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Regional Integration and Domestic Institutional Homogeneity: A Comparative Analysis of Regional Integration in the Americas, Pacific Asia, and Western Europe

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ABSTRACT

This work argues that the formation of an economic union requires that the homogeneity of domestic economic institutions and the process of regional integration reinforce each other. Granger causality tests on four cases of regional integration in the Americas, Asia and Europe (1975 through 1995) confirm our thesis. These cases include the Andean Pact, the Association of Southeast Asian Nations, the Central American Common Market and the European Union. The most successful case of integration – the European Union – does evince a pattern of positive interaction between the two variables, while less successful cases, found in Latin America, are lacking in this mechanism of mutual influence. We further discuss several regional groups that have recently emerged and use our theoretical implications to assess their future development.

KEYWORDS

Regional integration; institutions; Granger causality; vector autoregression.

INTRODUCTION

The wide variation of regional integration is a striking characteristic. Some countries form a free trade area, and evolve into a customs union, but demonstrate a lack of dynamics required to move toward a common market, let alone an economic union. Others succeed in overcoming the differences among them and creating the ultimate form of regional integration: an Economic Union. The European Union (EU) has emerged as a great accomplishment by bringing member countries together in a fairly cohesive political and economic unit. In contrast, the Forum for

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Asia-Pacific Economic Cooperation (APEC) has a long way to go even to achieve the modest goal of a free trade area. What produces this variation in the degree of regional integration across the world? The literature on regional integration attempts to explain the process by focusing on the regional/international context and domestic forces. In addition they tend to be specific to European integration.

In this paper, we focus on the dynamic between institutional homogeneity and integration as an explanation of the emergence of an economic union. We argue that in order for an economic union to appear, the homogeneity of economic institutions across countries and the integration process of the group must reinforce each other. Economic institutions in this context are represented by inflation, taxation, government regulation and economic openness. The integration process refers to the incremental development in the areas of the mobility and exchanges of goods, services, labour and capital among states, the existence and influence of supranational agency overseeing economic relationships among states, as well as the coordination of fiscal and monetary policies. The prospect for integration improves when member countries are able to reduce the variance of their economic institutions. Meanwhile, further integration will reduce the heterogeneity of economic institutions.

We develop, operationalize and test our central argument in the subsequent sections. The second section presents an overview of various theories of regional integration. Next, we discuss our central thesis further and relate it to current research. In the fourth section we introduce the methodology used to test our hypothesis as well as the operationalization of the level of regional integration and the homogeneity of economic institutions. We report the statistical results and explore various cases in the fifth section, leaving the final section for conclusions and implications for some fledging regional organizations.

THEORIES OF REGIONAL INTEGRATION

A common definition of regional integration states that it is a shifting of certain national activities toward a new centre (Haas, 1958). Integration therefore is a form of collective action among countries in order to obtain a certain goal. This goal can be as grand as political unification (in the case of the EU) or a free trade area, as found in the North American Free Trade Association (NAFTA). Lindberg refines the definition by proposing that it is an 'evolution over time of a collective decision making system among nations. If the collective arena becomes the focus of certain kinds of decision making activity, national actors will in that measure be constrained from independent action' (1970: 46). More simply, it is 'a series of voluntary decisions by previously sovereign states to remove barriers to the mutual exchange of goods, services, capital, or persons'

(Smith, 1993: 4). Each of the following schools of thought attempts to explain this phenomenon.

Neofunctionalism

The earliest theory, neofunctionalism, states that integration results from the need to shift specific functions away from exclusively nation-state control toward supranational institutions (Mitrany, 1975). These new units would hold the decision-making power once enjoyed by the nation-state (O'Brien, 1995). Neofunctionalism also states that the causal mechanism for this transfer is in the increasing complexity of governmental systems requiring a demand for highly trained specialists at the national level who would tend to solve problems at the international level (Haas, 1958). However, this theory lacks clear empirical support.[1] It may have been overly ambitious to find hard evidence because as Pentland states, 'The relation between functional need and structural adaptation, central to the theory, is "necessary" only in the sense of being an ideal or norm, not in the sense of predetermining the direction of change' (1973: 98).

Neofunctionalism, however, is important because it theorizes that integration depends on specific conditions found in earlier stages that promote further cooperation. While one can argue that the mechanism of spillover is *ad hoc* (Keohane and Nye, 1975), it mainly suffers due to its vagueness. We believe that Haas (1961) is correct when he directs our attention to 'ripe' conditions that enhance the ability of member nations to successfully come together to solve mutual problems. This success stems from the environment under which effective institutions were formed. But what are the conditions that lead to effective institutions? While Haas (1961) states that ideological-political homogeneity is the ideal condition for integration, our argument speaks to the homogeneity of the domestic economic institutions as a necessary condition for the ultimate formation of an economic union. Furthermore, the integration process promotes institutional homogeneity that provides a stabilizing environment for both negotiations between national leaders and the relationship between national leaders and their own constituencies.

Intergovernmentalism

Nye (1971) observes that the success of integration depends upon the ability of member countries to adapt and respond to the cooperative agreements that define integration. His argument provides the foundation for the perspective that regards integration as a function of negotiations between governments to produce cooperative agreements that evolve into further integration.

Moravcsik (1995; 1991) argues that integration is due to the bargaining among the more powerful members of a regional group. This argument continues the tradition that integration is a means for member countries to obtain domestic policy preferences through regional negotiation (Keohane, 1984; Taylor, 1983; Wallace *et al.*, 1977). Through negotiation, EU member countries converge economic policy in order to alleviate negative externalities due to economic interdependence while retaining national sovereignty.

This theory was adapted in later works (Moravcsik, 1998; 1993) to also include the sources of the demand for integration in domestic politics. The strength of argument, as stated by the author, lies in explaining the major treaties of the EU especially the Single European Act and the Treaty on European Union (Maastricht).

Supranationalism

One of the major critiques of intergovernmentalism is that it ignores or underestimates the power of supranational institutions and transnational actors in the process of integration (Garrett and Tsebelis, 1996; Stone Sweet and Sandholtz, 1998; 1997). This has given rise, or rather a revisit, to the role integration itself has on further integration. The supranationalist arguments return the direction of research back to the neofunctionalist perspective (Stone Sweet and Sandholtz, 1997). By including supranational institutions and transnational actors, integration is again theorized as being self-perpetuating: the origins of integration in the current step lie in the outcomes of prior steps. This includes the role of the European Parliament (Tsebelis, 1994), the Commission and the institutionalization of qualified majority voting (Garrett and Tsebelis, 1996), the European Court of Justice (Stone Sweet and Caporaso, 1998; Starr-Deelen and Deelen, 1996), and various transnational actors (Sbragia, 1998; Stone Sweet and Sandholtz, 1998; 1997) participating in both the demand for and the supply of integration.

Political economy theories of integration: external consequences

The aforementioned theories seem to share the same weakness: assuming that the outcomes of decision-making modes, whether they are exclusively intergovernmental or supranational, are obtainable by member countries. Alternatively, theories dealing with the political economy of integration speak to the regional and domestic conditions that drive the demand for integration within member countries. One line of research argues that such a demand is due to external influences on the domestic economy; many small states have had a long dependency on trade because of the lack of local resources. As a result, they tend to be highly vulnerable to any external economic shock and require highly adaptive decision-making systems (Katzenstein, 1985).[2] When the impacts of external economic effects are negative due to the degree of openness, the demand for integration increases from the political elite's coalition because the costs of interdependence outweigh the costs of integration (Milner, 1997a). Pauly (1997), in reference to capital mobility, suggests that the political elite will opt for integration to head off negative external impacts in order to increase domestic legitimacy. Therefore the external impacts of globalization on domestic politics lead to crisis management, becoming the central ingredient in the demand for integration.[3]

Political economy theories of integration: internal consequences

The other side of the political economy argument focuses on domestic economic considerations, carrying on the theoretical tradition of endogenous explanations of international economic relations through the aggregation of societal demands by politicians (Alesina *et al.*, 1997; Magee *et al.*, 1989; Levi, 1988). While certain domestic economies are able to absorb the short-term negative consequences of social displacement, others do not have the capacity to institute the social welfare cushions that would aid in the facilitation of integration. Indeed many have argued that this would be a request for liberalization in general (Rodrik, 1997; Katzenstein, 1985; Polanyi, 1957). However, there is an incentive to pursue integration given the neo-classical economic argument that individual countries will achieve higher long-term growth by adopting free trade policies (Krugman and Obstfeld, 1997).[4]

This logic is also the basis of Milner's argument (1997b) when she describes the demand for integration as stemming from the degree of home benefits. It is assumed that some degree of material benefit must be present in order for a country to take the integration option. Others (Haggard, 1997; Bouzas and Ros, 1994) point out that countries that have undergone severe domestic economic crises will tend to be more likely to participate in regional integration than those who have had minor crises. This explains the higher degree of development of regional integration in Latin America than in East Asia. Along similar lines, Cohen (1997) argues that the potential of governments to use inflationary policy will tend to make private investors voice demands for greater integration. The loss of sovereignty over fiscal and monetary policy is a plus for private investment because of the reduced risk of inflationary and exchange rate volatility. Garrett (1998a) and Ortiz (1996) state that workers, trade unions and leftist parties are actually benefiting more under regional integration than previously argued. Integration may help mould the domestic power structure depending on the effects it has on the society.

AN INSTITUTIONAL THESIS OF REGIONAL INTEGRATION

The preceding section points to two important deficiencies in explaining the success or failure of integration. First, arguments need to be operational across regions to enable the understanding of integration in broader terms. Second, they need to go beyond demand-driven arguments, focusing on the aftermath of negotiations and their effect on integration. Both issues are legacies of neo-functionalism, but have been downplayed over the last 20 years of research. Bargaining among countries may produce treaties, without necessarily producing integration. Supranationalism is an important consideration for the EU, but not one for regions without influential supranational institutions. Domestic economic conditions of one potential member may not be sufficient for its participation in regional integration if the probability of other potential members to adapt domestic institutions is low. International economic conditions may still offer uneven effects if adaptation among member countries is not present. Therefore we wish to augment the above body of literature by emphasizing the relationship between domestic institutional homogeneity, integration processes and the emergence and existence of an economic union. Furthermore, no studies have directly tested the causal structure of the relationship between integration processes and domestic institutional homogeneity.

As stated earlier, we denote the degree of similarity of domestic institutions as institutional homogeneity. Institutions are defined as economic institutions characterized by monetary policy, fiscal policy, government regulation and economic openness. Those variables represent systematic characteristics related to political and economic organizations. These characteristics may be guided by some norms (e.g. various versions of socialism and capitalism), or they may be institutionalized behaviour (e.g. embedded inflation). Because of the existence of cross-country variance in those dimensions, they largely represent the main characteristics of economic systems.

The integration process here refers to the incremental development in the areas of the mobility and exchanges of goods, services, labour and capital among states, the existence and influence of supranational institutions overseeing economic relationships among states, and the coordination of fiscal and monetary policies among them. The unit of analysis here is the regional group. For any group, there are a number of states. Homogeneity is determined by the existing variance in economic institutions across member states. Integration processes are given by the degree of interpenetration of factors and policies among states in the group.

Our theory has a weak and a strong version. The weak version of the thesis has two interrelated dimensions. First, institutional homogeneity and integration processes should reinforce each other in order for regional integration to be successful. Institutional homogeneity leads to a reduction of uncertainty and transaction costs – a condition needed for further integration (the homogeneity effect). A classic example is provided by the democratization and liberalization pre-conditions for Spain and Portugal prior to becoming members of the European Community.[5]

Similarly, a commitment to regional integration results in the modification of domestic institutions, making them compatible across members (the integration effect). If domestic institutions remain heterogeneous between member countries during the process of regional integration, there will be a reduction in the likelihood of further integration. Figure 1 sums up this dimension and postulated integration scenarios. The upper left corner illustrates the scenario where both effects are present promoting complete integration. Where neither effect is present, we postulate that the ultimate form of integration will fail. Where one or the other is not present, scenarios occur where the probability of having complete integration (i.e. economic union) is somewhere between the two preceding scenarios.

So far the most successful case of regional integration has been the EU, which has evolved from a free trade area into an economic union, with the possible formation of a political union. By contrast, integration in Latin America has not been as successful. For instance, both the Central American Common Market (CACM) and the Andean Pact (ANCOM) 'fell into obscurity by the early 1980s, when the initial goals of liberalizing trade and coordinating macroeconomic policies became first delayed, then implemented only half-heartedly, and eventually postponed indefinitely' (Mansetti, 1992: 103). The problem with further integration in these two regional groups resides in the lack of domestic economic institutional change. Since the homogeneity of macroeconomic policies

		Integration effect: Yes	Integration effect: No
Homogeneity effect	Yes	Emerging integration	Stalling integration
	No	Stalling integration	Failing integration

Figure 1 Integration and institutional homogeneity

has a significant effect on regional integration, the momentum of the process was hard to sustain in the cases of CACM and ANCOM.

The stronger version of our argument is temporal: the synchronization of the two effects improves the likelihood of successful integration. Figure 2 sums up the scenarios of this dimension. When the 'integration effect' far precedes the 'homogeneity effect', the degree of regional integration may be unbalanced and falters due to the lack of enhancement through domestic institution homogeneity. The rapid demands of regionalization with slow homogeneity may produce unsteady integration. As the uncertainty about the likelihood of a member country's homogeneity increases, the probability of successful integration decreases. Similarly, if the homogeneity effect far precedes the integration effect, then regional integration may lack sufficient power to further streamline domestic institutions of the member states, resulting in the lack of a continuing pattern of reinforcement of the two effects. Only when the two effects are in synchronization (either fast or slow) does the likelihood of successful regional integration increase.

We have theoretically proposed that the ultimate formation of integrated economic systems (e.g. the European Union) requires interaction between the homogeneity of domestic economic institutions and regional integration processes: the homogeneity of member states' domestic economic institutions will promote regional integration and at the same time, regional integration will promote homogeneity resulting in the eventual emergence of a union. In this context, the two effects may take different lags. More importantly, homogeneity, integration and the union are not tautological, as defined in the beginning of the paper. There is no circularity among the three variables until a full and complete union is reached (after that happens, regional integration processes will take constant values) and what we are interested in here is the period up to the emergence of a full-fledged union.

		Integration effect: Fast	Integration effect: Slow
Homogeneity effect	Fast	Rapid integration	Unsteady integration
	Slow	Unsteady integration	Gradual integration

Figure 2 Synchronization of integration and homogeneity effects

If this institutional thesis of integration is correct, we should find that the data support the placement of the EU in the upper left cells of Figure 1 and Figure 2. Additionally, it is not surprising that the degree of integration for APEC remains very limited.[6] The lack of institutional homogeneity among the APEC members prevents major breakthroughs for this group of countries to emerge as a powerful regional group – a process that will continue to be exacerbated by the large variance of economic systems among the member countries.

METHODOLOGY AND OPERATIONALIZATION

This paper attempts to quantify the relationship between domestic institutional homogeneity and regional integration, while seeking to understand the causal effect between the two variables. Granger (1969) provides a useful definition of statistical causality and a test using standard time-series methods.

The Granger test intuitively leads us to a proposal that the past can cause the future, whereas the future cannot cause the past. Letting Ω_t be the universe of information up to and including time period t, the Granger definition is as follows: X causes Y, given Ω_t if Y_{t+1} can be better predicted using X_t, than by not using it. This entails a comparison of the forecasting ability of Ω_t with and without X_t. If X_t significantly contributes to forecasting of Y_{t+1}, then X is said to *Granger cause Y*.

We use Sargent's test for Granger causality because of its easy implementation and evidence of its superior small sample properties (Sargent, *et al.*, 1982). The equation we estimate is:

$$Integration_t = \alpha + \gamma(\mathrm{L})Integration_{t-1} + \beta(\mathrm{L})Institution_{t-1} + \varepsilon_t$$

where γ(L) and β(L) are the lag operators. For example,

$$\beta(\mathrm{L})Institution_{t-1} = \sum_{j=1}^{m} \beta_j\, Institution_{t-j}$$

Then, a standard F test will be conducted on the null hypothesis of Granger non-causality from institutions to integration, i.e. $\beta_1 = \beta_2 = \ldots = \beta_m = 0$. Granger causality from regional integration to institutional homogeneity is readily tested by replacing $Integration_t$ with $Institution_t$ as the left-hand-side variable and testing $\gamma_1 = \gamma_2 = \ldots \gamma_n = 0$.

Specifically we have three alternative hypotheses:

(i) Institutional homogeneity causes regional integration.
(ii) Regional integration causes institutional homogeneity.
(iii) There is a feedback effect between institutional homogeneity and regional integration.

This concept and test of causality conveniently help to infer the causality between institutional homogeneity and integration. This procedure is also important, for Granger non-causality is a necessary condition for strong econometric exogeneity (Sims, 1972; Sargent, 1976). If the evidence shows that regional integration causes institutional homogeneity, then there is support for the idea that the process of integration promotes domestic institutional homogeneity. If the reverse is true, then domestic institutional homogeneity will prove to be a powerful means toward improving regional integration. Finally, a feedback effect suggests that regional integration and institutional homogeneity are endogenous to each other – mutually evolving. The evidence consistent with the weak version of our integration theory will require that data reject the null hypothesis with the statistical result in favour of the feedback effect, as this version of our theory requires the presence of both effects. The stronger version of our theory will require a rejection of the null hypothesis with the result of not only feedback effect, but also of feedback effect with similar lag structures.

Measuring regional integration: the integration achievement score

Lindberg (1970) was the first to note that measuring integration requires assessment of its multidimensional nature. To capture the level of integration at a given time period, one must break it down into its parts, measure the specific components, and aggregate the measurements. While Lindberg focused on measuring the level of integration as a process, we are solely interested in measuring the level of integration achieved in each regional project in a given year. Hufbauer and Schott (1994) developed a reasonable framework to measure the degree of regional integration, referred to as the integration achievement score (IAS). The coding of the IAS in their work involves a smaller number of regional integration projects for only one year (1994). We adopted their method, specified a metric and expanded it to include a greater number of regional integration projects from their initial implementation through 1995. Each IAS is the average of scores in six categories that measure distinct components of regional integration. These categories include (1) trade in goods and services; (2) the degree of capital mobility; (3) the degree of labour mobility; (4) the level of supranational institutional importance in decision-making; (5) the level of monetary policy coordination; and (6) the level of fiscal policy coordination. Each category has a value of 0 through 5 along a Guttman scale with higher values translating to higher levels in each category. Appendix A to this paper provides the scoring system for each category.[7] Each score reflects the arrangements negotiated and agreed upon by the member countries on the year each treaty took effect. Table 1 lists the 1995 IAS for each of the regional organizations, including those tested by the Granger causality procedure in this paper.

Table 1 Integration achievement scores (1995)

Group	*IAS*
Andean Common Market	1.67
Association of Southeast Asian Nations	.33
Forum for Asia-Pacific Economic Cooperation	.00
Central American Common Market	.83
European Union	3.33
Southern Cone Common Market	1.33
Central African Customs and Economic Union	.33

The economic homogeneity index

We use the standard deviation of the economic institutional variables (Gwartney and Lawson, 1997) to measure domestic institutional homogeneity. A large standard deviation implies substantial difference among member states in their economic institutions and therefore a lack of homogeneity in the area of economic policies. The economic institutional indices have 17 components in four major areas: (1) money and inflation; (2) government operations and regulations; (3) takings and discriminatory taxation; and (4) international exchange. These four areas represent the major dimensions of a country's economic institutions, and the ratings are ranked to indicate levels of economic freedom (see Appendix B). The first area includes money supply, price variability and a citizen's freedom to own foreign currency bank accounts domestically and maintain bank accounts abroad. The second area comprises government consumption, presence of state-owned enterprises, price controls and other government regulation and existence of competitive markets. The third category consists of transfer and subsidies, taxation and military conscription. The last component is made up of trade protection, exchange black markets, openness of the economy and a citizen's freedom to engage in capital transactions with foreigners. Together, these sources present a complete picture of economic institutions in a certain country.[8]

While both our theoretical variables, the regional integration index and the institutional homogeneity index, are ordinal variables, they can be used in our testing as long as their variance is nonzero and other OLS assumptions are satisfied. The standard deviation of the Integration Achievement Score is relatively low: ANCOM (0.234), ASEAN (0.700), CACM (0.576) and EU (0.596). As a matter of fact, small standard deviations imply a conservative test of our hypothesis, as they result in a large standard error of the parameter estimate, making it more difficult to reject the null hypothesis of no Granger causality, keeping everything else constant. Empirically, such data have been used in various granger

causality tests (e.g. Burkhart and Lewis-Beck (1994) on democracy and modernization).[9]

STATISTICAL ANALYSIS AND DISCUSSION

Prior to conducting the Granger causality test, we examine the homogeneity of domestic economic institutions of some existing regional economic organizations. Table 2 reports the mean and standard deviation of each of the four main categories of economic institutions, reflecting the core of the economic systems in eight regional groups in the Americas, Pacific Asia, Central Africa and Europe.

The monetary policy category displays the largest variance for all regional groups ranging from 1.29 for the EU to 3.31 for CACM. In the area of government operation and regulation, with the exception of the EU, regional groups have a relatively large within-group variance in government operations and regulations. In the area of government takings and discriminatory taxation, the largest variation in this category occurs within the UDEAC group, ranging from 0 (The Central African Republic) to 7.5 (Chad). The EU has some variation in this category, ranging from 0.5 (Belgium, Denmark, Italy and Sweden) to 4.5 (Britain). The least varied are the ASEAN countries, with a standard deviation of 0.513. By contrast,

Table 2 Indices of economic institutions by group (1995)

Group	*Statistic*	*Money*	*Government*	*Takings*	*Int'l exch.*	*Sum*
ANCOM	$\bar{x}$	3.775	4.875	6.625	5.350	5.300
	σ	2.392	1.417	0.869	0.985	1.007
APEC	$\bar{x}$	8.320	6.486	6.153	7.973	7.007
	σ	2.024	1.859	1.921	1.098	1.123
ASEAN	$\bar{x}$	8.720	5.400	7.760	8.040	7.140
	σ	1.143	1.082	0.513	1.172	0.684
CACM	$\bar{x}$	5.200	7.740	7.100	6.700	6.220
	σ	3.314	0.950	0.583	1.122	1.023
EU	$\bar{x}$	9.169	6.362	1.877	8.577	6.077
	σ	1.290	0.704	1.210	0.650	0.546
MERCOSUR	$\bar{x}$	3.300	6.275	6.350	6.225	5.800
	σ	2.364	1.461	1.292	1.632	1.417
NAFTA	$\bar{x}$	8.100	6.800	5.300	8.467	6.967
	σ	3.035	1.249	1.136	0.808	0.902
UDEAC	$\bar{x}$	3.580	3.680	4.540	4.060	4.080
	σ	1.678	1.182	2.788	0.796	0.492

the variance for international exchange tends to be low for EU, UAEDC and NAFTA. Both EU and NAFTA have formalized their trade agreements among their respective member states and the intraregional trade has been on the rise.

Table 3 ranks these groups on the mean and standard deviation, with one indicating the highest number for the former and the lowest number for the latter. In terms of the aggregate level of economic freedom in 1995, ASEAN ranks the first (7.14), followed by APEC (7.01), NAFTA (6.97), CACM (6.22) and EU (6.08). UAEDC has the lowest level of economic freedom (4.08), lower than ANCOM (5.3) and MERCOSUR (5.8).[10] As stated earlier, the regional organization with the lowest level of variation in domestic institutions has a higher potential for the deepening of integration. The EU countries evince a low level of variance of the aggregate score of economic freedom with UDEAC being the lowest. NAFTA and ASEAN are distinct from the EU in their relatively larger institutional variances.[11]

As the Granger causality method requires the duration of time series, we select regional groups that have the longest history of existence: EU, CACM, ANCOM and ASEAN. The length of the economic freedom data series (1975–95) defines the beginning and ending years in the time series. The UDEAC is not included due to lack of variation in the degree of integration. Although the CARICOM has existed since 1968, it is not included in the study because quite a few member states are missing in the economic freedom database (e.g. Antigua and Barbuda, Dominica, Grenada, Guyana, Montserrat, St. Kitts & Nevis, St. Lucia, and St. Vincent & the Grenadines).

Table 4 presents the F-statistics and their significance level for the null hypothesis that Granger causality does not exist. The results of Granger causality tests depend on the choice of lag length. If the chosen lag length is less than the true lag length, the omission of the relevant lags may cause

Table 3 Group rankings

GROUP	*Money*		*Government*		*Taxes*		*Int'l Exchange*		*Sum*	
	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ
ANCOM	6	7	7	7	4	3	7	4	7	5
APEC	3	4	3	8	5	7	4	5	2	7
ASEAN	2	1	5	3	1	1	3	7	1	3
CACAM	5	5	1	2	2	2	5	6	4	6
EU	1	2	4	1	7	5	1	1	5	2
MERCOSUR	8	6	5	6	3	6	6	8	6	8
NAFTA	4	8	2	5	8	4	2	3	3	4
UDEAC	7	3	8	4	6	8	8	2	8	1

Table 4 Granger causality test results

Group	*Lags*	*F-statistic*	*Probability*
ANCOM			
Integration to Institution	2	25.363	0.00002
Institution to Integration	5	8.415	0.01775
CACM			
Integration to Institution	1	148.133	0.00000
Institution to Integration	5	9.682	0.01313
ASEAN			
Integration to Institution	2	19.390	0.00009
Institution to Integration	3	6.299	0.00957
EUROPEAN UNION			
Integration to Institution	3	17.876	0.00015
Institution to Integration	3	6.753	0.00757

a bias in the results. If the chosen lag length is greater than the true lag length, the inclusion of irrelevant lags causes the estimates to be inefficient. In this paper, the decision on the length of lags is made on the basis of the maximization of F-statistic in each specific equation. That means that for the same group of countries, the number of lags in the equation of institutional homogeneity causing integration may well differ from the number of lags in the equation of integration causing institutional homogeneity. Compared to the practice of assigning the same number of lags to the two equations for the same group, the F-statistic maximizing approach may reveal the dynamic differential of the two forces.

Some regional groups may have a balanced and harmonious relationship between the dynamic effects of regional integration and institutional homogeneity, while others may present a short-run effect of integration on homogeneity or the converse. In the light of our thesis, we believe that the regional group that demonstrates a more or less synchronized pattern of the two variables stands a better chance in regional integration than those that do not. The synchronization of regional integration and institutional homogeneity is consistent with having the same number of lags in both equations and rejecting the null hypothesis of no Granger causality decisively at the same time. Finally, it would be interesting to test the relationship between integration and homogeneity of various sub-components of the economic freedom score, as that would reveal the more precise mechanisms of integration. Due to space limitations, we settle on the aggregate score while encouraging future work using a similar test on some of the sub-components.

In general, we have evidence that institutional homogeneity and integration processes interact with each other positively.[12] While institutional homogeneity increases integration processes, integration processes improve institutional homogeneity, illustrating the feedback effect anticipated by our theoretical argument. However, the cross-bloc variation of success in regional integration can be further analysed by examining both the statistics associated with each bloc and its historical evolution.

For ANCOM countries, the coordination of domestic institutions appears to have a slow effect on the degree of integration, though the integration process within ANCOM has an almost immediate effect on domestic institutional homogeneity, tending to bring member states in line with regional macroeconomic policies. The lack of synchronization between the increase in integration and reduction of institutional heterogeneity makes it difficult to achieve a solid success of regional integration.

The objectives of ANCOM were to create a common market with a harmonization of social and economic policies (Ocampo and Esguerra, 1994). Economic policies did not stray from the import substitution industrial policy (ISI) popular in Latin America at the time, consisting of adoption of common planning in heavy industry, control of foreign investment and regional trade liberalization within the confines of ISI. Under the original framework, the result can be described as a development of ISI regionalism. The Andean Commission envisioned a pooling of common resources and mutual aid as a response to the domestic economic crises brought on by international economic shocks during their individual experiences in export-led growth. To this end, the Decision 24 policy was adopted, fixing the amount of profit remittances for multinational corporations and setting a time frame for the relinquishment of majority ownership of domestic firms by foreign companies (Bulmer-Thomas, 1994). ANCOM has demonstrably had a strong effect on homogenizing institutional variables (the integration effect), and as our regression results show, has done so in a fairly fast manner.

However, there was also a slow and weak homogeneity effect as evidenced in the early development of ANCOM, which did not produce a high level of integration. ANOM was unable to implement the goals of a customs union and common market primarily as a result of domestic political changes, both in regime stability and policy preferences. Chile left the Pact in 1976 mainly due to the desire of the newly installed Pinochet regime to adopt liberalization policies that greatly outpaced the timing found in the Cartagena Declaration, especially in regard to foreign capital (Lawrence, 1996). This was a particularly strong blow to integration given the strong complementary nature of the Chilean economy with Colombia and Venezuela (Ocampo and Esguerra, 1994). Lack of monetary coordination was also devastating for the Pact; the debt and commodity crises in the 1980s were characterized by strong currency devaluations and the imposition of trade restrictions in order to correct individual balance of payments deficits (Bulmer-Thomas, 1994). This

move produced increases in transactions outside the region while reducing them within the region.

The strongest outcome of the development of ANCOM was its influence on the domestic economic policies of the member states. This is evident in the adoption of ISI within the region during its early period and the more recent changes toward liberalization in the present era. The periods of minimal influence occurred when domestic institutions defected from earlier agreements due to dramatic political changes. The future of the ANCOM can only be promising if its strong effect on domestic institutional homogeneity continues and is complemented by increased political stability. Political stability will shorten the time these countries take to affect the development of ANCOM, however given the recent political developments in the area, especially in Peru, Venezuela and Colombia, the prospects of this occurring are small.

The Granger causality analysis of CACM yields almost the same causal structure between the integration effect and homogeneity effect. Like ANCOM countries, CACM countries evince a strong and immediate effect of integration on domestic institutional homogeneity, though the evidence regarding the effect of this homogeneity on further integration is weak and such an effect tends to be remote rather than immediate. The objectives of CACM in its first life never came to fruition due to the 1969 'Soccer War' between El Salvador and Honduras and political instability during much of the 1970s among and within the member states with the exception of Costa Rica. Incompatibility among the former member states grew out of diverging views regarding economic policy (Bouzas and Ros, 1994).

The effort was re-ignited in the 1980s but remained largely dormant until the 1990s. As with the ANCOM members, political instability among the CACM countries in the 1980s (as well as the 1970s) caused large lag times in the development of integration as a part of its homogeneity effect. Regional integration efforts attempted to increase stability among the members of the 1960 agreement and Panama through the coordination of trade and industrial policy along liberal economic principles (Rodríguez, 1994). The revitalization of CACM had a large impact on domestic institutional homogeneity though the provision of positive incentives through which members sought to increase economic growth and political stability. By renewing the effort, members could now petition the EU for access to the European market, thereby increasing their export base. Additionally, access to the US and Mexican markets were more feasible under the new CACM. In sum, the project did reduce heterogeneity among the members' economic institutions.

For ASEAN, the integration and homogeneity effects are both statistically significant, but lacking the same degree of synchronization as the EU case discussed below. The integration effect tends to precede the homogeneity effect. The process of integration tends to reduce the heterogeneity of domestic economic institutions, though the reverse effect is prolonged and less decisive. Regional cooperation makes ASEAN member states coordinate economic policies and norms; however, the reduction in institutional heterogeneity has yet to strengthen the integration of ASEAN. Although ASEAN began in 1967 with the signing of the Bangkok Declaration, it was not until 1975 that the members decided to create a uniquely ASEAN institution: The ASEAN Secretariat (Palmer and Reckford, 1987). The main decision-making body is found in meetings of member foreign ministers referred to as the ASEAN Standing Committee (Department of State, 1992). This decentralization of decision making is within the spirit of the Bangkok Declaration, which establishes ASEAN as without central authority and organized around consensus among members (Edwards and Wong, 1996). This lack of a central authority helps to explain the weak and prolonged homogeneity effect.

The major advance for the aim of economic development occurred with the signing of the ASEAN Free Trade Agreement (AFTA) in 1992, including all the members of ASEAN. The AFTA is the primary example of the limit put on regional integration by a set of domestic institutions. The trade agreement is very limited in scope, especially compared to the others discussed in this paper. Liberalization of capital, labour and services are not covered and no dispute settlement exists, traded products may become cheaper in 2003 as a limit of 0 to 5 percent is placed on a limited set of items (Edwards and Wong 1996). In addition, members have the right to temporarily exclude 'sensitive' items from the list (Edwards and Wong, 1996). This limited trade package is a result of national preferences inclined toward protectionism for 'sensitive' industries and a continued high level of competition among the members often framed in ideological terms. Members are limiting the homogeneity of economic institutions by maintaining individual member preferences that hamper further homogeneity and integration effects.

For the EU, there appears to be a feedback effect between regional integration and institutional homogeneity. The process of integration tends to homogenize institutions, and the reduction in the variance of institutions further strengthens the integration process. Moreover, there appears to be a level of synchronization between the integration effect and the homogeneity effect. F-statistics are maximized both with the length of lags equal to three and with F-statistics highly significant in both cases.

The deepening of integration demonstrates the strong influence the EU exerts in the alteration of its members' policies. The SEA amendments (1986) to the Treaty of Rome required that members make significant policy changes in order to move the region into a true common market (Urwin, 1991). Primary provisions for the establishment of a common market included an end to the non-tariff barriers impeding intra-regional trade through the alteration of an array of domestic laws and procedures

(Cecchini, 1988). The beginning of a common social policy to improve uniformity in standards of social protection were also included (Wood and Yesilada, 1996). The Treaty on European Union (TEU) marks the latest attempt in the deepening process with the formal adoption of the Social Charter, requiring members to change social policy regarding worker protection in accord with decisions from the Commission (Holland, 1994). The TEU also established the inclusion criteria for the European Monetary Union (EMU), requiring a change in member behaviour in several significant ways: the establishment of homogeneity criteria on budget deficit spending; public debt as a percentage of GDP; and the adoption of common monetary policy (Garrett, 1998b).

Finally, we attempt to examine the direction of the causal effect using the EU case as an example. So far, we have explored the existence of the Granger causality effects without assessing directional change. While we theorize about a negative effect between integration and institutional heterogeneity as measured by the standard deviation of the institutional variables, or a positive relationship between the integration effect and homogeneity effect, some statistics revealing directional change will complement our findings derived from the Granger causality analysis. Though we could look at our regression that generates *F* statistics, the parameter estimates are very difficult to explain, as the signs on the lags often alternate. To solve this problem, we utilize the vector autoregression (VAR) technique.

A VAR is a system in which every equation has the same right-hand variables. These variables include lagged values of all of the endogenous variables, avoiding the problem of *a priori* specification or identification of a system of simultaneous equations. Like conventional regression, researchers recognize that the estimated coefficients of a VAR themselves are very difficult to interpret due to the opposite directions often seen in the same parameter estimates in each equation. The alternative strategy is to examine the impulse response functions (IRF) of the system to draw conclusions about a VAR. The IRF traces the response of the dependent variable in the VAR system to the shocks in the error terms, also called 'innovations'. An impulse response function describes the response of an endogenous variable to one unit change of the innovations in terms of one standard deviation increase.

The IRF results are displayed in Figure 3. Please note that we use heterogeneity as the label for homogeneity, which is measured through the standard deviation of the economic institutional variables. There are four graphs of responses to innovations. The numbers on the horizontal axis indicate the number of lead times in which the original shocks work through the system. We select five years as the number of leads. We divide Figure 3 into four areas of relationships. The graph in the upper right corner presents integration responding to innovations in homogeneity.

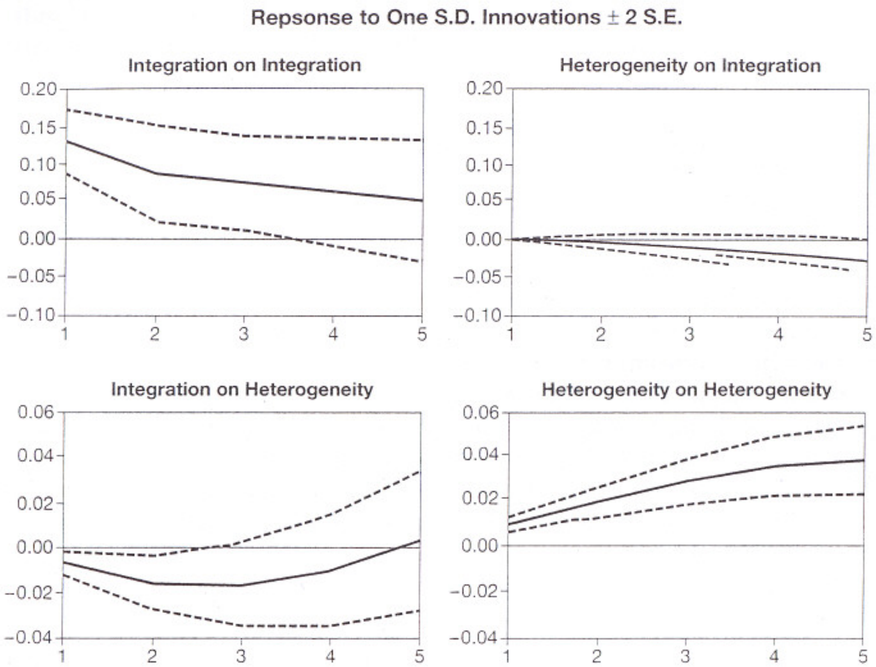

Figure 3 Impulse response functions of the integration and homogeneity effects in the case of the European Union

The graph in the lower left corner shows homogeneity responding to innovations in integration. The graph in the upper left corner provides information on integration responding to innovations in integration and the graph in the lower right corner reveal homogeneity responding to innovations in homogeneity.

Our theory does not specify the lag structure of the interaction between the two variables across regional blocs, as our model does not include the variables that jointly determine those two variables (e.g. political systems). Therefore, the study of lags at this juncture is an empirical, rather than theoretical issue. In the Granger causality structure, it is difficult to analyse the individual effects of different lags, as the signs of the parameter estimates for the lagged variables may alternate and their significance levels may be over- or under-estimated due to the multicollinearity problem. The use of IRF allows us to have some insight into the dynamic effects between regional integration and institutional homogeneity. It should be noted that the IRF function in Figure 3 examines the ramification of the impacts of integration and homogeneity on each other, given that there is only one initial shock.

The IRF result is very consistent with our Granger causality analysis of

the EU case; the integration effect is more pronounced than the homogeneity effect. Integration responds negatively to innovation in the institutional divergence as measured by the standard deviation of institutional variables. The negative response of institutional divergence to a unit increase in the shock of integration reaches a low at about the third year once that the shock starts. By contrast, the degree of regionalization of the EU responds negatively to an upward unit surprise in domestic institutional divergence and the negative response tends to be more pronounced with the passage of time, even though the initial negative response is negligible. This demonstrates that, given that there is one shock, the effect of integration on institutional homogeneity is strong and positive in the short run and that the effect of institutional homogeneity on integration is gradual and a long-run phenomenon. In the short run, it is relatively easy for integration to make institutions conform than for 'homogenous' institutions to contribute to further integration. In the long run, it is natural for 'homogenous' institutions to fuel further integration while it is a challenge for integration processes to perfect institutional homogeneity. The IRF analysis here is conservative, as it assumes that there is only one shock producing ramifying effects into the future while our Granger causality test indicates feedback effects with synchronized lags, implying that integration and homogeneity are a permanent, rather than one-shock phenomenon, as in the case of the EU.

Finally, the upper left graph and the lower right graph show the self-sustaining momentum of the integration effect and the homogeneity effect. While the momentum of the former effect declines, the latter decreases and eventually levels off over time. The implication of the two graphs is quite telling: in the particular case of the EU, without the enhancement of institutional homogeneity, the integration process loses its momentum. This finding is contradictory to the functionalist or neofunctionalist argument that integration, once it begins, is thereafter self-perpetuating. On the contrary, without the pressure of integration, domestic institutional heterogeneity will gather momentum and increase, driven by inertia.

Our theory and empirical findings strongly support the evidence by Frankel and Rose (1997; 1998) on the relationship between trade linkage and correlated economic activities. They find strong effects of increased trade integration on the cross-country correlations of business cycle activities including GDP, industrial production and employment.[13] There is strong compatibility between their works and ours. Their trade linkage variable overlaps with our integration achievement score due to the inclusion of trade as one of our six dimensions in the *IAS*. The idea of correlated economic activities in their work is highly consistent with our institutional homogeneity concept. Our theoretical framework extends theirs as we test not only the effect of integration on institutional homogeneity, but also the reversed effect of homogeneity on integration.

Our finding here can be used also to understand the debate of institutional convergence concomitant with regional integration. Risse *et al.* (2001) refer to domestic level convergence as Europeanization, that is, the development of distinct structures of governance at the European level. They focus on a unidirectional causality – namely, how European integration affects domestic factors. However, they do mention that the causal pathway can be in the other direction as well, but do not focus on this in their edited volume (2001: 4). Their case studies indicate that the EU does influence domestic policy areas by making them increasingly similar. Our research confirms this, but also adds the effect of domestic institutions on further integration. Mosley (2000) argues that the convergence of domestic institutions, as a result of globalization, is hard to find. However, his results do show that the degree of convergence varies across regions. Our findings indicate that the degree of homogeneity of domestic institutions within a regional group also varies across regions, but this variation is accounted for by the direct impacts regional integration and domestic institutional homogenization have on one another. Therefore, the variation of convergence across regions is best understood not by globalization, but by the variation of the two effects across regions. Garrett and Lange's (1995) findings imply that the distributional pressures associated with democratic politics would make convergence difficult to reach under globalization. However, at the regional level, our findings indicate that domestic institutions tend to be homogenized in the process of successful integration.

Each of these works indicates reservations about whether convergence is actually happening among industrialized societies. In a strict sense, as long as sovereignty exists in the hands of the nation-states, it is difficult, if not impossible, for perfect convergence to happen. Both homogeneity and integration in our paper refer to incremental change. They are variables, rather than specific states. While perfect convergence of economic institutions among member states may never happen, The European Union, as the example of the most successful regional integration in the last and this century, shows that a higher degree of homogeneity of its member countries' economic institutions leads to a higher degree of their integration, and vice versa.

IMPLICATIONS AND CONCLUDING REMARDS

The combination of the statistical analysis and descriptive exploration of the above four regional groups confirms our theory that successful regional integration requires that domestic institutions and the integration process reinforce each other. While they may have different triggers and

needs, these regional experiences actually have commonalties in their dynamic processes. In this section, we discuss some cases of integration that have not been in existence for long, which preclude effective statistical analysis. In particular, we examine MERCOSUR, NAFTA and APEC in light of our findings.

MERCOSUR

The Treaty of Asunción (1991) established MERCOSUR's objectives: the liberalization of intraregional trade; a common external tariff; harmonization of laws and regulations concerning rules of origin; and the mutual consultation on macroeconomic policies (Pereira, 1999). The regional integration project, while young, has the potential to influence domestic institutions with respect to homogeneity in a few ways. The statement of Las Leñas decrees that democratization and consolidation of democracy in the region are among the major goals of MERCOSUR (Peña, 1993). The initial negotiations of MERCOSUR began with Brazil and Argentina in the midst of their consolidation efforts (Fritsch and Tombini, 1994). The promise of democratization in Paraguay and continuation of democratic consolidation in Uruguay led the way for their membership (Hufbauer and Schott, 1994). In the light of our theory these changes may lead to an increase in the degree of political and economic homogeneity and contribute to regional integration.

However, we may see lengthy lag times before domestic institutions increase homogeneity that would influence the progress of regional integration, similar to the situation found in both ANCOM and CACM. In particular the balance of interests in Brazilian trade policy still favours the import competing sector over the export sector. This skewed distribution may cause some time to pass before the process of integration will benefit from the homogeneity effect. Also there have been signs that Brazil wishes to participate in its own regional power building (da Motta Veiga, 1999) causing a long lag time while it reviews the effects of MERCOSUR on its economy. Smaller members will defer continuation of regional integration while Brazil ponders its next move.

NAFTA

Like MERCOSUR, NAFTA is a relatively young effort in regionalism but already demonstrates the ability to influence domestic institutional homogeneity. During negotiations it was clear that for Mexico, capital mobility in the form of direct investment, needed to be an imperative part of the final treaty (Ros, 1992). Debt-led growth and loan defaults in the two previous decades resulted in lowered incentives for capital flows into Mexico (Bulmer-Thomas, 1994). The great need for capital on Mexico's part and the security required by Canadian and US investors prompted a stronger continuation of the economic liberalization efforts begun under the de la Madrid administration (Lustig, 1993).

Other potential homogenization vehicles are found in the two NAFTA supplemental agreements. The labour side agreement established the North American Commission on Labor Cooperation, a consultation group on domestic labour standards and evidenced an effort to produce compatible labour practices and to bring Mexico more in-line with Canadian and US labour laws (Hufbauer and Schott, 1993). The environmental side agreement established the North American Commission for Environmental Cooperation (NACEC), requiring the three members to improve and enforce domestic environmental laws (Hufbauer and Schott, 1993). The NACEC assists in monitoring environmental conditions of existing and newly created industrial areas in order to safeguard land, water and air resources from any harmful effects of economic growth projected under NAFTA. Like the labour agreement, the environmental agreement is an effort to bring Mexican regulations and enforcement closer in-line with those of Canada and the US. While these side agreements have strong language toward commitment in these areas, the results are mixed at best.

Whether the homogenization of the domestic institutional variables will lead to further integration remains to be seen. NAFTA may appear to be closer in this regard to the EU than other integration efforts found in the Americas. If the current trend continues, we may see a commitment towards homogeneity on the part of Mexico to further the integration efforts in the region. Since Mexico has a less than perfect record in the stabilization of its economy, NAFTA may turn out to be the appropriate vehicle for the construction of sound and sustainable economic policies. Given the Fox administration's establishment of goals to further integration, it seems likely that Mexico will continue its commitment for the future development of NAFTA.

APEC

While the plans, commitments and promises present a seemingly sanguine future for regionalism under APEC, certain problems exist for integration. Currently only verbal signalling of the steps that will be taken to produce the required homogeneity and integration effects has occurred. APEC's present goals include hopes to develop 'open regionalism' for free trade and investment by 2010 for industrialized nations and 2020 for developing countries (Lawrence, 1996). Open regionalism refers to the establishment of trade and investment liberalization among APEC members as well as between APEC and non-APEC members (Edwards and Wong, 1996). The mechanism envisioned for nonmembers would follow the most favoured nation (MFN) principle found in the World

Trade Organization (WTO). The Osaka Action Plan (1995) provides that the implementation of liberalization will occur at the discretion of individual members (Edwards and Wong, 1996). These individual plans not only include the dismantling of impediments to international transactions, but also include domestic policies, regulatory systems, and product standards (Lawrence, 1996). The plan also asks each member initiate early reforms in order to demonstrate sincerity to commitments outlined at Osaka. However, no commitment was made for 'sensitive industries', and various domestic institutions remain politically tied to protected sectors (Edwards and Wong, 1996). Resolve to settle this issue has yet to materialize (Edwards and Wong, 1996). Therefore, while the APEC members have already established a significant degree of economic interdependence, economic integration may be a very long-term reality given the findings of this paper.

APPENDIX A

1. Trade in Goods and Services

0 = No agreements made to lower tariffs and non-tariff barriers
1 = Preferential Trade Agreement
2 = Partial Free Trade Area
3 = Full Free Trade Area
4 = Customs Union
5 = No barriers among member countries

2. Degree of Capital Mobility

0 = No agreements made to promote capital mobility
1 = Foreign Direct Investment allowed in limited form
2 = Capital withdrawal allowed
3 = Full access for foreign investment and capital withdrawal, except for national government procurement
4 = Full capital mobility expect for large-scale merges and acquisitions
5 = Full capital mobility without restriction

3. Degree of Labour Mobility

0 = No agreements made to promote labour mobility
1 = Right of movement granted for select professions
2 = Full right of movement
3 = Transferability of professional qualifications granted
4 = Transferability of pensions and other retirement devices
5 = Full freedom of movement

4. Level of Supranational Institution Importance

0 = No supranational institutions
1 = Establishment of nominal institutions

2 = Information gathering and advisory role
3 = Ability for institutions to amend proposals
4 = Ability for institutions to veto proposals
5 = Supranational institutions operate as primary decision node

5. Degree of Monetary Policy Coordination
0 = No monetary policy coordination
1 = Consultation regarding policy
2 = Commitment to maintain parity
3 = Coordinated interventions
4 = Regional Central Bank establishment
5 = Single currency

6. Degree of Fiscal Policy Coordination
0 = No fiscal policy coordination
1 = Consultation regarding policy
2 = Commitments regarding deficit spending and taxation
3 = Sanctions regarding breaking commitments
4 = Uniform tax code
5 = Single budget

APPENDIX B: ECONOMIC INSTITUTIONS AND FREEDOM

1. Money and inflation (protection of money as a store of value and medium of exchange).

A. verage annual growth rate of the money supply during the last five years minus the potential growth rate of real GDP.
B. Standard deviation of the annual inflation rate during the last five years.
C. Freedom of citizens to own a foreign currency bank account domestically.
D. Freedom of citizens to maintain a bank account abroad.

2. Government operations and regulations (freedom to decide what is produced and consumed).

A. Government general consumption expenditures as a percent of GDP.
B. The role and presence of government-operated enterprises.
C. Price controls – the extent that businesses are free to set their own prices.
D. Freedom of private businesses and cooperatives to compete in markets.
E. Equality of citizens under the law and access of citizens to a non-discriminatory judiciary.

F. Freedom from government regulations and policies that cause negative real interest rates.

3. Takings and discriminatory taxations (freedom to keep what you earn).

A. Transfers and subsidies as a percent of GDP.
B. Top marginal tax rate.
C. The use of conscripts to obtain military personnel.

4. Restraints on international exchange (freedom of exchange with foreigners).

D. Taxes on international trade as a percent of exports plus imports.
E. Difference between the official exchange rate and the black market rate.
F. Actual size of trade sector compared to the expected size.
G. Restrictions on the freedom of citizens to engage in capital transactions with foreigners.

Source: Gwartney and Lawson (1997).

NOTES

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1 See Keohane and Hoffman (1991), Dougherty and Pfaltzgraff (1990), Milward and Sørensen (1994), Caporaso and Keeler (1995), Keohane and Nye (1975), and Hoffmann (1966).

2 Using the EMU as a case study, Jones, Frieden and Torres (1998), however, do not find a relationship between opposition to the EMU and the population or the territorial size of a country.

3 Sometimes, countries create regional agreements only to find unintended consequences, thus requiring further adjustments. Bayoumi *et al.* (2000) evaluate the suitability of a regional monetary arrangement for ASEAN. The authors find that ASEAN countries are not as close in levels of economic or financial development as European countries, and that economic shocks may have larger costs in the context of a shared currency for ASEAN countries due to the vulnerability of member countries to dissimilar shocks. However, a common currency would facilitate regional trade by decreasing transaction costs and trade disruptions caused by floating exchange rates.

4 Higher growth can occur in two related ways. The removal of transaction barriers can reduce the costs of goods and services resulting in lower prices.

Also, increases in producer competition generate efficiencies through a better allocation of production inputs and thereby fully realizing individual country comparative advantage. Therefore the calculation to favor integration among the political leadership is a trade-off between the incentive of longer-term gain and the disincentive for short-term social displacement.

5 Frequently, preconditions for entering economic agreements undertake political dimensions. When Brazil and Argentina entered into the partnership called the Argentina-Brazilian Economic Integration Program (ABEIP), their political agenda included the strengthening of liberal principles in their newly emerging democratic governments (Manzetti, 1992).

6 As Haggard points out, 'The most substantial difference between the APEC and its Western Hemisphere counterparts has to do with fundamental political processes and commitments. Not only are the means for achieving cooperation unclear, but the very nature of the commitments to be made are both equivocal and contested' (1997: 45).

7 The following sources were consulted in attributing a value for each category: Abbott, 1992; Bouzas and Ros, 1994; Castro, 1982; Edwards, 1996; Eng Fong, 1988; Holland, 1994; Heywood, 1990; Hufbauer and Schott, 1993a and 1993b; Irvine, 1982; Lawrence, 1996; Palmer and Reckford, 1987; Smith, 1993; Swee-Hock, 1980; Urwin, 1991; Williams, 1991; Wood and Yesilada, 1996.

8 In order to create aggregate scores comparable across nations, a 0 to 10 rating scale is used for each sub-component in the index, with 10 representing the highest possible rating and 0 the lowest. Countries are assigned higher component values where their institutions and policies are more consistent with economic freedom. Then, weights are generated for these scores. The weights are based on a survey of economic experts who are asked to provide their views concerning the weights that should be attached to each component.

9 Like every other ordinal variable created under a set of criteria – e.g. the political rights and civil liberties data by Freedom House or the corruption indices in the Business Environment Risk Intelligence (BERI) and the International Country Risk Guide (ICRG) – our theoretical variables have much room for refinement. However, our confidence in their robust measure of the phenomena of our interest in the paper has increased with their use in various publications (e.g. Efird and Genna, 2002).

10 The aggregate score for the EU is dragged down by its taxation and government regulation, due to some EU members having liberal social security and welfare policies. Some Asian economies have very high economic freedom. The levels of economic freedom in Hong Kong and Singapore have been the highest and the second highest, respectively, in the world. One problem for further integration for these economies lies in the variance of the economic systems across regional groups, particularly, APEC.

11 While this paper does not specifically deal with the relationship between economic institutional freedom and regional integration, we believe that once a minimum level of economic freedom is satisfied institutional homogeneity determines the success of integration.

12 Parametric results for each individual regression are available upon request.

13 They use an Instrumental Variable regression model to estimate the effect of trade linkage on economic coordination, and their statistical results are robust with various specifications. However, the instruments for trade (i.e. distance, common border and language) leave room for improvement, as they by themselves may not proxy trade well.

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