International Institutions and Domestic Politics: Can Preferential Trading Agreements Help Leaders Promote Economic Reform?*

Leonardo Baccini  
London School of Economics

Johannes Urpelainen  
Columbia University

Abstract

How do domestic politics influence the formation of international institutions, and how do international institutions shape domestic politics? These questions cannot be answered in isolation, because national leaders form and join international institutions to advance their domestic interests. We illuminate the relationship between international institutions and domestic politics by analyzing whether preferential trading agreements (PTAs) promote liberal economic reform. In developing countries, leaders engage in PTA negotiations with major powers (European Union and United States) when these leaders want to implement reforms but cannot do so due to domestic political opposition and a lack of credible commitment. PTA negotiations promote economic reform by enabling credible commitment and allowing the leader to condition the implementation of the PTA on liberal policies.

*An online appendix for this article is available at http://www.cambridge.org/cjo/WHATEVER, containing additional empirical analysis. Data and supporting materials to reproduce the statistical analyses will be made available at http://www.WHEREVER.org no later than at the time of the publication of the article.
1 Introduction

How do domestic politics influence the formation of international institutions, and how do international institutions shape domestic politics? These questions cannot be answered in isolation because national leaders form and join international institutions to advance their domestic interests (Poast and Urpelainen, 2013; Vreeland, 2003). However, the empirical evidence on the role of international institutions in a leader’s political calculus remains scant. Although scholars recognize the domestic benefits of joining international institutions (Vreeland, 2003; Mansfield and Pevehouse, 2006), existing work has not investigated why individual leaders join international institutions at specific times.

To illuminate the relationship between international institutions and domestic politics, we examine whether leaders in developing countries use preferential trading agreements (PTAs) with major powers (European Union and United States) to promote liberal economic reforms. Economic reforms are interesting for political scientists because liberalization has provoked intense political controversy and influenced the livelihoods of billions of people around the world (Haggard and Kaufman, 1995). EU/US PTAs are ideal for studying the role of international institutions in promoting economic reform, because they are usually bilateral and contain detailed provisions on economic reform (World Bank, 2005).

We argue that leaders engage in PTA negotiations when they want reform but cannot overcome domestic political opposition to it. A PTA with a major power enables credible commitment and increases domestic support to economic reform, so we expect leaders to engage in PTA negotiations to promote economic reforms that would be difficult to implement through domestic strategies. Operationalizing demand for economic reform by recent democratization (Milner and Kubota, 2005) and a leader’s inability to circumscribe domestic political opposition by recent leader change (Haggard and Kaufman, 1997), we find that their interactive effect on the probability of PTA negotiations between a developing country and the EU/US is strongly positive. Moreover, we show that PTAs induce economic reforms across various sectors of the economy.

These findings can inform research on international economic institutions and the domestic politics of economic reform. While previous studies have found that IMF programs (Vreeland, 2003; Pop-Eleches, 2009) and EU accession (Mattli and Plümper, 2004) promote economic reform, our findings show that

---

1 By international institutions, we refer to rules and standards codified in formal agreements; no formal international organization is required. A supplementary appendix is available at http://whatever.org. A complete replication package is available at http://wherever.org.
more flexible bilateral economic institutions can also promote liberalization. While our results do not directly speak to the ability of other international institutions to promote economic reform, the combination of legally binding provisions, a partnership with a major power, and the flexibility of negotiation timing that bilateralism affords seems an effective recipe for economic reform. We expect those economic international institutions that meet the above conditions to be particularly effective. Potential candidates include investment treaties, regulatory agreements, and energy cooperation.

The policy implications are notable. In recent years, domestic pressures to democratize have intensified in the strategically important Middle East. In Egypt, Libya, and Tunisia, precarious democratic transitions are currently underway. Our findings suggest that intensifying trade cooperation with recently democratized countries can promote liberalization and help insecure leaders implement economic reforms. We recommend that the EU/US keep their door open for democratizing countries interested in deeper trade cooperation and leverage the trade negotiations to promote a wide variety of economic reforms. From this perspective, the US decision to initiate trade negotiations with Tunisia’s democratic government in October 2011 is welcome news. As Assistant US Trade Representative for Europe and the Middle East put it, “The United States strongly supports Tunisia’s transition to democracy and to an open economic system governed by the rule of law ... enhancing U.S. trade and investment integration with Tunisia to increase economic growth and jobs is an important part of the support we can give to this process.” However, it is important to recall that the democratizing country’s leader must initiate the negotiations. Our evidence does not suggest that the EU/US can successfully force economic reform on recalcitrant negotiation partners.

2 Domestic Politics, International Institutions, and Economic Reform

National leaders are key strategic actors in international politics. While leaders must decide on many issues, few have drawn as much attention as economic reform (Keefer, 2007; Milner and Kubota, 2005; Vreeland, 2003). To dismantle structures of redistribution and discrimination is one of the most controversial policy choices available to a leader. After decades of controversial reform efforts, political economists have debated why some leaders succeed in reform while others fail (Geddes, 1994; Przeworski, 1991; Rodrik, 1996). According to this literature, a leader’s ability to compensate or suppress the losers and mobilize the winners

---

is the key to successful reform (Brooks and Kurtz, 2007; Haggard and Webb, 1994).

International institutions promote economic reform in two ways. First, international institutions allow credible policy commitments (Mansfield and Pevehouse, 2006; Büthe and Milner, 2008). If a leader joins an international institution that increases the cost of reneging on liberalization, the extent of reform increases. Second, international institutions allow leaders to compensate or coerce domestic constituencies (Vreeland, 2003; Mattli and Plümper, 2004). If a leader joins an international institution that requires economic reform, the benefits of the international institution are contingent on economic reform. Those domestic constituencies that expect benefits from the international institutions support economic reform because failure to reform would mean losing the benefits of international institutionalization. However, there are few systematic empirical analyses of these arguments. Most scholarship on leaders focuses on cooperation or bargaining (Bueno de Mesquita and Smith, 2009; Dreher and Jensen, 2009). Scholarship on international institutions mostly focuses on the IMF (Stone, 2008; Pop-Eleches, 2009), and these studies do not emphasize the individual leader’s incentives. Perhaps the most important exception is Vreeland (2003), who argues that leaders use IMF programs to pass unpopular policies.

Although the PTA literature is burgeoning, few studies reach beyond trade liberalization to examine the general issue of economic reform. This is unfortunate because PTAs can offer valuable insights into the role of international institutions in economic reform. Several economists have theorized about PTA effects on economic reform (Ethier, 1998; Fernandez and Portes, 1998), but these studies do not provide empirical evidence. Some political scientists have noted that PTAs can increase foreign direct investment (Büthe and Milner, 2008; Manger, 2009), but these studies do not theorize about the circumstances in which an international institution is a necessary substitute for domestic policy reform. Other political scientists argue that the US has used PTAs to force developing countries to implement economic reforms (Shadlen, 2008), but the evidence provided for this claim is limited to one multilateral agreement.

3 Theory

Our theory focuses on an individual leader’s decision to form an international institution with a major power, namely the EU or the US. We expect the leader to pursue international institutionalization when two conditions are met:

1. The leader wants economic reform.
2. The leader faces domestic political opposition to reform, but the international institution can help overcome this opposition. If these conditions are met, the leader prefers economic reform but cannot implement it through domestic political channels. By forming an international institution, the leader can implement more ambitious reforms than otherwise. When at least one of the two conditions fails, we expect different outcomes. If the leader does not want economic reform, then policy change should not occur. If the leader wants economic reform but faces little political opposition, domestic implementation is possible without international institutions.

We operationalize the leader’s demand for economic reform by recent democratization, because success in electoral competition depends on providing public goods to mass constituencies. We operationalize the leader’s domestic implementation difficulties by recent leader change, because a new leader’s position is weaker and more precarious than an established leader’s. Empirically, the combination of democratization and leader change should promote PTA negotiations between the EU/US and developing countries. Without democratization, the effect of leader change on the probability of PTA negotiations should be smaller. If democratization occurs without leader change, the extent of economic reform may increase somewhat, but the probability of PTA negotiations need not increase.

3.1 Democratization and Leader’s Demand for Economic Reform

By democracy, we refer to the recent enactment of political institutions that induce competition for office (Cheibub, Gandhi, and Vreeland, 2010). Empirically, a country is said to be democratizing if it has introduced competitive elections within the last five years. We define economic reform as policies that liberalize profitable activities in various sectors of the national economy. Not limited to trade reform, this definition captures many reforms in services, finance, and investment.

Recent democratization increases a leader’s demand for economic reform. In electoral competition, leaders must supply public goods to mass constituencies. Democratization creates incentives to implement economic reforms that generate economic growth and increase the supply of public goods, despite the fact that vested distributional interests incur a cost (Milner and Kubota, 2005; Poast and Urpelainen, 2013). By contrast, since autocratic rulers need only satisfy the needs of narrow elite constituencies, they have few incentives to implement politically risky economic reforms that may hurt influential domestic interests (Bueno de Mesquita et al., 2003).
3.2 New Leaders and the Difficulty of Economic Reform

Even if a leader wants to reform, she may fail to do so. Since newly democratized states are susceptible to clientelism, their ability to commit to policy is limited (Keefer, 2007). Beneficiaries of state intervention continue to oppose economic reforms, and liberalization may become entrapped in a “partial reform equilibrium” that benefits elites at the expense of the public (Hellman, 1998). Weak leaders often find themselves in an impossible situation. They need economic reforms to survive politically, but they cannot implement these economic reforms because of political opposition.

Implementing economic reforms is particularly difficult for new leaders. By a new leader, we refer to a leader who has been recently elected in office and faces an uncertain political future.\(^3\) By an established leader, we refer to a leader who has held power for a long time. Vested interests have strong incentives to oppose economic reforms, and new leaders cannot easily override them because their own ruling coalition is not stable (Bueno de Mesquita et al., 2003).\(^4\)

New leaders also suffer from commitment problems. Given that established leaders are not in immediate danger of losing power, their long time horizons allow credible intertemporal exchanges and promises. By contrast, new leaders have yet to consolidate their rule, so their credibility is limited. Lack of credibility is harmful because economic reforms cannot reassure investors unless the government is able to credibly commit to them in the long run (Mansfield and Pevehouse, 2006).

Even if economic reform is popular among citizens, a new leader’s difficulties will not disappear. Although the median voter prefers economic reform, vested interests may block the reform. Previously protected elites prefer to undermine democratic consolidation, a process characterized by a political struggle between those who expect to gain from it and those who expect to lose (Haggard and Kaufman, 1995; Hellman, 1998; Przeworski, 1991). Thus, even if popular demand for economic reform increases, the leader’s ability to supply the policy response is limited by opposition from vested interests who expect to lose upon liberalization. They may try to influence political veto players to stall reform policy, and they may try to undermine implementation by bureaucratic agencies.

\(^3\)We focus on new leaders instead of, say, a leader’s probability of losing power because our theory captures multiple impediments to economic reform. Only some relate to the probability of losing power.

\(^4\)Some new leaders may be consolidated while some established leaders may face stiff political competition. All else constant, new leaders are in greater danger of losing office, as shown in the appendix.
Here, we assume the process of political liberalization that causes democratization is not sufficient to deprive vested interests, which generally prefer previous policies of state intervention, of all their political power. Electoral accountability in young democracies is often imperfect, exhibiting patterns of clientelism and patronage (Keefer, 2007). The democratic government must not only win elections, but also avoid authoritarian reversals (Haggard and Kaufman, 1995; Przeworski, 1991). The vested interests that benefited from authoritarian rule can use their resources and connections to undermine reforms that hurt them the most. Indeed, empirical evidence from case studies suggest that, even as the public’s support is necessary for democratic consolidation (Haggard and Kaufman, 1995), democratizing countries often revert to authoritarian rule due to a lack of elite support (Geddes, 1994).

While a new leader may also temporarily benefit from a “honeymoon” period with the general public (Haggard and Kaufman, 1997), the relevance of the honeymoon for successful economic reform is limited. First, while honeymoon periods increase a leader’s popular appeal, they do not change the balance of power among organized interest groups. If a leader worries about a coup or losing the support of organized interests in the long term, a temporary honeymoon is not helpful. Second, the temporary nature of honeymoon periods undermines the leader’s credible commitment to liberalization. Even if a leader were able to implement liberalization during the honeymoon period, investors would not believe these favorable political conditions to last for long. And when the short honeymoon is over, the harsh reality of domestic political opposition to liberalization is again there. Anticipating potential implementation problems, investors fail to respond to the incentives that liberalization was supposed to create, and so the leader’s gains from temporary liberalization during the honeymoon period would be limited.

3.3 Preferential Trading Agreements and Economic Reform

So far, we have argued that a new leader undergoing democratization needs reform but cannot easily implement it. We now explain how successful PTA negotiations with a major power help. First, they allow a credible commitment to reforms. Second, the promise of market access can help the leader to compensate influential domestic opponents for their losses. We focus on major powers, specifically the EU/US, because these two giants include a wide range of reform provisions in their agreements: from financial and service liberalization to to privatization and improved regulations for foreign direct investment (Horn, Mavroidis, and Sapir, 2009; World Bank, 2005). Thus, a PTA with the EU/US is an ideal policy instrument
for facilitating economic reform.\textsuperscript{5}

We assume both the EU/US and developing countries have a say in negotiations. Since the EU/US have global economic interests, they have an interest in negotiating bilateral treaties on economic reform with a rather large number of developing countries. However, we also assume the EU/US cannot easily coerce developing countries into forming PTAs. Our theory does not require that the developing country’s leader holds the initiative, but it does require that the leader’s consent is, in most cases, necessary for initiating the negotiations. As long as the leader’s role in PTA negotiations is not insignificant, an increase in the leader’s in PTA formation, so as to promote economic reform, should play a role.

How can a PTA enable credible commitment to reform? First, it explicitly codifies legally binding rules (Büthe and Milner, 2008; Ethier, 1998; Mansfield, Milner, and Rosendorff, 2002). Failure to comply with international law undermines a country’s reputation, thus reducing future opportunities to cooperate on related issues (Guzman, 2008). If a developing country reneges on a PTA, it not only sends a negative signal to investors who prefer liberalization, but also shows that it is ready to disregard international law to pursue its interests. Second, a PTA often contains enforcement mechanisms, such as a dispute settlement procedure that can issue legal rulings on trade and other policies (Kono, 2007). These enforcement mechanisms mean that the PTA partner whose rights have been violated can legitimately impose sanctions on a defector. This reduces the PTA partner’s cost of imposing these sanctions, and thus increases the cost of defection in the first place. Finally, in the case of the EU/US, the developing country is negotiating with a major power that can effectively retaliate policy violations. For example, if a developing country fails to liberalize according to PTA provisions, the EU/US can retaliate by withdrawing trade concessions.

For these reasons, a PTA should reduce a developing country’s incentive to renege on previous commitments to economic reform. A commitment enshrined in a PTA is more credible than a purely domestic commitment, both because the PTA facilitates international enforcement and because the reputational loss from violating international law is greater than the loss from dismantling domestic legislation.

Already during the negotiations, the promise of a PTA with provisions for access to large markets in

\textsuperscript{5}An EU/US PTA is not the only policy instrument that allows a leader to promote economic reform. In particular, focal multilateral institutions and organizations, such as the WTO and the IMF, also promote liberal policies. Poast and Urpelainen (2013) find that democratizing states often form their own organizations to enhance the supply of public goods. While our focus is on PTAs, the empirical analysis of economic reform also accounts for the potential effects of WTO membership and participation in IMF programs.
advanced industrialized countries can create incentives to implement economic reforms. This is so for three reasons. First, if the leader promises that the reforms will create market access to the EU/US, she pays a reputational cost for failing to fulfill this promise. Second, since the leader and the domestic groups supporting liberalization understand that the reforms are not credible without the enforcement powers afforded by the PTA, it is in their own interest to finish the negotiations. Finally, to the extent that the main obstacle to a treaty is EU/US concern about the developing country’s credibility, some prior action may be necessary to seal the deal.\(^6\)

The institutional design of EU/US PTAs illustrates. We coded the design provisions of PTAs in our dataset on FDI liberalization. Based on a sample of 41 agreements, an EU/US PTA has on average 6.9 FDI liberalization provisions. Moreover, practitioners emphasize the importance of credible commitment. For example, the International Trade Administration of the US Department of Commerce emphasizes that “Trade agreements are also a tool for promoting fair competition and encouraging foreign governments to adopt open and transparent rulemaking procedures as well as non-discriminatory laws and regulations.”\(^7\)

The second reason why a new leader can promote reforms through a PTA with a major power is the promise of market access. By beginning negotiations, the leader can offer foreign market access to influential domestic constituencies who expect to lose from economic reforms. Although these domestic constituencies may lose from the economic reforms, they also accept the reforms if the value of the foreign market access that they acquire in exchange is high enough. Such domestic issue linkage explains why even a weak leader can engage in PTA negotiations: by raising the possibility of PTA negotiations, the weak leader can create a domestic constituency who supports the PTA. If the PTA is contingent on economic reform, this new domestic constituency will also support economic reform.\(^8\) As Pastor and Wise (1994, 475) put it, “the set of potential supporters can widen as various interest groups accept the costs from one government action in

\(^6\)The vast majority of PTA negotiations succeed, and the negotiation time in most cases is only 1-2 years. Moreover, domestic interest groups can observe developments in negotiations to avoid promoting reforms that will not be accompanied by a PTA in the future. Empirically, then, domestic interests have good reasons to believe successful reforms will be followed by a PTA.


\(^8\)Notably, the leader need not use the PTA to buy off vested interests from the autocratic era. Instead, the leader could use the PTA to expand her support coalition among constituencies empowered by democratization. Even as opposition from vested interests would remain stiff, the power of the winner coalition would also increase.
order to obtain the benefits of another part of the policy package.” Additionally, international negotiations are in most developing countries the executive’s privilege, so initiating them may be easier than passing domestic legislation.

The benefits of credible commitment and domestic side payments require that the major power prefer economic reform in the partner country. The EU/US expect net benefits from PTAs because the policy commitments enshrined in these treaties create profitable opportunities for major corporations, especially with regard to services and investment. By forming PTAs, the EU/US can pry open markets and create investment opportunities for major corporations in developing countries (Heron and Siles-Brügge, 2012; Shadlen, 2005). Moreover, the competitive nature of PTA formation may result in defensive PTA formation, whereby the EU/US forms a bilateral trade treaty to offset the competitive advantages that corporations from other countries have formed through PTAs (Manger, 2009). PTAs generally increase FDI inflows to countries that are potential FDI recipients (Büthe and Milner, 2008). PTAs enable a credible commitment to liberal policies, protecting IPRs, and liberalizing services.

In sum, PTAs can be thought of as removing obstacles to profitable investments in developing countries. Both the EU and the US have a high number of major corporations that are in a position to invest in newly liberalized markets, and these major corporations lobby for PTAs that allow developing countries to implement economic reforms that are otherwise unfeasible. More broadly, the EU/US may also expect political benefits from supporting new leaders during democratic transitions, so as to avoid autocratic reversals. The EU/US are not only willing but also able to enforce PTAs. Their large domestic markets are valuable to their partners. Moreover, failure to enforce a PTA would undermine their credibility in the future. Such credibility is important for the EU/US given their global political and economic interests.9

3.4 Empirical Implications

To test our theory, we examine two falsifiable hypotheses. First, we have argued that new leaders in recently democratized countries engage in PTA negotiations because they need reform but cannot implement it without external assistance.

9The EU/US may also be interested in specific strategic benefits, such as supporting a strategically important ally in the Middle East (Ludema, 2007). This may explain why the EU/US would sometimes, if not often, promote PTA formation even with seemingly unimportant national economies. However, in such cases, the PTA’s ability to promote economic reform may be limited.
**Hypothesis 1.** Following recent democratization, leader change increases the probability that a developing country engages in PTA negotiations with the EU/US.

This hypothesis is the cornerstone of our theory. If there is no interactive effect of leader change and democratization on the probability that a developing country engages in PTA negotiations with the EU or the US, the other hypothesis that we will present lose importance.

Our second hypothesis is that PTA negotiations prompt economic reform in the developing country. While there are many reasons why leaders may engage in PTA negotiations, credible international commitments on economic reform should be important, if our theory is valid. Furthermore, it is reasonable to expect that PTA negotiations induced by leader change under democratization are particularly adept at promoting economic reform. Our theory posits that democratization creates demand for economic reform, while leader change means that policy change is difficult without an international treaty, so the PTA should cause a sharp break from past policies.

**Hypothesis 2A.** EU/US PTA negotiations and signature increase economic reform in developing countries.

**Hypothesis 2B.** The positive effect of EU/US PTA negotiations and signature on economic reform should be particularly likely for new leaders under democratization.

We consider both negotiation and signature because there are good reasons to expect anticipatory effects.\footnote{We refer to “signature” instead of “ratification” because, following Mansfield, Milner, and Rosendorff (2002), this is how we operationalize treaty formation. In practice, the distinction is meaningless because the mean time from signature to ratification is approximately one year, and no EU/US PTA has ever failed due to a lack of ratification.}

If the EU/US worry about the credibility of reform plans in developing countries, they may demand policy change already during negotiations. For a leader interested in reform, this is obviously high desirable. Moreover, the domestic constituencies that expect benefits from an EU/US PTA have strong incentives to demand such reforms, so as to seal the PTA deal.

**4 Case Study: South Africa**

To illustrate our theory, we discuss the relationship between South Africa’s post-apartheid reforms and the country’s Trade, Development and Co-operation Agreement (TDCA) with the EU. Our quantitative model
below predicts an EU-South Africa PTA particular well, so the case is useful for illustrating our theory (Lieberman, 2005; Seawright and Gerring, 2008). It features a prominent leader change, namely Nelson Mandela’s becoming the country’s President, at the time of democratization as the black majority gained suffrage. Moreover, the developing country in focus is an important economy with a previous history of extensive state intervention (Hirsch, 2005), so the scope conditions of our theory are clearly met: economic reform is possible and the EU has a clear interest in investment and export market access. Given these features, the case study is a “most likely” one.

The PTA negotiations began in 1994 and were concluded in 1999, with the PTA entering into force on May 1, 2004. Based on evidence from elite interviews and other material, we show that South Africa’s new President, Nelson Mandela, who faced political opposition to reform and suffered from a lack of credibility as a liberalizer, used the PTA negotiations to promote badly needed economic reform during a difficult democratization process. In the next section, we conduct a more general statistical test of this argument.

4.1 Demand for Reform

According to our theory, developing countries should engage in PTA negotiations with major powers if democratization creates demand for reform but a new leader’s lack of political clout and credibility impede liberalization. In South Africa, democratization’s effect on demand for economic reform could not have been larger. In April 1994, the African National Congress (ANC) won a landslide victory, receiving almost two-thirds of all votes. During apartheid, the heavily regulated South African economy had been geared toward meeting the white minority’s needs. Per capita income among whites was almost ten times as high as among blacks, and the performance of the South African economy during the last ten years had been dismal (Hirsch, 2005, 2). For the ANC, democratization thus presented a dilemma: “was there a way in which growth and redistribution in South Africa could complement each other” (Hirsch, 2005, 1)?

For Mandela’s government, economic reform was needed for a successful combination of redistribution and growth. During the apartheid era, South Africa had been largely isolated from the world economy due to international sanctions. South Africa’s trade and other economic policies were designed to maximize the white minority’s welfare under de facto autarky. Following democratization, Mandela’s government sought to maximize the black majority’s welfare in an open world economy. This goal required trade liberalization, enhanced foreign direct investment, privatization, and extensive redistribution of wealth. According to
Ismail Faizel, one of South Africa’s lead negotiators in talks on the EU PTA, “Mandela’s presidency was focused on economic reform.”

4.2 Difficulty of Reform

Despite the urgent need for reform, Mandela’s young and inexperienced government faced numerous obstacles to liberalization. While the ANC itself supported reform, two other influential political players, namely the Congress of South African Trade Unions (COSATU) and the South African Communist Party (SACP), were opposed to liberalization. At the time, some commentators believed the government’s promise to reform while others questioned it.

Why would COSATU and SACP not oppose a PTA with the EU if they were against economic reform? First, both COSATU and SACP opposed privatization and foreign investment more than they opposed tariff reductions. As Habib and Padayachee (2000, 249) explain, “[g]rassroots activists within the ANC, the SACP and COSATU continued to advocate a radicaleconomic program that included nationalization ... and controls over foreign investors.” More specifically, there were two constituencies with different economic strategies: (i) the business community and the white population emphasized economic growth, minimal state intervention, privatization, and deregulation; (ii) the poorest part of the black population advocated the expansion of the public sector, state intervention, and radical redistribution policies (Habib and Padayachee, 2000, 250). According to Pillay, the stance against privatization was a strict ideological position of trade unions that advocated nationalization as instrument to redistribute resources to the black majority.

Conversely, Alan Hirsch argues that “all parties of the majority, i.e., mainly black parties, favored trade reform during the transition to democracy.” As a result, “South Africa developed a genuine and far reaching multilateral trade reform agenda in the early 1990s, and stuck to it through the 1990s and 2000s”. That is also confirmed by Wilhelm Smalberger, a lead economist in the Department of Trade and Industry. Furthermore, Pillay notes that trade liberalization was not the main focus of trade unions political agenda that

---

11Interview by the authors with Ismail Faizel, on February 6, 2012.
12Interview by the authors with Morgenie Pillay, deputy director of International Trade in Services for the Department of Trade and Industry, on February 27, 2012. Ms. Pillay’s views do not necessarily represent the views of the Department of Trade and Industry.
13Interview by the authors on July 19, 2012.
14Interview by the authors on February 14, 2012.
15Interview by the authors on February 13, 2012. Smalberger’s views are personal and do not necessarily represent the views of the Department of Trade and Industry.

13
were especially concerned about resource redistribution and nation building. Indeed, the tariff reductions were more favorable for South African than for European products. For instance, Kalaba, Sandrey, and van Seventer (2005, 25) show that the EU liberalized “at a faster pace (three years compared the 12 for South Africa) and with a broader coverage (95 percent of all imports versus the 86 per cent for South Africa).” Such a smooth tariff schedule allowed import-competing industries to gradually adjust to liberalization. This helps explain why the opposition to a PTA was lower than the opposition to privatization and foreign investment.

Opposition to reform was not the only problem that the newly elected Mandela’s government faced. There was also a credibility issue. Specifically, international investors did not believe Mandela’s promises of liberalization were credible. President Mandela himself justified the renewed appointment of apartheid-era technocrats in his administration by noting that “the boys from the stock exchange and elsewhere seem to be very jittery.” Moreover, as we interviewed Ismail Faizel, he offered the following description: “we were young and inexperienced leaders who had spent the previous years hidden in the bush ... the skepticism from the market was understandable.” Lacking experience and credibility in a difficult political environment, Mandela’s government sought external assistance for reform.

The lack of credibility is emphasized by Alan Hirsch as well. He argues that “the ANC did not have a clear economic policy or a track record of governing, and because most of its supporters had suffered economically under Apartheid, there was a credibility issue”. In the same interview, Hirsch claims that “there was a real fear of South Africa losing its sovereignty to the IMF or global banks.” Pillay argues that “there was uncertainty regulations and economic policies implemented by the newly elected government. There were concerns about nationalization and high taxation on capital owned especially by the white minority. In this respect, the PTA with the EU was a signaling instrument to reassure intentional markets that South Africa was serious about liberalizing and protecting investment.”

16 Interview by the authors on July 19, 2012.
17 Cape Times on July 6, 1994.
18 Interview by the authors on February 14, 2012.
19 Interview by the authors on July 19, 2012.
4.3 Preferential Trading Agreement and Economic Reform

The negotiations with the EU were difficult. In particular, the parties disagreed on agricultural liberalization, with South Africa demanding more liberalization than the EU was willing to offer. However, the available evidence also suggests that, from the very beginning, the South African government used the PTA negotiations to build political support for, and enhance the credibility of, economic reform. When interviewed, Morgenie Pillay noted that “the government used the WTO and the PTA with the EU to tie its hands and to sell reforms to political constituencies that were not happy about economic liberalization.” Academic research supports this view: “the trade negotiations with the EU were integrated into a more comprehensive trade policy reform process ... This explicit link between trade negotiations and overall development policy played a determinant role in the coherence of the South African approach” (Bilal and Laporte, 2004, 14).

South Africa implemented important economic reforms during the negotiation period and soon after its signature. Importantly, these reforms are tightly linked to the agreement’s provisions. For instance, South Africa took serious step to encourage and entice foreign direct investment. Habib and Padayachee (2000, 249) note that “twin objectives of restoring business confidence and attracting foreign investment seemed to swamp all other considerations.” Moreover, in mid 1990s Thabo Mbeki, then Deputy-President, “announced plans for privatization initiatives that included parts of parastatals like Telkom and South Africa Airways” (Habib and Padayachee, 2000, 252). More generally, South Africa championed liberal reform in general, and trade liberalization in particular, during the 1990s. This is so true that Manuel Trevor, then Minister of Trade and Industry, was often accused by trade union leaders to be “holier than GATT” when it comes to tariff reductions (Habib and Padayachee, 2000, 252).

The EU PTA prescribed particularly demanding changes in competition policy, which was important for South Africa’s ambitious privatization plans. Section D contains provisions on competition policy. Article 35 states that restriction of competition and abuses of market dominance affecting trade between the EU and South Africa are not compatible with the PTA. Article 36 stipulates that the parties have to implement the necessary laws and regulations to comply with the competition provisions within a period of three years from the entry into force of the PTA. Articles 41-43 deal with public aid. Specifically, article 41(1) states that public aid favoring certain companies or the production of certain goods, which distorts or threaten to distort competition, is not compatible with the PTA.
Competition provisions have also tied South Africa’s hands over time. For instance, “in at least one case, the EU has vetoed a merger approved by the South African Authorities” (Holmes et al., 2005, 106). While EU intervention in foreign mergers is not new, the EU-South Africa trade agreement went further than that. It fostered informal cooperation between the EU and South Africa on anti-competitive activities (Chetty, 2005). As Ismail puts it in the aforementioned interview, “we learnt a lot from the EU in terms of competition policy”.

There is also evidence of side payments to domestic constituencies. For instance, in article 40, the EU provides technical assistance to help South Africa comply with the competition policy provisions. The associated reforms were so successful that a 2003 peer review by the OECD praised South Africa for exceptional performance in competition policy reform (OECD, 2003).20

Finally, South Africa’s compliance with the EU PTA is noteworthy. While the EU PTA provides for legally binding dispute resolution and sanctions, the EU never saw any need to apply these enforcement mechanisms. According to the interview with Dr. Smalberger, the EU had not filed a single complaint about implementation at the time of the interview. Remarkably, the EU PTA allowed South Africa to implement political controversial economic reforms with relative ease.

5 Democratization, New Leaders, and Preferential Trading Agreements: Research Design

Is South Africa’s experience unique, or does this same logic apply to EU/US PTAs more generally? We present our empirical evidence, which shows that South Africa’s experience generalizes, in two parts. The first part examines the interactive effect of democratization and leader change on PTA negotiations. The second part investigates whether EU/US PTAs induce economic reform in developing countries.

Recall our primary hypotheses: leader change under democratization has a strong positive effect on PTA negotiations and economic reform. While democratization without leader change may increase reform incentives (see our supplementary appendix for evidence), we do not expect it to increase the probability of PTA negotiations. Leader change may cause policy change simply because a new leader has different preferences than the previous one; beyond this novelty effect, we do not expect leader change to have large effects on PTA negotiations or reform.

20The EU PTA also prescribed extensive reform of intellectual property rights, but our interviews suggest that this demand was imposed by the EU and opposed by the South African government.
The unit of analysis is the undirected dyad-year. Each dyad-year comprises a developing country $i$ and a major power $j$, which is either the EU or the US. We classify a country as developing if it is included in the category Upper Middle Income, Lower Middle Income, or Low Income by the World Bank. With 140 developing countries included, most of the missing countries are tiny economies, such as island states. Given that PTAs began to proliferate in the aftermath of the Cold War, and PTAs formed prior to 1990 were shallow agreements, we focus on the years 1990-2007. The dataset is unbalanced since some countries, such as those from the former Soviet Union, enter the dataset only after 1990. In total, we have 4,460 observations.

We estimate the probability that a developing country engages in EU/US PTA negotiations at a given time. Technically, we estimate a proportional hazards model of the form $h_{ij,t} = h_0(ij,t) \exp[\beta X]$, where

$$
\beta X = \beta_0 + \beta_1 \text{LeaderChange}_{i,t} + \beta_2 \text{Democratization}_{i,t} + \beta_3 \text{LeaderChange}_{i,t} \times \text{Democratization}_{i,t} + \beta_4 \text{Controls}_{i,t} + \beta_5 \text{Controls}_{ij,t} + \eta_i + \varepsilon_{ij,t},
$$

In this equation, $h_{i,j,t}$ is the hazard rate for the initiation of PTA negotiations between developing country $i$ and major power $j$. Similarly, $h_0(ij,t)$ is the baseline hazard. Year is denoted by $t$. Leader change and democratization in country $i$, as well as their joint occurrence, are the main explanatory variables. The model will also include a battery of control variables, some specific to developing country $i$ and some to the undirected dyad $ij$. Finally, each $\beta_k$ is a coefficient, $\eta_i$ denotes region fixed effects, and $\varepsilon_{ij,t}$ is the error term. In the main text, we report results from a standard regression analysis. While we recognize the fact that PTA negotiations are not randomly distributed, we do not use matching for the main analysis because data would be lost. However, the supplementary appendix shows that the results are robust to matching.

### 5.1 Dependent Variable

Our dependent variable, $\ln(t_{ij})$, is the logarithmized time in years $t$ that country $i$ ‘survives’ without initiating PTA negotiations with major power $j$. To code the beginning of PTA negotiations, we use the official starting year. Although countries hold informal talks before the actual bargaining begins, we cannot systematically this information. To guard against bias from inaccurate measurement, we implemented multiple robustness checks, as discussed in the results section. The data are original and described in the supplemen-
Recall that our theory focuses only on EU/US PTAs. First, beyond tariff reductions, the EU/US are concerned with key economic reforms such as financial liberalization and IPR protection. Second, the EU/US are major powers capable of enforcing PTA provisions.

No developing country has signed more than one PTA with the EU/US, respectively, over the period of investigation. Thus, a dyad drops from our dataset immediately after the first negotiation round begins. Our model explains 71 negotiation onsets during the period under investigation. We include both bilateral and multilateral trade agreements, such as the EU-Gulf Cooperation Council and the US-Central American Free Trade Agreement. Since observations are not independent in the case of multilateral negotiations, we also estimate the model without any multilateral agreements. In this case, the number of negotiation onsets decreases to 46. Next, we estimate a model excluding ongoing negotiations that have so far failed to produce a PTA. This allows us to verify that our findings are not driven by contentious negotiations. Finally, we estimate the model excluding all stable democracies from the dataset because they cannot democratize. A democracy is said to be stable if it has been continuously democratic for 10 years. By using such a lax criterion for democratic stability, we stack the deck against our theoretical argument.

5.2 Explanatory Variables

The relative rarity of PTA negotiations presents a challenge. Given that the dependent variable rarely obtains a positive value, the coding of explanatory variables requires particular care. The problem is compounded by the fact that both democratization and leader change are, ultimately, qualitative phenomena that cannot be coded in a purely objective fashion. To ensure that our results are not driven by qualitative coding decisions, we present results from a wide variety of alternative coding schemes.

Our data on leader change are from the Archigos dataset (Goemans, Gleditsch, and Chiozza, 2009). This variable scores 1 if a new prime minister is elected in a parliamentary democracy; a new president is inaugurated in a presidential democracy; or a new dictator seizes power in an autocratic country. We have data on leader change by date, so the measurement is highly accurate. We code leader change in a conservative fashion. In year $t$, the binary variable obtains a positive value only if there was a leader change.

Japanese is another country to consider. It is, however, a much smaller economy than the EU/US. Additionally, Japan’s PTAs are very recent and regional.
in that year. In alternative specifications, we also verify that our results continue to hold if we include leader changes at \( t - 1 \) or \( t - 2 \).

For democratization, we use the relatively stringent Cheibub, Gandhi, and Vreeland (2010) coding that distinguishes between autocracies and democracies. Democratization occurs in year \( t \) if the country allowed competitive elections between years \( t - 5 \) and \( t \).\(^{22}\) As alternate measures, we use a positive change of at least 3 points in a country’s Polity IV score and a change of more than 1 point in the Freedom House measure of democracy (combined political and civil rights).\(^{23}\) For robustness, we also used 3-year and 7-year intervals for each measure.

To facilitate the presentation of the results, we use the following transformations. \( \text{LeaderChange} \) scores 1 if there was a leader change but no democratization, and 0 otherwise. \( \text{Democratization} \) scores 1 if there was a democratization but no leader change, and 0 otherwise. \( \text{LeaderChange} \times \text{Democratization} \) scores 1 if there was a leader change under democratization, and 0 otherwise. This formulation is mathematically equivalent to a standard interaction model with constituent terms, but it yields correct standard errors in the results table.\(^{24}\)

Some developing countries were not independent states during the Cold War, so we could not calculate the variables \( \text{Democratization} \) and \( \text{LeaderChange} \times \text{Democratization} \) for them. To avoid losing PTA negotiations in the early 1990s, we filled in the missing values for the 1980s as follows. First, we use the democracy score of the Soviet Union for countries that were previously members. Second, we use the democracy score of Yugoslavia for Bosnia, Croatia, Macedonia, Serbia, and Slovenia. Finally, we use the democracy score of Ethiopia for Eritrea. As a robustness test, we ensured that this coding decision does not drive our results by allowing the missing data to disappear from our dataset.

5.3 Control Variables

In some of our models, we add control variables based on Baier and Bergstrand’s (2004) model of PTA formation. First, we add GDP per capita to capture the income level of a developing country. Second,

\(^{22}\)For a similar operationalization of democratization, see Gleditsch and Ward (2000).
\(^{23}\)For Polity IV, we deal with interregnum years following Plümper and Neumayer (2010, 214-218).
\(^{24}\)The tetrachoric correlation between leader change and democratization is 0.22 (standard error is 0.04). There are countries that democratized without leader change. For instance, Jerry John Rawlings ruled Ghana as a military dictator in 1979 and from 1981 to 1992, and then he became the first elected president of the Fourth Republic in 1993, keeping his office until 2001.
we measure economic growth in a developing country. Third, we add total GDP to measure the economic importance of a developing country. Fourth, we use the logarithmized value of exports plus imports in constant SUS from developing country $i$ to the EU or the US, depending on the dyad, in year $t - 1$ for trade flows. Since a PTA is nominally a trade agreement, we use this common proxy for trade relations. The data for these four variables are from the IMF.

We include several political variables in the baseline model. Most of these variables are lagged by one year to avoid endogeneity problems. First, the alliance variable scores 1 if a developing country is an ally of the United States in year $t - 1$ and 0 otherwise. As Gowa (1994) shows, military alliances are positively associated with good trading relations. These data are from the Correlates of War. Second, democracy is a dummy variable that scores 1 if a developing country $i$ is a democracy at time $t - 1$, as measured in Cheibub, Gandhi, and Vreeland (2010). Previous research has shown that democratic pairs of countries sign PTAs more frequently than autocratic or mixed pairs (Mansfield, Milner, and Rosendorff, 2002). Third, tenure measures the number of years that the previous leader was in office. We obtain it from the Database of Political Institutions (Keefer, 2007). This measure allows us to separate the effect of leader turnover from past uncertainty regarding executive tenure. Fourth, we include distance as another control of the importance of a developing country. The data are from the 2005 CEPII dataset. Finally, we add the number of PTAs negotiated by countries other than country $i$ with the EU and the United States in the same geographic region by time $t$. This captures the possibility that country $i$ reacts to other agreements negotiated with the EU or the United States (Manger, 2009). We label this variable “diffusion.” Descriptive statistics are provided in the supplementary appendix.

We include an expanded model with several other variables capturing domestic institutions and international factors. For data on executive constraints, we rely on the Polity IV database. Moreover, we include a political stability variable from the Worldwide Governance Indicators to account for the possibility that major powers avoid risky partnerships. Furthermore, we estimate the model with a dummy variable for participation in an IMF program (Vreeland, 2007) and a count variable for World Bank programs (Dreher,

---

25 We use GDP instead of population, another widely used indicator of economic importance, because the former measure is available for a larger number of number of countries than the latter measure. However, since GDP appears three times on the right-hand side of our equation, we also replaced it with population as a robustness test.
Sturm, and Vreeland, 2009). These programs are relevant because they could induce developing countries to implement economic reforms (Vreeland, 2003). Finally, we include the natural logarithm of bilateral aid from the EU/US to developing countries, so as to account for developing countries’ salience as recipients. These data are also from the WDI.²⁶

5.4 Model Specification

We estimate a Cox proportional hazards model, and the supplementary appendix presents a variety of parametric models. Survival analysis is appropriate because we are dealing with right-censored data. The Schoenfeld residuals test indicates that the proportionality assumption holds. We base our significance tests on Huber (robust) standard errors. These standard errors can account for possible heteroskedasticity, serial correlation, and intra-group correlation. To control for heterogeneity among regions, we include dummy variables following a 2003 World Bank classification for eight regions.²⁷

6 Democratization and New Leaders: Results

The empirical analysis supports our theoretical argument. We find that for all seven models, leader change has a substantively large effect on the probability of PTA negotiations if a developing country has recently democratized. This effect is statistically distinguishable from zero and clearly dominates the effect of standard control variables, such as income levels and distance.

The hazard ratios are reported in Table 1. The first column gives the full sample. The second and third columns give the models excluding multilateral agreements and stable democracies, respectively. The fourth column excludes negotiations that have yet to produce a PTA. The fifth and sixth columns report the expanded models for the full sample. As the table shows, the simultaneous occurrence of leader change and democratization has a positive effect on the hazard rate for PTA negotiations. This effect is much larger than the effect of leader change without democratization.²⁸ Interestingly, democratization itself does not have an effect on PTA formation in the absence of leader change. This observation undermines the alternative

²⁶We replace missing values with zero to avoid losing observations. The variable is not included in most of our models, so this coding decision is not driving our results.
²⁷Sub-Saharan Africa represents the omitted reference category in the estimations. We cannot use dyad fixed effects because many developing countries do not initiate PTA negotiations.
²⁸The coefficients of leader change without democratization and leader change with democratization are statistically distinguishable at the 0.05 level.
explanation that the EU/US use PTAs to simply reward democratization.

The substantive effects of leader change without democratization, democratization without leader change, and both are illustrated in Figure 1. Since marginal effects are difficult to interpret with the Cox model due to the absence of a baseline hazard (Kyyrä, 2009), we rely on probit models to estimate the marginal effects.29 Marginal effects for Democratization capture the effect of democratization without leader change, while marginal effects for Leader Change capture the effect of leader change without democratization. Marginal effects for Both represent simultaneous leader change and democratization. We show these effects for the baseline model and the four different samples.30

The control variables do not contain any major surprises. Consistent with previous research, high income levels and small distances are powerful predictors of PTA negotiations. By contrast, neither regime type nor population seem to consistently predict the initiation of PTA negotiations. Population and military alliances also do not predict PTA negotiations. Interestingly, political stability increases the probability of

---

29 Results of the probit models are found in the supplementary appendix. We obtain similar results if we use flexible parametric cox model (‘stpm2’ in Stata 12).

30 In the supplementary appendix, we present a table of actual cases. It shows that the models capture such salient cases as US-Mexico (1990), EU-South Africa (1995), EU-Croatia (2000), and US-Peru (2003). For the EU, our relatively rare explanatory variables can explain 13/26 cases. For the US, they explain considerably fewer, 2/13. As to failed predictions, many of these countries are poor African economies. They may have failed to utilize PTA negotiations for economic reform because the EU/US were not interested in engaging in talks with them. Taiwan cannot formally negotiate international agreements, while Sri Lanka and Congo have been in a civil war in recent years. Interestingly, our matching analysis in the robustness section demonstrates that many of these countries are removed if we balance such covariates as GDP per capita between positive and negative observations.
PTA negotiations. This goes against the notion that the EU/US use PTAs to stabilize unstable countries for geopolitical reasons.\textsuperscript{31}

7 Preferential Trading Agreements and Economic Reforms

Leader change under democratization explains PTA negotiations, but do PTAs induce economic reform? In this section, we show that they do. First, we examine the timing of structural breaks in reform data for countries that negotiated or signed a PTA with the EU or the US. Second, we compare these results with economic reforms in a selection of countries that did not engage in PTA negotiations but are comparable to those that did based on matched data. We find that economic reform in such countries was much less common. We also replicate these results using a conventional differences-in-differences regression. The technical details of the estimation are found in the supplementary appendix.

7.1 Structural Breaks

We analyze structural breaks because it is difficult to examine the causal effect of PTA negotiations on economic reform using standard regression techniques. Major powers have incentives to negotiate a PTA with developing countries that are willing to implement economic reforms. Additionally, developing country leaders may negotiate PTAs because they believe implementation to be easy. Since both economic reforms and PTA negotiations increase over time, uncovering causality is further complicated.

We begin by examining the timing of economic reform countries that negotiate a PTA at some point. Within this sample, there are several outcomes that would falsify our theory. First, there are few structural breaks in the data. Second, structural breaks begin already before PTA negotiations. Finally, we can compare the frequency of structural breaks with and without leader change, with and without democratization.

Next, we conduct a structured comparison with countries that do negotiate a PTA at any point in time. To ensure that these countries are comparable with those that do negotiate a PTA, we first use a matching technique to achieve a balance between relevant covariates, such as GDP per capita. Done this way, the comparison is not between apples and oranges. If we find few structural breaks in the control group, it supports the view that PTAs induce economic reform.

\textsuperscript{31}For robustness, we estimated a variety of models using alternative coding schemes for democratization and leader change. The coefficient for simultaneous leader change and democratization is positive in all models, and statistically significant in 103/108 models. Similarly, we verified that possible measurement error in negotiation onset is not a problem.
We use a technique called *rolling regression*. First, we form an estimation sample of ten consecutive years, such as 1980-1989. We then regress the value of a reform indicator, such as privatization, on time. Thus, we are constructing a linear trend in the reform indicator. Second, we use the estimated trend over these years to predict the value of the reform indicator in the following year. If the prediction is precise, there is no structural break in the data. If the prediction is poor, there is a structural break in the data because the historical trend fails to explain the following year. Technically, the precision of a prediction is based on a statistical significance test on the $R^2$ and mean squared error of the time series when the last year is added.

We repeat this exercise for several reform indicators and as many years as possible. For example, if we have data for years 1970-2007, we first use 1970-1979 as our estimation sample to predict the value of a reform indicator in 1980. We then use 1971-1980 to predict the value of that indicator 1981. Finally, we use years 1997-2006 to predict the value of the indicator in 2007. If we identify an upward shift in the data during PTA negotiations or immediately after signature, we code it as a structural break.

### 7.2 Economic Reform Data

We use data on four forms of economic reform. First, we explore financial liberalization using a new indicator, KAOPEN (Chinn and Ito, 2008). It includes four major categories on the restrictions on external accounts: the presence of multiple exchange rates; restrictions on current account transactions; restrictions on capital account transactions; and a requirement to surrender export proceeds. Capital account liberalization is a useful proxy for politically contentious reforms given that it has large distributive effects and often provokes domestic opposition (Mukherjee and Singer, 2010). This index ranges from -1.80 to 2.54. High values imply less stringent restrictions, or financial liberalization.

Second, we examine IPRs. IPR protection is a contentious issue in developing countries, as many interest groups can expect benefits from piracy and reverse engineering in the absence of robust IPR protection (Sell, 2003). We measure the number of legislative acts protecting IPR approved by the national legislature in developing country $i$ in year $t$, labeled. High values of this variable imply strict IPR regulations. The data are compiled by the authors from the World Intellectual Property Organization dataset.

Third, we measure privatization as the proceeds in trillions of dollars from the privatization of compa-

---

32To be sure, IPR reform is not necessarily “liberal” in that it imposes constraints on economic activity. However, from an EU/US perspective, it qualifies as an important economic reform (Sell, 2003).
nies every year $t$. Privatization reduces the size of the public sector, and thus provokes opposition among public sector employees and beneficiaries of the public services provided. Data are from the World Bank Privatization Dataset (Kikeri and Perault, 2009).

Finally, we use an investment profile measure from the International Country Risk Guide.\textsuperscript{34} According to Büthe and Milner (2008), PTAs hold potential for improving FDI policy in developing countries. Thus, we search for structural breaks in the general quality of FDI policy in countries that did (and did not) negotiate a PTA with the EU/US. This measure focuses on investor perceptions, so it allows us to obtain a different view of PTA effects on reform. The descriptive statistics for the rolling analyses can be found in the supplementary appendix.\textsuperscript{35}

### 7.3 Results

The results of the rolling analysis offer evidence in support of our second hypothesis. An overview is provided in Table 2. The table shows the proportion of developing countries that implemented types of reforms, separately for PTA-negotiating and non-negotiating countries. Furthermore, the association between PTA negotiations and economic is presented separately for the EU/US. In every category, PTA negotiations are associated with an increase in the economic reform rate.

[Table 2 about here.]

Let us begin with IPR legislation. We were able to conduct the analysis for 36 dyads. We found clear evidence of a structural break for 15 of the 36 dyads. Of these, 7 structural breaks were found during the negotiations and the other 8 within five years from signature. As an illustration, Figure 2 shows the reform patterns for EU-Algeria (signature), EU-Poland (signature), US-Jordan (negotiations), and US-El Salvador (signature). The figure shows that the IPR effects have occurred both during and after negotiations, and that the departures from the status quo were abrupt. This pattern is consistent with the notion that the leader and/or the EU/US saw the PTA as a window of opportunity to implement major economic reforms.

\textsuperscript{34}See http://www.prsgroup.com/icrg.aspx.

\textsuperscript{35}Due to missing data, we lost the following PTA negotiations in Eastern Europe around the year 1990: Estonia, Latvia, and Lithuania. This stacks the deck against finding evidence for our hypothesis because post-communist countries were clearly among the most ambitious reformers in the aftermath of the Cold War. We also cannot estimate a rolling regression for PTA negotiations initiated in 2006 or 2007, because not enough time has passed to identify a possible structural break. We drop observations of failed negotiations because they should not be able to induce reform.
For capital account openness, we only found enough data to estimate the rolling model for 29 dyads. Of these, only five indicated a structural break during the negotiations. It seems that the association between PTA formation and capital account liberalization is weaker than for the other two reforms that we have investigated. As an example, the supplementary appendix shows reform patterns for EU-Chile (negotiations), EU-Egypt (negotiations), US-Colombia (negotiations), and US-Korea (negotiations).

Third, we consider privatization. We found enough data to estimate the rolling model for 30 dyads. Of these, 11 indicated a structural break during the negotiations and another 9 within five years of signature. The findings are illustrated in the supplementary appendix for EU-Macedonia (signature), EU-South Africa (negotiations), US-Costa Rica (signature), US-Oman (negotiations).

Finally, we present the results for the investment profile variable. We were able to complete the estimation for 30 dyads. Of them, 9 showed a structural break during negotiations and 6 within five years of signature. To illustrate, we show the data for four PTAs in the supplementary appendix: EU-South Africa (negotiations), EU-Poland (signature), US-Vietnam (signature), and US-Nicaragua (negotiations).

In total, we found that 30 of the 40 dyads with some available data showed a structural break for at least one of the reform indicators. The fact that a structural break was found in approximately 75 percent of the cases, despite missing data for some of the most probable reformers in Eastern Europe after the collapse of the Soviet Union, is strongly consistent with our theoretical argument.

We found few structural breaks for countries that did not negotiate a PTA at any time but were comparable in regard to other key covariates.\(^{36}\) Whereas 30 of the 40 dyads with a PTA showed a structural break during or within five years from PTA negotiations, in the group of countries without PTA negotiations only 20 of the 42 countries showed one or more structural breaks for a comparable time frame.\(^{37}\) Only 7/39 countries had a structural break in the IPR data, while 9/37 had such a break in privatization and 2/25 had a break in capital account liberalization. In investment profile, 20/42 countries had a structural break.\(^{38}\)

---

\(^{36}\)See the supplementary appendix for the matching technique we used.

\(^{37}\)Specifically, we randomly selected a 7-year time period (average length of negotiations plus five years for countries that did engage in negotiations) for each such country and examined the occurrence of structural breaks during that time.

\(^{38}\)In the supplementary appendix, we also examine conditional patterns. Leader change strengthens the association between PTA formation and economic reform, and this association is particularly strong given
7.4 Differences in Differences

To further test the relationship between PTA formation and economic reforms, we conducted a conventional differences-in-differences analysis. This analysis does not emphasize structural breaks and is less flexible than the rolling regression, but it allows us to analyze the entire sample and control for confounding variables. Moreover, we can offer a rigorous characterization of the confidence intervals around the estimates.

Using the matched sample, we compared economic reform trends before and after either PTA negotiations began or the treaty was signed. For each of the four reform indicators, we estimated the economic reform trends for countries that did and did not negotiate a PTA with the EU or the US. With the exception of capital account openness, for which there were few structural breaks in the rolling analysis, we found that economic reforms accelerated in PTA-negotiating countries after PTA negotiations began. The difference in reform pace was also statistically significant at the $p < 0.01$ level. These results are consistent with those from the rolling regression analysis.

8 Additional Evidence

The appendix provides a series of additional tests. First, we found that reforms implemented under PTA formation are rarely reversed. This stands in stark contrast to the overall pattern of liberalization; in general, reforms are often reversed. This supports the interpretation that PTA formation allows leaders to tie their, and their successors’, hands (Büthe and Milner, 2008).

Second, we examined if economic crises explain our finding. While PTA negotiations often follow an economic crisis, economic crises without leader change and democratization do not increase the probability of PTA negotiations. This suggests that economic crisis is not the underlying driver of PTA negotiations. Instead, both leader change and democratization seem to play an important role.

Third, we examined whether our results hold if exclude two geopolitically important regions, namely the Middle East and North Africa. Especially for the US, PTAs in these region may have been influenced by security considerations, and especially the search for allies in war on terror. We found that our results were robust to excluding these regions.

Finally, elsewhere we have examined the effect of EU/US PTA formation on bilateral foreign aid (?). leader change under democratization. Perhaps surprisingly, we also found little evidence for IMF effects.
We found that the EU/US significantly increase foreign aid in sectors that require economic reform for approximately five years following PTA signature. However, the effect disappears over time. This finding suggests that the EU/US complement PTA negotiations with foreign aid for economic reform.

9 Conclusion

How do international institutions influence domestic politics, and how do the anticipated institutional effects influence a leader’s decision to pursue membership in such institutions? We have used data on EU/US PTA negotiations to examine whether developing country leaders strategically use these agreements to promote economic reform. New leaders facing difficult political circumstances under democratization are particularly dependent on the credible commitment and domestic side payments that EU/US PTAs allow. The combination of recent leader change and democratization increase the probability of PTA negotiations, and EU/US PTAs induce significant reforms.

Leaders apply for membership in international institutions to reap tangible domestic political benefits. We provide direct empirical evidence that individual leaders use international institutions to advance domestic reforms. Furthermore, we complement those previous studies that have found reform effects for IMF programs (Vreeland, 2003; Pop-Eleches, 2009) and EU accession negotiations (Mattli and Plümper, 2004).

Bilateral economic institutions with major powers and enforceable, legally binding obligations hold particular potential for promoting economic reform. These conditions provide the basis for future research on the international determinants of economic reform. For example, the generalizability of our argument could be explored by evaluating whether domestic political factors, such as leader change and democratization, have different effects on suitable bilateral economic institutions, such as investment treaties, and less suitable ones, such as multilateral scientific organizations.

Fragile democratic transitions in the Middle East underscore the policy importance of our study. If the EU/US are to support democratization and economic liberalization in the Middle East, including Egypt and Libya, trade agreements offer a useful policy instrument. Leaders who need economic reform but face domestic political opposition to it can engage in PTA negotiations to create new constituencies for economic reform. Additionally, PTA formation enables credible commitment to liberalization. By deepening economic cooperation with democratizing countries, the EU/US can promote lasting political-economic change in geopolitically important partner countries.
References


Figure 1: The effect (hazard ratio) of leader change, democratization, and both on PTA negotiations in the four samples. The confidence intervals are for the 95 per cent significance level.
Figure 2: PTA formation and cumulative IPR legislation. In each figure, the first (second) vertical line indicates the onset of negotiations (signature).
<table>
<thead>
<tr>
<th>SAMPLE</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratization, no leader change</td>
<td>1.06</td>
<td>1.66</td>
<td>1.01</td>
<td>1.89</td>
<td>1.07</td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td>(0.63)</td>
<td>(1.17)</td>
<td>(0.61)</td>
<td>(1.31)</td>
<td>(0.60)</td>
<td>(1.25)</td>
</tr>
<tr>
<td>Leader change, no democratization</td>
<td>2.22***</td>
<td>2.29**</td>
<td>2.45**</td>
<td>2.33**</td>
<td>1.84**</td>
<td>1.89*</td>
</tr>
<tr>
<td></td>
<td>(0.66)</td>
<td>(0.88)</td>
<td>(0.97)</td>
<td>(0.92)</td>
<td>(0.56)</td>
<td>(0.62)</td>
</tr>
<tr>
<td>Leader change and democratization</td>
<td><strong>5.56</strong>*</td>
<td>6.81***</td>
<td>5.18***</td>
<td><strong>8.09</strong>*</td>
<td>5.73***</td>
<td>7.54***</td>
</tr>
<tr>
<td></td>
<td>(2.55)</td>
<td>(3.65)</td>
<td>(2.72)</td>
<td>(4.83)</td>
<td>(2.74)</td>
<td>(4.37)</td>
</tr>
</tbody>
</table>

| GDP per capita                              | 1.05**    | 1.03      | 1.09***   | 1.04      | 1.08***   | 1.07**    |
|                                             | (0.02)    | (0.03)    | (0.02)    | (0.04)    | (0.03)    | (0.03)    |
| Trade                                       | 1.02      | 0.96      | 1.00      | 0.95      | 1.01      | 0.99      |
|                                             | (0.03)    | (0.04)    | (0.04)    | (0.04)    | (0.03)    | (0.03)    |
| Democracy                                   | 1.05      | 0.85      | 1.01      | 0.81      | 0.50      | 0.23***   |
|                                             | (0.39)    | (0.43)    | (0.45)    | (0.45)    | (0.22)    | (0.11)    |
| Alliance                                    | 0.72      | 0.58      | 0.86      | 0.76      | 0.69      | 0.48**    |
|                                             | (0.22)    | (0.21)    | (0.34)    | (0.29)    | (0.22)    | (0.18)    |
| Distance                                    | 0.35***   | 0.23***   | 0.30***   | 0.17***   | 0.30***   | 0.20***   |
|                                             | (0.08)    | (0.06)    | (0.08)    | (0.05)    | (0.07)    | (0.06)    |
| GDP                                         | 1.41***   | 1.49***   | 1.39***   | 1.48***   | 1.32***   | 1.32**    |
|                                             | (0.12)    | (0.18)    | (0.18)    | (0.19)    | (0.13)    | (0.17)    |
| GDP growth                                  | 1.00      | 1.00      | 0.99      | 1.00      | 0.99      | 1.00      |
|                                             | (0.01)    | (0.01)    | (0.01)    | (0.01)    | (0.02)    | (0.02)    |
| Previous leader’s tenure                    | 0.97*     | 0.97      | 0.98      | 0.96      | 0.98      | 0.99      |
|                                             | (0.02)    | (0.03)    | (0.02)    | (0.03)    | (0.02)    | (0.02)    |
| PTA diffusion                               | 1.08      | 1.03      | 1.13*     | 1.04      | 1.05      | 1.13      |
|                                             | (0.06)    | (0.07)    | (0.08)    | (0.07)    | (0.05)    | (0.08)    |
| Executive constraints                       | 1.47***   | 1.55***   | 1.55***   | 1.55***   | 1.55***   | 1.55***   |
|                                             | (0.17)    | (0.20)    | (0.21)    | (0.21)    | (0.20)    | (0.20)    |
| Political stability                         | 1.27      | 1.56      |           |           |           |           |
|                                             | (0.21)    | (0.33)    |           |           |           |           |
| Foreign aid                                 | 1.01      |           |           |           |           |           |
|                                             | (0.02)    |           |           |           |           |           |
| IMF program                                 |           |           | 3.40***   | (1.22)    |           |           |
|                                             |           |           | (0.02)    | (1.22)    |           |           |
| World Bank programs                         |           |           | 1.09      |           |           |           |
|                                             |           |           | (0.07)    | (1.09)    |           |           |
| East Asia                                   | 1.69      | 5.69*     | 1.37      | 11.09*    | 1.65      | 3.22      |
|                                             | (1.13)    | (5.34)    | (1.13)    | (13.79)   | (1.08)    | (2.98)    |
| E. Europe and C. Asia                       | 0.87      | 2.14      | 0.38      | 2.58      | 0.59      | 0.37      |
|                                             | (0.62)    | (2.23)    | (0.33)    | (3.32)    | (0.40)    | (0.48)    |
| Latin America                               | 2.24      | 2.70      | 2.40      | 7.49*     | 2.32      | 2.92      |
|                                             | (1.40)    | (2.64)    | (1.67)    | (8.80)    | (1.33)    | (2.36)    |
| M. East and N. Africa                       | 2.52      | 6.42      | 1.40      | 12.07*    | 3.86      | 4.70      |
|                                             | (2.13)    | (7.47)    | (1.30)    | (17.06)   | (3.40)    | (6.58)    |
| Western Europe                              | 2.90      | 5.30      | 1.65      | 1.29      | 2.49      |           |
|                                             | (2.42)    | (5.62)    | (1.36)    | (1.03)    | (2.05)    |           |
| South Asia                                  | 0.64      | 1.90      |           | 0.74      |           |           |
|                                             | (0.56)    | (2.01)    |           | (0.60)    |           |           |

| Negotiation onsets                          | 71        | 46        | 47        | 43        | 68        | 56        |
| Observations                                | 4458      | 4563      | 3466      | 4559      | 3818      | 3206      |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 1: The effect of leader change and democratization on the initiation of PTA negotiations.
Table 2: PTA negotiations and frequency of economic reform. If we compare the frequency of reform in the combined EU/US PTA and non-PTA groups, the difference is statistically significant at the conventional level for all four reform indicators (two-tailed t-test). Column (4) shows the p-value for this test: *** \( p < 0.01 \), ** \( p < 0.05 \), * \( p < 0.1 \).