REPUTATIONS FOR CONFLICT AND THE FORMATION OF PREFERENTIAL TRADE AGREEMENTS

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ABSTRACT

LEE FOSTER: Reputations for Conflict and the Formation of Preferential Trade Agreements. (Under the direction of Mark Crescenzi)

The influence that reputations for hostility have on future interstate conflict and the formation of security alliances has been well-studied. By comparison, the influence of such reputations on relations outside the security realm has received relatively scant attention. This paper begins to close this gap, exploring how reputations for militarized conflict influence the formation and design of reciprocal trade arrangements. Specifically, I argue that an extra-dyadic reputation for hostility undermines the formation of Preferential Trade Agreements (PTAs) within the dyad, as a potential partner becomes skeptical of a state’s willingness to adhere to agreement terms and to follow peaceful dispute settlement channels. Additionally, where PTAs are signed, reputations for hostility increase the likelihood of institutionalized, legalistic dispute settlement mechanisms (DSMs) being incorporated, as signatories attempt to shield themselves from future opportunistic behavior. Importantly, however, I argue that these reputational effects are only influential when states are not party to existing formal economic or security agreements. Logistic analyses of PTA signings and DSM design for the decade 1991-2000 provide empirical support for this argument. The results suggest that, regardless of actual intent, reputations for hostility can follow states around and undermine their ability to form cooperative relationships outside the security domain.
For Mindy, in appreciation for all her support.
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1 Introduction

Do states evaluate the ‘character’ of potential partners when contemplating collaborative endeavors? How do the impressions formed alter their foreign policy decision making and shape their interactions, if at all? What implications does this have for broader patterns of international cooperation? Such questions are central to the concept of reputation in international politics, a topic that has received significant attention in recent IR scholarship. Prominent themes in the security sphere have included the influence that reputations for hostility have on subsequent outbreaks of conflict (Crescenzi 2007; Crescenzi, Kathman and Long 2007), how governments’ reputations for resolve can deter separatist groups (Walter 2006), and how reputations for upholding or reneging on one’s alliance obligations informs subsequent patterns of alliance formation and design (Mattes 2012; Crescenzi, Kathman, Kleinberg and Wood 2012). In the international political economy literature, the significance of reputation has received less scrutiny, but important studies have investigated, for example, the impact of state reputations for sovereign debt servicing on future foreign investment and broader levels of economic cooperation (Tomz 2007). Thus far, however, relatively little attention has been paid to how a reputation for certain behavior in one realm of international politics can influence a state’s prospects for cooperation in another. This is somewhat surprising given broader efforts in the literature to link discrete behaviors across security and IPE. The influence of economic interactions on peace and conflict, for example, has been well explored (Barbieri 1996; Copeland 1996; Morrow 1999; Gartzke, Li and Boehmer 2001; Oneal, Russett and Berbaum 2003; Gartzke 2007). The reverse relationship has similarly been examined in detail, with a particular focus on the effects of conflict on trade (Barbieri and Levy 1999; Anderton and Carter 2001; Oneal, Russett and Berbaum 2003; Long 2008). Investigating how reputations in one of these spheres (security) can influence outcomes in the other (IPE), then, represents a natural but important next step for the reputation research agenda.
This paper begins to bridge this gap, exploring how a reputation for engaging in militarized confrontations can affect a state’s future economic relations. Specifically, I investigate how a state’s extra-dyadic reputation for hostile behavior influences the formation of Preferential Trade Agreements (PTAs) – formal vehicles designed to regulate the reciprocation of trade liberalization between member countries. The central argument advanced is that an extra-dyadic reputation for conflict can undermine a state’s ability to credibly commit to upholding the terms of an agreement, even if it has every intention of meeting its obligations. Given the material and political costs they incur when implementing PTAs, potential partners are careful to evaluate the likelihood of a state cheating in future, and as they operate in a world of uncertainty and private information, will utilize whatever indicators are readily available to them for this end. Thus, even though it might not speak directly to a state’s future behavior within the reciprocal trade regime, in the absence of existing formalized cooperative arrangements that its partner can look to instead, a reputation for hostility in other areas of that state’s international affairs will suggest a propensity to step outside the bounds of appropriate behavior.

I investigate two key implications of this theory of reputation and credibility. First, I evaluate whether a reputation for conflict has a dampening effect on the signing of PTAs. Analyzing a dyadic data set spanning the years 1991 to 2000, I find that it does indeed inhibit the incidence of PTA adoption when states do not share existing economic or security agreements. Consequently, as a state improves its reputation, it can improve its prospects for successfully concluding reciprocal trade arrangements. Where existing agreements are in place, on the other hand, a reputation for conflict has little bearing on PTA signing. Secondly, if states with poor reputations are sincere in their desire to liberalize, they may attempt to overcome the concerns of skeptical partners by either proposing, or acceding to, more-constraining agreement terms. To test this, I use data on 111 PTAs signed during that same time period to evaluate whether reputations for conflict result in the adoption of more institutionalized, or ‘legalistic’, dispute settlement mechanisms (DSMs). Once again, I find that reputations for hostility are important when states do not share existing economic or security agreements. In the presence of such arrangements, however, reputation has
little bearing on DSM design. Collectively, the evidence suggests that, under certain circumstance, reputations for hostility can follow states around and undermine their ability to form cooperative economic relationships.

This paper proceeds as follows. I first briefly review the trajectory of the reputation literature over the past two decades, before developing in detail the theory of reputation and PTA formation. Following this, I outline a useful approach for conceptualizing reputation in international politics using Crescenzi’s (2007) Risk Information (RI) model, and then describe the research design I use to test four hypotheses stemming from my theory. I then follow this with an analysis of the results before concluding with a brief discussion on the wider implications of my findings.

2 Reputation and International Relations

Three interrelated questions have shaped the research agenda on reputation in international relations over the past two decades: 1) How do states form reputations? 2) Do these reputations matter in the conduct of international affairs? 3) If so, how do these reputations influence state behavior? Arguably the most prominent area of focus has been on the relevance of reputation in the context of deterrence and resolve. Mercer (1996), for example, argues that in the context of deterrence and resolve, reputations do not matter. Borrowing theoretical contributions from the field of social psychology, he argues that states do not update their beliefs about an adversary’s commitment to a given issue, even when the latter undertakes action designed to demonstrate their resolve. As such, shows of force designed to generate and maintain a reputation for resolve in the face of adversity are unnecessary, as they do not alter other states’ perceptions or actions. Later work by Press (2005) concurs with this assessment but goes even further, suggesting states do not form reputations at all. Undertaking a detailed case history of the interactions between Germany and the other European powers during the 1930s, he argues that states evaluate the credibility of an adversary based not on their previous actions, but instead through consideration of contemporary balance of power dynamics and the degree of interest their rival has in the issue under dispute. Tang (2005) argues along similar lines to Mercer and Press, claiming that an inherent state of anarchy in the international system makes it impossible for reputations for resolve to form. Anarchy, he
suggests, compels states to adopt worst-case scenario assessments during international crises, such
that they will always assume rivals to be resolute and allies to be the opposite. Political leaders
that concern themselves with demonstrating resolve, then, are simply participants in a ‘cult of
reputation’ characterized by the misplaced belief that they can alter the perceptions, and therefore
behavior, of others.

Other authors reach the opposite conclusion. In response to Mercer, Huth (1997) surveys the
empirical findings on reputation in international politics and concludes that reputations for resolve
are an important influence on international outcomes. Walter (2006) focuses on a specific instance
of this, arguing that governments that demonstrate an unwillingness to capitulate to the demands
of separatist movements can deter future challenges from other, similarly minded groups. Tingley
and Walter’s (2011) subsequent experiments on decision making in an entry-deterrence game have
provided additional empirical support for this claim. Beyond this, in contrast to both Mercer’s as-
sertion that reputations rarely, if ever, change over time, and Tang’s assertion that anarchy prevents
reputations from forming in the first place, Copeland (1997) argues that the dynamic nature of
alliances and the fact that adversaries are able to resolve their differences demonstrate that states
can – and do – improve their images in the eyes of others.

Beyond the narrow theme of resolve, however, substantial research has focused on broader
questions pertaining to reputation in international politics. Some have sought to explain how rep-
utations among states are formed. Levy (1994), for example, suggests states develop perceptions
about others through experiential learning, or the ‘change of beliefs… or the development of new
beliefs, skills, or procedures as a result of the observation and interpretation of experience’. Upon
observing the actions of an adversary or ally, a state updates its beliefs about how that party is
likely to act in future interactions. Others have attempted to operationalize this concept of experi-
ential learning in order to aid empirical evaluation of how reputations can influence state behavior
in different areas. One major focus has been on interstate conflict. (Crescenzi and Enterline 2001),
for example, develop a dynamic model of direct learning within the dyad that uses the history of
militarized conflict between two states to quantify their respective reputations for hostility. Using
this operationalization, they argue that dyadic reputations for hostility increase the likelihood of additional conflicts occurring between two countries. Crescenzi (2007), on the other hand, develops an indirect, extra-dyadic model of learning, whereby states form perceptions regarding a dyadic partner’s propensity for hostility based on that partner’s interactions with others outside the dyad. Testing this ‘Reputation Information’ model on the incidence of militarized interstate disputes between 1965 and 2000, he concludes that states are more likely to use force to resolve disputes with dyadic partners when those partners have an extra-dyadic reputation for hostility themselves. Conversely, if a dyadic partner has a reputation for cooperation, a state is less likely to use violence as a means of dispute resolution, as a positive reputation signals that partner’s likely ability to commit to a negotiated settlement instead. In yet another paper, Crescenzi, Kathman and Long (2007) similarly find that a reputation for hostility is an important predictor of the most extreme form of political interaction: interstate war.

Attention has also been paid, however, to how reputations for certain behaviors can affect state interactions in other areas of international politics. One prominent theme in this regard has been alliance formation. Miller (2003), for example, argues that a state’s reputation for failing to uphold its alliance commitments will harm its ability to join other alliances in future. Other studies provide empirical support for this argument, suggesting that states improve their alliance prospects when they follow through on their existing alliance obligations (Gibler 2008; Crescenzi, Kathman, Kleinberg and Wood 2012). Mattes (2012) instead focuses on how reputations can affect the design of security alliances. Using a model of direct historical learning within the dyad, she argues that a reputation for reneging on one’s previous alliance obligations will lead to greater degrees of institutionalization in subsequent alliance designs. This, she argues, represents an effort to increase alliance reliability and bind members to their commitments. It is in the same vein as studies such as these that this paper seeks to contribute to the literature on how reputations can affect state behavior, focusing specifically on conflict and the signing and design of preferential trade agreements.
Reputation and the Formation of Preferential Trade Agreements

Preferential trade agreements (PTAs) are reciprocal trade arrangements negotiated between states that are designed to increase or secure access to members’ markets. By their nature they are discriminatory, in that their benefits are realized only by signatories (Mansfield and Milner 2012). Commonly taking the form of arrangements that reduce trade barriers on specific goods or market segments, PTAs can also consist of wider free trade agreements (FTAs), customs unions, common markets, and economic unions\(^1\) (Mansfield, Pevehouse and Bearce 1999). Importantly, they can be trade creating or trade diverting, a characterization that refers to their effects on liberalization more broadly. Trade diversion occurs when trade flows are shifted away from partners outside of the agreement to those within it at the expense of efficiency. The formation of a new PTA, for example, may prompt a signatory to increase imports from its new partner (as tariffs and thus prices have been reduced) even if that new partner is less efficient at producing those goods than former sources from outside the agreement. As a direct result of increased trade within the PTA, these outside third-parties suffer a reduction in exports (Manger, Pickup and Snijders 2012; Freund and Ornelas 2010). Trade creating PTAs, on the other hand, shift production away from a signatory’s costly domestic producers to cheaper suppliers within other signatory states, thereby increasing efficiency (Freund and Ornelas 2010).

Much consideration has been given to the question of why states form PTAs. The most obvious motivation is the potential economic gains that can be realized: the reciprocal reduction of trade barriers can benefit members both by reducing the costs of their imports and increasing the attractiveness of their exports in the eyes of other participants. Additionally, some countries might seek PTA membership as a means of attracting scarce foreign direct investment (FDI) from high-income partners (Büthe and Milner 2008; Manger, Pickup and Snijders 2012). Economic motivators can also be more complex than the direct wealth benefits that PTAs provide. Mansfield and Reinhardt (2003), for example, argue that states have sometimes joined PTAs in order to

\(^{1}\)For the purpose of the analysis conducted here, I do not differentiate between these different forms of PTA. That is, I do not attempt to delineate the effect of reputation on PTA signing across different types of agreement. This is not to say that such an undertaking would be unfruitful. Instead, I leave this endeavor for future research.
increase their market power and gain greater bargaining leverage in multilateral trade talks under the GATT/WTO. Beyond such purely economic benefits, PTAs can also act as important signals of credibility. Internally, for example, the constraining nature of PTAs can serve an electoral benefit, allowing leaders to signal to domestic audiences that they are not beholden to protectionist special interests (Mansfield and Milner 2012). Externally, they can indicate a state’s commitment to the continued maintenance of advantageous trading policies, allaying the fears of partners who might otherwise – in a less formal setting – doubt their willingness or ability to sustain liberalization long-term (Mansfield, Pevehouse and Bearce 1999). Indeed, this was the motivation behind Canada’s desire for a free trade agreement with the U.S. during the mid-1980’s. As Yarbrough and Yarbrough (1992) note, each country was the principal trading partner of the other, and the majority of trade between the two was already free from import tariffs. As such, Canada’s motivation for pursuing a PTA was not so much a desire to gain wider access to U.S. markets, but instead to secure its existing access. Specifically, it was concerned with the future potential of the U.S. to selectively and opportunistically enact protectionist measures that might harm Canada’s economy. A PTA, in this case, would reassure Canadian policymakers and provide the U.S. with additional credibility, by signaling that its commitment to reciprocal liberalization was not fleeting (Yarbrough and Yarbrough 1992, pp.99-100).

The reputation thesis presented here evolves from this credibility rationale. While a willingness to sign a PTA may, as in the case of the U.S. and Canada, be indicative of a potential partner’s commitment to reciprocal liberalization, this gesture alone will not always be sufficient to allay concerns about the potential for cheating. Given the substantial financial and political capital a government can expend when negotiating, implementing, and maintaining trade agreements, states will be concerned with the long-term viability and profitability of such arrangements. These expenditures can come in a multitude of forms. Such agreements, for example, can take a number of years to negotiate and ratify (Manger, Pickup and Snijders 2012), and this process can impose substantial transaction costs on signatories – including informational, bargaining, monitoring, and enforcement costs (Mansfield and Milner 2012). The U.S.-Colombia Trade Promotion Agreement
(CTPA), for instance, provides a pertinent example of just how long the PTA formalization process can take. The agreement originated as part of an attempt in 2004 to establish a free trade arrangement between the U.S. and Peru, Colombia, and Ecuador. When these multilateral negotiations broke down, the U.S. and Colombia pursued a bilateral arrangement, which was signed on November 22, 2006. However, due to concerns over abuses against labor union members in the Latin American country, it took an additional five years for the agreement to be ratified, and it did not finally become active until May 12, 2012 (Villarreal 2012). While this may be a somewhat extreme example, on the whole most PTA negotiations still take an average of three years to conclude, and involve multiple discussion rounds between governments. The longer this process takes, the greater the transaction costs that signatories incur (Baccini 2012).

Such transaction costs are not confined to the negotiation and implementation stages however. Procedural transaction costs are also incurred by signatories when enforcing compliance with agreement provisions – costs that relate to the administrative capacities required for states to pursue complaints through institutional dispute settlement procedures and the provision of legal expertise for this end. As Kim (2008) notes in the context of the WTO, for example, bringing trade dispute cases against other countries can be an expensive proposition, requiring that the plaintiff possess intricate knowledge of complex institutional procedures and substantial administrative resources in order to successfully navigate them. Compounding this, where such expertise is lacking, outside legal assistance is often necessary, and even small cases can cost upwards of $200,000, with lawyers fees exceeding $600 per hour (Shaffer 2003, p.16). As the challenging of violations under PTA frameworks will consume similar administrative resources, ex ante anticipation of frequent or sizable disputes will likely deter agreement formation. A high degree of compliance must be expected for a state to deem a preferential arrangement worthwhile, and doubts over a potential partner’s willingness to eschew future opportunism can therefore be a sticking point for cooperation.

Yet transaction costs are not the only costs related to PTA formation that can prompt careful contemplation of a potential partner’s credibility. Substantial political costs can also be incurred.
As discussed earlier, PTAs are by design discriminatory. Their implementation excludes others not party to the arrangement, and when trade diverting, actually harm some non-participants economically. This itself might damage a signatory’s prospects for future cooperation with third parties, as a state that opts to partake in exclusive arrangements that harm others will be viewed negatively by those they shut out. This may lead to a loss of access to existing third-party markets. The historical record demonstrates this to be an important concern for some countries. During the 1930s, for example, Britain was reluctant to sign a trade agreement with the U.S. for fear it would anger its empire trading partners and the Baltic states, such that continued access to those markets would be threatened. This was compounded by concerns that these disaffected regions would turn to Nazi Germany for their imports instead (Drummond and Hillmer 1989, p.11). More recently, in 2006 Venezuela left the Andean Community of Nations (CAN) customs union in direct protest to Peru and Colombia signing free trade agreements with the U.S. (BBC 2006). While gaining broader access to U.S. markets, Peru and Colombia damaged an important regional political relationship. States must therefore be conscious of the negative political implications of signing PTAs with select partners, and not concern themselves solely with an assessment of their anticipated economic returns.

Given these transaction and political costs, a state is unlikely to pursue an agreement if it reasonably suspects, ex ante, that its partner will fail to uphold its end of the deal and, as a result, undermine the institution’s long-term viability.\footnote{A partner that intends to cheat on an agreement, however, can avoid some of these transaction costs (particularly those of monitoring and enforcement). As such, it can still be rational for that partner to pursue an agreement if it believes the benefits of defection outweigh both the initial investment and the long-term consequences.} If a prospective partner’s sincerity in meeting its obligations is doubted, pursuit of a preferential arrangement will be deemed imprudent. This will be particularly compelling if a government believes that adopting the PTA in question might jeopardize favorable resumption of access to its old trading partners should the agreement fall apart in future. Thus, noncompliance will be a serious concern for signatories, and in a world of uncertainty and private information about a prospective partner’s intent to adhere to agreement provisions, states will look for further indicators to reassure themselves that they will not become
the target of future opportunistic behavior. Such indicators can stem from a number of sources, however, with some being more illuminating than others. It is in the absence of existing formal cooperative agreements with a prospective partner that I argue an extra-dyadic reputation for conflict becomes important to PTA formation. To conceptualize this, consider the interaction between two states, \( i \) and \( j \), with \( i \) seeking to assess \( j \)'s credibility before deciding whether to agree to the formation of a PTA between the two.

The most insightful indicator of \( j \)'s future behavior, of course, will be its performance under any existing PTAs or other formalized economic arrangements with \( i \). If the two states share membership in a separate PTA, \( i \) will look to \( j \)'s conduct under that arrangement in order to predict its likely future behavior under a new agreement. If \( j \) has upheld its commitments previously, \( i \) will likely infer that \( j \) will continue to do so under a new agreement as well. Alternatively, if \( j \) has previously violated agreement provisions, its credibility moving forward will be doubted. When no such economic relationships exist, however, \( i \) might instead look to \( j \)'s behavior under other formal cooperative arrangements between the two countries. For example, while a noisier signal, \( j \)'s performance under a formal security alliance with \( i \) might be regarded as indicative of its likely future performance under a trade agreement. If \( j \) has not previously reneged on its alliance commitments with \( i \), \( i \) might reasonably conclude that such cooperation will transcend into the economic realm as well. In this way, \( j \)'s actions under a non-economic cooperative arrangement will act as a proxy for its expected future behavior within a formal economic relationship.

In the absence of such formal agreements between the two, however, \( i \) will instead look to extra-dyadic indicators of \( j \)'s ability and willingness to cooperate. One such indicator, I argue, is \( j \)'s broader reputation for militarized conflict. This can be influential in two ways. Firstly, a reputation for hostility is a red flag that will prompt skepticism about \( j \)'s ability more generally to play by the rules and avoid opportunistic behavior. If \( j \) regularly finds itself embroiled in militarized disputes, it may suggest frequent engagement in conduct that angers other states and prompts them to resort to violence as a means of resolving their grievances. This, of course, is an inherently noisy signal devoid of context, but state \( i \) will find it difficult to ignore in the absence of direct experience with
that might override such an impression. Much like a defendant with a prior arrest record sitting before a jury, a poor reputation will be damaging to j’s credibility, irrespective of whether it is accurately reflective of j’s intended future behavior. With few alternative sources of information to look to, i will assume that j is unlikely to uphold its obligations under a PTA, and being eager to avoid sinking financial and political capital into the formation of an arrangement it believes is destined to falter, will instead forego it altogether. Secondly, as conflict results from a breakdown of bargaining (Fearon 1995), a reputation for hostility will also allude to an inability for j to commit to peacefully negotiated settlements when disagreements do arise. State i will therefore be reluctant to pursue a PTA if it appears unlikely, should a trade dispute occur under the arrangement, that a timely and non-violent resolution will be attainable.

This is not to say, however, that states with a poor reputation cannot overcome the credibility obstacle in all cases, or that they do not make efforts to do so. As Mansfield and Milner (2012) note, governments needing to demonstrate a more credible commitment to a PTA can do so through formal, binding dispute settlement mechanisms (DSMs). They argue this from an internal credibility standpoint, suggesting that democratic governments are more likely to include DSMs in their PTAs than autocracies because of domestic electoral pressures to insulate themselves from protectionist special interests. But DSMs, if ‘legalistic’ or ‘institutionalized’, can also act as a signal of commitment externally, indicating to potential partners that they are sincere about upholding their obligations under an agreement (Jo and Namgung 2012). Whereas non-legalistic DSMs are characterized by diplomacy and bargaining between participants, legalistic DSMs are defined, at the very minimum, by the third-party review of complaints. In practice, DSMs vary widely in their degree of legalization, which can incorporate legally binding third-party review, non-binding third-party review, the capacity for private entities to initiate cases, a permanent complaint adjudication body, and the installation of enforcement instruments directly into the domestic law of offending participants (Smith 2000; Kono 2007; Jo and Namgung 2012).

Thus, a state might consider a partner’s assent to the implementation of a legalistic DSM to be a potent gesture of its intent to comply with agreement terms. Costly signals have long been
identified as a means by which states can communicate their commitment to an issue or policy (Fearon 1997), and formal DSMs provide a germane example. As Smith (2000) argues, legalistic DSMs modify a state’s assessment of the costs and benefits of violating agreements, as they can increase the likelihood of detection, independently determine if violations have occurred, and dictate subsequent penalties to be imposed. Furthermore, legalistic DSMs raise the reputational price states pay for failing to uphold their obligations (Kono 2007; Smith 2000). If a country is readily willing, therefore, to agree to demands for a formal DSM, it suggests a seriousness of intent to commit to liberalization. States with poor reputations might pursue this instrument to alleviate the concerns of potential partners, who themselves can press for the adoption of legalistic DSMs as reassurance that agreement provisions will be observed. Indeed, a somewhat similar argument has been forwarded with regards to the influence of reputation on the design of security alliances. As (Mattes 2012) contends, states with a reputation for engaging in opportunistic behavior under previous alliance treaties may be willing to implement more costly provisions – particularly a greater degree of military institutionalization – in subsequent alliance designs. This institutionalization, which can include the integration of military forces, centralized planning procedures, and joint training operations, allows partners to regularly evaluate each other’s commitment to the alliance, and increases its overall reliability by binding members to the institution. Within PTAs, the institutionalization of dispute settlement procedures will serve a similar function, binding signatories to their commitments and constraining opportunism. Furthermore, as disputes are resolved through formal procedures and not negotiation and diplomacy, this will also reduce opportunities for bargaining to breakdown. Thus a reputation for conflict may not be as problematic for signatories when an agreement will incorporate a legalistic dispute settlement mechanism.

Again, however, I argue that an extra-dyadic reputation for hostility will only be relevant to the choice of DSM in the absence of existing formal arrangements between signatories. If states $i$ and $j$ are party to other formal economic or security agreements, then their respective performances under those will inform the DSM architecture of a new PTA between them. Direct experience will again override any reputational signal, such that a prior poor performance will increase the
likelihood of a legalistic DSM being adopted irrespective of either states’ extra-dyadic reputation. Conversely, a direct history of compliance will increase the likelihood of costly institutionalized procedures being deemed unnecessary, even when one (or both) of the parties possesses a particularly poor reputation for conflictual behavior more broadly. When PTAs are formed in the absence of any existing agreements, however, extra-dyadic reputations will likely serve as an important informational input for DSM design. Specifically, reputations for hostility are likely to prompt the adoption of costly, institutionalized procedures, as partners attempt to insulate themselves from becoming the target of future opportunistic behavior. Where states have a positive reputation, on the other hand, their partners will be less inclined to invest in costly mechanisms that they do not foresee needing to call upon in future.

Four simple hypotheses follow from this, that will allow us to discern the role that reputation plays in the formation of preferential trade agreements. Firstly, in the absence of existing formal cooperative relationships, we should expect reputation to influence the likelihood of PTA formation. Specifically, if a reputation for conflict is a red flag for states attempting to evaluate the credibility of potential partners, we should expect to see such reputations have a dampening effect on the likelihood of PTA formation. Conversely, if a reputation for cooperation provides reassurances that a partner will follow through on its commitments, we should observe a positive effect of such reputations on the likelihood of PTA adoption:

\( H_1 : \) In the absence of existing formal economic or security agreements, states will be less likely to form PTAs with partners who have a reputation for hostility in their international affairs than with those who have a reputation for cooperation.

When existing formal agreements are present, however, we should not expect extra-dyadic reputations to matter, as evaluating states will instead rely on their direct experiences to assess a partner’s credibility:

\( H_2 : \) In the presence of existing formal economic or security agreements, a state’s extra-dyadic reputation will have no bearing on the likelihood of PTA formation.
If a state’s concerns over a partner’s reputation can sometimes be placated by the inclusion of a formal or institutionalized dispute settlement mechanism, however, we should not expect a poor reputation to always preclude PTA adoption. Instead, where states with poor reputations do become party to a PTA, we should expect it to increase the likelihood of a legalistic DSM being incorporated, conditional on the absence of any existing formal economic or security relationships between the signatories. This leads to the final two hypotheses:

\( H_3 : \text{In the absence of existing formal economic or security agreements, newly established PTAs that include signatories who have a reputation for hostility in their international affairs will be more likely to contain legalistic dispute settlement mechanisms than those agreements consisting only of signatories with reputations for cooperation.} \)

\( H_4 : \text{In the presence of existing formal economic or security agreements, a state’s extra-dyadic reputation will have no bearing on the choice of dispute settlement mechanism in a newly established PTA.} \)

I now discuss a suitable method for conceptualizing reputation that will allow for empirical testing of these hypotheses.

4 Modeling Extra-Dyadic Reputation

The Reputation Information (RI) model developed by Crescenzi (2007) provides a useful approach by which to conceptualize extra-dyadic reputation in international politics. It is designed to capture a state’s estimation about a partner’s likely future behavior towards it, based on an assessment of how that partner has acted in the past towards third-parties and how similar in nature those third-parties are to the evaluating state. That is, a state forms expectations of a partner’s likely behavior based on observation and evaluation of its interactions with other states outside of the dyad.

Figure 1 illustrates this concept. Two states, \( i \) and \( j \), form a dyad of interest, with \( i \) attempting
to evaluate j’s likely future behavior (hostile or cooperative) towards it. It achieves this through a two-stage process. Firstly, \( i \) observes how \( j \) has previously interacted with a third-party state \( k \). State \( i \) then compares itself to \( k \) in order to estimate how \( j \) will likely behave in subsequent exchanges within the \( ij \) dyad. In the specific manifestation used here, comparison occurs across two dimensions: power and foreign policy. That is, if \( i \) judges itself to be similar to \( k \) in terms of power and foreign policy behavior, it will infer from observation of \( j \)’s history with \( k \) that it is likely to act in the same way should \( i \) and \( j \) find themselves in an analogous situation. If, however, \( i \) deems \( k \) to be sufficiently different, it will either infer that \( j \) will act in an alternative manner, or not regard \( j \)’s historical conduct as particularly informative. When this process of observation and comparison is directed towards all third-parties in the international system, \( i \) forms a holistic impression of \( j \); through this process, \( j \) acquires a reputation for either hostile or cooperative behavior in the eyes of \( i \). Formally, the Reputation Information measure takes on the following the structure:

\[
RI_{ijN} = \frac{\sum_{k \neq i, j} \rho_{jk} \phi_{ik} \psi_{ik}}{N - 2}
\]  

(1)
where $N$ is the number of states in the international system, $\rho_{jk}$ represents the observed history between $j$ and $k$, $\phi_{ik}$ measures how closely $i$ and $k$’s foreign policies resemble one another, and $\psi_{ik}$ measures how equivalent $i$ and $k$ are in terms of power (Crescenzi 2007, p.386). Importantly, the Reputation Information model is directed, in that state $j$ can (and most likely will) have a different reputation in the eyes of $i$ to the one that $i$ has in the eyes of $j$. I discuss how the $RI$ measure is operationalized in the next section, where I also describe the empirical design used to test my hypotheses on PTA formation.

5 Data and Research Design

5.1 Key Independent Variable

As the theory of reputation and PTA formation presented here explicitly concerns reputations for hostility, I also adopt Crescenzi’s (2007) specific operationalization of the $RI$ model as my key independent variable. This operationalization generates two directed Reputation Information Scores (RISc) bound between -1 and 1 for each state pair in the international system for every year in my respective data samples. Negative scores indicate a state’s reputation for hostility in its extra-dyadic affairs, whereas a positive score indicates a broader reputation for cooperation. As such, a state’s extra-dyadic reputation improves as its score increases in value. These scores are calculated as described in equation (1) using three distinct inputs.

Firstly, the comparison of the foreign policies of $i$ and $k$, $\phi_{ik}$, is attained using the $S$-similarity Score developed by Signorino and Ritter (1999), which captures the similarity of alliance and UN voting portfolios between states. Secondly, Singer, Bremer and Stuckey’s (1972) Composite Indicator of National Capabilities (CINC) scores are used to identify similarities in power. Specifically, $\psi_{ik}$ is computed as $1 - |CINC_i - CINC_k|$, such that a value of 1 represents power parity. Finally, the historical relationship, $\rho_{jk}$, between state $j$ and each third-party $k$, is captured using the Interstate Interaction Scores (IIS) originally developed by Crescenzi and Enterline (2001) and
subsequently upgraded by Crescenzi, Enterline and Long (2008). These scores measure the direct history of hostility and cooperation between two states, based on the incidence of militarized interstate disputes (MIDs) between them and patterns of joint membership in intergovernmental organizations (IGOs). Under the IIS model, a conflictual or cooperative event delivers a ‘shock’ to the relationship between two states that subsequently alters their perceptions of each other. Interstate Interaction Scores provide a particularly useful way to measure relationship history as they are not sticky; the model of interaction contains a built-in decay function such that the relevance of past interactions between two states declines as time passes.

These three components are summed for all third-party states, $k_1, k_2, \ldots k_n$, to create directed, extra-dyadic reputation scores for each state within a dyad. As PTA ties are undirected, however, in that $i$ cannot share a tie with $j$ when $j$ does not share a tie with $i$, I adopt Crescenzi’s method of using the smaller RISc value in a dyad to depict the weakest reputation present. Given my theory of PTA formation, it is the poorer reputation within a dyad that will ultimately drive the outcomes of interest. This lower RISc value thus forms the key independent variable, which I lag by one year and label Reputation for ease of exposition. It is important to note that despite my analyses being restricted to the 1990s as discussed below, the Reputation variable is not subject to left-censoring. As I import the RISc values directly from Crescenzi (2007), their calculation does not begin at the start of my sample, but instead take into account all relevant information either since as far back as 1817, or since a given state entered the international system, whichever is the latter.

5.2 Evaluating Hypotheses 1 and 2

Data

For my sample selection as delineated below, RISc values range from a minimum of -0.224 to a maximum of 0.017, with a long left-side tail. 25% of the RISc values are negative, with most of these falling between the interval -0.04 and 0. 75% of the values are positive. As such, it is important to note the tight clustering of RISc values, with approximately 99% falling between the interval -0.04 and 0.017. It should also be noted, however, that this is not a product of my sample selection. Approximately 99% of Crescenzi’s (2007) original data ranging as far back as 1817 similarly falls between the interval -0.04 and 0.017. This tight distribution, then, is reflective of the process by which RISc values are calculated rather than any sensitivity to my chosen timeframe of analysis.
The data used for testing the first two hypotheses are taken from Mansfield and Milner’s (2012) dataset on PTA formation, which I subset to a sample spanning the 10 year period from 1991 to 2000.\footnote{Data is available at https://ncgg.princeton.edu/ptas/} This is not an arbitrary choice of timeframe, but a deliberate selection made for two reasons. Firstly, as Mansfield and Milner demonstrate, important systemic factors such as the decline of hegemony and shifts in the global business cycle can influence the rate of PTA formation in the international system.\footnote{See Chapter 3 of Mansfield and Milner (2012) for an extensive discussion on the influence that systemic factors have on PTA formation.} Confining my analysis to the period immediately following the Cold War is therefore intended to help control for some of these broader structural and systemic influences on PTA formation. That is, in order to parse the effects of reputation specifically, I attempt to keep the broader structural environment as static as possible. Secondly, as Baccini and Dür (2012) note, relatively few PTAs were concluded prior to the 1990s, such that including earlier years would not provide much additional variation in the outcome variable. Focusing on the period 1991-2000, therefore, provides a useful starting point for exploring the effect of reputation on PTA formation while mitigating, at least to some degree, the problems of $N$-inflation associated with dyadic analyses.\footnote{For an insightful discussion on the problems associated with $N$-inflation or ‘data multiplication’ in dyadic analyses, see Cranmer, Desmarais and Menninga (2012).}

The selection of this time frame does have important implications that may skew any inferences that are drawn, however. Importantly, while PTAs have experienced cycles of growth and decline, the 1990s saw an unprecedented increase in the number of such agreements being established (Mansfield and Milner 1999). One driver of this was the signing of PTAs involving newly emerging states following the collapse of communism (Manger, Pickup and Snijders 2012), and indeed the end of the Cold War has been identified as a critical juncture for the upward trend in PTA adoption for this reason. New states, eager to break away from their communist pasts and develop their newly capitalist economies, embraced PTAs as tools of economic growth. It is possible, then, that any analysis of PTA formation in this period will be driven by these new states scrambling to establish themselves economically. This will be compounded by the fact that new states will not
have any meaningful extra-dyadic reputations of which to speak.\textsuperscript{7} In order to mitigate against this possible sensitivity then, I drop all countries that emerge in the international system during this period from the analysis, such that the youngest state in the sample was formed in 1984.\textsuperscript{8}

Beyond the potential skewing effects of new states entering the international system, it is also important to account for the inability of certain dyads to form PTAs at all. If all dyads are included in the analysis, inherently prohibitive environments for PTA formation might unduly influence any inferences drawn. Some dyads, in other words, will simply not be in a position to form PTAs, irrespective of their members’ reputations. As such, I restrict my sample in two further ways in order to parse the effects of reputation. Firstly, it is unlikely that governments engaged in civil wars will be in a position to negotiate trade agreements with other countries. Yet if these states also possess an extra-dyadic reputation for conflict, we might mistakenly infer that their reputation is constraining their ability to form preferential ties rather than the domestic political environment in which they find themselves. Using the Correlates of War (COW) Project Intra-State War Data to identify relevant states, I therefore drop from my sample all dyad-years in which one or more state is engaged in civil war.\textsuperscript{9} Secondly, Manger, Pickup and Snijders (2012) identify a hierarchy of PTA formation among states based on their respective levels of economic development. Specifically, they demonstrate that PTAs are most likely to form between a high income country and a middle income country, or between two high income countries. Middle income pairs are then next most likely to form agreements, followed by middle-low income pairs being somewhat less likely. Finally, PTAs seldom form between two low income countries or between a low income country and a high income country. Ostensibly, this is due to low income countries having too little to offer

\textsuperscript{7}On this point, there are two potential ways to look at the issue of new states and reputation. One is that they have ‘neutral’ reputations, as they have not yet had an opportunity to establish themselves as either hostile or cooperative. The other is that they simply do not possess a reputation whatsoever. The substantive impacts of these are the same however, in that ultimately they are uninformative to other states. As such, any distinction between these interpretations is not particularly important.

\textsuperscript{8}It should be noted that dropping these countries has no substantive effect on my overall findings. That is, my conclusions regarding reputation and PTA formation are robust to both inclusion and exclusion of newly emerged states. Dates of state emergence are identified using the Correlates of War (COW) Project’s State System Membership List v2011, available at www.correlatesofwar.org.

\textsuperscript{9}Specifically, I remove all states in which conflict raged for central control of the country. Version 4.1 of the Intra-State War Data was used, available at www.correlatesofwar.org.
high income countries or each other to warrant reciprocated liberalization. For this reason, we might reasonably consider such dyads to be inherently unviable environments for PTA formation. Based on World Bank income group classifications, I therefore drop from my sample any low-low and high-low income dyads. Together, these two additional restrictions ensure that only those dyads for which PTA adoption is actually viable are included in the analysis, and that any observed dampening effect of reputation is not being driven by these other mollifying factors. The final sample then, comprises a total of 138 countries and 2,192 signings of preferential trade agreements between them.

Dependent Variable

Given that my first two hypotheses concern the effect of reputation on the decision to form PTAs in the first place, my outcome variable, PTA Signed, is a binary measure of whether two states signed a PTA in a given year. This is coded ‘1’ if a PTA was signed within a dyad during a given year, and ‘0’ otherwise. I opt to use the date of signing rather than ratification, as the former represents the simultaneous decision by both parties to liberalize trade within the dyad. The duration of the ratification process, which occurs after the agreement has been signed by both countries, can vary substantially across different governments and be susceptible to the vagaries of domestic politics. Depending on their internal policies and the dynamics of the domestic political environment, some governments will take much longer to ratify a signed agreement than their partner(s). As the theory presented here is primarily one of foreign policy decision making, I opt to focus on the date of signing only. The key assumption underlying this decision, of course, is that states fully

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10 In the former case, trade arrangements tend to be non-reciprocal in nature. That is, low income countries will open their markets to high income countries, but those high income countries will not respond in kind. As such, these types of agreement do not fall under the definition of a PTA.

11 Low income countries are defined as those with a GDP per capita of less than $1,035, middle income countries are defined as those with a GDP per capita between $1,036 and $12,615, and high income countries are defined as those with a GDP per capita of more than $12,616. See data.worldbank.org/about/country-classifications. The data used here are taken from Manger, Pickup and Snijders (2012).

12 Robustness checks suggest that this thinning of the population does not bias my overall findings regarding reputation. That is, the relevance of reputation for PTA formation still holds when these dyads are retained, and at the other extreme, when all low income states are dropped from the sample.
evaluate their partners’ reputations prior to signing an agreement, and not subsequently during the domestic ratification process.

**Methodology**

The key assertion of the reputation thesis is that reputation will only be important for PTA formation in the absence of existing formal dyadic agreements. I test this using two types of formal accord. The first is the presence of any existing PTAs between two states. As discussed previously, these are likely to be most informative for a state looking to predict a partner’s behavior under a future trade agreement. The second is the presence of any security alliance. While a noisier signal, a partner’s performance under formal security arrangements may be indicative of future performance under an economic agreement. The question that arises is how to account for these institutions in a way that allows for satisfactory evaluation of hypotheses 1 and 2. One potential method is to interact the *Reputation* variable with an *Existing Relationship* dummy that records whether a PTA or security alliance was in effect between two states. I code this ‘1’ if an agreement is present within a dyad, and ‘0’ otherwise.\(^{13}\) Given the claims of the reputation thesis, we should expect this interaction to have a dampening (negative) effect on the importance of reputation. That is, moving from the absence of an existing agreement to the presence of an existing agreement between two states should reduce the influence that reputation has on the likelihood of PTA signing.

To further parse this relationship, I also split my sample into two sets based on the presence or absence of an existing agreement. I then test for the influence of reputation on PTA formation for each of these subsets individually. In this way, the full data sample is still utilized, but the unique effects of reputation in the presence and absence of existing relationships can be further explored, helping us to isolate when, if at all, reputation matters.\(^{14}\) When an existing PTA or alliance is

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\(^{13}\)Alliance data comes from the Alliance Treaty Obligations and Provisions (ATOP) dataset (Leeds, Ritter, Mitchell and Long 2002).

\(^{14}\)It is important to note here that we do not require information on how states have performed under existing PTAs or security alliances. Given the reputation thesis as constructed here, we simply need to know whether such an agreement was in place. If a partner performed poorly under an existing arrangement, a state will look to that to inform its judgement about forming a new agreement rather than to the partner’s extra-dyadic reputation. If, on the other hand, a partner performed well under an existing agreement, that information will negate the relevance of its
in effect, we should expect to obtain a *Reputation* coefficient that is not statistically significant, indicating that the influence of reputation on the likelihood of PTA formation is indistinguishable from zero. On the other hand, when existing agreements are absent, the *Reputation* coefficient should be positive and statically significant, indicating that as a state’s extra-dyadic reputation improves, the likelihood of it forming a PTA increases. Conversely, a reputation for conflict will have a dampening effect on PTA formation. Given this approach, and the fact that the outcome of interest is binary in nature, I use a series of logistic regressions to evaluate my first two hypotheses.

*Controls*

To evaluate the importance of reputation, it is necessary to also account for other factors that may influence PTA signings. The challenge here is to do so in a parsimonious manner – one that does not resort to the adoption of overly complex model specifications that incorporate all possible explanatory variables. In order to avoid the pitfalls of over-specification, I choose to account only for principal influences on PTA signings, as well as those factors that might negate the importance of a state’s extra-dyadic reputation. I lag these controls by one year where appropriate to prevent endogenous feedback effects from distorting my results.

The first of these, *Historical Interaction*, uses the Intestate Interaction Scores (IIS) from Crescenzi, Enterline and Long (2008) described above, to account for any direct history of conflict within a dyad. This is an important control to include for two reasons. Firstly, such histories may directly affect the likelihood of PTA signing. As militarized conflict can be damaging to economic relations (Barbieri and Levy 1999; Anderton and Carter 2001), a direct history of hostilities is also likely to undermine the ability for states to conclude PTAs. If this coincides with a state having a reputation for conflict more broadly, then failing to account for this direct history may lead to inflated inferences about the agreement-retarding effects of poor reputations. Secondly, in a similar way to how the presence of an existing agreement may negate the effects of reputation, a potential partner’s extra-dyadic reputation for cooperation is likely to hold little sway with a state extra-dyadic reputation.
if their direct history has been defined by hostility. That is, the possession of direct experiential information may once again override the influence of reputation altogether in some instances. It is crucial to note that I this time operationalize the IIS scores only along the conflictual dimension, omitting the cooperative dimension from the measure entirely. The reason for doing so is to avoid conflation with the Existing Relationship variable. Crescenzi et al. use joint ascension to IGOs to operationalize the histories of cooperation between states, using data provided in the Correlates of War 2 IGO dataset (Pevehouse, Nordstrom and Warnke 2004). This IGO data, however, contains a number of PTAs and security alliances already captured in the Existing Relationship measure, such as NAFTA and NATO. Including the cooperative dimension of the IIS scores as well would therefore be problematic, as a number of influential relationships would be double counted.15

A second important factor that states may look to as a means of assessing a potential partner’s credibility is their system of governance. Specifically, some may perceive more democratic countries to be more trustworthy due to a greater appreciation for fairness and the rule of law. Exclusion of this potential influence from the model may therefore lead us to erroneously infer that the propensity to sign or eschew trade agreements is being driven by country-specific reputations rather than general perceptions based on regime type. Indeed, more broadly, a number of studies have identified democracy to be a key driver for trade liberalization (see, for example, Milner and Kubota (2005)), and empirical evidence suggests that two democracies are more likely to sign PTAs compared to other combinations of regime type (Mansfield, Milner and Rosendorff 2002; Mansfield and Milner 2012). As such, controlling for this influence is important. To do so, I include the variable Regime, which uses data from the Polity IV project (Monty and Jaggers 2005) to record the regime types of both states within a dyad. In their original form, these fall along a 21-point scale, with values ranging from -10 (highly autocratic) to +10 (highly democratic), however

15By omitting this dimension, some information regarding states’ direct histories will of course be lost, as joint membership in non-PTA and non-alliance institutions will not be recorded. It is arguable, however, that many of these IGOs, such as the educational, cultural, and environmental organizations, for example, would be unlikely to influence PTA formation one way or the other. Any influence on PTA formation coming from the cooperative dimension of the IIS scores would thus likely be driven by the PTAs and alliances included in that data anyway. The Existing Relationship variable will be superior in capturing the cooperative dynamics between states, however, as it also incorporates numerous bilateral PTAs and alliances that are not recorded in the IGO data due to their limited memberships.
I use Mansfield and Milner’s (2012) rescaled measure ranging from 0 to 21. As my data are undirected, I again use the lower value within each dyad to represent the minimum level of democracy present.

Beyond these influences, a number of factors based on countries’ economic incentives and capacities to form agreements are also important to account for. One of these is the amount of trade conducted between states. Large trade volumes can increase the dependence that importers and exporters in each country have on continued access to their respective markets (Baccini and Dür 2012). As discussed previously with regards to Canada and the U.S., this can lead to pressure to form trade agreements as a means of warding off future protectionist impulses that might subsequently harm them. In order to ensure that we do not misattribute the effects of weak economic incentives to poor reputations, I therefore include the measure *Total Trade*, which is the natural log of the total trade conducted within each dyad for a given year.\(^\text{16}\) Related to this, large physical distances between two countries are likely to limit their ability to trade with each other, such that incentives to form trade agreements as a means of securing market access will be nominal. Once again, reputation will have little bearing on the proclivity for states to sign PTAs under those circumstances where their formation is inherently impracticable. As such I include the variable *Distance*, which measures the logged distance between the capitals of each state in the dyad.

One key driver of PTA formation mentioned previously may be the desire to gain greater bargaining leverage within the WTO. Thus, if either state in a dyad is not a member of the multilateral trade regime, that dyad is likely to have a reduced predisposition towards preferential arrangements. Once again, we run the risk of falsely attributing this reduced incentive to sign PTAs to a poor reputation. To control for this, I therefore include *GATT/WTO Member* in the model, which is coded ‘1’ if both states in the dyad were members of the organization at the time of PTA signing, and ‘0’ otherwise. Finally, I control for the wealth of each party in a dyad, which can influence both the incentive and capacity for states to enter into PTAs. Firstly, the gains in volume of trade engendered by PTAs are believed to disproportionately benefit larger economies (Baccini and Dür

\(^\text{16}\)Measured in constant 2000 U.S. Dollars.
(2012). See also, Baier and Bergstrand (2004)), such that we might expect wealthier countries to have a greater baseline incentive to form such agreements. Secondly, with regards to capacity, empirical studies in the welfare literature suggest that more economically developed countries are better able to offset the losses incurred by those who suffer from open trade (i.e. import-competing industries), through the provision of compensatory public welfare spending mechanisms. This allows leaders to pursue trade liberalization without risking political backlash from important domestic constituents (Adserà and Boix 2002; Hays, Ehrlich and Peinhardt 2005). In order to ensure that low economic incentives and capacities do not drive any inferences regarding the effects of poor reputations, I include a lagged GDP control in the model. Once again, given that my data are undirected, I use the GDP of the smaller state to account for this dynamic.

Models

Table 3 in the appendix provides summary statistics for all variables used to test hypotheses 1 and 2. Table 4 in the appendix shows the correlations between each of these. As can be seen, there is little correlation between the controls and the reputation variable, nor between the controls themselves.\(^{17}\) As such, there is little evidence to suggest that my explanatory variables are not truly independent of one another. The complete logistic regressions are therefore specified as follows. Firstly, I test the interaction model on the full data sample:

\[
\text{PTA Signed} = \beta_0 + \beta_1 \cdot \text{Reputation} + \beta_2 \cdot \text{Historical Interaction} + \beta_3 \cdot \text{Regime} \\
+ \beta_4 \cdot \text{Distance} + \beta_5 \cdot \text{Total Trade} + \beta_6 \cdot \text{GDP} + \beta_7 \cdot \text{GATT/WTO Member} \\
+ \beta_8 \cdot \text{Existing Relationship} + \beta_9 \cdot \text{Reputation} \times \text{Existing Relationship} + \epsilon
\]

\(^{17}\)Perhaps the one exception here, depending on choice of threshold, is the correlation between Total Trade and GDP (0.67), which is one we might reasonably expect. That is, greater trade volumes are likely to produce wealthier countries. This does not appear high enough to cause problems for my analysis, however, and later tests for multicollinearity support this.
Separating the data into two subsets based on the presence or absence of existing formal dyadic relationships, I then test the first two hypotheses using a second, reduced specification:

\[
\text{PTA Signed} = \beta_0 + \beta_1 \cdot \text{Reputation} + \beta_2 \cdot \text{Historical Interaction} + \beta_3 \cdot \text{Regime} \\
+ \beta_4 \cdot \text{Distance} + \beta_5 \cdot \text{Total Trade} + \beta_6 \cdot \text{GDP} + \beta_7 \cdot \text{GATT/WTO Member} + \epsilon
\]

(3)

5.3 Evaluating Hypotheses 3 and 4

Data and Dependent Variable

The PTA data for the latter hypotheses are taken from Jo and Namgung’s (2012) dataset on dispute settlement mechanism design, for which I recode the original country- and agreement-level data into dyadic observations. The sample spans the years 1991 to 2000 and encompasses 68 bilateral and 43 multilateral PTAs formed between 114 countries.\(^{18}\) My dependent variable, Legalistic DSM, records whether a legalistic dispute settlement mechanism was incorporated into an adopted PTA. Jo and Namgung’s original dataset classifies levels of DSM legalism as falling into one of three categories: ‘low’ legalism refers to DSMs with either no third-party review or only non-binding third-party review, ‘medium’ legalism refers to those that incorporate binding third-party review, and ‘high’ legalism refers to those DSMs that include a permanent adjudication body in addition to binding third-party review. NAFTA, for example, is classified as having a medium level of legalism, as the option exists for a binding dispute review panel to be set up

\(^{18}\)Data available at http://jcr.sagepub.com/content/56/6/1041/suppl/DC1. Note that the original data treat both the European Union (EU) and the European Free Trade Association (EFTA) as single actors rather than as groups of individual states. I therefore break these organizations down into their respective members, in order to facilitate the consolidation of the DSM data with the Reputation variable and the controls taken from Mansfield and Milner (2012). Thus, for example, a trade agreement between Turkey and the EU is recorded as an agreement between Turkey and each individual member of the EU. The EU comprises 12 states prior to 1995 and 15 afterwards. The EFTA comprises 7 states prior to 1995 and 4 afterwards.
when negotiated settlements have not been reachable. The South African Development Community (SADC), on the other hand, retains a permanent tribunal responsible for adjudicating disputes between member states. As my theory is concerned with the choice between adopting institutionalized vs. non-institutionalized DSMs, I dichotomize this measure such that the outcome is coded ‘1’ if a PTA adopted a medium or high level of legalism, and ‘0’ if it adopted a low level (i.e. if it is non-legalistic). Under this operationalization, 22 multilateral and 24 bilateral agreements in my sample are defined as legalistic, with the remaining 21 multilateral and 44 bilateral agreements being non-legalistic in design.

Methodology

My research design follows the same format as that used to evaluate hypotheses 1 and 2. As the outcome variable is discrete and my population limited only to those states that signed PTAs during the period of analysis, logistic regression is again an appropriate method to use. Given the reputation thesis asserts that reputation will only be important to the choice of DSM in the absence of other formal relationships between signatories, I again utilize the Existing Relationship dummy detailed previously to account for the presence of existing PTAs and security alliances. To begin with, I interact this with the Reputation variable in order to gain insight into when reputation matters. In this instance, we should expect a negative Reputation coefficient and a positive interaction coefficient, suggesting that poorer reputations increase the likelihood of legalistic DSMs being adopted, but that this effect is dampened when existing formal agreements are in effect. One benefit of this interaction model is that it also allows us to ascertain the independent influence that existing agreements have on DSM design. Intuitively, to the extent that existing PTAs and security alliances are reflective of broader cooperative relationships between states, we should expect the presence of such arrangements to independently reduce the need for legalistic DSMs in subsequent agreements. I then split my sample into two sets based on the presence or absence of an existing relationship, and test for the influence of reputation on choice of DSM for each of these subsets.

Only three institutions in my sample are classified as having a high degree of legalism, whereas 43 are classified as having a medium level. As such, treating medium and high levels separately would not be particularly informative.
When an existing arrangement is absent, we should expect to see a negative and statistically significant coefficient on the reputation variable, indicating that as a state’s reputation worsens, the likelihood of an institutionalized DSM being adopted increases. In the presence of an existing formal relationship, however, we should not expect a statistically significant coefficient estimate for the reputation variable, suggesting that under this circumstance, extra-dyadic reputations are not important for DSM design.

**Controls**

Once again, it is necessary to account for other crucial influences on the choice of DSM design that might nullify the importance of a state’s extra-dyadic reputation. I therefore include the following control variables, which I lag by one year where appropriate in order to mitigate against the potential for endogenous feedback. Firstly, I include the *Historical Interaction* control discussed previously, in order to account for the direct history of conflict between PTA signatories. If two states with a strained history opt to establish a PTA with each other, that agreement will likely incorporate a legalistic DSM as a means of inducing sustained cooperation, even if their respective extra-dyadic reputations are relatively benign. Conversely, if they do not have a history of conflict with each other, they will likely see less need for more costly, institutionalized DSMs. Secondly, as discussed with regards to the formation of PTAs in the first place, states may look to their partners’ systems of governance as a signal of their credibility. As such, we might expect institutionalized DSMs to be less likely in PTAs signed between democracies than between other combinations of regime type. As this influence may otherwise be erroneously attributed to states’ reputations, I again include the 21-point *Regime* variable as described previously to represent the mimim level of democracy present in each dyad.

Beyond these, I include two additional controls, the first of which records whether the PTA in 20

As before, information on how states have performed under their existing agreements is not required in order to test my hypotheses. According to the reputation thesis, reputation will be irrelevant for DSM design when existing economic or security relationships have already been established, regardless of how the respective parties have performed under them. Thus the only information required is whether an existing agreement was in place at the time the PTA in question was adopted.
question was adopted after 1995. It has been posited that the new global trade regime that emerged with the conclusion of the Uruguay Round represented a fundamental structural shift in the international trading system. Specifically, the adoption of a highly legalistic DSM framework under the WTO may have prompted states to establish PTAs with lower levels of legalism, as it provides them with the flexibility to forum shop and settle disagreements through negotiation rather than adjudication when desired (Jo and Namgung 2012). In order to avoid misattributing the influence of this structural dampener on legalism to the effects of positive reputations, I include a Post-Uruguay Round dummy to the model specification, which records whether or not a given PTA was signed after 1995. This is coded ‘1’ if the PTA in question was formed after that year, and ‘0’ if before.

Secondly, given the greater difficulties inherent in monitoring compliance and negotiating dispute settlements among multiple parties, we might expect a greater degree of legalism in multilateral PTAs than in bilateral agreements. That is, where multiple states are party to a given arrangement, an institutionalized DSM may simply be a practical necessity as much as reflective of members’ reputations or credibility. The final control I include, therefore, is whether a PTA was bilateral or multilateral, which I code as ‘1’ if the agreement consisted of more than two members, and ‘0’ if otherwise.

Models

Table 5 in the appendix provides summary statistics for all variables used to test hypotheses 3 and 4. Table 6 in the appendix shows the correlations between each of these. Once again, there is little correlation between the controls and the reputation variable, or between the controls themselves. As such, there is little evidence to suggest that my explanatory variables are not truly independent of each other. The complete logistic regressions are specified as follows. Firstly, I test the interaction model on the full DSM data sample:
Legalistic DSM = \beta_0 + \beta_1 \cdot \text{Reputation} + \beta_2 \cdot \text{Historical Interaction} + \beta_3 \cdot \text{Regime} \\
+ \beta_4 \cdot \text{Post-Uruguay Round} + \beta_5 \cdot \text{Multilateral} + \beta_6 \cdot \text{Existing Relationship} \\
+ \beta_7 \cdot \text{Reputation x Existing Relationship} + \epsilon \\
(4)

Separating the data into two subsets based on the presence or absence of existing formal dyadic relationships, I then test the final two hypotheses using a second, reduced specification:

Legalistic DSM = \beta_0 + \beta_1 \cdot \text{Reputation} + \beta_2 \cdot \text{Historical Interaction} + \beta_3 \cdot \text{Regime} \\
+ \beta_4 \cdot \text{Post-Uruguay Round} + \beta_5 \cdot \text{Multilateral} + \epsilon \\
(5)

6 Results and Analysis
6.1 Reputation and PTA Signing

The results for the first set of logistic analyses provide statistical support for hypotheses 1 and 2; a reputation for conflict appears to have a dampening effect on the signing of PTAs in the absence of existing formal relationships between states. Conversely, as one’s reputation improves, the likelihood of a PTA being signed within a dyad increases. In the presence of existing formal relationships, however, reputation does not appear to matter for PTA formation. With respect to hypotheses 3 and 4, the analysis suggests that a reputation for conflict increases the likelihood of PTA signatories incorporating institutionalized dispute settlement mechanisms into their agreements. Conversely, as one’s reputation improves, the likelihood of adopting a legalistic DSM decreases. Once again, in the absence of existing formal relationships, however, reputation does
not appear to influence DSM design.

Table 1 presents the results for the logistic analyses used to test hypotheses 1 and 2. The first column presents the output from the interaction model used on the full data sample. The second column presents the results for the subset of data containing only dyads in which there were no existing formal relationships, with the third column presenting a nested version of this without the Reputation variable included. The fourth and fifth columns then present similar models for the subset of data containing only dyads that had existing formal relationships between their constituent states. 95% confidence intervals in brackets follow the coefficient estimates, and were calculated using cluster robust standard errors clustered on the dyad to account for any temporal correlation within them.21

As hypothesized, the results suggest that a reputation for hostility lessens the likelihood of a PTA being signed between two states when they do not share an existing formal relationship. Support for this is provided by the interaction model, where the Reputation coefficient is positive and statistically significant at the 0.05 level while the Reputation x Existing Relationship interaction is negative and statistically significant. This indicates that as the extra-dyadic reputations of two states improve from hostile to cooperative, the likelihood of their signing a PTA with each other increases, but that this reputational effect is dampened when the states already share an existing formal relationship. Additional support for hypothesis 1 is provided by the positive and statistically significant Reputation coefficient in model 2, which again suggests that a reputation for hostility decreases the likelihood of states forming PTAs in the absence of existing formal relationships between them. A Wald test on the variable gives a $\chi^2$ value of 84.13 with a corresponding p-value of 0.00. From this, we can infer that the Reputation coefficient is not equal to zero and that the variable’s inclusion improves model fit over the nested specification shown in model 3.22 Model 4,

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21I also tested the regressors for multicollinearity, but all Variance Inflation Factors were < 2.2.

22As cluster robust standard errors are generated using Psuedo-Maximum Likelihood estimation, the ‘likelihood’ is not considered to be a true likelihood. As such, traditional methods of comparing nested models, such as the Likelihood Ratio test or comparison of the Akaike Information Criterion (AIC), are not considered appropriate. See Sribney (2005).
Table 1: Logistic Analyses of PTA Signing, 1991-2000

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Interaction</th>
<th>Model 2 Existing Rel = 0</th>
<th>Model 3 Existing Rel = 0</th>
<th>Model 4 Existing Rel = 1</th>
<th>Model 5 Existing Rel = 1</th>
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<td>Reputation</td>
<td>131.52</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[111.87, 151.16]</td>
<td>[109.19, 150.07]</td>
<td>[-6.93, 28.08]</td>
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<td></td>
</tr>
<tr>
<td>Historical Interaction</td>
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<td>3.37</td>
<td>4.17</td>
<td>1.09</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>[0.86, 2.43]</td>
<td>[1.52, 5.21]</td>
<td>[2.30, 6.04]</td>
<td>[0.31, 1.88]</td>
<td>[0.43, 1.96]</td>
</tr>
<tr>
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<td>-0.06</td>
<td>-0.05</td>
<td>-0.05</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>[-0.06, -0.05]</td>
<td>[-0.07, -0.04]</td>
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<td>[-0.06, -0.04]</td>
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</tr>
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<td>-1.38</td>
<td>-0.53</td>
<td>-0.53</td>
</tr>
<tr>
<td></td>
<td>[-0.97, -0.84]</td>
<td>[-1.52, -1.32]</td>
<td>[-1.48, -1.28]</td>
<td>[-0.59, -0.47]</td>
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<td>Total Trade</td>
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<td>-0.01</td>
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<tr>
<td></td>
<td>[-0.03, -0.02]</td>
<td>[-0.05, -0.03]</td>
<td>[-0.04, -0.03]</td>
<td>[-0.02, 0.00]</td>
<td>[-0.02, -0.00]</td>
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<tr>
<td>GDP</td>
<td>-0.09</td>
<td>-0.17</td>
<td>-0.22</td>
<td>-0.05</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>[-0.12, -0.05]</td>
<td>[-0.22, -0.11]</td>
<td>[-0.27, -0.16]</td>
<td>[-0.10, 0.00]</td>
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<tr>
<td>GATT/WTO Member</td>
<td>0.21</td>
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<td>0.72</td>
<td>0.05</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>[0.11, 0.31]</td>
<td>[0.36, 0.65]</td>
<td>[0.58, 0.86]</td>
<td>[-0.07, 0.21]</td>
<td>[-0.05, 0.22]</td>
</tr>
<tr>
<td>Existing Relationship</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.22, 1.49]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Rep x Existing Relationship</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[-147.52, -98.04]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>4.30</td>
<td>9.52</td>
<td>10.04</td>
<td>2.48</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td>[3.57, 5.01]</td>
<td>[8.42, 10.62]</td>
<td>[8.95, 11.12]</td>
<td>[1.69, 3.28]</td>
<td>[1.81, 3.37]</td>
</tr>
<tr>
<td>Observations</td>
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<td>50,902</td>
<td>50,902</td>
<td>10,164</td>
<td>10,164</td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
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<td>1333.40</td>
<td>1013.97</td>
<td>575.17</td>
<td>575.10</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.16</td>
<td>0.15</td>
<td>0.13</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Log Pseudo-Likelihood</td>
<td>-9205.17</td>
<td>-4585.05</td>
<td>-4685.66</td>
<td>-4467.20</td>
<td>-4471.05</td>
</tr>
</tbody>
</table>

*(Notes: 95% confidence intervals in brackets, calculated using robust standard errors clustered on the dyad. Wald $\chi^2$ statistics significant at the 0.01 level.)*
on the other hand, provides additional statistical support for hypothesis 2. As anticipated, the Reputation coefficient, while still positive, is this time not statistically significant at the 0.05 level. This lack of statistical significance implies that the effect of reputation on PTA signing in the presence of existing relationships is indistinguishable from zero. A Wald test confirms this, producing a $\chi^2$ value of 1.37 with a corresponding p-value of 0.24, and suggests that inclusion of the Reputation variable does not improve model fit over the restricted specification shown in model 5. Together, then, these models provide statistical support for hypotheses 1 and 2. That is, in the absence of existing formal relationships, states appear less likely to sign PTAs with partners who have reputations for hostility in their international affairs than with those who have reputations for cooperative behavior. In the presence of existing formal relationships, however, reputation appears to have no bearing on the likelihood of PTA signing. The predicted probability plot presented in figure 2 illustrates the substantive impact of reputation when existing formal relationships are absent, for a range of Reputation values present in my data sample.\footnote{All other regressors were held at their mean if continuous, and their median if discrete.}

The influence of the controls is mixed with regards to prior expectations, but comparison across the different model specifications suggests that the discrepancies are not being driven by inclusion
of the Reputation variable. Firstly, the Historical Interaction between two states has the anticipated effect on PTA signing; in the absence of existing formal relationships, the more conflictual the history between two states, the less likely they are to sign a PTA with each other. This influence, however, appears to be mollified by the presence of existing formal relationships. The fact that the Historical Interaction coefficient in models 4 and 5 is not statistically significant suggests that states assess one another’s credibility to commit to trade liberalization based upon their performance under other formalized agreements rather than on how hostile they have historically acted towards each other. Indeed, as expected, the presence of an existing relationship itself appears to have an independent effect on the likelihood of PTA signing. The positive and statistically significant coefficient for the Existing Relationship variable in the interaction model suggests that states are more likely to sign PTAs with each other if they already share existing formal agreements, as these will have already provided their partners an opportunity to demonstrate their ability to uphold formal obligations. Beyond these, the propensity to form preferential trade ties appears to decline as the geographic Distance between two states increases. As discussed previously, this is likely reflective of the constraining effect that physical distance has on trade itself. That is, the more geographically separated two states are, the less likely they are to share trade flows voluminous enough to warrant the signing of formal agreements intended to secure long-term access. Similarly, the signing of formal trade agreements would be unlikely to increase trade flows between two countries if they are already physically limited by geographic proximity.

The remaining controls, however, do not behave as previously anticipated. Notably, the Regime coefficient suggests that as two states in a dyad become more democratic, the likelihood of them signing a PTA with each other decreases, a finding that is consistent across all model specifications. This contrasts with previous studies that have argued a positive association between democracy and the incidence of PTA formation (Mansfield, Milner and Rosendorff 2002; Mansfield and Milner 2012). While the reasons for this discrepancy are not apparent, it could perhaps indicate a further variation of the credibility theme at work. It is possible, for example, that democratic governments might be less concerned with formally locking in existing access to one another’s markets than
they are with non-democracies, due to an increased baseline trust among them akin to the norms argument espoused in the democratic peace literature. Alternatively, it could be that existing preferential arrangements between democracies during this time period were already so extensive that further agreements were simply unnecessary. Regardless, the contrasting finding here suggests that further research into the influence of regime type on PTA formation warrants pursuit. Beyond regime type, the negative parameter estimates for Total Trade and GDP differ from prior expectations. One possible explanation for this could be the notion that PTAs are sometimes formed in order to kickstart commercial activity during economic slumps (Mattli 1999). As such, wealthier states with high trade flows might see PTAs as less essential for their economic health compared to poorer, less internationally integrated countries. Finally, while the GATT/WTO Member coefficient is positive as expected, indicating that states may well form PTAs as a means of gaining greater bargaining leverage in the WTO, it is statistically significant only in models 1 through 3. This suggests that joint membership in the organization is only important to PTA formation in the absence of other formal relationships between two states. Further investigation is required to explain this finding, but one possible explanation might be that those who share existing agreements have already achieved said leverage gains in the WTO, such that it is no longer a motivator for the signing of subsequent agreements.24

6.2 Reputation and DSM Design

Table 2 presents the results from the logistic analyses testing hypotheses 3 and 4. The first column again presents the output from the interaction model used on the full data sample. The second and third columns respectively present unrestricted and restricted models for the subset of data containing only dyads in which there were no existing formal relationships. The fourth and fifth columns present similar models for the subset of data containing only dyads with existing formal agreements between their constituent states. Once again, 95% confidence intervals follow the coefficient estimates in brackets, calculated using robust standard errors.25

24 This explanation, of course, assumes that it is the PTAs within the Existing Relationship variable that are driving the finding, and not the presence of alliances.

25 I again also tested the regressors for multicollinearity, but all Variance Inflation Factors were < 1.4.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Interaction</th>
<th>Model 2 Existing Rel = 0</th>
<th>Model 3 Existing Rel = 0</th>
<th>Model 4 Existing Rel = 1</th>
<th>Model 5 Existing Rel = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>-147.21</td>
<td>-159.46</td>
<td>-7.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[-241.59, -52.84]</td>
<td>[-259.91, -59.00]</td>
<td>[-27.23, 11.43]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Interaction</td>
<td>-0.33</td>
<td>-18.76</td>
<td>-16.49</td>
<td>3.66</td>
<td>3.64</td>
</tr>
<tr>
<td>Regime</td>
<td>0.05</td>
<td>0.17</td>
<td>0.17</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>[0.03, 0.08]</td>
<td>[0.08, 0.26]</td>
<td>[0.08, 0.26]</td>
<td>[0.01, 0.07]</td>
<td>[0.01, 0.07]</td>
</tr>
<tr>
<td>Post-Uruguay Round</td>
<td>-2.24</td>
<td>-2.52</td>
<td>-2.46</td>
<td>-2.24</td>
<td>-2.21</td>
</tr>
<tr>
<td></td>
<td>[-2.75, -1.72]</td>
<td>[-3.58, -1.46]</td>
<td>[-3.56, -1.36]</td>
<td>[-2.87, -1.60]</td>
<td>[-2.84, -1.57]</td>
</tr>
<tr>
<td>Multilateral</td>
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<td>-0.04</td>
<td>-0.47</td>
<td>-0.30</td>
<td>-0.27</td>
</tr>
<tr>
<td></td>
<td>[-1.05, 0.54]</td>
<td>[-1.77, 1.84]</td>
<td>[-2.18, 1.24]</td>
<td>[-1.23, 0.64]</td>
<td>[-1.21, 0.66]</td>
</tr>
<tr>
<td>Existing Relationship</td>
<td>-0.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[-1.16, -0.12]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep x Existing Relationship</td>
<td>138.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[41.12, 235.86]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.52</td>
<td>-1.11</td>
<td>-1.17</td>
<td>0.13</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>[-0.51, 1.55]</td>
<td>[-3.32, 1.09]</td>
<td>[-3.27, 0.92]</td>
<td>[-0.93, 1.19]</td>
<td>[-0.97, 1.15]</td>
</tr>
<tr>
<td>Observations</td>
<td>605</td>
<td>138</td>
<td>138</td>
<td>467</td>
<td>467</td>
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<tr>
<td>Wald χ²</td>
<td>130.50</td>
<td>291.43</td>
<td>331.30</td>
<td>82.83</td>
<td>81.09</td>
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<td>Pseudo R²</td>
<td>0.20</td>
<td>0.36</td>
<td>0.31</td>
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<td>0.17</td>
</tr>
<tr>
<td>Log Pseudo-Likelihood</td>
<td>-330.48</td>
<td>-60.05</td>
<td>-64.05</td>
<td>-263.14</td>
<td>-263.40</td>
</tr>
</tbody>
</table>

(Notes: 95% confidence intervals in brackets, calculated using robust standard errors. Wald χ² statistics significant at the 0.01 level.)
As hypothesized, the results suggest that a reputation for hostility increases the likelihood of a PTA incorporating an institutionalized dispute settlement mechanism when their signatories do not share existing formal relationships, but has little bearing on DSM design when such relationships are present. Support for this is provided by the negative and statistically significant Reputation coefficient and the positive and statistically significant Reputation x Existing Relationship interaction coefficient in the interaction model. These indicate that as the extra-dyadic reputations of states improve from hostile to cooperative, the likelihood of a PTA to which they are party incorporating a legalistic DSM decreases, but that this reputational influence is dampened when the states already share existing formal relationships. Additional support for hypothesis 3 is provided by the negative and statistically significant Reputation coefficient in model 2, which further suggests that reputations for hostility increase the likelihood of legalistic dispute settlement mechanisms being incorporated into PTAs when signatories are not party to other formal agreements. A Wald test on the variable gives a $\chi^2$ value of 9.68 with a corresponding p-value of 0.00, and indicates that the Reputation variable improves model fit over the restricted specification of model 3. Additional support for hypothesis 4, on the other hand, is found in the non-significant Reputation coefficient of model 4. A Wald test, with a $\chi^2$ value of 0.64 and a corresponding p-value of 0.42, suggests that the effect of reputation in the presence of existing relationships is indistinguishable from zero, and that inclusion of the variable does not improve model fit over the nested specification of model 5. Together, these tests provide support for hypotheses 3 and 4. That is, in the absence of existing formal relationships, newly established PTAs appear more likely to include legalistic DSMs when one or more signatories possess reputations for hostility. In the presence of existing relationships, on the other hand, reputation appears to have no bearing on DSM design. The predicted probability plot presented in figure 3 illustrates the substantive impact of reputation on DSM design when existing formal relationships are absent, for a range of Reputation values present in my data sample.²⁶

²⁶ All other regressors were held at their mean if continuous, and their median if discrete.
The behaviors of the controls used in this second series of models are once again mixed compared with prior expectations. As anticipated, the *Historical Interaction* coefficients suggest that, in the absence of existing formal relationships, a history of direct hostilities between states increases the likelihood of them incorporating legalistic DSMs in any PTAs they form with each other. Conversely, the less conflictual their histories, the more likely they are to eschew legalistic dispute settlement mechanisms in favor of less formal, diplomatic frameworks. In the presence of existing formal agreements, however, conflictual histories do not appear to inform DSM design, once again implying that states look to other agreements to assess a partner’s credibility when possible. Beyond this, the negative coefficient on the *Post-Uruguay Round* variable lends support to the argument presented earlier that, since 1995, some countries have opted for non-legalistic DSMs in their PTAs in order to diversify their options for settling trade disputes. With many states already having recourse to a highly legalistic dispute settlement apparatus through the WTO, there is less need for them to incorporate similar mechanisms in their preferential arrangements. Curiously, however, the positive and statistically significant *Regime* coefficient suggests that as two states become more democratic, their demand for legalistic frameworks for resolving disagreements increases. This counters prior expectations that two democracies should be less likely to require institutionalized DSMs if regime type is looked to as an indicator of trustworthiness. One
possible explanation for this discrepant result may be that as countries become more democratic, their concern for the rule of law increases such that legalistic frameworks become standard operating procedure. That is, they may simply be a democratic norm rather than reflect a democracy’s impressions of another’s credibility. Certainly, the finding here suggests that further research into the influence of regime type on institutional design would be useful. Finally, the results suggest that multilateral PTAs are no more likely to incorporate legalistic DSMs than bilateral agreements; while the coefficient estimates for the Multilateral variable indicate that PTAs are more likely to include legalistic DSMs when they contain more than two states as one would expect, these are not statistically significant at the 0.05 level.

7 Conclusion

An unexplored but important gap in the study of international politics concerns how reputations for behavior in one area of foreign affairs can influence a state’s interactions in others. This paper begins to bridge this divide, investigating how a reputation for militarized conflict can undermine a state’s prospects for future economic cooperation. Focusing on the formation and design of preferential trade agreements, I argue that under certain conditions, a reputation for hostility can damage a state’s credibility in the eyes of potential partners. Establishing and maintaining preferential arrangements can be costly in both material and political terms, such that states will be keen to avoid relationships with partners likely to renege on their future commitments. In a world of uncertainty and private information, however, assessing the likelihood of this prospect is not a straightforward task. As such, states must look for outside indicators of a partner’s credibility and probable future behavior. When two countries share existing economic or security agreements, these will be turned to for insight. When such agreements are absent, however, extra-dyadic reputations for conflict will become important, with a poor reputation indicating a propensity to step outside the bounds of appropriate behavior and an inability to settle disagreements amicably. Countries possessing such reputations, I posit, are more likely to be excluded from consideration as preferred
trading partners. Despite this, however, they may in some instances be able to signal their commitment to reciprocal liberalization through accepting the imposition of greater legal constraints on their behavior. Empirical tests on PTA signings and DSM design spanning the decade 1991-2000 provide statistical support for this argument.

Of course, as with any study of this nature, there are potential areas where the analysis could be modified, improved, and expanded upon. One notable improvement over the current research design would be to account for any previous formal agreements between states and not only existing ones in place during a given year. While these are likely to be relatively rare, particularly in the case of PTAs, they are nonetheless important to the story. The very fact that they were disbanded would likely speak to a lack of congeniality among some of these states, and this would have important ramifications for future PTA formation. The challenge would be to determine how best to account for these agreements with the passage of time. As with the event shocks in the Reputation and Historical Interaction variables, we should expect the influence of former agreements to decline as the years pass. As such, it would need to be operationalized in such a way as to account for this decay, though perhaps one effective method would be its direct integration into the Historical Interaction measure. Indeed, along this line, one other major improvement to the analysis would be to insert more information into the cooperative dimension of the Reputation variable. Two additions immediately spring to mind. The first would be to account for all of those PTAs and alliances not currently captured due to their limited memberships. As discussed previously, the cooperative dimension of the IIS values that are incorporated into the Reputation variable only records joint membership in IGOs, which are defined by, among other things, a minimum of three members. This is, of course, somewhat limiting, and there is no theoretical reason to believe that state $i$ would only evaluate $j$’s historical cooperation with $k$ through their interactions within multilateral institutions. In fact, $j$ and $k$’s joint membership in bilateral PTAs and alliances is likely to be much more informative to $i$ than a large number of the IGOs that are included in the Reputation measure. The second useful addition would be to account for each state’s actual performance under these agreements. When attempting to identify $j$’s historical behavior towards $k$, there is
little reason to believe that $i$ does not have access to information regarding $j$’s performance within a given PTA or alliance, and that information will be far more useful to $i$ than simply observing their joint participation. As such, the Reputation measure currently stops short by accounting only for joint IGO membership and not for specific behavior. From an analysis standpoint, however, the challenge here becomes one of data availability.

Nonetheless, the findings presented here have important implications for state behavior. PropONENTS of deterrence theory, for example, espouse the benefits that a reputation for military resolve can imbue. Shows of force, they argue, deter future aggressors by signaling a willingness to engage militarily, even over relatively minor disputes. In such cases, a reputation for hostility is considered a positive attribute that can strengthen one’s bargaining position in subsequent crises (Huth 1988, 1997). The key argument laid out in this paper, however, suggests that such reputations can also be detrimental for other areas of a state’s affairs. While a show of force can be an effective short-term signal to a current rival, repeated use of such tactics may undermine one’s ability to engage in productive exchanges with third parties long-term. At the very least, it may increase the costs of doing so. A reputation for conflict, in other words, can follow a state around.
### APPENDIX

<table>
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<tr>
<th>Variable</th>
<th>Type</th>
<th>Min</th>
<th>Max</th>
<th>Mean/Median*</th>
<th>Standard Deviation</th>
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<td>0.000</td>
<td>0.008</td>
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<td>Interval</td>
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<td>7</td>
<td>6.953</td>
</tr>
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<td>16.59</td>
<td>1.585</td>
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<td>GATT/WTO</td>
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<td>1</td>
<td>1</td>
<td>0.500</td>
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<tr>
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<td>Dichotomous</td>
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<td>1</td>
<td>0</td>
<td>0.373</td>
</tr>
</tbody>
</table>

*Means presented for continuous variables, medians presented for dichotomous and Interval variables
Table 4: Correlations Between Variables for Testing Hypotheses 1 and 2

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Reputation</td>
<td>-</td>
<td>0.140</td>
<td>0.076</td>
<td>0.059</td>
<td>-0.045</td>
<td>-0.057</td>
<td>0.116</td>
<td>0.001</td>
</tr>
<tr>
<td>Hist. Interaction</td>
<td>0.140</td>
<td>-</td>
<td>0.328</td>
<td>-0.362</td>
<td>0.413</td>
<td>0.320</td>
<td>0.325</td>
<td>0.551</td>
</tr>
<tr>
<td>Regime</td>
<td>0.076</td>
<td>0.326</td>
<td>-</td>
<td>0.023</td>
<td>0.313</td>
<td>0.265</td>
<td>0.362</td>
<td>0.227</td>
</tr>
<tr>
<td>Distance</td>
<td>0.059</td>
<td>-0.362</td>
<td>0.023</td>
<td>-</td>
<td>-0.283</td>
<td>-0.085</td>
<td>0.001</td>
<td>-0.600</td>
</tr>
<tr>
<td>Total Trade</td>
<td>-0.045</td>
<td>0.413</td>
<td>0.313</td>
<td>-0.283</td>
<td>-</td>
<td>0.674</td>
<td>0.284</td>
<td>0.277</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.057</td>
<td>0.320</td>
<td>0.265</td>
<td>-0.085</td>
<td>0.674</td>
<td>-</td>
<td>0.265</td>
<td>0.144</td>
</tr>
<tr>
<td>GATT/WTO</td>
<td>0.116</td>
<td>0.325</td>
<td>0.362</td>
<td>0.001</td>
<td>0.284</td>
<td>0.265</td>
<td>-</td>
<td>0.123</td>
</tr>
<tr>
<td>Exist. Relation.</td>
<td>0.001</td>
<td>0.551</td>
<td>0.227</td>
<td>-0.600</td>
<td>0.277</td>
<td>0.144</td>
<td>0.123</td>
<td>-</td>
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Table 5: Descriptive Statistics for Data Testing Hypotheses 3 and 4

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<tr>
<th>Variable</th>
<th>Type</th>
<th>Min</th>
<th>Max</th>
<th>Mean/Median*</th>
<th>Standard Deviation</th>
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<tr>
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<td>-0.207</td>
<td>0.016</td>
<td>0.001</td>
<td>0.010</td>
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<td>Continuous</td>
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<td>0.000</td>
<td>-0.009</td>
<td>0.077</td>
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<td>Interval</td>
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<td>Dichotomous</td>
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<td>1</td>
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<td>Dichotomous</td>
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<td>1</td>
<td>1</td>
<td>0.419</td>
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</tbody>
</table>

*Means presented for continuous variables, medians presented for dichotomous and Interval variables
Table 6: Correlations Between Variables for Testing Hypotheses 3 and 4

<table>
<thead>
<tr>
<th></th>
<th>Reputation</th>
<th>Hist. Interaction</th>
<th>Regime</th>
<th>Post-Uruguay</th>
<th>Multilateral</th>
<th>Exist. Relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>-</td>
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<td>-0.129</td>
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<td>-0.067</td>
</tr>
<tr>
<td>Hist. Interaction</td>
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<td>-</td>
<td>-0.146</td>
<td>0.149</td>
<td>-0.050</td>
<td>0.253</td>
</tr>
<tr>
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<td>-0.126</td>
<td>-</td>
<td>-0.384</td>
<td>-0.130</td>
<td>-0.083</td>
</tr>
<tr>
<td>Post-Uruguay</td>
<td>-0.129</td>
<td>0.149</td>
<td>-0.384</td>
<td>-</td>
<td>-0.169</td>
<td>-0.152</td>
</tr>
<tr>
<td>Multilateral</td>
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<td>-0.050</td>
<td>-0.130</td>
<td>-0.169</td>
<td>-</td>
<td>0.072</td>
</tr>
<tr>
<td>Exist. Relation</td>
<td>-0.067</td>
<td>0.253</td>
<td>-0.083</td>
<td>-0.152</td>
<td>0.072</td>
<td>-</td>
</tr>
</tbody>
</table>
REFERENCES


