

Regional Trade and Institutional Design: Long After Hegemony?

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A major development within the international trading system during the post-World War II era is the creation and expansion of agreements to manage international trade. Although the GATT/WTO framework consumes the lion's share of attention in this realm, scholars increasingly acknowledge the rise of economic regionalism. Thus, while great strides have been taken to provide a universal forum for the establishment of standards, rules and regulations for the trading system, there has also been a concomitant rise in regionally-based preferential trading agreements (PTAs). These regional agreements bring together groups of states that are geographically linked or share some other common experiences that facilitate cooperation and mutual gains.

Despite the growing number of regional trade arrangements, political scientists have little empirical knowledge concerning the operation of these institutions. Some have examined the impetus to join these institutions (Mansfield 1998; Mansfield, Milner, and Rosendorf 2002), while others have investigated their ability to influence international political outcomes (Mansfield and Pevehouse 2000; Mansfield and Bronson 1998; Schiff and Winters 1998; Bagwell and Staiger 1999). No major studies, however, explore the durability of these agreements. We argue that this is a major oversight as there are a host of theoretical arguments concerning the conditions under which these institutions will survive and prosper.

In this paper, we outline and test arguments drawn from both political science and economics that predict the survival or failure of preferential trade arrangements. The first section of the paper describes the theoretical propositions concerning PTAs. The second section discusses a model of the durability of trade agreements, while the third presents

and discusses the results. Finally, we conclude with future directions and refinements of the current investigation.

I. Preferential Trade Agreements & Durability

Although our focus in this paper is the durability of international trade agreements, the broader issue of intergovernmental organization (IGO) durability has received little attention. This dearth of empirical research is surprising given theoretical claims about regime robustness made by both realists and neoliberal institutionalists (see Grieco 1990; Keohane 1984). Shanks, Jacobson, and Kaplan (1996) have argued that although we often assume there are consistent increases in the numbers of IGOs in the world, there are important dynamics involving the birth, death, and replacement of IGOs neglected by international relations scholars over the past fifty years.

A small body of recent scholarship tests broader theoretical claims of IGO durability (Cupitt, Whitlock, and Whitlock 1996; Pevehouse and Nordstrom 2002). By contrast, our efforts center on examining the duration of preferential trading arrangements, a class of commercial arrangements that includes non-reciprocal and free trade arrangements, customs unions, common markets, and economic unions. While the theoretical reasons for PTA duration may apply to all IGOs, most of these theories arise from literatures specific to the operation of regional trade agreements. Thus, we feel there is strong justification for the separation of this group of IGOs from the broader set of multilateral institutions.

Our approach is to model how variations in PTA characteristics influence their durability while controlling for system level explanations. Similar to Kahler (1995), we

identify two general approaches to differentiating IGOs and preferential trade agreements. One approach measures variations in institutions by member states. In this approach, the focus lies on the identity of institutional members, holding that these traits will influence the overall effectiveness of the organization. For example, traditional theories of hegemonic stability theory argue the presence of a hegemon in an institution will bode well for its operation. In this framework, one knows nothing about the rules or nature of the institutions, only its content in terms of membership.

A second approach suggests that characteristics of the institution itself are important to differentiating these organizations. Thus, specific rules, procedures, goals, and mandates, rather than the identity of the members, shape the likelihood of success or failure. Rather than privileging one approach, we address both theoretical possibilities. We see this as a strong advantage to the current project, as it will allow us to determine whether member or institutional characteristics are important in shaping the duration of PTAs.

Four sets of literatures speak to the issue of long-term viability of preferential trading arrangements - two based on member qualities, two on institutional qualities. The next four sections review each of these and deduce several hypotheses to be tested.

Member Traits: Democracy and Institutional Constraints

The first member trait we rely on concerns the nature of regime type for PTA members. Recent work on the democratic peace and rationalist causes of war argues that democracies are better able than non-democracies to make credible commitments to international agreements and organizations for two reasons. First, the nature of divided

government within most democracies makes policy commitments more credible since any commitment must initially pass more domestic “hurdles”. States can be doubly convinced that a democracy will fulfill a commitment to a PTA because of the extensive ratification processes involved in turning agreements into law (Martin 2000; Cowhey 1993).

Second, since democratic institutions are more transparent, reneging on or failing to fulfill agreements is highly visible in democracies. Leaders who refuse to uphold their agreements face potential audience costs, and these costs deter leaders from breaking international agreements (Gaubatz 1996; Fearon 1995). In the words of Brett Ashley Leeds (1999: 980): “Democratic executives experience costs from not following through on a planned course of action and find it difficult to adjust quickly to changing circumstances in the international environment. As a result, their commitments are likely to be more credible...”. These arguments suggest that IGOs with more democracies as a percentage of all member states should endure longer than IGOs with fewer democracies.

In a similar vein, a related body of research has recently found that pairs of democracies are more likely to enter into regional trade agreements than non-democratic pairs (Mansfield, Milner, and Rosendorf 2002). These authors derive their theoretical argument from similar ideas: democracies will find it mutually advantageous to “lock-in” gains from trade by entering PTAs because of the unique institutional constraints placed on democratic leaders, as well as the need to provide credible commitments dealing with commercial policies. Taken together, these arguments paint a picture of democracies both entering into PTAs and upholding their membership in them. This leads to our first hypothesis:

H1: PTAs which are more homogeneously democratic will last longer than PTAs with a more heterogeneous composition.

Member Traits: Concentration of Economic Power

For nearly thirty years, scholars have debated the relative merits of regional economic institutions in which members are of relatively equal size. One camp argues that *asymmetry* is a key ingredient to success in regional organizations (see Deutsch et al 1957; Russett 1967). One or two noticeably larger members can assist in overcoming collective action problems (e.g., enforcing tariff schedules) as well as help in offsetting the cost of regional integration. For example, many PTAs possess mechanisms to assist smaller states in dealing with economic displacement that may result from economic integration. In a PTA with one large member willing to bear a large share of these costs, more members can remain satisfied with the progress of the arrangement. Moreover, with a large state in the organization, political hostilities are likely to be deterred or at least effectively managed by the larger member. In fact, Mansfield and Pevehouse (2000: 799-800) find that asymmetric preferential trade arrangements, i.e., PTAs with increasingly skewed income distributions, are more likely to lower the prospects of militarized interstate disputes between member states.

The counter argument - that skewed distributions of member size are harmful to integration - has also been forcefully argued (see Barrera and Haas 1969; Schmitter 1969). In PTAs with a single large member, industries in smaller states are likely to take advantage of lower trade barriers to locate (cluster) in these larger economies. Thus, integration can harm smaller states through the creation of economies of scale, leading to the breakdown of cooperation resulting from a backlash within domestic politics (Balassa

1961). Efforts by states to then deal with these externalities of integration can lead to charges of "bullying" by the small states and stop integration attempts altogether. Even in the absence of realized losses from integration, some arrangements with single, large members have suffered from "foot dragging" by smaller states, out of long-term fears arising out of the comparative strength of the large state (e.g., ECOWAS, see Bundu 1997).

Taken together, these two lines of theory suggest two competing hypotheses:

H2a: Higher levels of economic concentration within a PTA will lead to a longer duration of agreement.

H2b: Higher levels of economic concentration within a PTA will lead to a shorter duration of agreement.

Institutional Traits: Legalism and Dispute Resolution

Recent literature within international relations theory has begun to explore the ability of IGOs to "legalize" relations between member states (see Abbott et al 2000). Scholars argue that an increasing number of IGOs have devised procedures that mirror domestic law in their function and specificity. This idea of legalization is multidimensional and is a continuum, ranging from "hard" to "soft" legalization. Nowhere does the notion of legalization apply more than to the variety of PTAs existing across the globe.

James McCall Smith (2000: 137) has already noted the importance of the variation in legal mechanisms associated with regional trade agreements: "questions of institutional design... have proven contentious in recent trade negotiations, underscoring their political salience." Indeed, the presence of formal mechanisms to deal with disputes over trade issues is often a key institutional factor in PTAs. As in the broader

legalization literature, these formal mechanisms lie along a continuum ranging from simple dispute resolution forums to binding legal bodies that can enforce decisions on member states. Interestingly, some PTAs possess none of this institutional machinery, relying only on informal diplomatic bargaining when trade and/or political disputes arise.

In contrast to both domestic institutional constraints and state concentration of economic power, dispute settlement mechanisms are a characteristic of the institutional arrangement. Theories of dispute settlement therefore posit that institutional attributes exert an independent causal effect on outcomes *above and beyond* the attributes of member states.¹ We hypothesize that the presence of more legalistic dispute resolution/legalism mechanisms will lead to longer-lasting PTAs, since these formal processes should help alleviate tensions within the organization.

H3: The presence of formalized dispute resolution mechanisms will lead to longer lasting PTAs.

Institutional Traits: Achievements and Goals of Integration

Not all PTAs are created alike. Often, this is by design – different sets of states have different goals for their economies, and these goals may include free trade or even deeper levels of economic integration. PTAs encompass a broad variety of institutional arrangements that lie along a continuum from lower to higher levels of integration. At one end are non-reciprocal agreements and free trade areas, which are more “shallow” integration agreements removing trade barriers between signatories. The next step up the integration continuum are customs unions, which establish a common external tariff among member states applying to goods arriving from states outside the agreement.

¹ One interesting issue is whether the institutions themselves are endogenous – states devise weak or strong institutions depending on their desires for weak or strong integration. Moreover, this desire may correlate highly with some of the member characteristics, such as economic concentration.

Next, common markets attempt to significantly deepen integration to include free movement of labor and capital across borders. Finally, economic unions represent attempts to achieve all of these goals, plus significant harmonization of macro-economic policies (Delener 1999).

These various institutional forms provide an excellent way to differentiate among preferential trade agreements. Presumably, the deeper the desired level of integration, the more “institutionalized” the regional framework will be. That said, many PTAs have not succeeded in fulfilling their desired goals. While many PTAs may possess the name “Common Market” or “Customs Union,” the reality can be far from the label. Within Africa and Latin America, numerous attempts to achieve “deep” integration have been waylaid by economic difficulties or political roadblocks.

In some cases, member’s economies are simply not highly complementary, creating a difficult road for long-term prospects for meaningful integration (Foroutan 1993; Saxonhouse 1993). At times, negotiations concerning the logistics of deepening integration beyond simply the removal of trade barriers leads to heated negotiations between states and “kill the forward motion” of integration (Bhagwati 1993: 28). In these cases, PTAs may actually come to an end if members perceive that there are few prospects for advancing their interests within the organization. Still, other PTAs may start with small, modest goals and approach integration at a slow pace. In these cases, one might imagine that, although the processes may still be difficult, state frustration may be lower because there are fewer expectations engendered by lofty integration goals.

Our argument proceeds along the following lines. Because deeper integration goals at the outset may foster expectations concerning the progress of the PTA, those

institutions which have not achieved their stated goals are more likely to fail. Thus, it is not an issue of simply “deeper” versus “shallow” integration, but the gaps between the proposed and realized levels of integration.

H4: The larger the gap between proposed levels of integration and realized levels of integration, the shorter the duration of the PTA.

II. Statistical Analysis: Model

To investigate these theories of PTA durability, we rely on a statistical technique known as event history analysis or duration modeling. Duration models are similar to traditional regression models and have become increasingly common in political science research (Box-Steffensmeier and Jones 1997; Bennett 1999). These models allow us to cope with problems that arise when using data that measure spells or episodes such as truncation, left- and right-censoring. Using this technique, we estimate the following model:

$$\text{Age}_{it} = \alpha_0 + \beta_1 \text{Democracy}_{it} + \beta_2 \text{GDPconcen}_{it} + \beta_3 \text{TotalGDP}_{it} + \beta_4 \text{MajorPower}_{it} + \beta_5 \text{DSM}_{it} + \beta_6 \text{Nmembers}_{it} + \beta_7 \text{MIDS}_{it} + \beta_8 \text{GAP}_{it} + \beta_9 \text{Hegemony}_{it} + \mu_{it}$$

The data set is cross-sectional, time-series data with the unit of analysis being IGO-year. The population of PTAs is drawn from a variety of sources including the WTO (1995), Mansfield and Pevehouse (2000), and Smith (2000). Currently, the data set includes over 45 multilateral PTAs and over 40 hub and spoke agreements.²

² We plan on introducing bilateral arrangements as well. Hub and spoke agreements are agreements between existing PTAs and single states which allow tariff-free access to the market of the PTA.

Our dependent variable, Age_{it} , represents the number of years that a PTA has survived. Although our data sample only encompasses the years 1965-1999, our age counter will reflect the years already passed if a PTA was created before 1965. For example, the EU's counter begins at "7" in 1965. This counter runs until the PTA ceases to exist, at which point, the PTA leaves the data set. If the PTA is still in existence as of 1999, the observation is right-censored.

Using the Age_{it} variable alone, one can get a sense of general patterns of PTA survival by plotting the Kaplan-Meier survival function. We present this in Figure 1, which shows that few PTAs actually do fail (failures are represented by downward drops in the survival curve). This confirms statistically what economists and political scientists have long discussed - international institutions, especially economic institutions, are "sticky". Rarely do states close shop on institutions, rather they reformulate agreements in attempts to revive these arrangements (Mansfield 1998). Nevertheless, PTAs do exhibit important variation in their failure rate, and our current research seeks to explain why states sometimes chose to abandon multilateral economic arrangements.³

To decipher which theories more accurately portray the conditions that lead to PTA decline, we introduce several time varying covariates to predict Age . The first, $Democracy_{it}$, taps theories of regime type and commitment to international institutions. The variable is the average regime score of all members of the PTA. We measure regime type using the Polity 4 (Marshall 2000) data and the -10 to +10 aggregate regime type measure. We transform the variable to run from 0 to 20, with a 20 representing a PTA that is homogeneously democratic and a 0 representing a PTA that is homogeneously

³ Further iterations will also attempt to identify when and why states choose to renegotiate PTAs by utilizing a technique known as competing risk models.

autocratic. Given the theory presented above, one would expect more homogenously democratic PTAs to endure longer.

The second variable, $GDPconcen_{it}$, measures the concentration of GDP within the organization. This variable taps the theoretical debates concerning size distributions within regional economic agreements. We compute the variable using the following formula for each PTA, each year:

$$GDPconcen_k = \sqrt{\frac{\sum_{i=1}^{N_k} (S_{ik})^2 - \frac{1}{N_k}}{1 - \frac{1}{N_k}}}$$

where S_{ik} is the proportion of the k th PTA's aggregate GDP contributed by the i th member (N_k is the total number of parties to the k th PTA). The resulting variable runs from 0 to 1, with higher numbers indicating more skewed distributions of GDP within the organization. If proponents of the symmetry hypothesis are correct, lower values of $GDPconcen_{it}$ should lead to longer PTA durations, while the opposite theoretical expectation holds for asymmetry proponents. Data is taken from the Penn World Tables (Summers et al 1995) and the World Bank (2000).

To control for overall levels of development and wealth within the PTA, $TotalGDP_{it}$ is included in the model. This variable represents the overall economic size of the organization. This is an important control, since even if GDP is concentrated quite highly within a PTA, other states may not find the size asymmetry as important an issue if overall GDP is quite high.

MajorPower_{it} is included to control for the influence of great powers. It is coded as a "1" if Russia, China, France, Great Britain, or the US is a member of the organization in time *t*. Since large powers have a greater ability to influence international outcomes, we include this term to control for these effects.

To test hypothesis 3, we code each PTA's formal institutional structure in two ways. First, we utilize data from the WTO (1995) and from PTA agreements to determine if there is a formal dispute resolution mechanism present in the arrangement. The variable is labeled *DSM_{wto}_{it}* in the results and is coded as a "1" if a dispute settlement mechanisms exists. In addition, we also adopt Smith's (2000: 143) coding of levels of "legalization" within PTAs. This variable, labeled *DSMSmith_{it}* is an ordinal variable that runs from 0 to 4 depending on how "legalistic" (versus "informal" or "diplomatic") the PTA's rule-making and judicial procedures function. We expect more formal dispute resolution and legal procedures to bring longer lasting PTAs since there are built-in institutional mechanisms to cope with economic and/or political disputes that may arise.⁴

Because any multi-member organization can potentially give rise to collective goods dilemmas (e.g., from enforcement), we include the variable *Nmembers_{it}*. This variable counts the number of PTA members in year *t*. Given coordination and collective goods problems, one would expect that larger PTAs do not last as long as smaller ones.

There is little doubt that the continued presence of military conflict between organizational members can contribute to a short life-span for PTAs. To this end, we introduce *MIDS_{it}*, which counts the number of Militarized Interstate Disputes (MIDS) between member states in year *t*. Although Mansfield, Milner, and Rosendorf (2002)

⁴ Since the two DSM variables are highly correlated, we include only one at a time in the model.

find that military disputes have little influence in the founding of PTAs, we expect that PTAs rife with conflict are more likely to fail. We use data from Jones, Bremer, and Singer (1996).

Another unique feature of our data set is that we measure both the proposed and realized integration of each PTA over time in order to test hypothesis 4. We code the proposed level of integration by reading the original charters or agreements of the PTA, while we code the realized level of integration from a variety of documentary sources. Each integration variable is coded on a five-point scale shown in Table 1. GAP_{it} represents the difference between the levels of proposed integration and realized integration. Our hypothesis is that greater differences between proposed and realized integration will lead to frustration on the part of member states and to lesser durations for the institutions.

Finally, in order to test neoliberalism's systemic-level claims about the consequences of hegemony on the duration of international organizations, we introduce $Hegemony_t$. This variable measures the percentage of world total GDP produced by the largest state (economically) in the world for each year t . For our purposes, that state is the US for the duration of the sample. If realists are correct, higher levels of hegemony are necessary to both establish and maintain international institutions (Keohane 1989; Kindleberger 1981). Neoliberals, such as Keohane (1984), counter that while hegemony may be necessary to establish multilateral institutions, because institutions serve useful ends in the system, they will take on a life of their own and survive without the support of the hegemon.

We make two final statistical notes concerning the model. First, given the distribution of survival times in Figure 1, we choose to use a Weibull distribution for the baseline hazard function in our model.⁵ This specification allows us to measure the degree of duration dependence in the data. One can often draw substantive conclusions from the existence of duration dependence (Bennett 1999). In our model, the presence of positive duration dependence would imply that for every year a PTA lasts, regardless of the value of the independent variables, it is more likely to survive the next year. This idea that the passage of time alone can increase the probability that a PTA survives can be easily tested in the Weibull model. If the estimate of duration dependence is less than 1 and statistically significant, then we can conclude that there is duration dependence in PTA survival.⁶ Likewise, an estimate greater than one indicates an increasing hazard rate over time. If, however, the inclusion of several explanatory variables makes the duration dependence parameter (α) statistically insignificant, then one can conclude that the model has accounted for what makes democracy endure rather than time itself.⁷

Finally, we note that the interpretation of the Weibull coefficients is "backwards" from traditional regression. Positively signed coefficients indicate an increasing hazard rate or shorter durations, while negatively signed coefficients indicates lower hazard rates and longer durations.

III. Statistical Analysis: Model Estimates

⁵ Estimates derived using a Cox proportional hazard model are highly similar to those using the Weibull specification.

⁶ We use a relative hazard parameterization for the Weibull estimation (see Box-Steffensmeier and Jones 1997: 1441-1442).

⁷ Beck (1998) notes that the presence of duration dependence can, in fact, be a nuisance parameter. That is, it could simply imply that the model is under-specified. Thus, one would ideally attempt to include better independent variables to explain the duration of the event.

Table 2 presents the estimates of the model and several variations. The first and third set of models exclude hub and spoke agreements which are, by definition, less institutionalized and strive to achieve a lower level of economic integration. Because hub and spoke agreements are considered a separate class of PTAs, we want to ensure that we are not creating heterogeneity within our sample. In addition, as previously discussed, we re-run each of these first models using the other DSM operationalization.

The first hypotheses concerning levels of democracy within the membership of an organization receives only marginal support in these models. Only in Model 1 does the larger average level of democracy bode well for institutional survival. Although in all four models this coefficient has the right sign, only once does it achieve statistical significance. Thus, within PTAs, the aggregate regime make-up of the member states appears to have little influence on the durability of cooperation. This is especially interesting given previous formal and empirical work showing that state regime type does matter for the likelihood of state involvement in PTAs.

The variables tapping the dispute resolution/legalism status of each PTA are consistently important, giving strong support to hypothesis 3. In three out of four models and across each measure of this institutional characteristic, the presence of formal dispute settlement and formal legal mechanisms bodes well for long-term survival of the institution. This finding confirms the idea that more formal rules to adjudicate issues between members can assist in strengthening long-term cooperation (Abbott and Snidal 2000).

Another variable which achieves statistical significance in both models which include hub and spoke agreements is *TotalGDP_{it}*. These negatively-signed estimates

indicate that larger aggregate wealth in the PTA augurs well for long-term survival. We argue this is likely because larger, wealthier PTAs can offset the costs of integration for member states, increasing the prospects for continued cooperation.

Three important variables fail to achieve statistical significance in any of the estimated models. First, we find that *Hegemony_t* is never close to statistical significance, a finding indicating that the neoliberals may be correct - stronger hegemons may have little influence on the long-term viability of institutions. Although we are hesitant to make too much out of this null finding, we feel it is illustrative - systematic variations in hegemony seem to have no influence on the duration of regional trade agreements. In combination with other evidence that hegemony is related to the foundation of these arrangements (see Mansfield 1998), a picture begins to emerge which supports the neoliberal position over the traditional realist-oriented hegemonic stability theory.

Second, we find that the concentration of GDP has little bearing on PTA duration, rejecting both parts of hypothesis 2. Although the sign of this estimate is consistently negative (indicating more concentrated or skewed distributions lead to longer lasting institutions), it never achieves statistical significance. This is surprising given the large amount of theoretical debate over the issue and past empirical findings. The evidence is not entirely *inconsistent*, however. Mansfield and Pevehouse (2000) find that high levels of concentration lead to fewer political-military disputes among member states, but note that in Table 2, the MIDS variable is rarely significant. That is, military hostilities seem to play little role in the continuance of a PTA, and so even if the distribution of GDP lowers hostilities, this may have no direct impact on long-term cooperation.

Third, to our surprise, we find that the GAP_{it} variable is not statistically significant. Larger gulfs between proposed levels of integration and realized levels of integration do not seem to wreak havoc on these arrangements. There are several candidate explanations for this finding, including the fact that states may simply scale back goals as realized integration stalls. This might account for the seemingly endless re-negotiations of some PTAs by member states. We plan to test this hypothesis in the future as we turn to examining proposed and realized integration as dependent variables.

We make one final note concerning these estimates. All four of these models contain statistically significant estimates of the shape parameter for the duration model (α). Although there is some debate as to the substantive interpretation of this parameter (see Beck 1997; Bennett 1999), the statistical interpretation is quite simple: each of these models possess positive duration dependence. This leads to one of two conclusions. First, the dependence parameter could be a measure of institutional “sticky-ness”. As PTAs last longer, their durability increases simply with the passage of time. This is supportive of several strands of institutionalist reasoning which argues for the incremental nature of regime change. A second conclusion would be that the model contains specification error – that is, there are important covariates that we have yet to introduce into the model. Although there are potentially additional controls that we would add in future iterations, because of the overwhelming size of the dependence parameter, we lean towards the former interpretation of this estimate.

IV. Conclusion

The rise of regional trade agreements has progressed unabated over the last ten years and shows no signs of lessening. As the United States pushes a Western Hemispheric FTA, attention will increasingly turn to the details of such an arrangement including dispute resolution mechanisms and the goals of economic integration. As these trade agreements expand in number and scope, it is important to realize that not all PTAs have led successful existences. Many PTAs sputter to achieve low amounts of economic integration, while others die entirely – either to be resuscitated years later or to be left on the ash-heap of history. Many theories within economics and political science attempt to speak to what factors lead to these varying outcomes, yet we have little empirical knowledge as to the validity of these theories.

This paper has attempted to fill this knowledge gap at least in a preliminary way. Our findings show that both aspects of institutional design and member constituency are important to the long-term survival of PTAs. Still, more empirical work should be undertaken on this subject to address what causal factors lead to the death of these arrangements.

In future work, we plan to expand our investigation in several ways. First, we plan to add all bilateral FTAs to our data set. Although by their very nature, many of these arrangements are less institutionalized than their multilateral counterparts, they are still part of the web of international trade agreements. In addition, more of these agreements have ended as disputes arise between its parties. Adding these agreements to the data will create a more complete picture of the international trade institutions.

The addition of more systemic-level controls would also address other hypotheses in the literature on PTAs. For example, assessing the prospects for exit and re-entry into

other regional arrangements is an important factor to measure in future work. That is, if states are unhappy with its present arrangement, do other, more attractive PTAs exist which may lure the state.

Finally, we hope to move to a more nuanced event history framework labeled a competing risk model. In these models, one can create heterogeneous sets of risks to the PTA. PTAs may end for a variety of reasons, including re-negotiation, absorption, or simply a breakdown of cooperation. A competing risk framework will allow us to treat these types of breakdowns as independent forces. In the end, we hope to shed empirical light on the question of institutional survival in the world economic system.

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Figure 1. Kaplan-Meier survival estimate

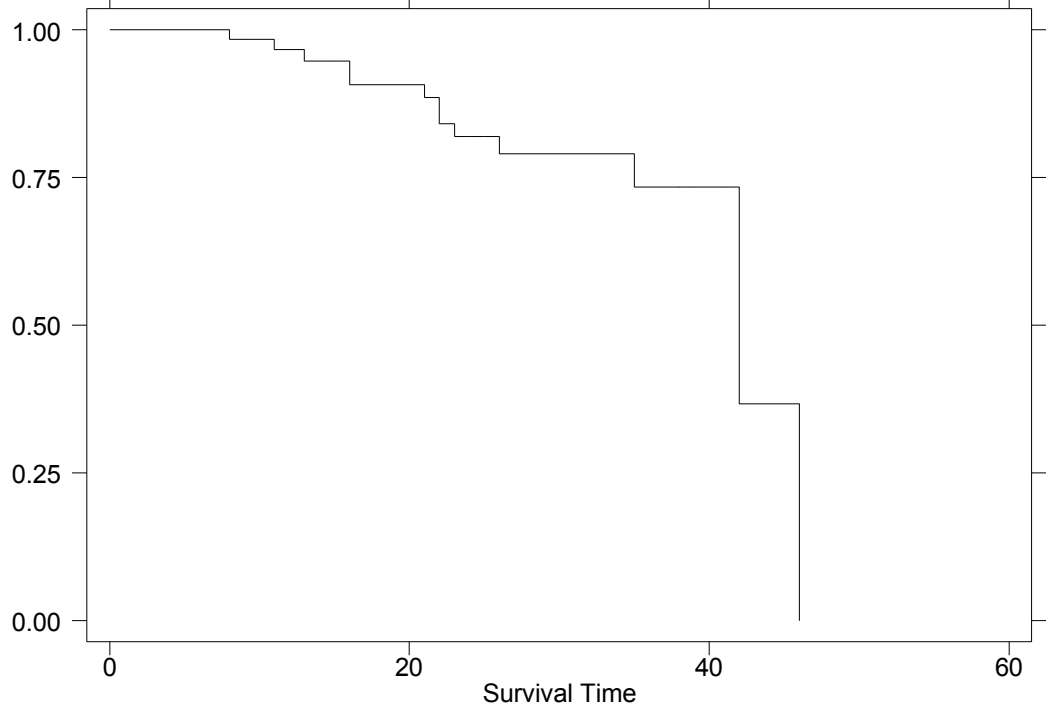


Table 1. Realized and Proposed Integration of PTAs

Institutional Type	Score	Characteristics
Non-Reciprocal Preferential Trade Agreement	1	Non-reciprocal reduction of internal tariffs among members External tariffs in place
Free Trade Area	2	No internal tariffs among members External tariffs in place
Customs Union	3	No internal tariffs among members Common external tariff policies on goods imported from states outside the union
Common Market	4	Customs Union Free flow of capital and labor among members
Economic Union	5	Common Market Harmonization of economic policy; common monetary and fiscal policy.