

The Interaction of International and Domestic Institutions: Preferential Trade Agreements, Democracy, and Foreign Direct Investment

Tim Büthe*

Associate Professor of Political Science
Duke University
buthe@duke.edu

Helen V. Milner

B. C. Forbes Professor of Politics and Int'l Affairs
Princeton University
hmlner@princeton.edu

v.3.3 (10 August 2012)

© Tim Büthe and Helen Milner, 2007-2012

Paper to be presented at the 108th Annual Meeting of the American Political Science Association,
Panel 16-15/17-4 (IPE/Int'l Collaboration), "The Domestic and International Politics of
Economic Liberalization: Causes and Consequences of Trade Agreements"
New Orleans, Thu 30 August 2012, 10:15am - 12noon

* For comments on previous drafts, we thank Todd Allee, Stephen Chaudoin, Raymond Hicks, David Leblang, Mark Manger, Michael Munger, Pablo Pinto, Jonathan Wand and participants of presentations at the American Political Science Association Meeting 2007, the Midwest Political Science Association Meeting 2008, and at Princeton, Rochester, and Stanford Universities. We thank Nancy Brune, Jose Antonio Cheibub, Zach Elkins, Freedom House, Witold Henisz, Nathan Jensen, Jon Pevehouse, the Polity Project, UNCTAD and WDI for making data available to us and Raymond Hicks, David Francis, and Torben Behmer for excellent research assistance.

ABSTRACT: Foreign direct investment (FDI) has come to be seen as a promising avenue for boosting economic development. As a consequence, most developing countries now seek to attract FDI, often by making ex ante promises to foreign investors not to pass laws or regulations—or refrain from other actions—that would diminish the value of the investment ex post. But how credible are such promises? A number of recent studies have examined the effect of domestic institutions (veto players, democracy, etc.) on the credibility of commitments by developing country governments toward foreign private economic actors, such as foreign investors. In addition, a few studies have examined the effect of international institutions on the credibility of such commitments. We examine the interaction of domestic and international institutions in promoting FDI. We show theoretically and empirically that democratic domestic institutions help attract more FDI into developing countries only in the context of economically liberal international institutions.

KEYWORDS: foreign direct investment; institutions institutional interaction; trade agreements; PTAs; democracy; MNCs; political risk; credible commitment

1. Introduction

Cooperation in international economic relations means, above all, not discriminating against foreign actors or assets, nor manipulating markets to the detriment of foreign economic actors. Cooperation thus entails resisting the temptation of unilateral short-term gains that undercut the joint gains from openness and economic exchange across borders.¹ The resurgence of expropriation of foreign direct investments in the wake of the global financial crisis of 2007-09—and prominent disputes over policies and regulations that allegedly target foreign assets—remind us that such cooperation is by no means guaranteed. This is a particularly serious problem for developing countries, where the risk of future non-cooperative behavior can lead to underinvestment, because developing countries generally have a shorter or weaker rule-of-law tradition and lower bureaucratic and judicial capacity than advanced industrialized countries. Even developing countries' often-reported desire to attract more foreign investments (e.g., Moran 1998) may not be sufficient to overcome the time inconsistency problem that is well known to investors/firms, governments, and scholars (e.g., Kobrin 1982, 1984; Moran 1978; Vernon 1971). Promises not to take actions that lower the value of foreign investments lack credibility because short-term gains may easily exceed the value that political actors with short time horizons assign to the long-term gains from cooperation. Multinational corporations considering an investment in a developing country must therefore assess not just commercial opportunities but also political risks. How can governments that want to attract investment reduce these risks? How can they make more credible commitments to reassure potential investors and induce them to make the investments?

¹ We here adopt Keohane's (1984) classic definition of cooperation as conscious, costly, non-coerced change in behavior (from what an actor would do absent the intent to achieve cooperation) in order to achieve joint—though not necessarily equal—gains. See also Milner (1992:468).

A large literature examines *domestic* institutions as the source of international conflict and cooperation, including the role that domestic institutions play in international economic relations. Taking its cue from the broader literature on international relations, much research on domestic institutions has focused on regime type. In the literature on the politics of foreign direct investment, discussed in greater detail below, scholars have focused especially on differences between democracies and non-democracies that may be consequential for foreign direct investors (e.g., Feng 2001; Gliberman and Shapiro 2003; Jensen 2003; Tures 2003).

Another substantial literature examines theoretically and empirically the impact of *international* institutions on international conflict and cooperation, including over economic matters. An important line of research within this literature has focused specifically on whether and how international institutions can help governments make more credible commitments (e.g., Dreher and Voigt 2011; Kim 2008; Simmons 2000a), including vis-à-vis foreign direct investors (e.g., Büthe and Milner 2008; Kerner 2009).

These literatures have developed largely independently of each other. Even in the rich 2-level games tradition, theoretical work that has genuinely considered joint or interactive effects of domestic and international institutions on conflict and cooperation in the world economy is rare (Drezner 2003a:esp. 3-8; Gourevitch 2002; Martin and Simmons 1998).² At a general level, we therefore argue for much more careful theorizing of the relationship between domestic and international institutions, especially conditional or interactive effects, as well as systematic empirical analyses of such effects. With regard to FDI, we build on the work by Büthe and Milner (2008), in particular their conception of trade agreements as credible commitments to

² See discussion below. Note that we consider here only formal institutions, thus bracketing constructivist scholarship has examined the interaction of domestic and international norms because we would expect the logic by which informal norms constrain political actors to be significantly different from the logic of formal institutions.

economically liberal policies that boost foreign direct investment. We adopt the same notion of PTAs but argue that the effect of PTAs on FDI is conditioned by the FDI host country's domestic political regime, so that FDI is a joint function of domestic and international institutions. Specifically, the substantive commitments to economically liberal policies enshrined in PTAs should be substantially more credible if undertaken in a legally binding manner by a democracy than by a non-democratic country because (1) ratification in democracies requires approval by a separate, competitively elected body, which assures foreign investors that the commitments have been made openly and with broad support after public scrutiny and (2) defining characteristics of democracy—freedom of the press, freedom of expression, and political contestation—increase the speed and quality of information that is publicly available about (impending and actual) changes in policy, which in turn should boost the effectiveness of international institutions as commitment mechanisms.

After we develop our theoretical argument in light of the existing literature, we conduct two sets of analyses of how domestic institutions condition international ones to get at the issue empirically. First, we conduct difference of means tests, for which we dichotomize the data on two dimensions: democracies versus non-democracies, using various alternative measures, and countries with high versus low levels of preferential trade agreements (PTAs). We find that countries receive substantially (and statistically highly significantly) more FDI in years in which they have a high number of PTAs in force than countries (country-years) with a low number of PTAs, and that *the difference is considerably greater among democracies than among non-democracies*. Second, we conduct regression analyses of the effect of international and domestic institutions on FDI, which includes an interaction term of PTAs and democracy (measured in the main regressions by the country's Polity score). We find that a country's level of democracy does

not have a consistent, statistically significant effect on inward FDI, except when a country is a party to an international trade agreement. By contrast, trade agreements generally boost inward FDI flows to a statistically significant extent, but the effect is much larger for more democratic countries. In sum, domestic institutions can reinforce the role of international institutions as commitment mechanisms for governments who want to attract foreign investment.

Our research contributes to several current debates and has important policy implications. First, we contribute to the literature on credible commitments by showing that domestic and international institutions interact in affecting the credibility of the commitments governments make, and that such institutions affect not just the credibility of commitments by governments to each other,³ but also commitments that governments make vis-à-vis foreign *private* actors in the international political economy. Second, we hope to advance the literature on foreign direct investment by showing not only that a significant amount of the variation in FDI can be explained by political variables, but also by interactions between them, neglected in previous research. Third and most importantly, we seek to contribute to the broader literature on institutions and how they matter in politics. We seek to shift scholars' theoretical and empirical attention from the study of particular domestic or international institutions in isolation to the study of more complex constellations of institutions. We develop specific theoretical hypotheses about how domestic institutions may condition the effect of international institutions, and we demonstrate for the credibility of commitments to foreign direct investors that the impact of international institutions depends in part on domestic ones—a promising area for further research. Additionally, we show that participation in institutions in one issue area can have effects in another: trade institutions affect foreign investment flows.

³ For some key works on this issue, see Leeds (1999); Martin (2000); Milner (1997); North (1989); Simmons (2000a, 2000b).

Finally, our research has important implications for scholars and practitioners interested in the politics of economic development and democratization. Most importantly, we find that democracy magnifies the economic benefits a country can gain from participation in international political-economic institutions, such as trade agreements. While it is unlikely that governments are going to fully democratize (and thus risk losing power completely) to increase foreign investments, the promise of these additional economic benefits creates incentives for taking small steps toward greater democracy. The resulting increase in foreign investment should promote growth, which should in turn enhance the government's political support, which might explain the relative stability of the "hybrid" political regimes that present a puzzle for much of the literature on democratization (Diamond 2002; Levitsky and Way 2002). Moreover, many scholars have pointed out the tension between economic liberalization and globalization on the one hand and democratic control of public policy on the other. Some even have argued that economic liberalization must precede democratization for democracy and an open economy to be compatible. We find that democratic countries can reap greater benefits from economic liberalization and globalization, which suggests that democracy and an open economy may in some ways be *more* compatible when democratization precedes economic liberalization rather than vice versa.

2. Domestic Institutions, International Institutions, and Credible Commitments

2.1. Existing Literature on Institutions, the Credibility of Commitments, and FDI

The credibility problems that countries face vis-à-vis foreign direct investors have long been known to policy makers and academics (e.g., Moran 1985; Vernon 1971).⁴ If a commercially attractive investment opportunity exists in a given country, potential investors consider the policies the country's government currently has in place (or the policies the government may have promised to adopt) to calculate the potential profitability of the investment. But investors know that, after they undertake the investment, the government has incentives to renege on its promises or change policies, thus reducing the value of the investment. All investors face the risk that the security or profitability of their investments will be reduced as an intentional or unintentional consequence of changes in government policy. All investors therefore should worry about the credibility of a government's commitment to any particular set of policies. But foreign investors should worry in particular: They have often no legitimate voice in the political process that determines the policies affecting them, which makes them attractive targets of nationalistic political opportunism. And foreign *direct* investors face even higher risks since their investments are by definition less mobile.⁵ Moreover, there are many reasons to expect foreign investors to be aware of the political risks that arise from the time inconsistency problem. While the level of explicit political consciousness among business executives tends to be low, interviews with senior managers in multinationals in the United

⁴ We investigate here how governments can mitigate the political risks associated with foreign direct investments; we are less interested in the economic factors that induce or repel such flows (although we try to control for these factors in our empirical analyses).

⁵ The degree of mobility of direct investments naturally varies. Investments in the extraction of natural resources are particularly immobile, which may explain why these investments have long been most at risk of expropriation; services FDI, which has increased greatly in recent years, is much more mobile, but still less mobile than financial investments, even when the formal-legal constraints on taking funds out of a given country are the same (which is not always the case).

States and Europe (conducted by one of us) suggest that major foreign direct investment decisions almost always include a political risk analysis, often involving outside expert consultants. A country's political and legal system is part of such analyses, along with specific policies and international legal commitments. In sum, the time inconsistency problem (and foreign direct investors' awareness thereof) makes it difficult for developing countries to attract foreign investments commensurate with the economic opportunities in the country, even when the country's government wants to attract FDI.

Scholars have increasingly examined whether and how domestic political institutions, especially regime type, can help governments overcome the time inconsistency problem that they face vis-à-vis foreign investors.⁶ The early literature on the politics of FDI in the 1960s and '70s suggested that MNCs cared how democratic a country is when they made investment allocation decisions—but only because these foreign investors were attracted by autocracies' ability to suppress labor demands and by the absence of election-induced policy uncertainty (Bornschieer and Chase-Dunn 1985; O'Donnell 1979 (1973)). Other scholars found no significant effects for regime type (e.g. Oneal 1994) or suggested more complex causal relationships (Kahler 1981). More recent research, starting with Feng (2001), has tended to find that democracies attract more foreign direct investment, though scholars differ over the causal mechanisms.

Jensen (2003, 2006) argues that democracies provide three advantages over autocracies when it comes to FDI. First, democracies provide more information to potential investors because they are more transparent and thus provide better, earlier information to foreign

⁶ While regime type has attracted the bulk of attention (e.g., Jakobsen 2006; Zheng 2011), a number of scholars have focused on other kind of domestic institutional or political variations as important explanations for FDI, including electoral and party systems (Garland and Biglaiser 2009; Henisz and Zelner 2001) and the resulting partisan composition of the government (Pinto and Pinto 2008); others have focused on intellectual property rights protection (Lee and Mansfield 1996; Maskus 2005), labor rights (Egan 2012 (forthcoming); Mosley 2011), or the autonomy of regulatory agencies and legal institutions (Raustiala 1997).

investors (see also Wittman 1995); second, democracies allow for more representation of the interests of foreign investors so investors can affect the governments of the FDI host countries; and third, democracies create a more credible environment for market friendly policy because of the higher audience costs executives face if they change policies. In sum, more democratic countries should be more predictable than less democratic countries, making democracies attractive to foreign investors, which a number of studies have found in recent years. Li and Resnick (2003) challenge some of these arguments, pointing out that democracy has both benefits and costs for foreign investors. They show that, beyond the protection of private property rights, which is generally high in democracies, democracy is unfavorable for FDI and reduces the amount of FDI received. Yet other scholars find the positive correlation between democracy and inward FDI flows into developing countries to be statistically indistinguishable from zero (i.e., not significant at conventional levels) after controlling for other domestic institutions or domestic political factors. Blanton and Blanton (2007), for instance, find little evidence that democracy as such matters for FDI, but only human rights treatment by host countries (which is generally positively correlated with democracy). In sum, mixed evidence exists for the impact of domestic regime type on FDI, and the causal process by which an effect is exerted is much debated.

Another strand of the literature has focused on international agreements and treaties as political mechanisms through which political leaders may increase the credibility of their commitments to foreign investors. A number of authors have shown that bilateral investment treaties (BITs) can help countries attract FDI inflows (e.g., Bütthe and Milner 2009; Gallagher and Birch 2006; Kerner 2009; Neumayer and Spess 2005; Salacuse 1990; Salacuse and Sullivan 2005), though others have found more mixed results. In recent work, Bütthe and Milner (2008)

have examined preferential trade agreements (PTAs) and the WTO as a means to attracting greater FDI. Trade agreements are politically significant, they argue, because they combine two features: First, PTAs entail substantive commitments—directly to liberal foreign economic policies, such as low trade barriers, and indirectly to liberal domestic economic policies—which foreign investors have been shown to like. Second, embedding these commitments to market-friendly policies in a binding international agreement with international partners and linking the commitments to trade openness makes the commitments more credible than commitments undertaken only domestically, because international agreements are more visible and more costly to break. And by lowering the political risks to foreign direct investors, they stipulate, trade agreements boost FDI. In other words, Bütte and Milner conceptualize trade agreements as "strategic moves" to raise the costs for a country to renege on its policies toward foreign investors later on (see Dixit and Skeath 2004: ch.10), consistent with a broader strand of research in economics on trade agreements as means of boosting the credibility of policy commitments (e.g. Handley and Limão 2012; Maggi and Rodriguez-Clare 1998; Mitra 2002; Staiger and Tabellini 1999). Moreover, Bütte and Milner show empirically that the purely economic effects of trade agreements are only part of what induces foreign investments, and that trade agreements boosts FDI above and beyond what might be attributed to the PTA-induced increase in market size.⁷

We concur with this view of trade agreements as commitments to economically liberal policies, which are costly to break and hence credible. They provide a means of reducing the likelihood that the country's government will adopt policies that hurt the value of investments

⁷ The positive, statistically significant correlation between PTAs and FDI flows has been confirmed in more recent analyses by, inter alia, Davis (2011), Leblang (2010), Manger (2009) and Ofa (2009), though cf. Peinhardt and Allee (2012) for U.S. FDI (only).

and thus boost FDI above and beyond the direct economic effects of increases in market size.⁸ We argue, however, that the magnitude of the expected effect should depend upon the FDI host country's domestic institutions. In other words, rather than think about domestic and international political-economic institutions as affecting FDI independently, we argue for thinking about inward FDI into developing countries as a joint function of domestic and international institutions.

2.2. Existing Literature on the Interaction of Domestic and International Institutions

The existing literature has, to our knowledge, neither theoretically nor empirically examined the joint or interactive effect of domestic and international institutions on the credibility of a government's commitments, especially commitments vis-à-vis private actors such as foreign investors. Indeed, there is only a limited theoretical literature about the interaction between international and domestic institutions.

Putnam's powerful image of the 2-level game (Putnam 1988; see also Mayer 1991) spurred a substantial literature about the interplay of domestic and international *politics*, some of which explicitly theorizes domestic and international institutions. Most work in this 2-level games tradition has focused on the effect of domestic institutional constraints on the probability and terms of international cooperation—institutions such as requirements for approval of any international agreement by a cabinet and/or a legislature whose preferences may differ from the country's representative in the negotiations that lead to the agreement (e.g., Evans, Jacobson, and Putnam 1993; Meunier 2005; Odell 2000; Wolf and Zangl 1996). Research in this tradition has tended to support the "Schelling conjecture" (Schelling 1980 (1960)) that domestic political

⁸ This is not to say that overcoming problems of credibility that are impeding socially optimal outcomes for a country is the only possible reason for governments to enter into PTAs (see, e.g., Limão 2005; Limão and Tovar 2011).

institutions that "tie" a negotiator's hands, as democratic institutions tend to do (albeit to varying degrees), strengthen the negotiator's bargaining position over the terms of cooperation.⁹ As Milner and Rosendorff (1996, 1997) have shown, however, the theoretical logic underpinning this conclusion becomes questionable when one introduces uncertainty into the model, thus magnifying the credible commitment problem.

While most work in the 2-level game tradition has focused on how domestic politics and domestic institutions affect international cooperation, some scholars have focused on how specific characteristics of international institutions empower some actors vis-à-vis others in domestic politics. Drezner and his collaborators (2003b), for instance, examine how a country's government can use international institutions to overcome domestic opposition. In particular, they argue theoretically and show empirically that international institutions allow "policy initiators" in the executive branch to commit the country to a particular policy in ways that raise the costs for other domestic political actors (the "policy ratifiers") to exercise their domestically institutionalized rights to veto international agreements or block their implementation (see also Moravcsik 1994; though cf. Paarlberg 1997). Martin puts the implementation of international agreements front and center, but develops a different argument in her analysis of what allows democracies to achieve extensive and deep international cooperation despite "supposed handicaps" such as systems of representation that impair the ability to "'speak with one voice' on foreign affairs" as "politics often do not stop at the water's edge" (Martin 2000:21). "The secret of democratic success," she argues, "lies precisely in its supposed handicap" (2000:47), namely that legislative involvement—or "interference"—in the foreign policymaking process ensures

⁹ At the same time, such institutions have been shown to reduce the set of Pareto-improving bargains—the "zone of possible agreements"—and hence reduce the likelihood of a cooperative outcome; see Mayer (2010).

that the commitments that the government undertakes vis-à-vis foreign countries will be credible in the sense of being generally assured ratification and implementation.

As Snidal and Thompson show game-theoretically, a key issue is actually the commitment problem of *domestic stakeholders vis-à-vis each other*. Here, the opportunity to commit to a given policy via international institutions may help achieve mutually beneficial (cooperative) outcomes because the policy initiators would otherwise refrain from even proposing policies—even policies that benefit the ratifiers—out of a concern about political opportunism by ratifiers who could otherwise gain more from opportunistic opposition to the proposed policies than from a mutually beneficial policy change (Snidal and Thompson 2003:204f). This argument assumes a domestic political system that institutionalizes political competition—a defining characteristic of democracy—and at least one veto point outside the executive branch of government (though cf. Pevehouse 2003). At the same time, however, the lack of domestic political constraints in *non*-democracies is often cited as the prime reason why those regimes cannot make credible commitments (vis-à-vis anyone), which should make the "use" of international institutions as a commitment device particularly attractive for autocracies and least necessary for democracies. Currently, our theoretical models of democratic institutions are not sufficiently precise to allow us to deduce some kind of net effect.

A more recent, explicit attempt to theorize the interaction of domestic and international institutions is Büthe and Mattli's "institutional complementarity theory" (2011), which emphasizes the cross-national and cross-issue variation in the functional fit between domestic and international regulatory institutions as a source of power and hence as an explanation for global regulatory outcomes, i.e. for the terms of inter- or transnational cooperation or coordination. Which features of domestic institutions are most advantageous (for stakeholders

from one country vis-à-vis their counterparts in another country) depends upon the nature of the international institutions involved—an important point, given that the analytically salient features of the international institutions are rarely made explicit in the literature on 2-level games. An important (if rarely explicitly articulated) scope condition for the "Schelling conjecture," for instance, is that agreements at the international level become binding on (or substantially affect the interests of) stakeholders at the domestic level only after such agreements have been ratified. By contrast, when decision at the international level affect domestic stakeholders regardless of any domestic "ratification"—as Büthe and Mattli argue is increasingly the case in global governance—the kind of domestic institutional fragmentation that might be a source of power in a conventional 2-level games context, is likely to diminish a country's influence in global rule-making because it impedes the efficient flow of information and undermines the ability to speak with a single voice.

2.3. The Interaction of Domestic and International Institutions and FDI

The literature noted above has yielded important insights for the study of international cooperation. At the same time, the existing literature has three important limitations. First, very little research actually examines—theoretically or empirically—the interaction or (potential) joint effects of domestic and international institutions. Second, the existing literature does not focus on how institutions might overcome the credible commitment problems that arise from time inconsistency problems rather than from institutional features of democracy itself (e.g., Martin 2000) or from the "anarchic" character of the international system (e.g., Lipson 2003). Third and finally, the existing literature does not examine the effect of institutions on the credibility of a government's commitments vis-à-vis transnational (private) actors.

In this paper, we explore how domestic and international institutions interact in allowing governments to make more credible commitments vis-à-vis foreign investors and thus attract more FDI. To do so, we follow Cowhey (1993) in asking whether key characteristics of political democracy at the domestic level reinforce or undermine the salient features of international institutions for solving the most pertinent problem for inter- or transnational cooperation: credible commitment problems caused by time-inconsistent preferences. Specifically, we ask whether domestic democracy affects governments' ability to use international trade agreements (PTAs) to enhance the credibility of their commitments to foreign investors.

Democracy as such does not constitute a commitment to fair treatment of foreign direct investors. As noted in the introduction, foreign investors face political risks not faced by domestic investors.¹⁰ As long as the median voter benefits from FDI (as recent research tends to show), democratic leaders should want to attract and keep FDI. But this long-term incentive is easily counteracted by short-term incentives to re-distribute the gains from the investment at the expense of the non-voting foreign investors, and regular political competition creates strong incentives for democratic politicians to focus far more on short-term benefits than long-term costs.¹¹ Standard theoretical models of democracy are not sufficiently precise to allow us to have strong expectations about the net effect. It need not be the case that democracies are on balance more politically risky for foreign investors, but it certainly does not seem warranted theoretically to equate democracy with lower political risks of discriminatory policies against foreign

¹⁰ Foreign investors might also have access to political protection from their home governments, using the channels of international politics, which are not available to domestic investors, but home government support for "their" multinationals or international investors is likely to be highly contingent (Krasner 1978; Tomz 2007), so that we do not attempt to incorporate it into our theoretical discussion here.

¹¹ Democracy also creates electoral incentives for opposition parties to adopt xenophobic economic policy position based on an assertion that the current government is favoring foreign investors over their own nationals/voters. For a more optimistic view of democratic politicians' ability not to sacrifice long-term benefits for short-term gains, see Barry (1985).

investments. Nonetheless, we expect democracy to help countries alleviate their commitment problems vis-à-vis foreign investors in conjunction with PTAs, which (following Büthe and Milner 2008) we conceptualize as combining a substantive commitment to economically liberal policies with features that make it more costly to renege on those commitment. Specifically, we hypothesize that democracy boosts the positive impact of trade agreements on FDI for two reasons, both of which emphasize several features of democracy working together. Our theoretical argument thus goes against the tendency in much recent research to want to isolate a single causally primary institutional feature of democracy.

First, the ratification of international treaties such as PTAs is more meaningful in democracies, assuring foreign investors that the commitments enshrined in those treaties have been made openly and with broad support after public scrutiny. Based on previous work, we assume that PTAs are commitment devices because they bind the participating governments under international law. A treaty is legally binding, however, only after it enters into force, which usually requires ratification by the signatories.¹²

Ratification, however, should make entry into force more meaningful for democracies than for non-democracies. While democracies differ in their ratification procedure for international treaties (Hathaway 2008), contemporary democracies generally have constitutional requirements for treaty ratification by a body that is not part of the executive branch of government—usually one or more chambers of the legislature. In democracies, legislatures are by definition competitively elected, so we would expect the opposition to have every incentive to use the legislature to keep a check on the government. As a consequence, the legislative debate over ratification (and the media attention that it generates) should provide foreign investors and

¹² Multilateral treaties might not require universal ratification but specify a super-majoritarian share of the signatories who must ratify before the treaty enters into force, initially only amongst the subset of those who have then ratified.

other observers with a wealth of information, including who the main opponents are of (any particular commitments contained in) the PTA-to-be, how vigorously opposed the opponents are, and how strongly supportive the supporters. Such information provision might be generally welcomed by foreign investors because it reduces uncertainty, but it should be reassuring only if the substantive information about domestic preferences is favorable (which, we have argued above, is not a function of domestic political institutions as such).

When the informative ratification debate is followed by actual ratification, however, then there must be a majority (often a super-majority) in favor of the commitment,¹³ which should reduce the risk of reversal and thus assure foreign investors that the commitment will persist. By contrast, in non-democracies, the legislature has little meaningful independence and ratification occurs without real debate and scrutiny—if it is required at all. Government commitments of the PTA type in a non-democratic domestic institutional context have thus not been vetted in the same way and therefore are a greater risk of unexpected opposition later.

Moreover, liberal democracies have inherently a strong rule-of-law tradition, which again makes ratification more meaningful. Consequently, even an opposition party that is originally strongly opposed to an international trade agreement and proclaims that it wants to re-negotiate, abrogate, or withdraw from the agreement (which of course is in principle possible, see Helfer 2005) will understand that its options for achieving such a change in the short run are limited. The recognition that it is not feasible (in the short run) to escape from, or act contrary to, the commitments enshrined in the PTA without being in overt violation of the country's obligations under international law, should reduce the attractiveness of exiting the treaty. At a minimum,

¹³ Issue linkage and other forms of political side-payments make it possible that ratification is achieved by merely accommodating some of the opponents, but they must have been accommodated to the point where they can live with the commitment—in full knowledge of what that commitment is.

democracy thus ensures foreign investors of substantial advance warning of a change in the pertinent commitments.

Second, defining characteristics of democracy—freedom of the press, freedom of expression, and political contestation—increase the speed and quality of information that is publicly available about (impending and actual) changes in policy, which in turn should boost the effectiveness of international institutions as commitment mechanisms. Notwithstanding considerable variation in press freedom among democracies (across countries and over time), freedom of the press tends to be much higher for democracies than non-democracies,¹⁴ as should be expected of one of the hallmarks of liberal democracy. It ensures more, better, and *public* information about government behavior from an independent source. Freedom of expression ensures that those who are (in danger of being) harmed by a (planned) policy change have the opportunity to make their grievances publicly known. And political contestation creates incentives for the political opposition to keep a close watch on the government and publicize plans for policy change and actual changes that can be portrayed as detrimental to any domestic stakeholders. It is the combination of all these features that makes democracy different.

As we noted in our discussion of ratification debates above, additional information—especially the unbiased information provided by a free press—is surely generally valued by foreign investors seeking to assess political risks (see also Jensen 2006: 7, 77f). These features, however, should not lead to significant increases in FDI if the information thus revealed is not favorable to foreign investors: The literature on the relationship between regime type and FDI suggests both reasons why democracies might be more FDI-friendly than non-democracies, as

¹⁴ See, e.g., Freedom House's "Freedom of the Press" rating (<http://www.freedomhouse.org/report/freedom-press/freedom-press-2012>, last accessed 7/2/2012) or the "Press Freedom Index" and "-Barometer" compiled by Reporters sans Frontiers (<http://en.rsf.org/>, last accessed 7/2/2012).

well as reasons why they might be more hostile to FDI, with no consensus over what to expect on balance. While we therefore have no expectation regarding the net effect of democracy by itself, we expect the combination of democracy with trade agreements to have an unambiguously positive effect.

If freedom of the press, freedom of expression, and political contestation coincide with trade agreements that commit governments to economically liberal economic policies, then the additional information should make it easier for any interested party to identify violations of those commitments. By facilitating the detection of any violation of a country's policy commitments, political competition as well as freedom of the press and expression make it easier for a country's partners in a trade agreement to punish such violations, making violations of the commitments more costly in expectation than if the same commitments had been undertaken by a non-democratic government. Even more importantly, these characteristics of democracy increase the probability that any policy change that would violate the FDI host country's commitments will be detected in advance (before the policies are implemented), allowing those foreign investors, whose interests are threatened by the change, to bring pressure to bear on the FDI host country *ex ante* (via FDI home governments or the foreign investors' domestic allies in the FDI host country). The combination of domestic democracy and commitments to economically liberal policies in international trade agreements thus should boost foreign investors' chances of forestalling discriminatory policy change before it has a detrimental effect on their investment. This, in turn, should increase foreign investors' confidence in these commitments.

In sum, we hypothesize that democratic domestic political institutions amplify the effect of international trade agreements on FDI because signing a trade agreement constitutes a

commitment that is in the eyes of foreign investors even more credible for democracies than for non-democracies. Consequently, we expect that countries with more PTAs will receive more FDI than countries with fewer PTAs (or no PTAs at all), *and that this effect will be stronger for more democratic countries*. In other words, democracy by itself might not significantly affect FDI in a consistent matter, but it boosts the credibility of a country's commitment in international trade agreements, thus making a democracy that enters into a PTA more attractive for foreign investors than a non-democracy that enters into a PTA. The flip-side of this argument is that, among the countries with a certain number of PTAs, countries that are (or become) more democratic might be expected to receive more FDI than countries that are (or remain) less democratic. This leads us to two hypotheses regarding the interaction of these two institutional factors:

H₁: The more democratic a country is, the greater will be the positive effect of PTAs on its inwards FDI.

H₂: The positive effect of democracy on a country's inwards FDI will be greater for a country the more PTAs it has signed.

3. Empirical Analyses

To test the above hypotheses, we conduct statistical analyses of inward foreign direct investment for all independent developing countries with a population of more than 1 million. We restrict our sample to non-OECD countries because there are strong theoretical reasons to believe—and empirical research shows (Blonigen and Wang 2005)—that FDI into developing countries is a function of a different set of factors than FDI into advanced industrialized countries. The first year covered by our analysis is 1970, the first year for which international organizations such as the UN Conference on Trade and Development (UNCTAD) have collected

comprehensive annual data on foreign direct investment flows into developing countries. The most recent year for which we have data on both FDI and PTAs is 2009.¹⁵

Our dependent variable, inward FDI, is the sum of direct investment undertaken by foreigners in a given country during a given year, as a percentage of GDP.¹⁶ The data is taken from the online version of UNCTAD's *Handbook of Statistics*, the source of the most comprehensive data on FDI. We use *FDI as a percentage of GDP* to eliminate the need to deflate our dependent variable and to make it comparable across countries and across time.

To study the interaction of domestic and international political institutions, we focus on how a comprehensive measures of international trade agreements interacts with measures of regime type (democracy). Our measure *CUMULATIVE PTAs*, from the new dataset compiled by Edward Mansfield and Helen Milner (2012), records the number of bilateral and minilateral trade agreements to which a country is a party by the end of the year for which the information is recorded. For the developing countries in our sample from 1970 to 2009, this variable ranges from 0 to 25.¹⁷

To measure political democracy at the domestic level, we first use the dichotomous measure of electoral democracy created by José Cheibub (originally with Alvarez, Limongi and Przeworski and also known as "ACLP democracy"), which codes a regime as democratic if and only if high political offices are chosen through fair and free contested elections where

¹⁵ There have been 133 non-OECD countries in existence at some point in time between 1970 and 2009; our dataset covers 125 of these 133 countries and most years during which any of them existed as independent countries.

¹⁶ Inward FDI flows tend to be positive but can take negative values in years when foreigners withdraw more direct investment than they undertake.

¹⁷ Since we interpret PTAs as commitments to liberal economic policies that are costly to break, we expect a positive correlation with FDI. We include as a separate measure of a single though global-scope trade agreement a dichotomous measure of formal membership in GATT and WTO: *GATT/WTO MEMBERSHIP* (coded 1 for every year in which a country is a member of GATT or WTO, see www.wto.org/english/thewto_e/gattmem_e.htm, www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm). The correlation with FDI should also be positive.

alternation of leaders occurs.¹⁸ Second, we employ the widely-used *POLITY* index, which combines data on five aspects of domestic political institutions that capture the differences between democracies and autocracies: (1) the competitiveness of the process for selecting a country's chief executive, (2) the openness of this process, (3) the extent to which institutional constraints limit a chief executive's decision-making authority, (4) the competitiveness of political participation within a country, and (5) the degree to which binding rules govern political participation within it.¹⁹ Aggregating these five components into the "Polity2" index results in a 21-point score (from -10 to +10) where higher values indicate more democratic domestic political institutions. Neither measure is perfect, and correlations among them, while above 0.7, are far from unity, which suggests that they are not in fact measuring the same thing (see also Elkins 2000; Munck and Verkuilen 2002; Treier and Jackman 2008). Yet, they provide reasonable and broadly comparable indicators of democracy, and they are the standard measures used in the literature.²⁰

3.1. Empirical Analyses I: Differences in Average Inward FDI

As a first cut, we split the sample between democracies and non-democracies (the columns in Figures 1 and 2).²¹ We also split the sample into two sub-samples based on the number of PTAs: country-years with a low number of PTAs and country-years with a high

¹⁸ For details see Alvarez *et al* (1996), Cheibub (2007) Przeworski *et al* (2000).

¹⁹ For details, see the Polity IV project website (<http://www.systemicpeace.org/polity/polity4.htm>, last accessed 7/20/2012); Gurr *et al.* 1989, and Jagers and Gurr 1995.

²⁰ In robustness checks, we also consider Freedom House's (FH) rating of countries as free, partly free, or not free, based on FH expert observers' answers to questions about the electoral process, political participation and the functioning of government. This results in a *FREEDOM* score of 1, 2, or 3, where a *lower* score indicates a more democratic political regime. This measure is widely used but has less comprehensive coverage and has been the subject of long-standing controversy over transparency, reliability, and bias in how the measure is encoded.

²¹ Since our unit of analysis is the country-year and many countries in the sample experienced regime changes during the time period covered by this analysis, we divide the sample based on observation-level information, *i.e.*, we did not assume that any given country is in one column or the other for the entire period. However, for consistency with the regression analyses reported below, we use the 1-year lagged values for democracy and PTAs. The lag allows for a time delay between these hypothesized explanatory variables (democracy and PTAs) and their stipulated effect on FDI. It also provides some safeguard against reverse causation.

number of PTAs.²² Since we have no theoretical reason to expect any particular threshold for the number of PTAs, we use the median number of PTAs (two) to dichotomize the sample based on this measure, so that the size of the two groups (the rows in Figures 1 and 2) are approximately equal. These two two-way splits of the sample result in the 2x2 tables in Figures 1 and 2. We then calculate, for all the country-years in each cell, the mean level of FDI (inwards FDI as a percentage of GDP), as well as the standard deviation.

Our general theoretical assumption about PTAs suggests that average FDI should be higher in the top row than in the bottom row. If, according to H₂, democracies generally attracted more FDI than non-democracies at a given level of PTAs, then—within each row—average inward FDI should be higher in the cell on the right than in the cell on the left. Our main focus in this paper, however, is to assess the hypothesis that the effect of PTAs on inward FDI is conditioned by domestic political institutions and more specifically that democracy boosts the effect of PTAs on FDI. In the dichotomous setting, this hypothesis (H₁) might be simplified to read: The positive effect of signing PTAs on a country's FDI inflows will be greater for democracies than for autocracies. If this hypothesis holds, we should observe a greater effect of PTAs (top vs. bottom cell) in the democracy column than in the non-democracy column.

[FIGURE 1 ABOUT HERE]

Figure 1 shows the results when Cheibub's dichotomous measure is used to differentiate between democracies and non-democracies. We find that countries with a high number of PTAs generally attract more FDI than countries with a low number of PTAs.²³ This difference is more

²² Given the findings regarding signed PTAs versus PTAs in force, discussed below, we here report the findings for PTAs in force, though the findings do not change in any consequential way if we use signed PTAs instead.

²³ More precisely, we find, with the country-year as the unit of observation: countries that were parties to a high number of PTAs in the previous year attract more FDI than countries that were parties to a low number of PTAs in the previous year—on average and controlling for democracy.

pronounced for democracies than for non-democracies—as expected theoretically: For democracies, the estimated effect of a country increasing the number of its trade agreements from a "low" number to a "high" number is an increase in inward FDI equal to almost 2.2% of GDP. By contrast, the estimated increase for non-democracies is just over 1.8% of GDP. And while the difference between the average for low PTAs and for high PTAs is strongly statistically significant for both democracies and non-democracies ($p < 0.00005$), it is larger and more significant for democracies. Looking at the findings the other way, we note that democracy appears to have no effect in a low-PTA environment, whereas it increases FDI inflows by more than 1/3 of a percent of GDP in a high-PTA environment.

Do these differences persist when we use the more multi-faceted measure of domestic political institutions, POLITY? As shown in Figure 2, using a Polity2 score of 7 or above to distinguish democracies from non-democracies yields even stronger support for H_1 than using Cheibub's measure of electoral democracy: Countries with a high number of PTAs generally receive more FDI, but this effect of PTAs is substantially stronger for democracies. Concerning H_2 , we find that, among countries with few PTAs, regime type makes no statistically significant difference, whereas among countries with a high number of PTAs, democratic countries attract more FDI than non-democracies—and to a statistically significant extent.²⁴

[FIGURE 2 ABOUT HERE]

²⁴ In the analyses using Cheibub's democracy measure, the difference between democracies and non-democracies in the high-PTA environment just misses conventional thresholds for statistical significance, but in the analysis using Polity, the difference is clearly significant at well below $p < 0.05$. Some scholars advocate also counting countries with a Polity score of 6 as "democracies." Among robustness checks, we re-ran the analysis using this threshold, which yielded substantively identical results. Analyses using Freedom = 1 to identify democracies (1973ff) similarly find that the effect of PTAs is stronger for democracies and that there is a statistically significant difference between democracies and non-democracies only in a high-PTA environment.

These striking findings, which are robust to changes in the time period considered and to exclusions of various countries that might be outliers, strongly support our argument. Most importantly, the fact that the difference between the top and the bottom cell is greater in the democracy column than in the non-democracy column suggests that democracy indeed boosts the effect of PTAs on FDI (H_1). The findings also suggest that PTAs have a more robust effect than democracy: PTAs matter irrespective of regime type (albeit more so in democracies), whereas democracy appears to matter only in a high-PTA environment. But most importantly, they suggest that the effect of the international institutions is conditional on domestic institutions—PTAs matter more in democracies—supporting our argument that we need to theorize the joint or interactive effect of domestic and international institutions.

The analyses summarized in figures 1 and 2, however, suffer from several handicaps. Most importantly, this approach does not allow us to control for other factors that previous research has found to be significant determinants of FDI, such as political instability/violence or the level of economic growth. If the variation in those factors is not entirely independent of our main variables of interest, the above results might suffer from omitted variable bias. Moreover, the above findings could be due to spurious correlation: The number of PTAs, the level of democracy, and the amount of FDI going into developing countries have all generally trended upwards during the time period covered here. More sophisticated statistical techniques are warranted.

3.2. Empirical Analyses II: Regression Models

3.2.1. BASELINE MODEL

FDI is also affected by other economic and political factors. To analyze the interaction between international and domestic institutions while controlling for these other factors, we now turn to regression analysis.

As a first step, we replicate Bütthe and Milner's (2008) main model, which includes three economic controls: the *MARKET SIZE* of the FDI host country, measured using the log of the country's population; the level of *ECONOMIC DEVELOPMENT*, measured using the log of per capita GDP in constant (2000) dollars; and, most importantly, economic opportunities or *GDP GROWTH*, measured using the percentage change in the country's real GDP from the previous year. These economic control variables enter with a one-year lag. In addition to their measure of PTAs, Bütthe and Milner (2008) include two further measures of international institutions (*GATT/WTO MEMBERSHIP* and the number of the country's bilateral investment treaties, *BITs*), and two additional political variables as predictors of FDI flows: Henisz's measure of preference-weighted veto players, *DOMESTIC POLITICAL CONSTRAINTS* (a preference-weighted measure of domestic political institutions, see Henisz 2000) and *POLITICAL INSTABILITY*, the composite measure from Arthur Banks' dataset of political events that indicate political violence and instability (Banks 1999).

The models we estimate in Table 1 include the same variables as Bütthe and Milner's main model, yet our dataset differs from theirs in three respects: First, our PTA measure is drawn from the new, more comprehensive dataset of PTAs described above. Second, we extend the analysis by seven years, which adds more than 800 observations, making our sample one third larger. Third, in order to extend the temporal dimension of the analysis, we use the 2010

update of Henisz' measure of DOMESTIC POLITICAL CONSTRAINTS. This measure not only extends the time series dimension through 2007 but also incorporates Henisz's extensive revisions to the coding of the earlier observations, which results in a measure that is correlated with the old "POLCON" measure below 0.6 (for the developing countries in our sample covered by both the 2002 and 2010 release of the Polcon data). At the same time, it is more highly correlated with measures of democracy than the old measure.

Following Büthe and Milner's estimation strategy, we pool data from all developing countries but then conduct "within" estimations (OLS with country fixed effects)²⁵ since our main theoretical interest is whether changes in international and domestic institutions (and hence changes in their interaction) affect a given country's attractiveness to foreign direct investors, and because preliminary tests showed that neither simple OLS on the pooled sample nor random effects estimation is appropriate. All explanatory variables are lagged one period. Since the dependent variable exhibits an upwards trend, we de-trend it to restore the Gauss-Markov assumptions. Independent variables that exhibit a statistically significant trend are also de-trended to safeguard against spurious correlation that arises from variables trending together over time (e.g., Davidson and MacKinnon 1993:670-673; Wooldridge 2000:311ff, esp. 337f). We use the "clustered" standard errors for within estimators proposed by Arellano (1987), which are robust to both heteroskedasticity and autocorrelation and generally yield very conservative inferences (see Kézdi 2004).

Model 1 simply re-estimates Büthe and Milner's main model, using *SIGNED PTAS* (the cumulative number of PTAs signed by the country) as the measure of PTAs. We replicate their

²⁵ For a full technical discussion, see, e.g. Hsiao (2003) and Wooldridge (2010). Country fixed effects are implemented at a preliminary stage using the "areg" command in Stata.

key finding that PTAs boost inward FDI flows to a highly statistically and substantively significant extent.²⁶

As we have discussed above, trade agreements become a legally binding commitment not at the moment when they are signed but only after they have been ratified by the signatory states and entered into force. Moreover, differentiating between the PTAs of democratic FDI host countries and PTAs of non-democratic FDI host countries—based on the argument that ratification is more meaningful in democracies (an important part of the theoretical logic underpinning our hypotheses)—only makes sense for PTAs that have entered into force. In model 2, we therefore replace SIGNED PTAs with two separate measures: *PTAS IN FORCE*, the cumulative number of the FDI host country's PTAs that have been ratified and entered into force, and *PTAS, ONLY SIGNED*, which records the number of *additional* PTAs (if any) that have been signed but not yet entered into force.²⁷ The estimated coefficients for model 2 show that PTAs that have entered into force are driving the positive effect of PTAs on FDI. PTAs that have only been signed result in no statistically significant additional increases in FDI flows, whereas *PTAS IN FORCE* are a statistically and substantively significant predictor of FDI.²⁸ The latter finding persists virtually unchanged even when we drop the measures of international agreements that have only been signed but not yet ratified.²⁹

²⁶ The positive coefficients, estimated for GATT/WTO membership and for signed BITs, both miss conventional levels of statistical significance. The lack of statistical significance for MARKET SIZE and ECONOMIC DEVELOPMENT is consistent with other within-country analyses (more than 97% of the variance in these variables is cross-sectional). GDP GROWTH is strongly statistically significant, as in most economic analyses of FDI. The lack of statistical significance for DOMESTIC POLITICAL CONSTRAINTS and POLITICAL INSTABILITY is discussed below and in robustness checks.

²⁷ While most trade agreements enter into force within two years after they are signed, some await ratification by the signatory countries for numerous years.

²⁸ A similar distinction between BITS IN FORCE and BITs that have only been signed does not yield statistically significant results for either of the measures. We nonetheless proceed with BITs-in-force in the model (see also robustness checks).

²⁹ See Model 3; estimates for the model that only omits signed-only PTAs available upon request.

One of the most notable findings in models 1 and 2 (beyond the strong estimated effect of PTAs on FDI) is that the measure of DOMESTIC POLITICAL CONSTRAINTS (hereafter "POLCON"), which had been the only consistently statistically significant measure of domestic political institutions in Büthe and Milner's analysis (2008), is far from statistically significant. In fact, POLCON remains insignificant when PTAs IN FORCE (or any other variable) is dropped from the model.³⁰ The finding that POLCON has no significant effect, while surprising in light of much of the literature on FDI and not directly anticipated, is consistent with our theoretical discussion of democracy since the desirability of an increase in policy stability due to a high number of veto players should be largely a function of the desirability of that policy (which as such is not determined by the number of veto players).

In light of its statistical insignificance, we drop POLCON from subsequent analyses, which barely changes the model fit but increases the efficiency of the model.³¹ Dropping POLCON also facilitates our analyses of measures of democracy, below, given the high collinearity between POLCON and democracy.

[TABLE 1 ABOUT HERE]

3.2.2. DOMESTIC-INTERNATIONAL INTERACTION

Our analysis of the interaction between democracy and PTAs start from a model of the following general form, which is a derived from model 2 after dropping the insignificant signed-only international agreements and the insignificant measure of domestic political constraints:

$$FDI_{it} = \alpha_{it} + \beta_1 PTA_{it-1} + \gamma_1 X1_{it-1} + \dots + \gamma_n Xn_{it-1} + \varepsilon_{it-1} \quad (i)$$

³⁰ Model estimates available upon request.

³¹ We discuss the omission of other insignificant variables in greater detail among robustness checks below.

... where "PTA" is our measure of trade agreements in force and " $X1_{it-1} \dots Xn_{it-1}$ " represent any number of control variables, not including any measure of domestic political institutions. We estimate this equation as model 3 in Table 1.

To assess our two hypotheses about an interactive effect of trade agreements and democracy, we then add a measure of democracy (generically "DEM")—first by itself in model 4, then jointly with an interaction term of the general form PTA*DEM in model 5:³²

$$FDI_{it} = \alpha_{it} + \varphi_1 DEM_{it-1} + \beta_1 PTA_{it-1} + \beta_2 (PTA * DEM)_{it-1} + \gamma_1 X1_{it-1} + \dots + \gamma_n Xn_{it-1} + \mu_{it-1} \quad (ii)$$

In developing our theoretical argument about the interaction of international and domestic institutions, we emphasized as one key reason the public scrutiny that international agreements receive as part of a formal ratification process when ratification requires approval by a competitively elected body that is separate from the government that negotiated the agreement. We stipulated that democracies "generally" have such a ratification requirement, so that the ratification logic might be considered to apply commonly to democracies. Data from Elkins and Ginsburg's Comparative Constitutions Project allows us to examine this claim directly. Among the advanced capitalist democracies of the OECD, only Italy's constitution provides for treaty ratification by the Head of State (nominally part of the executive branch but highly independent of the government). All others require ratification by one or more chamber of the legislature. Among developing countries (to which our main analyses are restricted) there are only three that did not require legislative ratification for any years during which they would have been considered democracies by at least one of our measures. Specifically, Benin (1991ff) and Somalia (until 1968 and thus prior to the beginning of our analysis) allowed for ratification by

³² We include DEM in model 5 regardless of whether it is significant in model 4, because it is a component of the interaction term.

the Head of State; only pre-civil war Lebanon allowed for treaty ratification by the government/cabinet collectively. This lack of variation in ratification requirements among the democracies on the one hand makes it impossible to directly model the ratification logic empirically. On the other hand, it implies that general measures of democracy indeed also capture the ratification argument very well.³³ We therefore proceed with estimating the models noted above using POLITY as our main measure of democracy.

Model 3 estimates equation i for the sample of country-years for which data are available for both PTAs and POLITY, which we use as our main measure of domestic institutions, so as to be able to consider the gradations of democracy captured by POLITY. The estimated coefficients are very close to those in model 2. When we add just POLITY in model 4, it is not statistically significant. At the same time, adding POLITY barely changes the estimated coefficient for PTAs, nor for any of the other variables (nor does it improve the model fit), suggesting that the simpler model 3 is preferable to model 4.

Since some previous work has shown democracies to be more prone to signing PTAs, however, it is possible that the inclusion of the PTA measure in the same model might obscure the effect of democracy on FDI. Although the low correlation between polity and our measure of PTAs makes it unlikely, we tested for this possible source of bias by re-estimating model 4 without the PTA variable (results not shown but available upon request). The omission of the PTA variable increases the magnitude of the estimated coefficient for POLITY, but POLITY remains some distance from standard levels of statistical significance ($p < 0.218$), and the omission reduces the model fit, suggesting again that model 3 is preferable.

³³ Ratification requirement for international treaties are much more varied for non-democracies. And although the data from the Comparative Constitutions Project show that many of them also have constitutional provisions requiring legislative ratification, such provisions are hardly meaningful if the legislature is not an independent political body. See <http://www.comparativeconstitutionsproject.org/data.htm> (last accessed 7/2/2012).

In model 5, we then include PTAs IN FORCE, POLITY, and the product of these two variables (PTAS*POLITY), along with the standard controls. This is the main model for assessing the interaction of domestic and international political institutions, and the previous analyses suggest that it should be interpreted in comparison with model 3. Since higher values for POLITY indicate more democratic domestic political institutions, our theoretical argument led us to expect a positive coefficient for the interaction term. This is indeed what we find. While the estimated effect of PTAs in force (now to be interpreted as the estimated effect when POLITY = 0) remains substantial and statistically highly significant, we estimate a significant positive coefficient for the interaction term—as well as a smaller, negative, and statistically insignificant coefficient for POLITY itself. The model also registers a small improvement in fit over model 3 (the estimated coefficients for the other variables are barely changed). Substantively, these statistical findings suggest an additional boost in FDI for PTAs entered into by more democratic countries.

Given that both POLITY and PTAS IN FORCE are continuous variables, however, the net effect and its statistical significance are difficult to assess based on the estimated coefficients. Proper assessment of hypotheses 1 and 2 requires calculating the marginal effect for each of the variables conditional on the other along with confidence intervals based on the variance-covariance matrix (Brambor, Clark, and Golder 2006; Franzese and Kam 2007).

Figure 3 displays the marginal effects for PTAs, conditional on domestic regime type as measured by POLITY, based on the estimates from model 5. It shows that PTAs do not have a statistically significant effect on inward FDI flows for the most autocratic governments (regimes with a detrended Polity score below about -2.5), but otherwise have a significant positive effect on FDI, which increases as countries become more democratic—almost doubling in magnitude

for the most democratic countries vis-à-vis what had been estimated as the average effect in model 3.

[FIGURE 3 ABOUT HERE]

The findings summarized in Figure 3 provide strong support for hypothesis 1: The more democratic a developing country becomes, the more does the entry into force of a PTA boost the level of FDI it receives. Put another way: The effect of international institutions is conditional on a country's domestic institutions.

What about hypothesis 2? Does the reverse argument hold, so that the effect of democracy on FDI depends upon the international institutional context, specifically the number of PTAs to which the country is a party? Figure 4 explores this issue.

[FIGURE 4 ABOUT HERE]

It shows the marginal effect of democracy (POLITY regime type), conditional on PTAs. The upwards slope is consistent with hypothesis 2. In striking contrast to Figure 3, however, zero (which would imply no effect) is within the 95% confidence interval throughout the entire range of the conditioning PTA variable. In other words, while model 4 taught us that democracy has no universally observable statistically significant effect on FDI, model 5 leads us conclude that, although the effect of democracy appears to be increasing in the number of a country's PTAs, the estimated conditional effect of democracy is never statistically clearly distinguishable from zero at any level of PTAs. Put another way: At no level of PTAs will an increase in a country's level of democracy (as measured by Polity) increase the level of FDI it receives to a statistically significant extent, though the estimated effect is strong enough to be statistically significant if we were to use the 90% confidence threshold.

3.3. Robustness Checks

We conduct four sets of robustness checks. First, we ask whether model 5 is correctly specified. Equation (i) above (estimated as model 3) is essentially a restricted version of the model shown in equation (ii), which we estimated as model 5. The latter, however, is itself a restricted version of the fully unrestricted model in equation (iii), which would imply that regime type conditions the entire structural relationship between the hypothesized explanatory variables and FDI:

$$FDI_{it} = \alpha_{it} + \varphi_1 DEM_{it-1} + \beta_1 PTA_{it-1} + \beta_2 (PTA * DEM)_{it-1} + \gamma_1 X1_{it-1} + \delta_1 (X1 * DEM)_{it-1} + \dots + \gamma_n Xn_{it-1} + \delta_n (Xn * DEM)_{it-1} + v_{it-1} \quad (iii)$$

We should draw conclusions from the estimated coefficients for models of type (ii) only if model (ii) offers an improvement in fit vis-à-vis model (i)—as we have shown to be the case for model 5 vis-à-vis model 3—and if estimating equation (iii) does *not* offer a significant further improvement over model (ii). As a first robustness check, we therefore estimated the full unrestricted model with POLITY as our measure of democracy. The results confirm that equation (ii), i.e., model 5 in Table 1, is superior to the fully unrestricted specification: The other interaction terms are neither individually nor jointly significant, and there is no improvement in the model fit from the additional interaction terms in equation (iii).³⁴

As a second robustness check, we use an alternative empirical operationalization to deal with the econometric issues in our panel analyses: error correction models (see, e.g. De Boef and Keele 2008). In those models, we focus on the estimated impact propensities for PTAs, democracy, and their interaction (and the long-run propensities implied for these variables by the estimated coefficient for the lagged dependent variable in those models). The analyses using error correction models confirm our main results: PTAs by themselves have in all models a

³⁴ Detailed estimates for the full model available upon request.

statistically highly significant positive effect on FDI; democracy (measured by Polity) has no statistically significant effect on FDI when it enters into the model by itself (with or without PTAs in the model), but becomes jointly significant when it enters together with an interaction term.³⁵

As a third robustness check, we re-estimate all the above models using the 3-category Freedom House score as an alternative measure of domestic political institutions (democracy). Table 2 shows the main models using the Freedom House measure, FREEDOM instead of POLITY. FREEDOM is encoded such that lower values indicate more democratic political institutions, so that we expect negative coefficients on FREEDOM and the INTERACTION TERM. Using this alternative measure of democracy, we confirm again the main findings from the analysis using POLITY. Most importantly, we find that PTAs boost inward FDI significantly more strongly in democracies than in non-democracies, and there is again no indication that the full unrestricted model is warranted.³⁶

[TABLE 2 ABOUT HERE]

As a final robustness check, we consider various changes in the model and sample. We drop statistically insignificant variables, such as our measures of market size and level of economic development, individually and jointly, and add further measures that previous research suggests might be predictors of FDI flows. We also omit countries with exceptionally high levels of FDI inflows, which might make them outliers (or more importantly, influential points)

³⁵ The most notable difference when using the ECM specification to test our hypotheses empirically occurs in the estimated coefficients for some of the control variables: In error correction models, BITs and POLITICAL INSTABILITY are generally at least weakly significant, which led us to keep them in the models shown above.

³⁶ The most notable difference when comparing the estimates for FREEDOM in models 4' and 5' to the estimates in models 4' and 5' (using POLITY) is that FREEDOM is weakly statistically significant by itself (in model-4- and model-4-type models), though that finding is statistically fragile: omitting PTAs from model 4, for instance (results not shown but available upon request), renders FREEDOM insignificant. PTAs and the interaction, by contrast, remain robustly significant.

and alter starting- and ending dates of the time series. None of these changes affect our main results of strong support for hypothesis 1 and weaker support for hypothesis 2.

4. Conclusions

In this paper we have asked how international and domestic political institutions interact to affect flows of direct foreign investment into developing countries. Governments face time inconsistency problems, which may reduce inward FDI because potential investors worry about the credibility of promises not to take measures that would devalue the investments. But governments can overcome or reduce these problems and thus increase inward FDI with the help of institutions that tie the hands of governments so that it is more costly to renege on their promises later on. Both international and domestic institutions matter. International institutions, specifically trade agreements, can perform this function. Having preferential trade agreements helps countries attract foreign investment. In this paper, we have shown that this effect persists even when a more comprehensive set of PTAs is taken into account and the time series are extended, increasing the sample size by 1/3 over previous analyses, but most importantly we have shown that domestic institutions matter as well. The impact of trade agreements on FDI is increased when countries are more democratic. Democracy at home can be used in combination with international institutions to enable governments to enhance the credibility of their commitments. Although we do not find an effect for domestic regime type by itself, we show that in combination with international trade agreements, democracy indeed matters. These results strongly underline the importance of politics and institutions for economic activity, and in particular for development.

These findings also have interesting implications for the current literature and future research. First, research in both security studies and IPE has during the last two decades

examined domestic political institutions and specifically regime type as an explanatory variable for a range of phenomena in world politics. Few, however, have systematically examined the interaction between domestic and international institutions. Our findings that domestic institutions influence the effect of international institutions underline that this interaction is a fruitful avenue for future research. Research on "two-level games" is an important starting point for such work, but our work suggests that there is much promise in more systematically theorizing interactive or joint effects of domestic and international institutions.

Second, recent research has suggested that governments can use international institutions to boost the credibility of commitments that they make to each other. Our finding that governments of developing countries can increase inward FDI by committing themselves to economically liberal policies through PTAs suggests that governments also can use international institutions to boost the credibility of their commitments vis-à-vis *private* actors in the international political economy. Domestic and international institutions can both provide mechanisms for governments to enhance the credibility of their policies. Private actors such as investors—whether domestic or foreign—can use the political institutions in a country to assess a government's likely behavior, and thus make decisions about investments. Political institutions may play additional roles than in influencing economic growth, in part by providing better information.

Third and finally, our findings have important policy implication for those who seek to improve the investment climate and thus increase investment and economic growth in developing countries. We have shown not only that international trade institutions can be constructed to help leaders attract investment and thereby increase economic growth, but also that their effect may be increased by having more democratic political institutions at home. This

finding first of all highlights how interconnected foreign trade and investment have become in the world economy. Many international economists today recognize this important linkage (Brainard 1997; Helpman, Melitz, and Yeaple 2004; Markusen 2002), but scholars of international political economy has been slower to do so, often treating the two as separate areas of investigation. Furthermore, this suggests that, in some ways, democracy and globalization can fit comfortably together.

Table 1
Regression Results, International and Domestic Institutions

	<i>model 1</i>	<i>model 2</i>	<i>model 3</i>	<i>model 4</i>	<i>model 5</i>
Signed PTAs	0.237*** (.0709)				
PTAs, only signed		0.141 (.183)			
PTAs in force		0.256*** (.0659)	0.227*** (.0640)	0.225*** (.0648)	0.226*** (.0639)
PTAs i.f. * Polity					0.0337** (.0158)
Polity				-0.0150 (.0177)	-0.0123 (.0173)
Domestic Political Constraints	-0.430 (.604)	-0.450 (.609)			
GATT/WTO Membership	0.711 (.497)	0.711 (.502)	0.735 (.500)	0.756 (.503)	0.732 (.502)
Signed BITs	0.0118 (.0133)				
BITs, only signed		0.0241 (.0328)			
BITs in force		0.00617 (.0159)	0.00527 (.0155)	0.00499 (.0156)	0.00403 (.0156)
Political Instability	-0.0144 (.0114)	-0.0144 (.0115)	-0.0150 (.0117)	-0.0158 (.0117)	-0.0147 (.0117)
Market Size	1.55 (1.99)	1.50 (1.99)	1.57 (1.99)	1.50 (1.99)	1.57 (1.99)
Economic Development	0.379 (.845)	0.405 (.844)	0.483 (.830)	0.443 (.833)	0.518 (.815)
GDP Growth	0.0998** (.0392)	0.0990** (.0391)	0.108*** (.0393)	0.108*** (.0393)	0.107*** (.0395)
constant	2.77e-9 (2.67e-9)	2.99e-9 (2.64e-9)	-1.27e-9 (1.44e-9)	-1.28e-9 (1.44e-9)	0.0127 (.0107)
R^2	+0.0446	+0.0449	+0.0462	+0.0463	+0.0479
n	125	125	125	125	125
N	3376	3376	3355	3355	3355

Note: OLS estimates with Arellano (1987) heteroskedasticity- and serial-correlation-robust (clustered) standard errors in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$; two-tailed tests. Analysis covers 1970-2007, subject to data availability. All variables de-trended, except GDP growth. R^2 shows the *additional* variance explained after 31.5% (models 1-2) and 31.4% (models 3-5) of the variance has been explained by country fixed effects and linear trend (implemented in advance via "areg" command, with "absorb(country)" in Stata 12).

Table 2
Main Models with Freedom House Regime Type Measure and Interaction with PTAs

	<i>model 3'</i>	<i>model 4'</i>	<i>model 5'</i>
PTAs in force	0.248*** (.0648)	0.255*** (.0639)	0.248*** (.0626)
PTAs in force * Freedom			-0.248** (.102)
Freedom		-0.284* (.151)	-0.288* (.149)
GATT/WTO Membership	0.612 (.544)	0.621 (.541)	0.615 (.540)
BITs in force	0.000573 (.0175)	0.00109 (.0173)	0.00131 (.0172)
Political Instability	-0.0196 (.0133)	-0.0166 (.0128)	-0.0163 (.0128)
Market Size	2.18 (2.57)	2.30 (2.52)	2.41 (2.53)
Economic Development	1.06 (1.12)	1.06 (1.10)	1.11 (1.09)
GDP Growth	0.0985** (.0414)	0.980** (.0411)	0.0986** (.0413)
constant	3.11e ⁻¹⁰ (1.29e ⁻⁹)	3.63e ⁻¹⁰ (1.29e ⁻⁹)	0.0117 (.00905)
<i>R</i> ²	+0.0444	+0.0452	+0.0468
<i>n</i>	124	124	124
<i>N</i>	3125	3125	3125

Note: OLS estimates with Arellano (1987) heteroskedasticity- and serial-correlation-robust (clustered) standard errors in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Analysis covers 1973-2007, subject to data availability. All variables de-trended, except GDP growth. *R*² shows the *additional* variance explained after 32.6% of the variance has been explained by country fixed effects and linear trend (implemented in advance via "areg" command, with "absorb(country)" in Stata 12).

		Democracy (Cheibub measure)	
		No	YES
PTAs	HIGH	3.29 (7.22, N=1137)	3.65 (3.87, N=766)
	LOW	1.47 (3.94, N=1580)	1.46 (2.01, N=580)

Figure 1: Mean annual inward FDI as a percentage of GDP 1970-2009, by regime type and dichotomized level of PTAs (PTAs split at the median: low = 0 - 2; high = 3 and more). Standard deviation and *number of obs* for each cell in parentheses.

		Democracy (Polity)	
		No	YES
PTAs	HIGH	3.09 (6.93, N=1323)	3.76 (3.61, N=635)
	LOW	1.48 (3.77, N=1789)	1.40 (2.01, N=353)

Figure 2: Mean annual inward FDI as a percentage of GDP 1970-2009, by dichotomized regime type and dichotomized level of PTAs. Only country-years with a Polity2 score of 7 or higher counted as "Democracy" observations (where Polity2 is a scale from -10 to +10); PTAs split at the median: low = 0 - 2; high = 3 and more. Standard deviation and *number of obs* for each cell in parentheses.

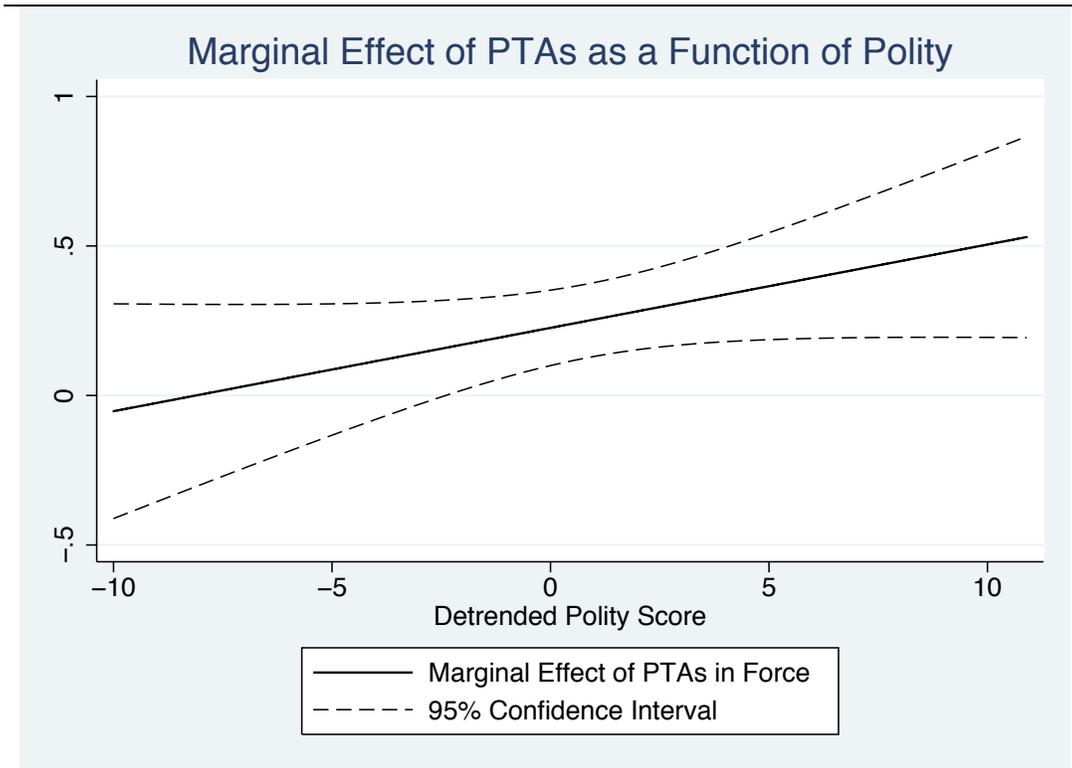


Figure 3

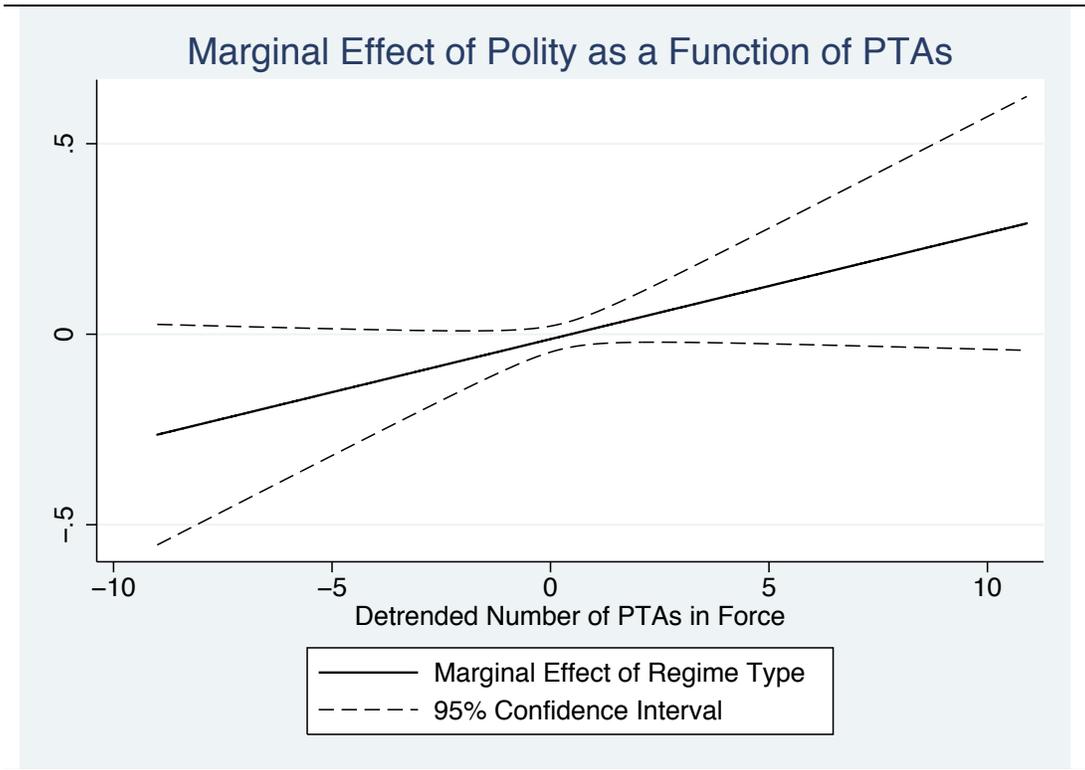


Figure 4

References

- Alvarez, R. Michael, *et al.* 1996. "Classifying Political Regimes." *Studies in Comparative International Development* vol.31 no.2 (Summer 1996): 3-36.
- Arellano, M. 1987. "Computing Robust Standard Errors for Within-groups Estimators." *Oxford Bulletin of Economics and Statistics* vol.49 no.4 (November 1987): 431-434.
- Banks, Arthur S. 1999. *Cross-National Time-Series Data Archive*. Binghamton, NY: Banner Software.
- Barry, Brian. 1985. "Does Democracy Cause Inflation? Political Ideas of Some Economists." In *The Politics of Inflation and Economic Stagnation: Theoretical Approaches and International Case Studies*, edited by Leon N. Lindberg and Charles S. Maier. Washington, D.C.: Brookings Institutions, 1985: 280-317.
- Blanton, Shannon Lindsey, and Robert G. Blanton. 2007. "What Attracts Foreign Investors? An Examination of Human Rights and Foreign Direct Investment." *Journal of Politics* vol.69 no.1 (February 2007): 143-155.
- Blonigen, Bruce A., and Miao Wang. 2005. "Inappropriate Pooling of Wealthy and Poor Countries in Empirical FDI Studies." In *Does Foreign Direct Investment Promote Development?*, edited by Theodore H. Moran, Edward M. Graham and Magnus Blomström. Washington: Institute for International Economics, 2005: 221-244.
- Bornschier, Volker, and Christopher Chase-Dunn. 1985. *Transnational Corporations and Underdevelopment*. New York: Praeger.
- Brainard, S. Lael. 1997. "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade." *American Economic Review* vol.87 no.4 (September 1997): 520-544.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* vol.14 no.1 (Winter 2006): 63-82.
- Büthe, Tim, and Walter Mattli. 2011. *New Global Rulers: The Privatization of Regulation in the World Economy*. Princeton: Princeton University Press.
- Büthe, Tim, and Helen V. Milner. 2008. "The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through International Trade Agreements?" *American Journal of Political Science* vol.52 no.4 (October 2008): 741-762.
- — —. 2009. "Bilateral Investment Treaties and Foreign Direct Investment: A Political Analysis." In *The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows*, edited by Karl P. Sauvant and Lisa E. Sachs. New York: Oxford University Press, 2009: 171-225.
- Cheibub, José Antonio. 2007. *Presidentialism, Parliamentarism, and Democracy*. Cambridge: Cambridge University Press.
- Cowhey, Peter F. 1993. "Domestic Institutions and the Credibility of International Commitments: Japan and the United States." *International Organization* vol.47 no.2 (Spring 1993): 299-326.
- Davidson, Russell, and James G. MacKinnon. 1993. *Estimation and Inference in Econometrics*. New York: Oxford University Press.
- Davis, G. Doug. 2011. "Regional Trade Agreements and Foreign Direct Investment." *Politics & Policy* vol.39 no.3 (May 2011): 401-419.
- De Boef, Suzanna, and Luke Keele. 2008. "Taking Time Seriously." *American Journal of Political Science* vol.52 no.1 (January 2008): 184-200.
- Diamond, Larry. 2002. "Thinking about Hybrid Regimes." *Journal of Democracy* vol.13 no.2 (April 2002): 21-35.
- Dixit, Avinash K., and Susan Skeath. 2004. *Games of Strategy*. 2nd edition ed. New York: W. W. Norton.
- Dreher, Axel, and Stefan Voigt. 2011. "Does Membership in International Organizations Increase Governments' Credibility? Testing the Effect of Delegating Powers." *Journal of Comparative Economics* vol.39 no.3 (September 2011): 326-348.

- Drezner, Daniel W. 2003a. "Introduction: The Interaction of International and Domestic Institutions." In *Locating the Proper Authorities: The Interaction of Domestic and International Institutions*, edited by Daniel W. Drezner. Ann Arbor: University of Michigan Press, 2003a: 1-22.
- — —, ed. 2003b. *Locating the Proper Authorities: The Interaction of Domestic and International Institutions*. Ann Arbor: University of Michigan Press.
- Egan, Patrick J. W. 2012 (forthcoming). "Is Worker Repression Risky? Foreign Direct Investment, Labour Rights, and Assessments of Risk in Developing Countries." *Review of International Political Economy* (forthcoming).
- Elkins, Zachary. 2000. "Gradations of Democracy? Empirical Tests of Alternative Conceptualizations." *American Journal of Political Science* vol.44 no.2 (April 2000): 293-300.
- Evans, Peter B., Harold K. Jacobson, and Robert D. Putnam, eds. 1993. *Double-Edged Diplomacy: International Bargaining and Domestic Politics*. Berkeley: University of California Press.
- Feng, Yi. 2001. "Political Freedom, Political Instability, and Policy Uncertainty." *International Studies Quarterly* vol.45 no.2 (June 2001): 271-294.
- Franzese, Robert J., and Cindy D. Kam. 2007. *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor: University of Michigan Press.
- Gallagher, Kevin P., and Melissa B. L. Birch. 2006. "Do Investment Agreements Attract Investment? Evidence from Latin America." *Journal of World Investment and Trade* vol.7 no.6 (December 2006): 961-973.
- Garland, Marshall W., and Glen Biglaiser. 2009. "Do Electoral Rules Matter? Political Institutions and Foreign Direct Investment in Latin America." *Comparative Political Studies* vol.42 no.4 (February 2009): 224-251.
- Globerman, Steven, and Daniel Shapiro. 2003. "Governance Infrastructure and U.S. Foreign Direct Investment." *Journal of International Business Studies* vol.34 no.1 (January 2003): 19-39.
- Gourevitch, Peter A. 2002. "Domestic Politics and International Relations." In *Handbook of International Relations*, edited by Walter Carlsnaes, Thomas Risse and Beth A. Simmons. Thousand Oaks, CA: Sage Publications, 2002: 309-328.
- Handley, Kyle, and Nuno Limão. 2012. "Trade and Investment under Policy Uncertainty: Theory and Firm Evidence." *NBER Working Paper Series* no.17790 (January 2012).
- Hathaway, Oona. 2008. "Treaties' End: The Past, Present and Future of International Lawmaking in the United States." *Yale Law Journal* vol.117 no.7 (May 2008): 1236-1372.
- Helfer, Laurence R. 2005. "Exiting Treaties." *Virginia Law Review* vol.91 no.7 (November 2005): 1579-1648.
- Helpman, Elhanan, Marc J. Melitz, and Stephen R. Yeaple. 2004. "Export versus FDI with Heterogenous Firms." *American Economic Review* vol.94 no.1 (March 2004): 300-316.
- Henisz, Witold J. 2000. "The Institutional Environment for Multinational Investment." *Journal of Law, Economic and Organization* vol.16 no.2 (October 2000): 334-364.
- Henisz, Witold J., and Bennet A. Zelner. 2001. "The Institutional Environment for Telecommunications Investment." *Journal of Economics & Management Strategy* vol.10 no.1 (Spring 2001): 123-147.
- Hsiao, Cheng. 2003. *Analysis of Panel Data*. 2nd edition ed. New York: Cambridge University Press.
- Jakobsen, Jo. 2006. "Does Democracy Moderate the Obsolescing Bargain Mechanism? An Empirical Analysis, 1983-2001." *Transnational Corporations* vol.15 no.3 (December 2006): 67-106.
- Jensen, Nathan M. 2003. "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment." *International Organization* vol.57 no.3 (Summer 2003): 587-616.
- — —. 2006. *Nation States and the Multinational Corporation: A Political Economy of Foreign Direct Investment*. Princeton: Princeton University Press.
- Kahler, Miles. 1981. "Political Regime and Economic Actors: The Response of Firms to the End of Colonial Rule." *World Politics* vol.33 no.3 (April 1981): 383-412.

- Keohane, Robert O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.
- Kerner, Andrew. 2009. "Why Should I Believe You? The Costs and Consequences of Bilateral Investment Treaties." *International Studies Quarterly* vol.53 no.1 (March 2009): 73-102.
- Kézdi, Gábor. 2004. "Robust Standard Error Estimation in Fixed-Effects Panel Models." *Hungarian Statistical Review* vol.9 (Special English Volume #9): 95-116.
- Kim, Moonhawk. 2008. "Costly Procedures: Divergent Effects of Legalization in the GATT/WTO Dispute Settlement Procedures." *International Studies Quarterly* vol.52 no.3 (September 2008): 657-686.
- Kobrin, Stephen J. 1982. *Managing Political Risk Assessment: Strategic Response to Environmental Change*. Berkeley: University of California Press.
- . 1984. "Expropriation as an Attempt to Control Foreign Firms in LDCs: Trends from 1960 to 1979." *International Studies Quarterly* vol.28 no.3 (September 1984): 329-348.
- Krasner, Stephen D. 1978. *Defending the National Interest: Raw Material Investments and U.S. Foreign Policy*. Princeton, NJ: Princeton University Press.
- Leblang, David. 2010. "Familiarity Breeds Investment: Diaspora Networks and International Investment." *American Political Science Review* vol.104 no.3 (August 2010): 584-600.
- Lee, Jeong-Yeon, and Edwin Mansfield. 1996. "Intellectual Property Rights Protection and U.S. Foreign Direct Investment." *Review of Economics and Statistics* vol.78 no.2: 181-186.
- Leeds, Brett Ashley. 1999. "Domestic Political Institutions, Credible Commitments, and International Cooperation." *American Journal of Political Science* vol.43 no.4 (October 1999): 979-1002.
- Levitsky, Steven, and Jucan Way. 2002. "The Rise of Competitive Authoritarianism." *Journal of Democracy* vol.13 no.2 (April 2002): 51-65.
- Li, Quan, and Adam Resnick. 2003. "Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries." *International Organization* vol.57 no.1 (Winter 2003): 175-211.
- Limão, Nuno. 2005. "Trade Policy, Cross-Border Externalities and Lobbies: Do Linked Agreements Enforce More Cooperative Outcomes?" *Journal of International Economics* vol.67 no.1 (September 2005): 175-199.
- Limão, Nuno, and Patricia Tovar. 2011. "Policy Choice: Theory and Evidence from Commitment via International Trade Agreements." *Journal of International Economics* vol.85 no.2 (November 2011): 186-205.
- Lipson, Charles. 2003. *Reliable Partners: How Democracies Have Made a Separate Peace*. Princeton: Princeton University Press.
- Maggi, Giovanni, and Andres Rodriguez-Clare. 1998. "The Value of Trade Agreements in the Presence of Political Pressures." *Journal of Political Economy* vol.106 no.3 (June 1998): 574-601.
- Manger, Mark. 2009. *Investing in Protection: The Politics of Preferential Trade Agreements between North and South*. Cambridge: Cambridge University Press.
- Mansfield, Edward D., and Helen V. Milner. 2012. *Votes, Vetoes, and the Political Economy of International Trade Agreements*. Princeton: Princeton University Press.
- Markusen, James R. 2002. *Multinational Firms and the Theory of International Trade*. Cambridge, MA: MIT Press.
- Martin, Lisa. 2000. *Democratic Commitments: Legislatures and International Cooperation*. Princeton: Princeton University Press.
- Martin, Lisa, and Beth Simmons. 1998. "Theories and Empirical Studies of International Institutions." *International Organization* vol.52 no.4 (Autumn 1998): 729-757.
- Maskus, Keith E. 2005. "The Role of Intellectual Property Rights in Encouraging Foreign Direct Investment and Technology Transfer." In *Intellectual Property Rights and Development: Lessons from Recent Economic Research*, edited by Carsten Fink and Keith E. Maskus. New York: Oxford University Press for the World Bank, 2005: 41-73.

- Mayer, Frederick W. 1991. "Domestic Politics and the Strategy of International Trade." *Journal of Policy Analysis and Management* vol.10 (Spring 1991): 222-246.
- — —. 2010. "Multi-Level Games." In *Handbook on Multi-Level Governance*, edited by Henrik Enderlein, Sonja Wälti and Michael Zürn. Cheltenham, England: Edward Elgar, 2010: 47-65.
- Meunier, Sophie. 2005. *Trading Voices: The European Union in International Commercial Negotiations*. Princeton: Princeton University Press.
- Milner, Helen V. 1992. "International Theories of Cooperation Among Nations: Strengths and Weaknesses." *World Politics* vol.44 no.3 (April 1992): 466-496.
- — —. 1997. *Interests, Institutions, and Information: Domestic Politics and International Relations*. Princeton: Princeton University Press.
- Milner, Helen V., and B. Peter Rosendorff. 1996. "Trade Negotiations, Information and Domestic Politics: The Role of Domestic Groups." *Economics and Politics* vol.8 no.2 (July 1996): 145-189.
- — —. 1997. "Democratic Politics and International Trade Negotiations: Elections and Divided Government as Constraints on Trade Liberalization." *Journal of Conflict Resolution* vol.41 no.1 (February 1997): 117-146.
- Mitra, Davashish. 2002. "Endogenous Political Organization and the Value of Trade Agreements." *Journal of International Economics* vol.57 no.2 (August 2002): 473-485.
- Moran, Theodore H. 1978. "Multinational Corporations and Dependency: A Dialogue for Dependistas and Non-Dependistas." *International Organization* vol.32 no.1 (Winter 1978).
- — —. 1985. *Multinational Corporations: The Political Economy of Foreign Direct Investment*. Lexington, MA: Lexington Books.
- — —. 1998. *Foreign Direct Investment and Development: The New Policy Agenda for Developing Countries and Countries in Transition*. Washington: Institute for International Economics.
- Moravcsik, Andrew. 1994. *Why the European Community Strengthens the State: Domestic Politics and International Cooperation*. Cambridge, MA: Center for European Studies.
- Mosley, Layna. 2011. *Labor Rights and Multinational Production*. New York: Cambridge University Press.
- Munck, Gerardo L., and Jay Verkuilen. 2002. "Conceptualizing and Measuring Democracy." *Comparative Political Studies* vol.35 no.1 (February 2002): 5-34.
- Neumayer, Eric, and Laura Spess. 2005. "Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?" *World Development* vol.33 no.10 (October 2005): 1567-1585.
- North, Douglass C., and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *Journal of Economic History* vol.49 no.4 (December 1989): 803-832.
- O'Donnell, Guillermo A. 1979 (1973). *Modernization and Bureaucratic Authoritarianism: Studies in South American Politics*. 2nd edition with a postscript by the author ed. Berkeley, CA: Institute of International Studies.
- Odell, John S. 2000. *Negotiating the World Economy*. Ithaca, NY: Cornell University Press.
- Ofa, Siopé V. 2009. "The WTO's Telecommunications Commitments and the Credibility of Telecommunications Regulatory Reforms in Small Island Developing Countries." *Pacific Economic Bulletin* vol.24 no.3 (October 2009): 39-57.
- Oneal, John R. 1994. "The Affinity of Foreign Investors for Authoritarian Regimes." *Political Research Quarterly* vol.47 no.3 (September 1994): 565-588.
- Paarlberg, Robert. 1997. "Agricultural Policy Reform and the Uruguay Round: Synergistic Linkage in a Two-Level Game?" *International Organization* vol.51 no.3 (Summer 1997): 413-444.
- Peinhardt, Clint, and Todd Allee. 2012. "Failure to Deliver: The Investment Effects of U.S. Preferential Economic Agreements." *World Economy* vol.35 no.6 (June 2012): 757-783.

- Pevehouse, Jon C. 2003. "Democratization, Credible Commitments, and Joining International Organizations." In *Locating the Proper Authorities: The Interaction of Domestic and International Institutions*, edited by Daniel W. Drezner. Ann Arbor: University of Michigan Press, 2003: 25-47.
- Pinto, Pablo M., and Santiago M. Pinto. 2008. "The Politics of Investment: Partisanship and the Sectoral Allocation of Foreign Direct Investment." *Economics and Politics* vol.20 no.2 (June 2008): 216-254.
- Przeworski, Adam, et al. 2000. *Democracy and Development: Political Institutions and Material Well-Being in the World, 1950-1990*. Cambridge: Cambridge University Press.
- Putnam, Robert D. 1988. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization* vol.42 no.3 (Summer 1988): 427-460.
- Raustiala, Kal. 1997. "Domestic Institutions and International Regulatory Cooperation: Comparative Responses to the Convention on Biological Diversity." *World Politics* vol.49 no.4 (July 1997): 482-509.
- Salacuse, Jeswald W. 1990. "BIT by BIT: The Growth of Bilateral Investment Treaties and Their Impact on Foreign Investment in Developing Countries." *The International Lawyer* vol.24 no.3 (Fall 1990): 655-675.
- Salacuse, Jeswald W., and Nicholas P. Sullivan. 2005. "Do BITs Really Work? An Evaluation of Bilateral Investment Treaties and their Grand Bargain." *Harvard International Law Journal* vol.46 no.1 (Winter 2005): 67-130.
- Schelling, Thomas C. 1980 (1960). *The Strategy of Conflict*. 2nd edition ed. Cambridge, MA: Harvard University Press.
- Simmons, Beth A. 2000a. "International Law and State Behavior: Commitment and Compliance in International Monetary Affairs." *American Political Science Review* vol.94 no.4 (December 2000): 819-835.
- — —. 2000b. "The Legalization of International Monetary Affairs." *International Organization* vol.54 no.3 (Summer 2000): 573-602.
- Snidal, Duncan, and Alexander Thompson. 2003. "International Commitments and Domestic Politics: Institutions and Actors at Two Levels." In *Locating the Proper Authorities: The Interaction of Domestic and International Institutions*, edited by Daniel W. Drezner. Ann Arbor: University of Michigan Press, 2003: 197-230.
- Staiger, Robert W., and Guido Tabellini. 1999. "Do GATT Rules Help Governments Make Domestic Commitments?" *Economics & Politics* vol.11 no.2: 109-144.
- Tomz, Michael. 2007. *Reputation and International Cooperation: Sovereign Debt Across Three Centuries*. Princeton: Princeton University Press.
- Treier, Shawn, and Simon Jackman. 2008. "Democracy as a Latent Variable." *American Journal of Political Science* vol.52 no.1 (January 2008): 201-217.
- Tures, John A. 2003. "The Impact of Instability and Institutions on US Foreign Direct Investment in Developing Areas." *Conflict, Security and Development* vol.3 no.2 (August 2003): 163-183.
- Vernon, Raymond. 1971. *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books.
- Wittman, Donald A. 1995. *The Myth of Democratic Failure: Why Political Institutions Are Efficient*. Chicago: Chicago University Press.
- Wolf, Dieter, and Bernhard Zangl. 1996. "The European Economic and Monetary Union: Two-Level Games and the Formation of International Institutions." *European Journal of International Relations* vol.2 no.3: 355-393.
- Wooldridge, Jeffrey M. 2000. *Introductory Econometrics: A Modern Approach*: South-Western College Publishing.
- — —. 2010. *Econometric Analysis of Cross Section and Panel Data*. 2nd ed. Cambridge, MA: MIT Press.
- Zheng, Yu. 2011. "Credibility and Flexibility: Political Institutions, Governance, and Foreign Direct Investment." *International Interactions* vol.37 no.3 (September 2011): 293-319.