POLICY CONVERGENCE IN LATIN AMERICA AND THE CARIBBEAN

By

Ms. Mahalia Jackman and Mr. Winston Moore*

*Department of Economics
The University of the West Indies
Cave Hill Campus, Cave Hill
St. Michael, Barbados
Email: winston.moore@uwichill.edu.bb
Tel.: 1 (246) 417-4279
Fax: 1 (246) 417-4260

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ABSTRACT

There have been numerous attempts at the formation of regional policy groupings within Latin America and the Caribbean (LAC). This paper analyses whether or not there has been any convergence in the macroeconomic policies pursued by member countries using realised correlation analysis and panel unit root tests of convergence for 26 LAC countries and observations covering the period 1970 to 2006. The study finds evidence of comovement in monetary, fiscal, trade and capital account policies, the strength of association rising over time. The main determinants of the strength of comovement were similarity in economic size, economic shocks, transportation costs and population size.

JEL Classification: E63; O54; C22
Keywords: Policy Convergence; Realised Correlation Ratios; Panel Unit Roots; Latin America and the Caribbean

1. Introduction

There has been renewed focus on the forging greater links within Latin America and the Caribbean (LAC) in recent years as means of facing the changes that are taking place in the international arena and crises that afflicted the region during the 1980s and 1990s (ECLAC, 1994). There are four main regional groupings: (1) the Southern Common Market (MERCOSUR), consisting of Brazil, Argentina, Uruguay, Venezuela and Paraguay; (2) the Andean Community made up of Bolivia, Colombia, Ecuador, Peru and Venezuela; (3) the Central American Common Market (CACM) comprising Guatemala, El Salvador, Honduras and Nicaragua, and; (4) the Caribbean Community and Common Market (CARICOM) which embraces 15 Caribbean countries.

One of the essential elements of furthering the goal of regional integration is policy convergence. Policy convergence occurs when the macroeconomic policies pursued by countries move toward being identical. Drezner (2001) contends that policy convergence in a regional grouping can occur either through structural factors or the power of self-directed agents. Structural theories argue that external pressures on states constrain countries to pursue one universal policy, while agent-based models assume that countries choose to implement some acceptable bounds on macroeconomic policies, but not necessarily identical rules or regulations.

The pressure to implement similar policies can either be due to economic or ideological factors. Most regional groupings explicitly attempt to remove restrictions on the free flow or movement of goods, services and capital across borders. This increased mobility, however, can itself lead to convergence as non-converging states are penalised by capital flowing to more competitive territories (Fischer, 1998; Stiglitz, 2000). Alternatively, demands for policy convergence can occur for ideological reasons, as countries fear that if they do not adopt similar policies they may be viewed as laggards (Drezner, 2001).

Theoretically, policy convergence should increase trade and economic growth. McCallum (1995) contend that policy convergence can reduce 'border effects' and lead to fewer trade disputes and thus lower transactions costs. Similarity in macroeconomic policies should also lead to greater economic integration as it should increase intra-regional trade in goods, services

and investment, as economic agents in two or more countries will receive the same treatment from governments.

There are also empirical reasons to expect that policies in LAC should be converging. One of the main reasons is that a number of recent studies have found evidence of long-run output convergence. Holmes (2005), using annual data for the period 1960-2000 and a tests for convergence based on the first largest principal component, finds that there is strong convergence among CACM countries, and weak long-run convergence among the Latin American Integration Association countries. Similarly, Dobson and Ramlogan (2002) find evidence of unconditional beta convergence (poor countries growing faster than relatively richer states), but not sigma convergence (equalisation in income distribution). Provided that per capita output growth in the region is converging, it suggests that there is some underlying policy convergence driving this process. In addition, a number of countries have implemented structural reforms in order to reposition their economies. Morley, Machado and Pettinato (1999) quantified the process of structural reform in Latin America in five main areas: trade reform, financial liberalisation, tax reform, liberalisation of external capital transactions and privatisation. The authors report that starting in 1985, there has been widespread policy convergence in three areas of reform.

This paper contributes to the existing literature in a number of ways. First, the study employs statistical tests for policy convergence rather the indices-based approach used by Morley, Machado and Pettinato (1999). Second, estimates of the speed of convergence and change in the speed of convergence over time are given. And finally, an empirical assessment of the potential determinants of the speed of policy convergence is provided.

The remainder of the paper is structured as follows. After the introduction, Section 2 gives a review of previous research on policy convergence. Section 3 present estimates of policy convergence in LAC while Section 4 undertakes an evaluation of the factors that influence the degree of convergence. A brief summary and policy implications are contained in Section 5.

2. Literature Review

Economists have long been intrigued with the topic of convergence. As such, there is a burgeoning body of theoretical and empirical literature that focuses on this issue. The policy fields that have been discussed most frequently include environmental, social, fiscal, monetary, banking regulation and health policy. In this review, the authors focus on the empirical findings of the monetary and fiscal policy convergence literature.

Most studies over the last fifteen years exclusively cover European and Organization for Economic Cooperation and Development (OECD) countries as most authors are interested in the effects of globalisation and Europeanisation. In Europe, studies on monetary policy convergence have emerged as the most popular type of policy convergence research. The early literature dealt primarily with the performance of the European Monetary System (EMS). These studies (for example, Hagen and Fratianni, 1990; McDonald and Taylor, 1991) sought to determine whether the EMS countries were capable of maintaining the necessary currency peg by following similar macroeconomic policies. Usually, the test of this hypothesis was framed in the convergence between the monetary policies of various EMS countries and the Federal Republic of Germany where the existence of cointegration between the series served as a test of the convergence hypothesis. The rationale was that the Bundesbank had the most credible monetary policies and in order for EMS member countries to maintain the peg, their policies would have to converge towards those of the Bundesbank.

With the successful establishment of the European Union (EU), researchers have shifted their focus to convergence between EU members and transition economy candidates. For example, Kočenda (2001) reports considerable monetary convergence whilst Brada and Kutan (2002), using cointegration analysis, found limited monetary convergence. Implicit in these studies was the assumption that the degree of policy convergence remained constant over time. According to Brada, Kutan and Zhou (2005), this is an unreasonable assumption since the time period covers disparate situations such as the transition recession, stabilisation, and then recovery and conscious efforts to prepare for EU membership. Using the rolling cointegration technique, they found that countries who recently joined the EU exhibited time-varying cointegration with the reference countries over much of the sample period investigated.

Other studies seek convergence in terms of the outcome of monetary policy i.e. inflation. Kočenda and Papell (1997) use panel unit root tests to find evidence in favour of inflation convergence. Beck and Weber (2003) performed a beta and sigma convergence analysis of regional inflation data for US, Japan and Europe over the period 1981-2001. They showed that inflation dispersion among European regions is higher than in the US or in Japan. Busetti et al (2006), instead, studied convergence by means of univariate and multivariate unit root tests on inflation differentials. Their results also provide evidence of strong inflation convergence. The authors also evaluated the stability of inflation rates among the member countries after the birth of the Euro. Interestingly, these results showed divergent behaviour implying that though inflation rates are converging, a significant degree of country heterogeneity still prevails in the Euro-area.

The evidence on fiscal policy convergence to date has been mixed. For example, Wolf (2002), using the sigma-convergence approach, reported strong fiscal convergence for EU member countries. Similar findings have also been obtained for OECD countries (Olewiler, 1999; De Bandt and Mongelli, 2000; Swank, 2003; Bouget, 2003) were able to confirm the convergence hypothesis. In contrast, Kautto and Kvist (2002) found limited convergence between the EU-15 and Norway and Kočenda, Kutan and Yigit (2006), using unit root tests developed by Perron and Vogelsang (1998) and Tomljanovich and Vogelsang (2002), and reported evidence against the fiscal convergence hypothesis

The literature on policy convergence for a particular geographical area outside of European and OECD regions is far from immense. Recently, there have been a number of studies that assess the feasibility of establishing an East Asian Monetary union. Sato and Zhang (2006) adopted the Johansen and Juselius (1990) maximum-likelihood procedure to examine the co-movements of real outputs among East-Asian economies. Their results suggest there are long-run synchronous movements of real outputs in the North East Asian area.

3. Measuring Policy Convergence

This study investigates convergence in the monetary, fiscal, trade and financial policies of LAC countries. The database employed in this study contains cross-sectional time-series data on 26 countries from 1970 to 2005 from the United Nations (UN) National Accounts Main Aggregates database and the International Monetary Fund's International Financial Statistics (IFS) database (2007). Monthly observations on M0, M1 and prices are obtained from the IFS database and are expressed in log changes. The interest rate spread is calculated as the difference between loan and deposit rates; both series are taken from the IFS database. The other indicators are only available on an annual basis. Real government consumption and real trade expressed as ratios of GDP and are calculated from series obtained from UN's database. FDI and portfolio investment are both taken from the IFS database. The averages for all the variables are presented by region in Table 1.

Two approaches are employed to investigate macroeconomic policy convergence in LAC: (1) realised correlation ratios, and; (2) panel unit root analysis. The realised correlation approach, introduced by Andersen, et al. (2003), attempts to build a measure of similarity between two series by using the moments of the distribution of the variables. The authors define the monthly change in the particular variable as $x^i_{t,m} = ln(p^i_{t,m} / p^i_{t,m-1})$, where $p^i_{t,m}$ is the value of the policy variable of *i-th* country, in year t and in month m. A consistent estimate of annual volatility can then be obtained based on the sum of the squared monthly changes:

$$\sigma^2_{t,i} = \sum_{m=1}^{M_t} (x^i_{t,m})^2 , \tag{1}$$

while a measure of realised covariance between the annual changes in policy of country i and country j is derived from:

$$\sigma^{ij}_t = \sum_{m=1}^{M_t} x^i_{t,m} \bullet x^j_{t,m} \tag{2}$$

By combining these two moments, a time-varying measure of the co-movement between LAC countries is obtained. The realised correlation ratio ($\rho^{i,j}$) is calculated as:

$$\rho_t^{i,j} = \frac{\sigma_t^{i,j}}{\sigma_t^i \bullet \sigma_t^j} \tag{3}$$

Compared to standard coefficients of correlations, the realised correlation approach improves the accuracy of the measure of association between variables measured at high frequency (Andersen et al., 1999). Pairwise realised correlations are estimated for each of the 26 LAC countries relative to the sample mean for the group to which they belong and for 35 years of data (1970 to 2005). When only annual data is available, annual changes in the policy indicators are calculated and the realised correlation ratios are derived for 10-year intervals.

The realised correlation ratios between the policy indicators for each region and for four different time periods (1970s, 1980s, 1990s and 2000-2005) are given in Table 2. For most regions and indicators there is, in general mixed evidence on the correlation between the monetary policy variables. In the case of the money supply variables there is evidence that the correlation between M0 and M1 fluctuations in MERCOSUR and the Andean Community are strengthening. However, there is little or no evidence of comovement in the money supply variables for CACM and CARICOM. In the case of the inflation and interest rate spreads, there is no consistent trend in the realised correlation ratios. There only seems to be episodic comovement for the four regions under consideration.

The comovement in trade and capital account policies in the four regions under consideration appears to be rising, but there is litter evidence of fiscal policy integration. The realised correlation ratios in relation to trade for MERCOSUR, the Andean Community and to a lesser extent CACM strengthened between the 1970s and the latter period under investigation. In contrast, MERCOSUR and CARICOM witnessed greater comovement in FDI flows to each region. The finding of episodic comovement in fiscal policies suggests that this policy tool is still primarily employed by most countries in LAC to achieve domestic objectives. The realised correlation ratios did not provide any apparent trend in the comovement of portfolio investment flows to each of the four regions.

The realised correlation approach provides an estimate of the strength of association of economic policies in LAC. However, the approach ignores the dynamic properties of the variables under

consideration. Based on the early work of Bernard and Durlauf (1996) and Quah (1992), two series are said to be converging if their difference is stationary over the period of observation. Building on this approach, Ben-David (1996) outlined a technique that combines data on cross-sections of individual time series. The framework assumes that the change in economic policies (x_{it}) follows an autoregressive process:

$$x_{it} = \alpha + \phi x_{it-1} + u_{it} \tag{4}$$

The differentials in economic policies for a particular country grouping can be described by

$$x_{it} - \bar{x}_t = \alpha + \phi(x_{it-1} - \bar{x}_{t-1}) + u_{it} \tag{5}$$

where $\bar{x}_t$ is region-specific mean. In this approach, $|\phi| < 1$ indicates that policies within the regional grouping are converging, while $|\phi| > 1$ suggests that policies are diverging. Monte Carlo simulations conducted by Ben-David (1996) shows that ϕ provides a robust estimate of policy convergence. The speed of convergence, the number of time periods that it takes for the gap to be cut in half, is given by $\ln(0.5)/\ln(\phi)$. To remove any possible serial correlation, the regression equations are augmented by lags of the dependent variable. The tabulated critical values provided by Levin, et al (2002) are employed to assess the significance of ϕ.

Tables 3 and 4 report the tests of convergence for each region and policy variable with and without intercepts. Busetti, Forni, Harvey and Venditti (2006) argue that for detecting absolute convergence it is appropriate to run unit root tests without intercept terms, otherwise their lower power might provide spurious evidence for the no convergence hypothesis. Looking first at the results without the intercept (Table 3), the coefficient ϕ is significant for most of the groups and policy variables, indicating that policies in the four regions appear to be converging. The only exceptions were trade in the Andean Community and portfolio investment in CACM. For the money supply indicators, prices and interest rate spreads MERCOSUR had the fastest speed of convergence. In contrast, the Andean Community and CACM had the smallest half-lives for fiscal policy convergence, while CARICOM had a relatively slower speed of convergence. Similar results were obtained in the case of trade as a percentage of GDP. Most countries had relatively slow speeds of convergence in terms of the FDI and portfolio investment indicators.

However, CARICOM had the fastest rate of convergence in terms of FDI flows, while CACM had the highest rate of convergence in terms of portfolio investment.

The convergence tests with the intercept (Table 4) were broadly consistent with those obtained when an intercept was excluded from the test equation. The relative speeds of convergence are fairly similar to those reported in Table 3. There were only two main differences between the two tables. First, the results presented in Table 4 suggest that there is indeed trade policy convergence in the Andean Community. And second, the speeds of convergence in relation to government consumption, trade, FDI and portfolio investment are relatively slower for all the regions.

4. Determinants of Policy Comovement between LAC Countries

Both the realised correlation ratios and the convergence coefficients both indicate that there is some similarity in the co-movement of economic policies in each of the four regions. For policymakers seeking suggestions to deepen integration, the next logical question to ask are what factors influence the co-movement of economic policies. To investigate this issue the paper employs a gravity-type model that allows for the combination of both cross-sectional and time series information. While gravity equations have been employed in numerous other aspects of economics, this is the first time it has been applied to the issue of policy co-movement. The estimated model is of the form:

$$p_{it} = \alpha + \delta_i + \beta(x_{it} - \bar{x}_{jt}) + \varepsilon_{ijt} \tag{6}$$

where p_{it} are the realised correlation ratios calculated earlier, α is the regression intercept, δ_i are cross-section effects, $(x_{it} - \bar{x}_t)$ are the explanatory variables obtained by subtracting the value of the variable for country i from the mean value of that variable of region j and ε_{it} is an error term with classical properties. The model is estimated via generalised least squares to address issues of cross-section dependence and heteroskedasticity (see Peersman and Smeets, 2005). The issue of heteroskedasticity is especially important when using correlation as the measure of comovement as the correlation coefficients tend to have an upward bias during periods of significant volatility (Forbes and Rigobon, 2002).

The explanatory variables considered in the regression equation are similar to those used by economist to model international trade flows. Economic size (proxied by real GDP in US dollars) is used to capture the mass of countries in the economic grouping. A negative coefficient on this variable would indicate that smaller countries tend to converge faster than larger countries. A positive coefficient, in contrast, would suggest that larger countries, due to a smaller number of economic frictions, have a relatively faster speed of policy convergence. The equation also includes a measure of the similarity of economic shocks. The measure is obtained by calculating the standard deviation of the per capita GDP growth rate for each country over each decade. A priori it should be expected that countries that are subject to comparable economic shocks should implement relative similar policies over time. The figures on real GDP are taken from the United Nations (UN) National Accounts Main Aggregates database.

The regression equation also captures the role of distance in the determination of policy convergence. Distance can be considered a proxy for transportation costs or the time elapsed during shipment. Distance is calculated using the great circle formula:

$$D_{ij} = 3962.6 \arccos[\sin(latitude_i).\sin(latitude_j)] + [\cos(latitude_i).\cos(latitude_j).\cos(longitude_i - longitude_j)] \quad (7)$$

where longitude and latitude are expressed in radians (obtained by multiplying the location in degrees by 57.3 and -57.3 respectively) and where j stands for region. The common criticism of this measure is that it underestimates the true distance between countries since most flights avoid the north and south poles. However, this error should be fairly small since the paper focuses on one region. To better reflect transportation costs, the distance variable is interacted with average the average crude oil price obtained from the International Monetary Fund's (IMF's) International Financial Statistics (IFS) CD-Rom (May 2007).

The final two variables included in the regression are population and political similarity. The population variable captures the demand potential that a country exerts on other countries in the regional grouping. On the other hand, the political similarity variable is based on the hypothesis that countries with relatively similar political systems should pursue similar economic policies. The variable is derived from the scores of political freedom derived by Freedom House (www.freedomhouse.org).

Table 5 presents the coefficients estimates for Equation (6) for the various indicators of policy convergence. The results are generally consistent across the various policy indicators. The coefficient on economic size is negative in six out of the eight policy regressions reported, suggesting that smaller countries have a faster speed of policy convergence. Only in the case of portfolio investment, do larger countries tend to have a relatively faster speed of convergence, possibly due to their size and level of capital market development.

The results in relation to economic volatility are mixed. While the similarity of economic shocks tends to foster faster convergence in M1, government consumption and trade, the opposite is the case for inflation, FDI and portfolio investment. The negative coefficient obtained for these three policy variables could suggest that countries in LAC respond to similar economic shocks using relatively different time paths for monetary policy and restrictions on the capital account.

In agreement with a priori expectations, countries with relatively similar transportation cost (countries that are geographically closer) and political systems tend to have relatively faster speeds of policy convergence. Similarity in population size also seems to play a role in fostering policy convergence in the region. Only in the case of M0, government consumption and trade was the coefficient on the population variable negative. The negative coefficient on the M0, government consumption and trade variables may reflect the intervention of policymakers to offset the effects of a particularly dominant country on the regional grouping.

5. Conclusion

This paper investigates the issue of policy convergence in LAC countries. For most regions and indicators there was a general upward movement in correlation between the policy variables for each region. However, the strength of this association differed for particular policy indicators. To therefore provide statistical tests of the strength and speed of this association, the study also employs panel unit root tests for each region and policy indicator. In most of the equations, the estimated convergence coefficient was statistically significant and less than one, indicating that policies within the four groups are converging. For the money supply indicators, prices and interest rate spreads MERCOSUR had the fastest speed of convergence. In contrast, the Andean

Community and CACM had the smallest half-lives, while CARICOM had a relatively slow speed of convergence in terms of fiscal and trade policies. Most countries had relatively slow speeds of convergence in terms of the FDI and portfolio investment indicators.

The study then estimated gravity-type equations to evaluate the factors that deepen policy integration. The results were fairly consistent across the different economic policies: (1) smaller countries have relatively faster speeds of policy convergence; (2) similarity of economic shocks enhanced convergence; (3) countries with comparable transportation costs (countries that are geographically closer) and political systems were more inclined to adopt similar policies, and; (4) resemblance in population size fosters policy convergence.

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Table 1: Region Averages for Policy Variables

Region	Change in M0	Change in M1	Change in Prices	Interest Rate Spreads (%)	Gov. Cons. (ratio to GDP)	Trade (ratio to GDP)	FDI (ratio to GDP)	Port. Inv. (ratio to GDP)
MERCOSUR								
Argentina	0.121	0.095	0.046	1.285	0.131	0.202	0.018	0.002
Brazil	0.077	0.090	0.069	39.114	0.136	0.167	0.017	0.006
Paraguay	-0.002	0.009	0.082	11.042	0.064	0.661	0.012	0.000
Uruguay	0.042	0.037	0.097	19.191	0.127	0.530	0.013	0.015
Venezuela	0.127	0.151	0.226	-14.241	0.157	0.767	0.024	0.019
Andean Community								
Bolivia	0.086	0.086	0.059	15.704	0.131	0.472	0.045	0.000
Colombia	0.041	0.063	0.126	-3.809	0.152	0.430	0.025	0.010
Ecuador	-0.052	-0.054	0.239	-15.351	0.127	0.697	0.034	0.018
Peru	0.132	0.142	0.077	18.389	0.121	0.392	0.025	0.005
CACM								
El Salvador	0.057	0.017	0.096	-5.356	0.088	0.682	0.017	0.007
Guatemala	0.085	0.116	0.122	-1.639	0.065	0.540	0.016	0.001
Honduras	0.084	0.049	0.180	-7.099	0.124	0.809	0.024	0.000
Nicaragua	0.486	0.451	0.385	-116.379	0.192	0.614	0.017	0.000
CARICOM								
Antigua and Barbuda	0.076	0.108	n.a.	n.a.	0.198	1.686	0.050	0.001
Barbados	0.097	0.102	0.063	1.533	0.181	1.154	0.007	0.016
Belize	0.088	0.101	0.057	n.a.	0.175	1.213	0.030	0.018
Dominica	0.076	0.076	0.055	3.838	0.217	1.128	0.101	0.032
Grenada	0.091	0.094	0.058	3.964	0.178	1.116	0.083	0.008
Guyana	0.074	0.067	0.058	3.716	0.224	0.205	0.124	0.004
Jamaica	0.090	0.082	0.134	-5.216	0.152	1.065	0.041	0.000
St. Kitts and Nevis	0.111	0.110	0.039	2.064	0.200	1.277	0.141	0.011
St. Lucia	0.081	0.095	0.059	3.840	0.182	1.214	0.082	0.008
St. Vincent and the Grenadines	0.232	0.229	0.157	-18.989	0.246	1.434	0.101	0.001
Suriname	0.066	0.094	0.044	4.593	0.253	1.008	0.111	0.001
Trinidad and Tobago	0.098	0.095	0.083	1.911	0.172	0.842	0.058	0.003

Table 2: Realised Correlation Ratios

Region	Change in M0	Change in M1	Change in Prices	Interest Rate Spreads (%)	Gov. Cons. (ratio to GDP)	Trade (ratio to GDP)	FDI (ratio to GDP)	Port. Inv. (ratio to GDP)
MERCOSUR								
1970s	n.a.	n.a.	0.399	n.a.	n.a	n.a	n.a	n.a
1980s	0.343	0.351	0.877	0.748	0.359	0.508	0.323	0.309
1990s	0.571	0.603	0.795	0.389	0.443	0.744	0.372	0.192
2000-2005	0.815	0.868	0.943	0.425	0.288	0.705	0.576	0.317
Andean Community								
1970s	n.a.	n.a.	0.434	n.a.	n.a	n.a	n.a	n.a
1980s	0.305	0.237	0.614	0.188	0.283	0.533	0.456	0.092
1990s	0.365	0.326	0.883	0.201	0.289	0.807	0.563	0.212
2000-2005	0.491	0.697	0.884	0.427	0.507	0.802	0.368	0.242
CACM								
1970s	n.a.	n.a.	0.758	n.a.	n.a	n.a	n.a	n.a
1980s	0.548	0.557	0.756	0.258	0.566	0.626	0.397	0.501
1990s	0.391	0.261	0.808	0.234	0.438	0.324	0.302	0.827
2000-2005	0.545	0.772	0.941	0.383	0.314	0.713	0.383	0.504
CARICOM								
1970s	n.a.	n.a.	0.608	n.a.	n.a	n.a	n.a	n.a
1980s	0.571	0.613	0.865	0.259	0.290	0.391	0.121	0.361
1990s	0.560	0.588	0.709	0.322	0.345	0.182	0.295	0.346
2000-2005	0.515	0.711	0.667	0.269	0.359	0.331	0.413	0.213

Table 3: Speed of Convergence (Without Intercept)

Region	MERCOSUR	Andean Community	CACM	CARICOM
Change in M0				
ϕ	-0.020	-0.028	-0.052	-0.135
$t-stat(\phi)$	-4.280	-4.750	-5.429	-12.902
$\ln(0.5)/\ln(\phi)$	0.177	0.194	0.234	0.346
Change in M1				
ϕ	-0.015	-0.027	-0.035	-0.093
$t-stat(\phi)$	-4.052	-4.233	-4.576	-10.022
$\ln(0.5)/\ln(\phi)$	0.165	0.192	0.207	0.292
Change in Prices				
ϕ	-0.012	-0.053	-0.037	-0.018
$t-stat(\phi)$	-5.043	-7.068	-5.988	-4.458
$\ln(0.5)/\ln(\phi)$	0.157	0.236	0.210	0.173
Interest Rate Spreads				
ϕ	-0.019	-0.111	-0.102	-0.053
$t-stat(\phi)$	-3.342	-6.488	-4.753	-5.801
$\ln(0.5)/\ln(\phi)$	0.175	0.315	0.304	0.236
Government Consumption				
ϕ	-0.073	-0.045	-0.046	-0.138
$t-stat(\phi)$	-4.077	-1.987	-2.026	-5.421
$\ln(0.5)/\ln(\phi)$	0.265	0.224	0.225	0.350
Trade				
ϕ	-0.067	-0.016	-0.073	-0.086
$t-stat(\phi)$	-2.705	-1.031	-2.279	-4.173
$\ln(0.5)/\ln(\phi)$	0.256	0.168	0.265	0.283
FDI				
ϕ	-0.495	-0.814	-0.517	-0.204
$t-stat(\phi)$	-4.812	-6.428	-4.296	-5.873
$\ln(0.5)/\ln(\phi)$	0.986	3.368	1.051	0.436
Port. Inv.				
ϕ	-0.855	-0.967	-0.085	-0.480
$t-stat(\phi)$	-9.424	-11.705	-0.510	-7.699
$\ln(0.5)/\ln(\phi)$	4.425	20.656	0.281	0.994

Table 4: Speed of Convergence (With Intercept)

Region	MERCOSUR	Andean Community	CACM	CARICOM
Change in M0				
ϕ	-0.023	-0.037	-0.060	-0.152
$t-stat(\phi)$	-4.568	-5.473	-5.085	-13.670
$\ln(0.5)/\ln(\phi)$	0.184	0.210	0.246	0.368
Change in M1				
ϕ	-0.017	-0.037	-0.038	-0.118
$t-stat(\phi)$	-4.363	-5.091	-4.763	-11.358
$\ln(0.5)/\ln(\phi)$	0.170	0.210	0.212	0.324
Change in Prices				
ϕ	-0.013	-0.053	-0.039	-0.030
$t-stat(\phi)$	-5.269	-7.115	-6.200	-6.549
$\ln(0.5)/\ln(\phi)$	0.160	0.236	0.214	0.198
Interest Rate Spreads				
ϕ	-0.035	-0.127	-0.111	-0.086
$t-stat(\phi)$	-4.32	-6.984	-4.853	-7.264
$\ln(0.5)/\ln(\phi)$	0.207	0.336	0.315	0.283
Government Consumption				
ϕ	-0.187	-0.039	-0.119	-0.283
$t-stat(\phi)$	-6.260	-1.506	-3.038	-8.082
$\ln(0.5)/\ln(\phi)$	0.413	0.214	0.326	0.549
Trade				
ϕ	-0.234	-0.289	-0.186	-0.212
$t-stat(\phi)$	-5.516	-5.395	-3.645	-6.697
$\ln(0.5)/\ln(\phi)$	0.477	0.558	0.412	0.447
FDI				
ϕ	-0.562	-0.909	-0.546	-0.375
$t-stat(\phi)$	-6.375	-7.061	-4.407	-8.213
$\ln(0.5)/\ln(\phi)$	1.203	7.265	1.145	0.707
Port. Inv.				
ϕ	-0.900	-1.020	-0.282	-0.525
$t-stat(\phi)$	-9.845	-12.380	-1.775	-8.168
$\ln(0.5)/\ln(\phi)$	6.579	-35.002	0.548	0.944

Table 5: Determinants of Policy Convergence

	Change in M0	Change in M1	Inflation	Interest Rate Spreads	Government Consumption	Trade	FDI	Portfolio Investment
Economic	-0.233	-0.194	-0.084	-0.167	0.016	-0.021	-0.048	0.230
Size	(0.003)***	(0.036)***	(0.004)***	(0.096)*	(0.216)	(0.064)	(0.083)	(0.084)***
Volatility	-0.007	0.071	-0.035	0.093	0.230	0.094	-0.127	-0.195
	(0.018)	(0.024)***	(0.020)*	(0.086)	(0.037)***	(0.020)***	(0.059)**	(0.034)***
Transportation	0.017	0.040	0.011	0.007	0.001	0.025	0.012	-0.018
Costs	(0.001)***	(0.004)***	(0.002)***	(0.004)*	(0.003)	(0.003)***	(0.016)	(0.009)**
Population	-0.384	0.578	0.324	0.236	-1.626	-1.510	0.229	1.403
Size	(0.012)***	(0.195)***	(0.156)**	(0.269)	(0.301)***	(0.098)***	(0.082)***	(0.463)***
Political	0.056	-0.019	0.013	0.086	0.037	0.049	0.029	0.033
Freedom	(0.008)***	(0.019)	(0.013)	(0.013)***	(0.023)	(0.089)	(0.047)	(0.025)
R-squared	0.944	0.924	0.672	0.701	0.529	0.570	0.409	642
S.E. of Regression	0.252	0.266	0.224	0.227	0.301	0.294	0.354	0.345
Observations	78	78	70	66	78	78	78	65

Notes: (1) Standard errors are provided in parentheses below the coefficient estimates.
(2) ***, ** and * indicates significance at the 1, 5 and 10 percent level.