIT variable instead of the ratified BIT variable produced broadly similar results, and in regressions which included both the number of ratified BITs and the number of pending BITs (i.e. those signed but not ratified), the latter had no significant effects.

In addition to the number of BITs, I also include a number of control variables relevant to FDI flows based on earlier empirical and theoretical studies of the determinants of foreign

[11] On this point see also Yackee, Jason, "Conceptual Difficulties in the Empirical Study of Bilateral Investment Treaties", *Brooklyn Journal of International Law*, Vol 33 No. 2, 2008, pp 405-462, p. 425.

investment.[12] The level of GDP per capita is included, under the assumption that richer economies may attract more FDI (although for some industries the impact of higher wages may dissuade foreign investment). The (log of) population is included, under the assumption that countries with larger domestic markets may attract more FDI. Economic growth is included, under the assumption that rapidly expanding economies may attract more FDI. Trade openness (exports and imports divided by GDP) is also included, though the expected direction of the effect is unclear: economies which are integrated into the global economy may attract more FDI for export production ("vertical investment"), whereas closed economies may attract more FDI aimed at serving the domestic market ("horizontal investment"). These explanatory variables, including the number of BITs in force, are all lagged one period in light of the possibility of reverse causality. Based on the political science theory that expropriation should be less of a risk in countries with stronger constraints on arbitrary government action, I also include the "executive constraints" variable from the Polity IV database, which measures constraints on executive authority.[13] A dummy variable for whether or not a country is home to proven oil or gas reserves is also included, in order to capture the fact that countries without such reserves are unlikely to receive investment in the oil & gas industry.[14] Finally, a full set of year dummies is included, to account for any time-sensitive global shocks, including notably the financial crisis of 2008-09.

Using this dataset, I run a series of pooled ordinary least squares (OLS) regressions, separately testing the effect of BITs on total FDI, FDI for the three sectors of the economy, and FDI for the 15 largest industries. Given the fact that standard errors are likely to be correlated within

[12] Unless otherwise specified, the data for control variables are from World Bank, *World Development Indicators Database* (Washington: World Bank, 2012).

[13] Marshall, Monty and Keith Jaggers, *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2011*, 2012.

[14] Data from British Petroleum, *BP Statistical Review of World Energy 2012*, British Petroleum, London, 2012.

countries (discussed further below), I use robust standard errors clustered at the country level. The model is represented by the equation

$$FDI_{it} = \alpha + \gamma_1 BIT_{i(t-1)} + \gamma_1 GDPPC_{i(t-1)} + \gamma_2 Population(log)_{i(t-1)} + \gamma_3 GDPgrowth_{i(t-1)} + \gamma_4 TradeOpenness_{i(t-1)} + \gamma_5 ExecutiveConstraints_{it} + \gamma_6 OilReserves_{it} + \delta_t + \epsilon_{it}$$

where δ represents a series of time dummies for each year.

Results

As a first step, tables 4.2 and 4.3 present regression results using total FDI and sectoral FDI as the dependent variables.[15] The coefficient on bilateral investment treaties is not significant is any of these regressions. In both the secondary and tertiary sectors, which collectively account for over three quarters of total FDI, the coefficient is positive but falls short of statistical significance, while in the primary sector the coefficient has an insignificantly small negative value. These results are in line with the mixed findings of earlier studies, and suggest that at the level of total aggregate investment, or the sectoral level, the effect of BITs, if there is any, is very modest.

Looking at the control variables, GDP per capita and population are both found to be highly significant predictors of total FDI, secondary FDI, and tertiary FDI; more developed countries and more populous countries attract more investment. The effects of growth, trade openness, and executive constraints are less clear cut. None are significant at the aggregate level; growth appears to have a positive effect on primary FDI, trade openness a negative effect on primary FDI, and executive constraints some positive effects on secondary and tertiary FDI. These results

[15] Standard errors are presented in italics below each coefficient; asterisks denote standard thresholds of statistical significance.

are also in line with past studies, which have generally found that level of development and market size are more important determinants of FDI than current economic conditions or political characteristics.[16] The presence of oil and gas reserves has a positive effect on primary FDI but a negative effect on secondary and tertiary FDI, perhaps suggesting that countries that rely on the oil & gas industry are less likely to diversify inward investment toward other sectors. The year dummies (not listed in the table) are not individually significant but are collectively; the clearest effect of the year dummies is a notable negative effect following the global financial crisis.

Table 4.2: Total FDI

	Total FDI	
BITs	0.0137	
	0.0111	
GDP per capita	0.0002	***
	0.0001	
Population log	0.8062	***
	0.1965	
Growth	0.0577	
	0.0425	
Trade openness	0.0071	
	0.0049	
Executive constraints	0.1180	
	0.1602	
Oil reserves	-0.2892	
	0.6547	
n	*69*	
N	*446*	
R-squared	*0.169*	
** = statistically significant at 10 percent*		
*** = statistically significant at 5 percent*		
**** = statistically significant at 1 percent*		

Table 4.3: FDI by Sector

	Primary		Secondary		Tertiary	
BITs	-0.0122		0.0332		0.0323	
	0.0224		*0.0263*		*0.0219*	
GDP per capita	0.0001		0.0004	**	0.0004	***
	0.0001		*0.0002*		*0.0001*	
Population log	0.4292		2.0662	***	1.8105	***
	0.2744		*0.4747*		*0.4720*	
Growth	0.1914	**	-0.0674		-0.0094	
	0.0930		*0.1314*		*0.1581*	
Trade openness	-0.0327	**	0.0157		-0.0021	
	0.0133		*0.0122*		*0.0106*	
Executive constraints	0.1396		0.5743	*	0.6660	**
	0.2436		*0.3433*		*0.3267*	
Oil reserves	1.8325	*	-3.0080	**	-3.1888	**
	1.0922		*1.4710*		*1.3242*	
n	69		69		69	
N	446		446		446	
R-squared	0.1087		0.2476		0.2804	
** = statistically significant at 10 percent*						
*** = statistically significant at 5 percent*						
**** = statistically significant at 1 percent*						

[16] See, for example, Blonigen, Bruce and Jeremy Piger, "Determinants of Foreign Direct Investment", National Bureau of Economic Research Working Paper No. 16704, January 2011.

We turn now to the key results of interest, those at the industry level. The central empirical hypothesis that derives from the model in the previous chapter is that any effect of BITs on FDI should be concentrated in highly regulated industries in which BIT alternatives, most importantly state contracts, are costly or impossible. Before looking at the regression results, then, we must first consider which industries meet these criteria.

Start with the issue of high regulation. It is difficult to create an objective and universal list of highly regulated industries, not least because the intensity of regulation of particular industries varies from country to country.[17] Nevertheless, it is possible to generate a list of industries which tend to be highly regulated in most developing countries most of the time. [18]

Finance industries are highly regulated in almost every country, both in the interests of protecting consumers and to limit the likelihood and/or severity of a financial crisis. Similarly, utilities also tend to highly regulated, as they are typically operated as monopolies; given the potential for companies to exploit monopoly pricing power, prices are often closely controlled by governments. Telecommunications, which in many countries is marked by monopolistic or at least highly concentrated market power, is often highly regulated. High-skilled business service industries such as legal services, accounting, and real estate tend to be highly regulated; indeed, some of these industries are effectively created by government regulation as, for example, the demand for professional auditing companies would likely be virtually non-existent if

[17] As noted toward the end of the previous chapter, there are no good quantitative indices of cross-industry regulatory measures in developing countries which would allow for a more rigorous classification of industries by regulatory intensity.

[18] To the best of the author's knowledge, the only other paper to study FDI in highly regulated industries in developing countries (in this case Latin America) focused on five industries: banking, electricity, water, oil & gas, and telecommunications. See García-Canal, Esteban and Mauro Guillén, "Risk and the Strategy of Foreign Location Choice in Regulated Industries", *Strategic Management Journal*, Vol. 29, 2008, pp. 1097–1115.

governments did not require public companies to publish certified audits of their financial statements.[19] Extractive industries, including oil and gas and mining, are often highly regulated, particularly through environmental regulations and social regulations designed to protect the rights of indigenous people.[20] Transportation industries tend to be highly regulated, for safety reasons, because the government is often involved in the industry, and because they are sometimes run as monopolies (particularly in the case of public transportation, such as metro systems). Regulation is generally less salient to profitability in manufacturing industries than in extractive or high-skilled services industries, but if the manufacturing involves particularly dangerous or polluting materials, regulation may be high. [21]

Of this list – finance, utilities, telecommunications, business services, oil & gas, mining, and transportation – in which industries are investors likely to have recourse to BIT substitutes through state contracts? Recall that state contracts are most likely to be used in industries in which the investor has a direct business relationship with the state. In natural resource industries FDI entry is almost always initiated by a state contract detailing the terms of the agreement for extraction between a multinational corporation and the state, the owner of the natural resources in the ground. [22] Thus oil & gas and mining are the industries in which state contracts are most likely to be present.[23] In addition to natural resources, state contracts are

[19] Thanks to Jonathan Bonnitcha for raising this point in conversation.

[20] Canel, Eduardo, Uwafiokun Idemudia, and Liisa North, "Rethinking Extractive Industry: Regulation, Dispossession, and Emerging Claims", *Canadian Journal of Development Studies*, Vol. 30, No.1, 2010, pp. 5-25. Note this isn't a comment that they are highly regulated relative to how they *should* be regulated, but rather relative to other industries.

[21] Less it appear that this list covers almost all economic activity, it is important to note that there are many more industries which are not highly regulated, including almost all manufacturing industries and most lower-skill services industries, such as retail, hotels, and restaurants.

[22] United Nations Conference on Trade and Development (UNCTAD), *State Contracts: UNCTAD Series on Issues in International Investment Agreements* (New York: UNCTAD, 2004), p. 3.

[23] UNCTAD, *State Contracts,* p. 16.

highly likely to be present in utilities.[24] In these industries foreign investors are likely to enter the market through a privatization process, in which a contract is necessary for the transfer of assets, or through a public-private partnership (PPP), in which a contract is necessary to detail the terms of the agreement.[25] In the transportation and telecommunications industries, where investors are providing public services this is likely to involve a state contract – often through a PPP – however it is also possible some investors in these industries may be in a purely private line of business, and not need a state contract.[26]

The highly regulated industries in which state contracts appear least likely to be used are finance and business services. In these industries the state is unlikely to be the primary client of a foreign investor. A large banking corporation is unlikely to enter a foreign market only to serve as a bank to the government; its clients will likely include consumers and businesses located in the host country and abroad. Similarly, in these industries incomplete contracting problems may be particularly acute: if business operations are evolving more rapidly in finance than, say, water provision, then it may be more difficult to estimate which future government policies and regulations will be relevant, rendering state contracts impossible. In the one extant empirical study of state contracts, a sample of 76 state contracts were analyzed, none of which were in the finance or business services industries.[27]

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[24] Yackee notes that state contracts are especially likely to be found in the natural resource, public utilities, and infrastructure sectors, as well as for any manufacturing companies which need contracts to receive special treatment, such as tax incentives or the right to operate in an export-processing zone. Yackee, "Conceptual Difficulties", p. 450.

[25] On privatization, see Mukherjee, Arijit and Kullapat Suetrong, "Privatisation, strategic foreign direct investment and the host country welfare", University of Nottingham Research Paper 2007/21, 2007. On public-private partnerships, see, for example, Marin, Philippe, *Public-Private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries*, World Bank, Washington, 2009.

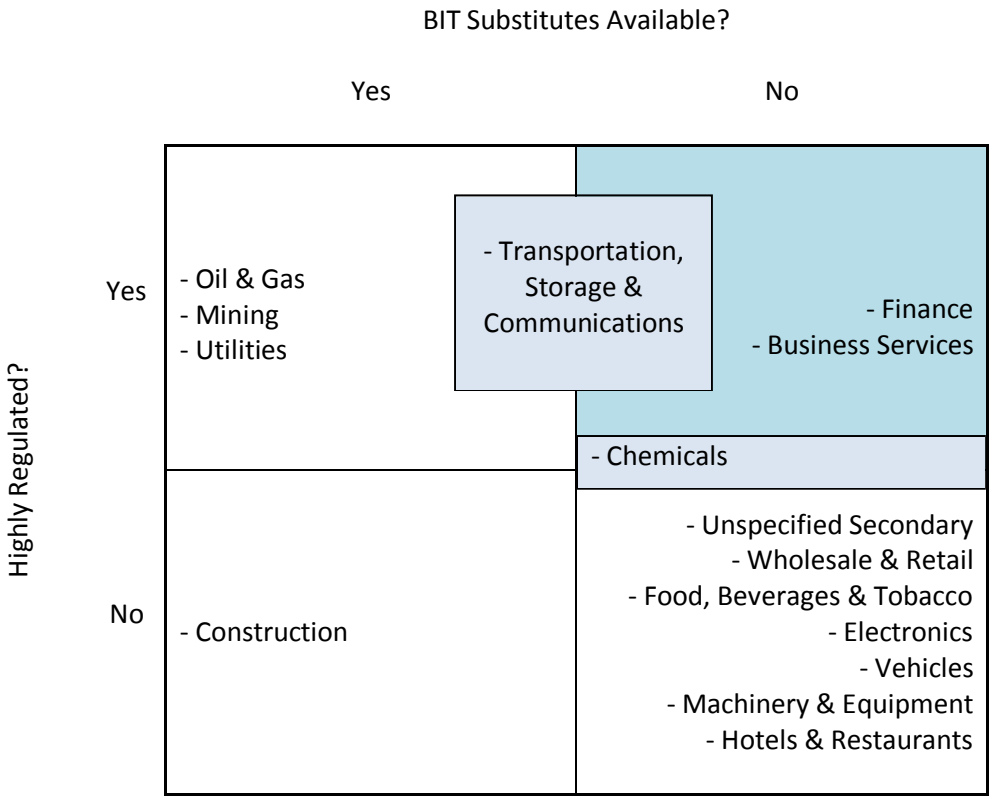
[26] World Bank, *PPP in Infrastructure Resource Center for Contracts, Laws and Regulation*, World Bank, Washington, 2013.

[27] International Finance Corporation (IFC), *Stabilization Clauses and Human Rights: A research project conducted for IFC and the United Nations Special Representative of the Secretary-General on Business and Human Rights* (Washington: The World Bank, 2009). Note, however, that the sample is by no means intended to be representative of the entire population of state contracts, which remains unmeasured.

Given the privacy of state contracts it is impossible to know with complete accuracy when and where state contracts which function as BIT alternatives are used. Yet logic and available evidence suggests they are used almost always in extractive industries, very frequently in utilities, frequently in transportation and telecommunications, and rarely in finance and business services.[28]

Based on these considerations, figure 4.2 categorizes the 15 industries under study according to the two criteria of interest.[29] The cell in the top right corner is where we should expect to see the strongest effects of BITs.

Figure 4.2: In Which Industries Should BITs Attract Investment?



[28] UNCTAD, *State Contracts*; IFC, *Stabilization Clauses and Human Rights;* Yackee, "Conceptual Difficulties".

[29] Note that the boundaries of the industries under study are, unfortunately, determined by data availability, i.e. there is no option but to use the same industry definitions as those provided in the data. Thus, while it would perhaps be of interest to test for separate BIT effects in the transportation and telecommunications industries, for example, the data does not allow this.

This hypothesis is borne out by the regression results by industry, which are presented in table 4.4. (Primary and secondary industries are presented in table 4.4a, while tertiary industries are presented in table 4.4b.)

Notice first that in every *non* highly regulated industry, the effect of BITs on FDI is insignificant. Across the manufacturing and lightly regulated services industries (wholesale & retail, construction, and hotels & restaurants), there is no evidence that BITs induce FDI. This is consistent with the theory that BITs serve primarily to reduce policy risk, not outright expropriation risk. For investors in non highly regulated industries, policy risk is a less important concern, and thus the protections offered by a BIT are of less value.

Of all 15 industries studied, finance and business services are the only two industries in which the coefficient on the BITs variable is statistically significant. These are the two industries which the theory suggests should be most likely to exhibit a positive effect of BITs on FDI: they are the only industries that are both highly regulated and in which state contracts are rare. The regression results suggest that an additional BIT ratified by a country is associated with a 12.4 percent increase in FDI in the business services industry and a 10.6 percent increase in FDI in the finance industry. (Although, for reasons discussed further below, these coefficients may be upwardly biased, and thus should be interpreted with caution.) The findings in some previous studies of a positive relationship between BITs and aggregate FDI may have been driven by these two industries, which collectively account for about a quarter of FDI into developing countries.

Table 4.4a: FDI by Industry (primary and secondary)

	Oil & Gas		Mining		Food, Beverage & Tobacco		Chemicals		Electronics		Vehicles		Machinery & Equipment		Unspecified Secondary	
BITs	-0.0065		-0.0112		-0.0140		0.0277		-0.0173		0.0313		0.0175		0.0268	
	0.0623		*0.0515*		*0.0573*		*0.0576*		*0.0579*		*0.0583*		*0.0482*		*0.0711*	
GDP per capita	0.0006	**	0.0000		0.0007	**	0.0008	***	0.0007	***	0.0007	***	0.0007	***	-0.0004	
	0.0003		*0.0002*		*0.0002*		*0.0002*		*0.0002*		*0.0002*		*0.0002*		*0.0003*	
Population log	-0.9826		2.5894	***	1.3527	*	1.1580		1.5889	**	1.6833	**	1.2125	*	0.8950	
	0.7717		*0.6502*		*0.7806*		*0.8035*		*0.7737*		*0.7121*		*0.7245*		*0.8885*	
Growth	0.2625	**	0.1037		0.1346		-0.0418		0.0460		-0.0490		0.0481		-0.0983	
	0.1295		*0.1487*		*0.1427*		*0.1102*		*0.1217*		*0.0943*		*0.1077*		*0.1665*	
Trade openness	-0.0705	***	-0.0078		-0.0429	*	-0.0501	**	-0.0288		-0.0511	***	-0.0264		0.0435	
	0.0164		*0.0199*		*0.0235*		*0.0229*		*0.0262*		*0.0153*		*0.0253*		*0.0324*	
Executive constraints	-0.4032		1.0100	**	0.8543		0.4123		0.1990		0.1004		0.6922		0.1086	
	0.5600		*0.4722*		*0.5367*		*0.5718*		*0.5001*		*0.4318*		*0.5007*		*0.6322*	
Oil reserves	6.6419	***	-0.5973		0.7220		1.3312		0.6202		0.2242		2.7840		*-0.8605*	
	2.3044		*1.9597*		*2.1498*		*2.1223*		*2.0517*		*1.6600*		*1.9769*		2.7605	
n	69		69		69		69		69		69		69		69	
N	446		446		446		446		446		446		446		446	
R-squared	0.2461		0.2265		0.1672		0.1941		0.1841		0.2888		0.2354		0.0629	
** = statistically significant at 10 percent*																
*** = statistically significant at 5 percent*																
**** = statistically significant at 1 percent*																

Table 4.4b: FDI by Industry (tertiary)

	Business Services		Finance		Wholesale & Retail		Transportation, Storage & Communication		Utilities		Construction		Hotels & Restaurants
BITs	0.1243	**	0.1063	**	0.0075		0.0346		0.0841		0.0579		0.0232
	0.0558		*0.0520*		*0.0398*		*0.0477*		*0.0575*		*0.0417*		*0.0529*
GDP per capita	0.0008	***	0.0007	***	0.0007	***	0.0003	*	0.0005	**	0.0004	**	0.0002
	0.0002		*0.0002*		*0.0001*		*0.0002*		*0.0002*		*0.0002*		*0.0002*
Population log	2.0138	***	2.2192	***	2.2304	***	2.1248	***	1.8707	***	2.0316	***	0.4442
	0.6485		*0.5904*		*0.4867*		*0.5311*		*0.5303*		*0.5539*		*0.6564*
Growth	0.1263		0.1409		0.1479		0.2110		0.1127		0.2047		0.0198
	0.1435		*0.1669*		*0.1530*		*0.1544*		*0.1239*		*0.1516*		*0.1272*
Trade openness	0.0043		-0.0197		0.0038		-0.0670	***	-0.0623	***	-0.0386	**	-0.0329
	0.0213		*0.0200*		*0.0171*		*0.0193*		*0.0212*		*0.0176*		*0.0205*
Executive constraints	0.2923		0.7179		1.3763	***	0.2332		0.3958		0.6842		0.6434
	0.4913		*0.4735*		*0.3742*		*0.4111*		*0.4985*		*0.4177*		*0.5337*
Oil reserves	-5.1170	**	-3.5430	**	-2.8816	*	-5.6531	***	-4.3846	***	-2.0766		-2.8888
	1.9317		*1.7954*		*1.5966*		*1.4254*		*1.6235*		*1.7282*		*2.0073*
n	69		69		69		69		69		69		69
N	446		446		446		446		446		446		446
R-squared	0.2904		0.3094		0.2744		0.261		0.2594		0.2469		0.1062
** = statistically significant at 10 percent*													
*** = statistically significant at 5 percent*													
**** = statistically significant at 1 percent*													

While we must be very cautious about drawing any conclusions from non-statistically significant results, it is worth noting that many of the larger coefficients are in highly regulated industries in which investors might use state contracts. The utilities industry, for example, exhibits the third largest BIT effect after finance and business services. It is possible that investors in this industry place some small value in BITs even though they likely use state contracts. This could be the case if multinational firms in these industries are unable to negotiate particularly favourable terms in state contracts. Or investors in this industry (relative to investors in other industries in which state contracts are common) may particularly value the treaty-standing of BITs over contracts, which could be the case if, for example, contracts are frequently renegotiated.

Finally, results in the two extractive industries, oil & gas and mining, show no evidence of an effect of BITs. In these industries, state contracts are likely to be almost universally used. The limited available evidence also suggests that state contracts in these industries include the strongest stabilization clauses: in a study of stabilization clauses in state contracts across nine industries, three quarters of the strictest stabilization clauses ("full freezing" or "partial freezing") were found in the extractive industries.[30] If investors in these industries are able to achieve superior terms in a state contract than those available in a BIT, BITs will be of little value to them. Furthermore, investors in the oil & gas industry may also be protected by the Energy Charter Treaty (ECT). Given these various substitutes for BITs, it is unsurprising that any further marginal benefit investors in extractive industries derive from BITs is likely to be extremely low.

The findings for the oil & gas industry presented here appear to differ from those reported by Srividya Jandhyala and Robert Weiner in a recent paper.[31] Jandhyala and Weiner assess whether the presence of an investment treaty influences the price paid for cross-border purchases of

[30] IFC, *Stabilization Clauses and Human Rights*, p. 18.

[31] Jandhyala and Weiner, "Do International Investment Agreements Protect Investment?".

petroleum reserves, and find that companies pay a higher price for natural resource assets protected by investment treaties than those that are not. Jandhyala and Weiner's innovative empirical strategy – which focuses on prices paid for similar assets, rather than levels of FDI flow – is quite different from that adopted here, and thus it is difficult to precisely pinpoint the source of this discrepancy. Yet there are a number of potential explanations. Jandhyala and Weiner look at data for both developed and developing countries – a third of their observations are from developed countries – while this thesis, following convention in BIT research and based on the assumption that policy risk is a significantly greater concern in countries with weaker governance, considers only developing countries. Additionally, in their main model specification Jandhyala and Weiner treat the ECT as an investment treaty, rather than as an alternative legal instrument to BITs, as it is considered here; when they drop ECT observations in a robustness check, the results are only significant at the 10% level. Further research may help disentangle these explanations and build a richer account of the role of legal instruments to protect investments in the oil & gas industry.

Overall, the econometric results presented in this chapter provide strong support for the model developed in the previous chapter. Bilateral investment treaties appear to be important for one specific group of investors: those that are significantly affected by state policy but are not directly doing business with the state. It is only in industries that are highly regulated and in which state contracting is rare that BITs are associated with a significant increase in FDI.

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There are several caveats of this empirical work which must be addressed, concerning measurement of the dependent variable, the independent variable, and the regression specifications.

To begin with, we must admit that FDI data is always imperfectly measured, and all FDI studies should be interpreted with this in mind.[32] Foreign investment is typically not tracked by governments as closely as trade is (as traded goods typically pass through a central customs and tariff agency), and while the IMF and OECD have issued international standards for measuring FDI, they are not uniformly followed. Given that FDI data are characterized by a few large transactions rather than many small transactions, the mismeasurement of any given transaction could potentially have a large effect.

The use of monadic rather than dyadic data may partially lessen these data concerns; with investment pooled across source countries, any individual mismeasurement will have less weight.[33] Conversely, the use of industry-specific data potentially introduces new errors. Classifying FDI by industry is not always straight forward, particularly within manufacturing, as many companies may produce multiple products across multiple industry classifications; this explains the large share of investment classified as "unspecified secondary" in the data. Thankfully this appears to be less of a problem in the primary and tertiary sectors, where the most interesting empirical results are found. Nevertheless, the general challenges of FDI data and the particular shortcomings of FDI data classified by industry – for which, unfortunately, there are no easy solutions – should qualify the certainty we place in these findings.

With respect to the independent variable, the total number of BITs ratified, the primary concern is the implicit assumption that all BITs are equal. This is questionable on two grounds. First, while most BITs are broadly similar, they are not written exactly the same, with differing stipulations – for example, whether or not domestic court options must be exhausted before proceeding to

[32]See the discussion on "Data sources and limitations" in ITC, *Investment Map Database*.

[33] Büthe and Milner, "Bilateral Investment Treaties and Foreign Direct Investment".

international arbitration, and who gets to choose the dispute settlement setting – leading some BITs to be "stricter" than others. Despite these differences, however, the fact remains that the provisions included in BITs are far more similar than disparate, and in such large-N analysis the small differences in the text across agreements seems unlikely to be a decisive factor.

The second, more worrying concern with treating all BITs as equal is that an agreement with a major capital exporter, such as the United States, is given equal weight as an agreement with a small country with little outward FDI. In the absence of dyadic FDI data, which would allow a meaningful method for weighting BITs by how important they are to the recipient country, there are no satisfying solutions to this problem. But while recognizing that some BITs are probably more important than others, the point should not be overstressed; again, Simmons' finding that the greater the number of BITs a country has signed the more likely it is to appear as a defendant at ICSID suggests that this is an adequate measure of the power of BITs, even failing to account for differences between the importance of different agreements to different capital importers.[34]

Finally, several caveats must be discussed with regard to regression specifications. In all econometric studies of foreign investment, endogeneity is always a central concern. There are two primary issues. The first is related to omitted variables, namely the fact that there may be a number of unobserved factors which lead some countries to attract more FDI than others. If these omitted variables are correlated with a government's propensity to sign BITs, then some of the effect attributed to BITs could in fact be driven by these other unobserved factors. The second is related to reverse causality. That is, it is possible that greater FDI causes BITs rather than the other way around; this would be the case, for example, if it is only when high levels of investment are already in place that investors push for the protections offered by a BIT.

[34] Simmons, "The International Investment Regime since the 1980s".

Ideally the problems associated with endogeneity would be addressed by using an instrumental variable. Unfortunately no good instruments exist for BITs; there are no variables which are highly correlated with BITs yet completely independent of FDI. Two instruments have been proposed in earlier studies which use dyadic data; leaving aside the fact that they are inappropriate for studies of monadic data, both would appear to fail the exogeneity assumption even on their own terms. Hallward-Dreimeir proposes using the number of *other* BITs which a host country has signed as an instrument for the presence of a BIT between a given source country and the host country.[35] Such an approach, however, ignores the likelihood that BITs can encourage investment from not only the signatory country but also other source countries; Büthe and Milner present empirical evidence that this is indeed the case, and the theoretical approach adopted in this study assumes as much.[36] Kerner proposes an alternative instrument, which is the percentage of a host country's neighbours which have ratified BITs with a given source country.[37] Yet given regional clustering in international production chains, a neighbour's investment policy could easily influence the FDI received by a host country. The complexity behind the determinants of FDI make it extremely difficult to find an instrument for BITs which is otherwise independent of investment flows.

In the absence of appropriate instruments, most FDI and BIT studies have addressed endogeneity by using models with country fixed effects (for monadic data) or country-pair fixed effects (for dyadic data). Such an approach assumes that there are unobserved country-specific determinants of FDI; given the importance of these omitted variables, then, these models abandon any attempt to distinguish how much cross-country variation in FDI can be attributed

[35] Hallward-Driemeier, Mary, "Do bilateral investment treaties attract foreign direct investment? Only a bit…and they could bite", World Bank Policy Research Working Paper 3121 (Washington: The World Bank, 2003).

[36] Büthe and Milner, "Bilateral Investment Treaties and Foreign Direct Investment".

[37] Kerner, "Why Should I Believe You?".

to cross-country variation in BITs, and look only at the "within" effects. Thus, rather than asking, for example, whether Vietnam receives more FDI than Thailand because Vietnam has signed more BITs, it asks only if Vietnam receives more FDI after signing an additional BIT than it did before. Such an approach produces conservative but reliable estimates of the effect of BITs on FDI.

Yet it comes at a great cost in terms of regression efficiency, as models using country fixed effects purposefully exclude all cross-country variation from the analysis. This trade-off is one worth making when using dyadic data with many country-pair sets and/or when using data with many years, as under these circumstances there is still enough "within" variation to allow for meaningful analysis. Given the limitations of the available data on foreign investment by industry, however, the inclusion of country fixed effects – and hence the exclusion of all cross-country variation – leaves too little variation in the data to exploit.

Importantly, this is a question not only of the *number* of years included in the dataset, but also of *which* years are included. Specifically, data coverage only begins in 2001, whereas the majority of BITs were signed in the late 1980s and 1990s. To use country fixed effects in such a model would therefore ignore the influence of the majority of BITs, drawing inferences based exclusively on the BITs which were signed since 2001 (which, given that they were the latest to be signed, are arguably likely to be the least important ones). In the absence of industry-level data extending to an earlier period, if we want to understand how all BITs influence industry-specific FDI we cannot include country fixed effects.

Additionally, the exclusion of country fixed effects is partially grounded in theoretical concerns. Most studies addressing the effect of BITs on FDI approach the issue implicitly or explicitly from the government policymaking point of view, effectively framing the question as if a government

chooses to sign a BIT will it then be rewarded with greater FDI. Under such a framework an exclusive focus on "within" effects is justified, as this is the question that is being studied. This study, however, is not primarily interested in whether a given country will receive more FDI by signing an additional BIT, but rather in seeking to better understand how BITs affect the strategic interaction between investors and governments, and what this suggests about how BITs constrain governments. From the investor point of view, both "within" and "between" effects are of interest: BITs may induce investors to invest more in a given country than they otherwise would, or they may influence investors' decisions about which country to invest in. The inclusion of country fixed effects would effectively exclude the latter from consideration.

For all of these reasons, country fixed effects are not used in the pooled OLS regressions. Country-level factors likely to affect FDI flows, such as market size, level of development, and political constraints are included as control variables. In recognition of the fact that there are still likely omitted variables which will lead the error terms of observations from the same country to be correlated, robust standard errors are clustered at the country level, thus reducing the likelihood of finding spurious statistical significance. To address the possibility of reverse causation between the dependent and independent variables, all explanatory variables are lagged by one period.

A number of robustness checks are performed to ensure that results are not overly determined by a few observations or countries. All regressions are re-run individually dropping each region, to ensure for example that results are not solely driven by the fact that East Asia attracts high levels of FDI; the results are substantively unchanged. Similarly, cross-sectional OLS regressions are run for the individual years with the greatest data coverage, 2007 and 2008; again the results are unchanged.

Notwithstanding these corrections and tests, however, the possibility that coefficients are partially driven by unobserved country-specific factors cannot be fully ruled out, and thus the coefficients should be interpreted with caution. Specifically, much more confidence is placed in the overall finding about the relative differences across sectors than in the exact values of the coefficients; across all regression specifications the coefficients on the BIT variable are greater in regressions using finance and business services as the dependent variable than for all other industries.

Hopefully with time better data will allow for more conclusive empirical assessments of how and from whom BITs attract investment. More extensive industry-level FDI data, including greater coverage of years and/or dyadic data, would permit more robust corrections for the endogeneity issues identified above. Even better, FDI data at the firm- or project-level would allow for a more nuanced and fine-grained testing of the effects of BITs on FDI. For while the industry approach adopted here is a significant advance over studies that use aggregate FDI as the dependent variable, in many ways it is still a crude measure, and doesn't acknowledge variation within industries. (The ideal regression for testing the theory advanced in this thesis would use project-level investment data and include a quantitative, continuous variable measuring the extent of government regulation for each project as well as information on whether the project included a state contract with recourse to international arbitration. This, however, may be too much to ask for.)

Unless and until more detailed FDI data become available, for the time being the strongest claim that can be based on careful analysis of existing data is that BITs appear to be a more important factor in attracting FDI to the finance and business services industries than to any other industries (leaving aside the precise magnitude of such effects). Even as a qualified claim, however, this marks an important and novel contribution to our understanding of if and how

BITs attract investment. The following chapter concludes in considering the implications of this finding – and the theoretical claims underpinning it – for the future evolution of the international investment regime.

Chapter V: Conclusion

This thesis presents three significant contributions to our understanding of the relationship between bilateral investment treaties and foreign investment.

First, it identifies a key shortcoming in most previous studies of BITs and FDI, namely a failure to develop sufficiently nuanced and fine-grained accounts not just of *if* BITs attract FDI, but of *how* and *from whom*. The very limited conclusions which have emerged from the considerable econometric literature regressing aggregate FDI on BITs suggests there is no strong universal relationship between BITs and total FDI: not all investors respond to BITs the same way all of the time. Looking forward, future research on this topic must look beyond the top-line question of whether BITs increase FDI to more carefully theorize under what conditions BITs are valued by potential foreign investors, and how different types of investors may respond to the incentives created by BITs in different ways.

Second, this thesis advances such a research agenda by introducing a new model of how BITs can attract FDI from one particular group of foreign investors. Drawing on ideas from International Law scholars on how investment treaties can constrain government regulation, it argues that investors worried about policy risk will value the fact that BITs create costs to governments for any regulatory change which could be declared illegal in investment arbitration. Given vague treaty language and ongoing debates in the international legal community over how to precisely distinguish bona fide regulatory policies from illegal government interference with an investment, there is a wide scope of regulations which ex ante have a non-zero probability of being declared illegal. This constraint on government regulation is particularly valued by one

specific group of investors: those in highly regulated industries that do not use BIT substitutes, most importantly state contracts.

Third, this thesis presents new empirical evidence that supports this model of how and from whom BITs attract FDI, based on the first analysis of the cross-industry differential effects of BITs on FDI. The model suggests two criteria should determine the value investors place in BITs: the importance of regulation to profitability and access to BIT substitutes. Since both of these criteria vary by industry, it is possible to identify in which industries the model suggests BITs should have the greatest effect. Indeed, regression results reveal that it is only in finance and business services in which BITs have a statistically significant effect in increasing foreign investment.

At a moment when many countries appear to be growing increasingly frustrated with the international investment system, these findings hold important implications for governments weighing the benefits and costs of ratifying a BIT. The benefits of BITs, in terms of increased investment, are narrowly concentrated in highly regulated industries in which state contracts are rare. Yet the costs are large and diffuse: in granting substantive rights to all foreign investors from a treaty partner, BITs expose governments to significant litigation risks from a wide range of investors. There is evidence that many governments underestimated these risks when choosing to sign BITs; it is only with mounting arbitration experience – as the number of cases has risen and the scope of potentially illegal regulatory action has expanded – that governments have come to understand the extent of these liabilities.[1]

[1] See Poulsen, Lauge and Emma Aisbett, "When the Claim Hits: Bilateral Investment Treaties and Bounded Rational Learning", *World Politics,* Vol. 65, 2013, pp. 273-313.

Of course, as this thesis has argued, the arbitration settlements awarded to investors represent only one aspect of the cost of BITs to governments. Given the inability to easily and precisely distinguish between legal and illegal regulatory changes, governments must evaluate all prospective regulatory changes through the lens of their BIT obligations. During a period when many states appear to increasingly value the right to regulate and intervene in the economy, this is a high price to pay. As governments and private interests across the world debate and seek to re-establish some consensus on the proper role of the state in the economy, investment treaties serve as a brake on any state looking to embrace a more active government regulatory policy.

Where will the international investment regime head from here? While it is difficult to know with any certainty, it is possible to speculate on a few potential directions. One, which the legal scholar Jason Yackee advocates, would see developing countries retreat from using BITs and instead place state contracts at the heart of international investment law.[2] This has the considerable advantage of allowing governments to better tailor their investment policies based on the costs and benefits of specific projects. Rather than offering one permanent and generalized set of substantive rights to all foreign investors, states and firms would bargain over the specific rights and concessions relevant to each investment. Forcing investors to bargain over each contract would mean that states would only need to offer terms as favourable as necessary to induce investment; as Yackee argues, BITs appear to be "devices designed primarily to require host states to provide investors with favorable guarantees that investors may not have been able to obtain on their own [through contracting]."[3] By relying primarily on contracts rather than BITs, states could more easily adjust their investment policies in light of their bargaining position

[2] See Yackee, Jason, "Do We Really Need Bits? Toward a Return to Contract in International Investment Law", *Asian Journal of WTO & International Health Law and Policy*, Vol. 3 No. 1, March 2008, pp. 121-146, as well as Yackee, Jason, "Toward a Minimalist System of International Investment Law," *Suffolk Transnational Law Review*, Vol. 32, 2008, pp 303-340. In practical terms such a solution is likely only feasible over the medium term, as many BITs include "survival" clauses of many years.

[3] Yackee, "Do We Really Need BITs", p. 140.

and the desirability of the investment – i.e. its potential contribution to economic development – under negotiation.

Yet there are (at least) two challenges to placing contracts at the heart of international investment law. The first is that, as this thesis has stressed, effective contracts may be costly or impossible for investors who are not in direct business with the state. The transaction costs of drawing up a contract detailing the rights and obligations of the state toward an individual foreign investor could be onerous, for both the state and the investor, and especially small states and small investors. Moreover incomplete contracting problems will persist, likely forcing many contracts to adopt similarly vague language as found in BITs.

A second challenge to strengthening the role of state contracts in international investment law relates to secrecy, and its effects on the legitimacy of the international investment regime. State contracts are typically confidential, as both the investor and the state want to hide the terms of an agreement from their respective competitors. So, too, are most arbitration decisions arising from state contracts. Yet, in order for the international investment regime to maintain (regain?) widespread legitimacy, it is important that the evolving debate over which regulations are non-compensable and legitimate and which are illegitimate and/or demand compensation plays out in public.[4] The extent of a government's rights to regulate the economy is a question of public concern, and such discussions should not be limited to confidential negotiations between lawyers. There is perhaps scope to introduce greater transparency into state contracts; for example, the recently launched Extractive Industries Transparency Initiative has had some success in encouraging both multinational companies and states to disclose payments within

[4] See also Choudhury, Barnali. "Recapturing Public Power: Is Investment Arbitration's Engagement of the Public Interest Contributing to the Democratic Deficit?", *Vanderbilt Journal of Transnational Law*, Vol. 41, 2008, pp. 775-832, on the importance of engaging the public in order to overcome the "democractic deficit" in international investment law.

extractive industries.[5] Still, if the international investment community is to embrace contracts as the key international legal instrument regulating foreign investment and expand their use, considerably greater strides toward transparency will be needed to ensure the legitimacy of the system.

Another possible direction for the international investment regime, and one which appears to have broad support, is to increase the precision in international investment law. More recently negotiated BITs have introduced more precise language than earlier examples, with the goal of better specifying what government actions are proscribed.[6] These efforts tend to be aimed at defining appropriate carve-outs for legitimate regulation in the public interest, which is then exempted from the treaty's terms demanding compensation for policy changes that harm an investor.[7]

Enhancing the precision in international investment law, however, is easier said than done. While both developed and developing countries appear to generally support the principle of greater precision, the reality that only modest progress has been made in more clearly delineating legitimate, bona fide regulations from properly illegal regulations serves to underline just how difficult a challenge this is. The basic incomplete contracting problem that it is impossible to neatly divide the universe of possible regulatory actions into legal and illegal will not be easily solved; it is unlikely we will ever see any breakthrough in investment treaty-making which settles on the perfect language to overcome this challenge.

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[5] For more information on the Extractive Industries Transparency Initiative, see eiti.org.

[6] For example, both Canada and the United States have introduced annexes to their model BITs which more narrowly define indirect expropriation. United Nations Conference on Trade and Development (UNCTAD), *Expropriation*: *UNCTAD Series on Issues in International Investment Agreements II*, (New York: UNCTAD, 2012), p. 58.

[7] On the issue of carve-outs, see Aisbett, Emma, Larry Karp, and Carol McAusland, "Police Powers, Regulatory Takings and the Efficient Compensation of Domestic and Foreign Investors", *Economic Record*, Vol. 86, 2010, pp. 367-383.

With only marginal advances expected to come in the form of more precise language in BITs, this leaves international arbitration panels as the key locus for enhancing the predictability of the international investment legal system and more narrowly defining its scope. Arbitration panels are not formally bound by precedent, yet informally arbitrators do appear to adhere to some measure of precedence, looking to past awards in similar cases for guidance and justification in their decisions.[8] Thus if states desire to more narrowly proscribe the rights granted to foreign investors in investment treaties without necessarily achieving this distinction through re-writing treaties, they could seek to better impress this policy goal on arbitrators, and have it be enshrined through informal precedence. Greater predictability could be realized through a stronger consensus on principles amongst arbitrators even in the absence of perfectly defined treaty texts.

Yet still here challenges persist. To begin with, while incomplete contracting difficulties are part of the problem with the inability to neatly divide legal and illegal regulation, it is important not to downplay the fact these are also deeply contested issues on which there is not yet clear consensus. That is, it is not merely the case that it is difficult to ex ante define illegal regulation but one knows it when one sees it (to paraphrase US Supreme Court Justice Potter Stewart's remarks on obscenity).[9] When it comes to the distinction between bona fide public interest regulation and arbitrary government interference, different people (and states) see different

[8] As Cheng notes, "Investment treaty arbitration tribunals tend to: (1) identify prior relevant decisions; (2) compare the aggregate costs of departure from prior decisions with the aggregate consequences of following prior decisions, taking into account whether the policies underlying those prior decisions remain relevant under contemporary conditions; (3) decide which prior decisions to follow or depart from; and (4) articulate reasons for their decision." Cheng, Tai-Heng, "Precedent and Control in Investment Treaty Arbitration", *Fordham International Law Journal*, Vol. 30 No. 4, 2006, pp. 1014-1049, p. 1031.

[9] Justice Potter Stewart, concurring opinion in Jacobellis v. Ohio 378 U.S. 184 (1964), regarding possible obscenity in *The Lovers.*

things. Thus there is not a strong consensus on how far a state's rights to regulate should extend which could be imparted to the arbitration community.

While there perhaps isn't a consensus on these details, it would appear that most states (as well as outside observers) are in broad agreement about the direction of change which is necessary, which is toward greater certainty that bona fide regulation in the public interest is exempted from investment treaty protection.[10] Yet states may still struggle to impose their intentions on arbitrators. Having delegated the responsibility for interpreting international investment law to arbitration tribunals, there are few obvious mechanisms through which states can exert control on these institutions.[11]

Indeed, the specific features of the international investment regime – a highly legalized system embedded in a network of bilateral treaties with delegated independent arbitration, rather than in a multilateral agreement backed by a formal institution – may make it particularly difficult for states to reassert control. If there were an institution equivalent to the World Trade Organization for foreign investment, states' delegates could express their preferences to protect public regulation and through coalition building and negotiation amongst themselves work to shift the regime's stance. With a diffuse network of bilateral treaties interpreted by a largely independent community of arbitrators, however, there are relatively few pressure points through which states can shape or propel the regime's evolution. While formal institutionalization may be associated with states ceding sovereignty in international relations, it also creates a focal point for states to voice and act on their shifting preferences, and thereby assert sovereignty. The experience of international investment law illustrates that, without such

[10] As evidenced, for example, by recent changes to model BITs discussed in chapter 2.

[11] See Yackee, Jason, "Controlling the International Investment Law Agency", *Harvard International Law Journal,* Vol. 53 No. 2, Summer 2012, pp. 391-448.

a focal point, even when a preponderance of states share an interest in changing a regime in a particular way, it can be difficult to do so.

In any case, the basic difficulty of ensuring the international investment regime balances states' interests in protecting the rights of foreign investors with their interests in pursuing bona fide public regulation is going to be with us for some time, and looks likely to only grow more challenging in the years ahead. The BIT regime is in some senses a legacy from the Washington Consensus era which privileged economic liberalization and the retreat of the state from the market.[12] Its struggles to adapt to shifting and contested norms in the 21st century concerning the appropriate level of government intervention in markets may presage some broader instability in international economic relations. [13]

Today industrial policy is once again ascendant, found first and foremost in China but increasingly all over the world. As Aghion et al argue, "the debate on industrial policy should no longer be 'existential', i.e., about whether sectoral policies should be precluded altogether or not, but rather on how such policies should be designed and governed so as to foster growth and welfare."[14] Meanwhile, in the aftermath of the global financial crisis, active government regulation to minimize the probability of crises and other catastrophic outcomes is also increasingly valued.

In this era of regulatory capitalism, the debates which have played out in international investment law may be echoed in other international economic spheres, such as trade, finance,

[12] Sornarajah, M., *The International Law on Foreign Investment*, 2nd Ed. (Cambridge: Cambridge University Press, 2004), p. 2-3.

[13] On the subject of international regimes outliving the circumstances of their birth, see Keohane, Robert, *After Hegemony: Cooperation and discord in the world political economy* (Princeton: Princeton University Press, 2005).

[14] Aghion, Philippe, Mathias Dewatripont, Liqun Du, Ann Harrison and Patrick Legros, "Industrial Policy and Competition", *CEPR Discussion Paper Series*, No. 8619, 2011, p. 2.

and currency.[15] So long as the appropriate role of the state in the market remains contested, businesses, especially those in highly regulated industries, will continue to seek expansive protection from government interference, while states will strive to at once protect their sovereign right to regulate the market while simultaneously fostering private sector growth. Creating and strengthening international institutions capable of effectively managing the inevitable conflicts which will arise from this constellation of pressures is likely to be a critical priority for global governance in the years ahead.

[15] On the global expansion of regulatory capitalism, see Levi-Faur, David, "The global diffusion of regulatory capitalism", *The Annals of the American Academy of Political and Social Science*, Vol. 598, 2005, pp. 12-32.

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