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Regional Monetary Cooperation in Latin America

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Abstract

Latin American has the longest history of regional integration efforts in the developing world. This paper analyzes the experience of regional monetary cooperation in Latin America over the past three decades. This experience has been overall successful but also uneven, both in terms of country coverage and services provided. Although strictly not a form of monetary cooperation, development financing does play a useful complementary role by proving counter-cyclical or at least stable financing during crises, when private financing for developing countries dries up.

JEL Classification: O23, O54

Contents

1. INTRODUCTION

Latin American has the longest history of regional integration efforts in the developing world. They go back to the 1950s, when the initiatives to create a Central American Common Market and a broader Latin American integration process were launched. The treaties for both of them were signed in 1960, although in the second of these cases only as a framework for partial bilateral and subregional agreements among its members—the Latin American Free Trade Area (LAFTA), later transformed into the Latin American Integration Association (LAIA or ALADI according to its Spanish acronym). Two subregional agreements were created within this framework: the Andean Community (formerly Andean Group) in 1969 and the Common Market of the South (MERCOSUR for its Spanish acronym) in 1991.

These integration processes were also the context in which different forms of regional financial cooperation were born. They include LAIA's clearing system for intraregional payments still in place, and the former clearing system and associated stabilization fund of Central America, the only regional financial institutions that have failed. They comprise two successful development banks created within the context of Andean and Central American integration agreement, the former of which has become effectively regional in scope. Finally, the Andean community also created a common reserve fund, the now Latin American Reserve Fund (FLAR, for its Spanish acronym), which has successfully provided balance of payments financing for over three decades. Although the debt crisis of the 1980s temporarily undermined the process of regional integration, and led to the collapse of the two Central American Institutions previously mentioned, the LAIA clearing mechanism thrived and the Andean institutions continue to make major advances. The revival of regional integration efforts in the 1990s led to the strengthening of all these institutions, particularly the two development banks and FLAR. The recent global financial crisis has also led to a few new initiatives, particularly in the area of clearing systems for intraregional payments.

This paper analyzes the experience of regional monetary cooperation in Latin America over the past three decades.[1] This experience has been overall successful but also uneven, both in terms of country coverage and services provided. Although strictly not a form of monetary cooperation, development financing does play a useful complementary role by proving counter-cyclical or at least stable financing during crises, when private financing for developing countries dries out. For this reason, we will include this counter-cyclical function of development financing as a complementary form of monetary cooperation.

[1] For a prior analysis of regional financial cooperation in Latin America, see Ocampo (2006), Titelman (2006), and Ocampo and Titelman (2009).

The paper is divided in four parts. The first summarizes the authors' past reflections on the role for regional monetary cooperation[2] and takes a first look at Latin American institutions from that perspective. The second looks at regional payments agreements and the counter-cyclical role of development financing. The third analyzes the experience of the Latin American Reserve Fund, the most relevant institution of monetary cooperation in the region, which could be expanded to include all (or most) Latin American countries to become a full-fledged Latin American Monetary Fund. The fourth provides brief conclusions.

1.1 The Case for Regional Monetary Cooperation and the Latin American Experience

The basic case for regional financial cooperation is built upon the recognition that the globalization process that the world has experienced in recent decades is also a process of open regionalism. In the area of trade, where regional integration has a long history, it reflects the result of both policy and market-driven processes, which have nonetheless been uneven across the world. They are clearly strong among the industrial economies of Western Europe and North America. In the developing world, trade integration has proceeded at a faster pace in East Asia, where it is market-driven, followed by Latin America, where the history of integration is older and policy-driven. Latin American trade integration has followed regional trends and cycles. So, it grew strongly during the 1960s and 1970s but was severely affected by the debt crisis of the 1980s. It boomed in 1990–97 but was again affected by the succession of emerging country crises that started in East Asia in 1997 and spread strongly to Latin America, and particularly to South America, after the succeeding 1998 Russian default. It recovered in 2003–07 to be hit once more by the effects of the global financial crisis.

In terms of financial integration, regional and global institutions are clear complements in a heterogeneous international community. We could think of them as responding to the principle of "subsidiarity" in a multi-layered system of global governance. The potential role of regional institutions is enhanced by the need to fill the gaps in the world's current highly incomplete international financial architecture.[3] It is also based on strong political economy arguments, in particular the greater sense of ownership of regional and subregional institutions by member countries, and particularly by medium and small-sized countries, which is clearly associated to the stronger voice they have in these organizations. This creates a special relationship between them and member countries, one of which is the strong preferred creditor status. For

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[2] See Ocampo (2006). This was part of a broader project of regional financial cooperation throughout the world, which also included development financing.

[3] See in this regard Culpeper (2006), ECLAC (2002), Mistry (1999), Ocampo, (1999, 2002, 2006) and contributions to Volz and Caliari (2010).

these reasons, an international financial architecture that relies on a *network* of global, regional and subregional institutions is more balanced from a point of view of world power relations than a system based on a few world organizations (Ocampo 2006). A system of this type can therefore contribute both to a better global economy and to a better global polity.

The experience with regional financial cooperation also shows important challenges. In particular, low-income countries have a limited capacity to create viable regional financial institutions, and these organizations pose special problems of institution building and difficulties in guaranteeing equitable distributions of the benefits for their services (Culpeper 2006). These issues are interrelated, since institutional capacities and equitable integration are created through a gradual process of institution building. As we will see, access to adequate resources at times of crises is also a major issue for regional institutions from developing (including middle-income) countries, indicating that they must play a complementary role with global institutions in supporting countries during major financial disruptions.

The system of multilateral development banks, where the World Bank is complemented by several regional development banks and an even larger array of subregional and interregional banks (such as the Islamic Development Bank), is the best example of a complementary system of global and regional institutions. The regional and subregional development banks that already exist have shown the advantages of diversity, particularly in their capacity to adapt to the demands of specific regions. The Arab and Islamic world and Latin American and the Caribbean region stand out in relation to the development of subregional development banks.

In contrast, advances are much more limited in the area of monetary cooperation. There are a few monetary unions in the developing world, particularly in francophone Western Africa and among the small island of the Eastern Caribbean. The oldest functioning mechanisms of monetary cooperation involving larger developing economies are the Latin American Reserve Fund and the swap arrangements among members of the Association of Southeast Asian Nations (ASEAN).[4] The Chiang Mai Initiative of ASEAN+3 (the Republic of China [PRC], Japan and the Republic of Korea) is more recent and ambitious and includes a developed country partner. There are a few initiatives to create monetary unions, notably members of the Gulf Cooperation Council, which has been delayed and will become a reality only with limited membership. Overall, institutions for monetary cooperation remain limited in scope in the developing world and, in open contrast with the European institutions (now, of course, undergoing a deep crisis and restructuring), arrangements among developing countries have only recently been given some recognition within the design of a new international financial architecture.

One way to view the different institutions of monetary cooperation in place in the developing world is that they break up cooperation into three basic components: macroeconomic policy

[4] We could add the Arab Monetary Fund but prior to the recent crisis it largely financed trade, so it belongs more clearly to the family of banks than to the monetary institutions.

dialogue and eventual policy surveillance and coordination; liquidity support during crises; and exchange rate coordination (and eventually unification) (Ocampo 2006). Given the pro-cyclical pattern of capital flows that developing countries face and the frequency of shocks associated with them, they generally eliminate the desirability of the third component, which has, of course, been the major objective of European monetary cooperation.

Beyond this, it can be argued that with the degree of capital mobility that characterizes the world today, developing countries have limited room for maneuver for autonomous monetary policies. In this context, the most commonly used strategy over the past decade has been the accumulation of large foreign exchange reserves that provide “self-insurance” against financial crises and larger space to undertake counter-cyclical macroeconomic policies when external financing dries out. Monetary cooperation at the regional level may provide in this context an additional layer of support and thus further macroeconomic policy space. In particular, it amplifies the collective insurance provided by reserve accumulation strategies and can thus help to contain or at least partly mitigate regional contagion.

It should be added that clearing mechanisms for intraregional payments are a weaker form of monetary cooperation, which is closely tied to trade integration and has an older history. Again, Western Europe provided the best example of its kind in the early post-war period: the European Payments Union. These arrangements can also bring specific benefits during crises. In particular, by reducing the need for foreign exchange to settle intraregional payments, they may help mitigate the effects of crises on intraregional trade. There are several experiences of this type in the developing world, some of which have been functioning for several decades; a few have faced difficulties owing to the accumulation of arrears by some members during balance-of-payments crises, including, as we will see, the Central American arrangement.

Latin America is probably the region of the developing world that has developed some of the most successful institutions of financial cooperation. They include, as already indicated in the introduction, clearing mechanisms for intraregional payments, a successful reserve fund and two prosperous development banks. All of these institutions have provided useful services to member states and thus represent very good examples of the complementarity between global and regional institutions. However, they have mainly involved the medium and small-sized countries in the region, with weak participation of the two largest countries, Brazil and Mexico, except in the clearing agreement and more recently in the major development bank.

Also, with the exception of the Central American payments system and balance of payments financing, these institutions have functioned well even in hard times. They enjoy a higher investment rating than member countries, and can thus intermediate private financing funds at a lesser cost and facilitate access to financing at good terms to members that face high risk premiums. They have shown a strong preferred creditor status, which has been reflected in the service of obligations to them even when member countries were in default with the private sector and other multilateral financial institutions. This reflects in turn, a strong sense of ownership of the subregional institutions, which has also helped them endure strong political tensions within the integration processes. In particular, most of them functioned effectively during the debt crisis, when trade integration agreements experienced a major disruption. They have also largely avoided political tensions. This has been true through the history of Central American integration, where political tensions have been recurrent (though the civil war in Nicaragua in the 1980s was undoubtedly one of the factors that contributed to the collapse of some of the subregional agreements in that decade). Also, the two financial institutions born out of Andean integration have continued to prosper over the past decade despite the political tensions in the subregion, that severely affected the Andean Community, particularly the withdrawal of Venezuela from the agreement.

In relation to political motivations, it is interesting to notice that the countries under the Bolivarian Alternative for the Peoples of Our America (ALBA, for its Spanish acronym)[5] have promoted a new payments agreement and a new development bank, the Bank of the South. However, the first of these is a limited arrangement and the second was subject to a protracted launching process. In turn, the payment agreement (SUCRE) has not been able to incorporate non-ALBA members. This may indicate that the strong political motivations that underlined the ALBA initiatives have led them to be suboptimal relative to the older institutions, which have had a strong historical endorsement independently of political trends and shifting political regimes in individual countries.

2. CLEARING AGREEMENTS AND COUNTER-CYCLICAL DEVELOPMENT FINANCING

2.1 Clearing Agreements for Intraregional Payments

The initial phases of the process of financial and monetary cooperation in the region were closely linked with trade integration. Growth in intraregional trade led to the creation of clearing arrangements for intraregional trade payments. In 1961, three members of the Central American Common Market (El Salvador, Guatemala, and Honduras) created a clearing system for the Central American Common Market; the other soon joined (Honduras in 1962 and Costa Rica in 1963). Slightly less than a decade later, in 1969, Central American central banks launched a mechanism for balance of payments financing, the Central American Fund for Monetary Stabilization (Fondo Centroamericano de Estabilización Monetaria, FOCEM). Both mechanisms were the major instruments of cooperation in the context of the Central American Monetary Council, created in 1964 with the long-term goal (never realized and now

[5] ALBA members include five Latin American countries (Bolivia, Cuba, Ecuador, Nicaragua, and Venezuela) and three Caribbean countries (Antigua and Barbuda, Dominica, and St. Vincent and the Grenadines).

abandoned) of converging toward a monetary union, but both of them collapsed in the 1980s and were formally dismantled in the early 1990s.

The Central American clearing arrangement thrived for two decades. As all mechanisms of its kind, it was based on bilateral credit lines extended by member central banks and regular clearing of payments with a convertible currency (the US dollar), in this case every semester. Between 1962 and 1980 the transactions through the clearing arrangement reached US$8,194 million, with a compensation of 87% (of the total value of transactions). During this period, 92% of intraregional trade was channeled through this mechanism, and in 1976–80 other current and capital account transactions also used it (Guerra Borges 1996). This success was achieved despite significant political and economic tensions among member countries, including the 1969 war between El Salvador and Honduras, the balance of payments adjustments of Costa Rica in late 1960s and early 1970s, and some restrictions on intraregional trade imposed by several member countries.

FOCEM used part of the foreign exchange reserves of member central banks and complementary credit lines, and provided balance of payments financing through three lines: liquidity (up to one year) and stabilization loans (of 5 and 8 years). It was used for the first time in 1975 but, due to its limited size and booming external financing, it provided resources equivalent to only about 5% of the current account deficits of 1975–79 (US$34 billion). In 1980–84 more than doubled, to US$88 million, but again it was small relative to the current account deficits of member countries, which reached US$1,579 million (González del Valle 1990, Annex A.1). It was also small relative to IMF financing during the early years of the debt crisis, which peaked at 617 million SDRs in 1983 (equivalent to US$646), according to IMF data, most of which had accumulated starting in 1979.

Both the trade clearance arrangement and FOCEM collapsed in the early 1980s. The major problem was the large debts that Nicaragua accumulated due to its incapacity to settle its obligation in the half-yearly settlements. FOCEM provided part of the financing, but even in those terms it was too small relative to the accumulated arrears. The major mechanism of financing was the rollover of debts by the major surplus countries, Costa Rica and Guatemala. The accumulated debts, for around US$700 million, essentially led to the gradual disuse of the clearing arrangement, which had essentially ceased to operate by the late 1980s. In turn, for lack of additional resources, FOCEM essentially rolled over the obligations of member countries. There were novel attempts to manage the collapse, particularly through the creation of the Central American Import Rights, a multilateral payments instrument issued by the central bank of the importing country that could be used to pay for exports from any member of the common market and was freely negotiable. However, this instrument did not work due to the absence of a well functioning secondary market and the decision of Costa Rica not to participate in the arrangement. An additional attempt was made in 1989 with European Union support to revive the clearing arrangement, but again Costa Rica did not participate in the proposed agreement (Guerra Borges, 1996). The clearing arrangement was suspended in

1992, and FOCEM in 1996. The structural deficits and surpluses in intraregional trade thus proved impossible to manage under these arrangements. By the mid-1990s, there was also a general perception in the subregion that these mechanisms were inconsistent with the increasingly deregulated foreign exchange markets toward which the Central American countries were moving.

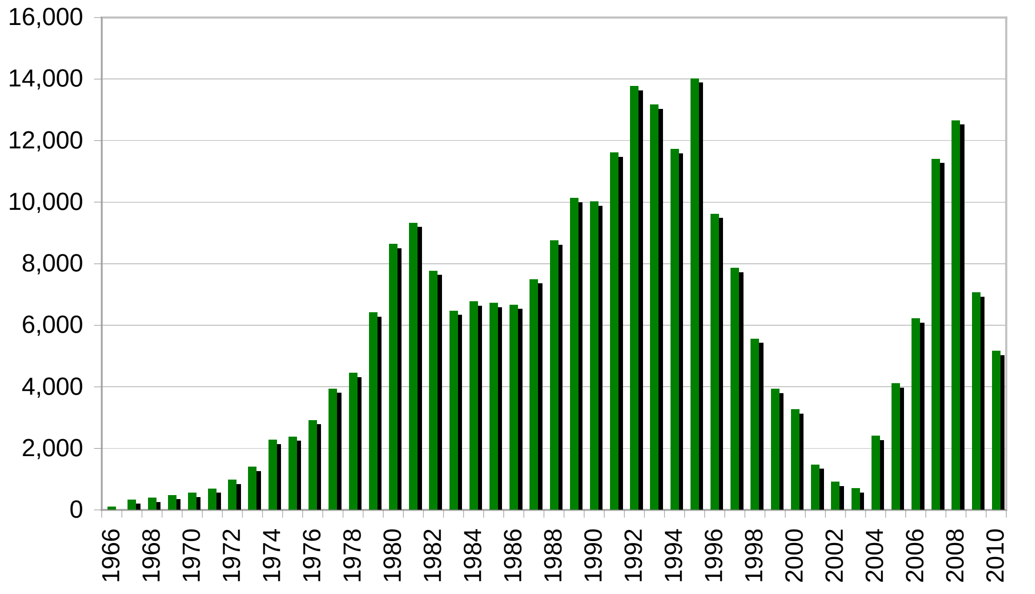
In contrast to this experience, the Agreement on Payments and Reciprocal Credits set up in the framework of LAFTA, now LAIA,[6] put in place in 1965 and reformed in 1982, has had a successful history. It has been based on the credit lines extended to each other by member central banks, with clearing three times a year. It boomed in the second half of the 1960s and in the 1970s but, in contrast to the Central American mechanism, it was also very successful during the otherwise dark age for intraregional trade unleashed by the debt crisis of the 1980s. Since then, its usefulness has been more limited.

After its creation, the value of intraregional trade channeled through the mechanism grew even faster than the booming intraregional trade. By the late 1970s, more than three-fourths of intraregional trade was channeled through the mechanism, which in turn achieved a high of compensation, 70–80% (see Figure 1). Although transactions through the agreement fell in the early 1980s, this was a reflection of the collapse of intraregional trade, as the coverage of the agreement continued to increase, reaching about 90% of mutual trade in the second half of the 1980s, again with a very high degree of compensation.

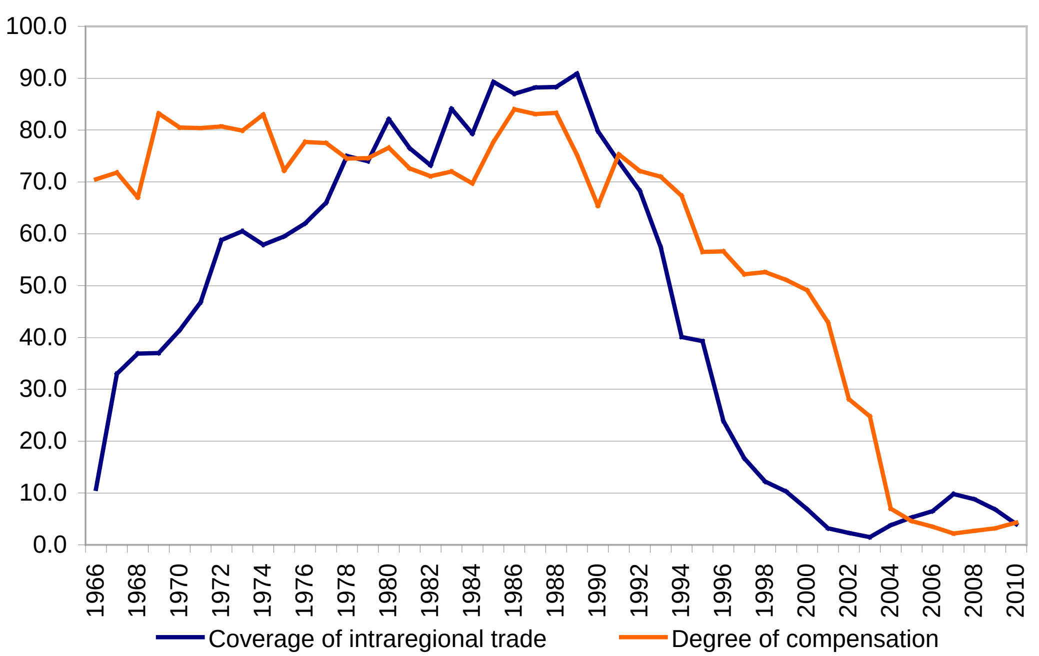
After peaking in the first half of the 1990s (with the annual peak being reached in 1995 at just over US$14 billion), the use of the mechanism fell substantially in the following years. The basic reason was undoubtedly the increasing liberalization of foreign trade transactions. Firms found more useful to use private financial institutions, which provided an efficient clearing system together with a series of services in dollars, including financing, including coverage for part of foreign exchange risk through derivate markets. In turn, the LAIA clearing system did not reform itself and even accumulated disadvantages. In particular, the interest charged for reciprocal lending under the agreement (Libor + 100 basis points) exceeded the typical return on the investment of foreign exchange reserves. For this reason, in a context of generally ample liquidity, central banks preferred on many occasions to pay their obligations to other banks before clearance, so that the degree of compensation offered by the agreement also fell. In short, the agreement turned out to be highly dependent on the foreign exchange restriction observed in the past and was unable to compete in an environment free of those restrictions.

[6] LAIA members include Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

Figure 1
Transactions through the LAIA clearing mechanism
A.Channeled transactions (million dollars)



B. Coverage of intraregional trade and degree of compensation



Source: Latin American Integration Association (http://www.aladi.org)

The agreement revived in 2004, peaking again at close to US$13 billion in 2008. This increased was related again to foreign exchange restrictions, as it was closely associated with the exchange controls imposed by Venezuela. As this country has a large trade deficit vis-à-vis other members of the agreement, the degree of compensation remained rather limited, and the coverage of intraregional trade only reached a new peak of slightly under one-tenth. The global financial crisis led to initiatives to reform the LAIA agreement to make it more useful under the new conditions in which foreign exchange markets operate today, but no decisions have been adopted in this regard.

Since the mid-2000s there have been two new initiatives in the area of payments arrangement. The first has been the launch of an agreement between Argentina and Brazil to facilitate payments in the local currencies. It was launched in 2006 and began functioning in 2008, under the expectation that it could be later extended to other members of MERCOSUR. It allows firms to pay in local currencies of the two countries for transactions up to 360 days. The mechanism has been particularly useful for small and medium-sized enterprises that do not have access to some of the services offered by the private financial sector in foreign currency. This mechanism has been mainly used by Brazilian exporters (Argentinean importers), but its coverage of bilateral trade has been very limited: 1.1% in 2009, 2.2% in 2010, and 2.5% in 2011. A novel feature of this mechanism is that compensations are very frequent, so that central banks have only a limited exchange rate risk associated with the payment of the compensation balances.

In turn, four ALBA members (Bolivia, Cuba, Ecuador, and Venezuela, with Nicaragua expected to join) launched in 2009 their own compensation mechanism, the Unified System of Regional Payments Compensation (Sistema Unificado de Compensación Regional de Pagos, SUCRE).[7] In the proposals on the table, this mechanism is supposed to be complemented by a reserve fund, but no firm commitment has been made in this regard. The use of a specific unit of account, the SUCRE, based on the exchange rates of member countries, implies for central banks an exchange rate risk relative to convertible currencies, which is absent in other agreements. The mechanism has been mainly used in Ecuador-Venezuelan transactions, and mainly by Ecuadorian importers, but it has also been limited: US$12.6 million in 2010 and US$172.8 million in 2011; again, these amounts represent a tiny fraction of trade among these countries (0.2% in 2010, the only year for which this proportion can be estimated).

Overall, the experiences with these payments agreements indicate that they can be very useful mechanisms in times of scarcity of foreign exchange but its advantages are less evident when central banks have ample liquidity. From the point of view of the firms engaged in intraregional trade, the advantages of using commercial credit lines that offer other services is important,

[7] Symbolically, the acronym of the agreement has the same wording of the old currency of Ecuador, which is now a dollarized economy.

particularly access to exchange risk coverage under flexible exchange rate systems. This means that a full development of intraregional payments when scarcity of foreign exchange is not an issue requires the development of deep exchange markets, including derivative markets, in the currencies of the member countries, or eventually in the common currency of the payments agreement. Finally, the major risk is, of course, non-payment in convertible currencies of compensation balances, the factor that led to the collapse of the Central American mechanism in the 1980s. This risk is obviously higher when there are countries that are systematically in a deficit vis-à-vis partners in the agreement.[8]

2.2 Counter-Cyclical Role of Subregional Development Banks

Latin America is a case of successful experience with subregional development banks. The older of them is associated again with Central American integration: the Central American Bank for Economic Integration (CABEI, BCIE according to its Spanish acronym), created in 1960. Aside from the members of the Central American Common Market,[9] which were its founding members, it includes two members of the Central American Integration System which are also borrowing members (Dominican Republic and Panama) and five extra-regional non-borrowing members (Argentina, Colombia, Mexico, Spain, and Taipei,China). Belize is a non-member with access to the bank's services.

The second is of Andean origin: the Andean Development Corporation (CAF), created in 1968 by Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela, one year before the Cartagena Agreement that launched the Andean Group. Membership of the Corporation has grown over time to include fourteen Latin American countries and two English-speaking Caribbean countries (Jamaica and Trinidad and Tobago), thus becoming close to a regional development bank. Portugal and Spain also joined on an equal basis to other members, and thus also as potential borrowers, as there is no distinction in this institution between borrowing and non-borrowing members. The successful expansion of its membership was recently reflected in its renaming as the Latin American Development Bank (although it kept its Spanish acronym, CAF, for legal reasons). Nonetheless, the main shareholders of Latin American Development Bank are still the Andean countries, which in turn also continue to be the main recipients of its financing.

There is a third development bank, FONPLATA (Financial Fund for the Development of the River Plata Basin), created in 1971 to act as the financial body of the Treaty for the Development of the River Plata Basin, with the objective of financing studies and projects

[8] See FLAR (2009), which also provides a review of the history of clearing arrangements in Latin America in the background of the European experience.

[9] Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

intended to promote the economic development and the physical integration of such basin.[10] However, it is a small institution and will be disregarded in the discussion below.

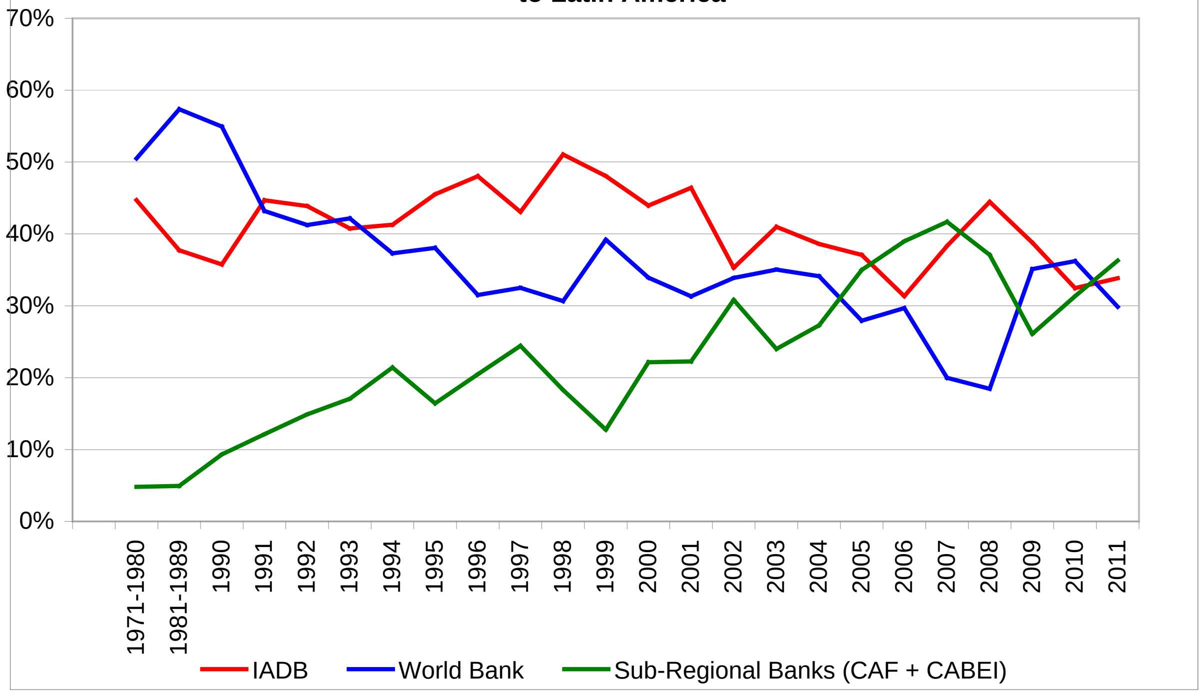
A salient feature of the two multilateral development banks is that they enjoy a higher investment rating than their member countries (Titelman 2006). This reflects their capacity to distribute risk as well as the strong sense of ownership of the institution by member countries, which leads in turn to their preferred creditor status and thus very low loan delinquency. These institutions therefore find themselves in a privileged position to intermediate private financing funds at a lesser cost than their member countries and can facilitate access to financing in good terms for those members that can only tap private external financing at high costs.

These institutions were created to support the long-term economic and social goals. Therefore, their functions focus mainly on mobilizing medium- and long-term resources for financing productive investment and, of course, foster the integration processes of which they are part. Their portfolio reflects the priorities established by its members, including active financing to the private sector. A significant part of financing by the Latin American Development Bank has been directed towards infrastructure investment, accounting about half of its loan portfolio. CABEI defines its portfolio in terms of three strategic axes, namely social development, competitiveness and regional integration, with two cross-cutting issues, environmental sustainability and gender equity.

Both of these institutions have been extremely dynamic over the past two decades, significantly increasing their share in multilateral development financing to the region. Indeed, as Figure 2 indicates, they were relatively marginal institutions in the 1970s and 1980s, when the World Bank still dominated development financing to Latin America, followed by Inter-American Development Bank (IADB). Since the 1990s, the share of the World Bank in such financing has fallen sharply and to a lesser extent that of IADB. The subregional banks have thus gained a growing share of development financing in the region, indeed becoming the major source of financing in 2006 and 2007, where their joint share was 39 and 42%, respectively.

[10] This treaty was subscribed by Argentina, Bolivia, Brazil, Paraguay, and Uruguay in 1969, which are still its current members.

Figure 2
Share of different institutions in multilateral development bank financing to Latin America



Source: Annual Memoirs of respective banks.

The share of financing is higher in the two subregional integration processes which gave birth to these institutions. So, the Latin American Development Bank contributed 56% of total multilateral financing to the Andean Community members during the 2000s. This pattern is slightly less marked in Central America, where nonetheless CABEI's share reached 50% in the 2000s. Agility in the loan approval process and proximity to the member countries are definite advantages in this regard, as well as the increased access of these institution to global capital markets at reasonable terms, which has given them the resources to expand their market shares.

Table 1
Multilateral Development Banks Loans to Latin America
(Approvals, current US million dollars)

	World Bank	IADB	CAF	CABEI	Total
1971-1980	1,462	1,294	56	83	2,895
1981-1989	4,332	2,849	281	91	7,553
1990	5,965	3,881	812	199	10,857
1991	5,237	5,419	1,300	171	12,127
1992	5,662	6,023	1,773	272	13,730
1993	6,169	5,963	2,096	402	14,630
1994	4,747	5,255	2,160	566	12,728
1995	6,061	7,248	2,258	358	15,925
1996	4,438	6,766	2,314	569	14,087
1997	4,563	6,048	2,900	532	14,043
1998	6,040	10,063	2,672	932	19,707
1999	7,737	9,486	2,182	336	19,741
2000	4,064	5,266	2,323	330	11,983
2001	5,300	7,854	3,196	572	16,922
2002	4,366	4,549	3,291	680	12,886
2003	5,821	6,810	3,304	682	16,617
2004	5,320	6,020	3,504	750	15,594
2005	5,166	6,858	4,746	1,722	18,491
2006	5,911	6,239	5,521	2,241	19,911
2007	4,553	8,735	6,607	2,892	22,787
2008	4,660	11,226	7,947	1,416	25,249
2009	14,031	15,507	9,170	1,258	39,965
2010	13,907	12,464	10,533	1,503	38,407
2011	9,629	10,911	10,066	1,629	32,235

Source: Annual Memoirs of respective banks.

In terms of the major issue of this paper, the contribution of development banks to counter-cyclical financing, the pattern is a different one. Thanks to the implicit guarantees by the United States and other industrial nations, the World Bank and IADB are better prepared to rapidly expand financing during times of crisis. The World Bank was the major source of additional financing during the 1980s and, together with IADB, in the late 1990s (Table 1). During the recent global financial crisis, this pattern was again evident, with IADB responding in a speedier way though followed shortly by a major jump in World Bank financing. As a result of this pattern, the falling share of the World Bank in development financing to the region has experienced sharp reversal during crisis periods (Figure 2).

The Latin American Development Bank has also played a useful role in counter-cyclical financing, a role which it explicitly recognized as a major function long before the World Bank and IADB. Thus, it increased its financing both during the emerging market crisis of the late

1990s and the most recent global crisis. However, the scale of this response has been weaker than those of the institutions that have industrial country backing. In contrast, CABEI has had a more limited role in this regard, and indeed had to sharply reduce its lending after the 1998 and 2007 peaks, in effect showing a pro-cyclical pattern of financing.

It should be added that another novelty in the recent past has also been the issuance by multilateral development banks, particularly of the IADB and the Latin American Development Bank, of bonds denominated in Latin American currencies. Since this type of issues started, in 2004, they have constituted a high proportion of total issues in the case of the Latin American Development Bank (Ocampo and Titelman 2009, Table 2). The investor base has been domestic as well as international. These bonds add value to international investors, by allowing them to separate currency risk from credit risk.

This development has an important supporting role in terms of counter-cyclical management in three different ways. First, it enhances the development of domestic bond markets, which can be a key factor in reducing dependence on external funding, which has been a major source of vulnerability in the past. Second, it allows development banks to diversify their sources of financing but also to fund local currency loans to its members, thus matching the currency denomination of liabilities and revenues of those projects where the latter are in local currencies. Third, through both channels, it significantly reduces the foreign exchange risks that countries face, which has again been a major source of vulnerability during balance of payments crises.

3. THE LATIN AMERICAN RESERVE FUND

3.1 The History and Functions of FLAR

Since the mid-1970s, the dynamics of business cycle in Latin American countries has been dominated by boom-bust cycles in external financing, mixed in different ways with variations in the terms of trade. The specific dominance of financial variables in determining the cycle is not exclusive to the region, as it derives from closer financial integration worldwide. In the case of emerging economies, it is associated with the twin phenomena of pro-cyclical financing and contagion. Indeed, the region has faced a series of frequent and severe shocks, which include the debt crisis of the 1980s; the 1994 Mexican crisis; the emerging countries' crisis at the turn of the century (with the 2001 Argentinean crisis as the worst regional manifestation); and the global financial unleashed by the collapse of Lehman Brothers in September 2008. These crises have had variable intensity and duration, being long in the 1980s (eight years) and at the turn of the century (six years), but short in the case of the Mexican crisis (less than a year) and the regional effects of the post-Lehman Brothers (about a year).

The vulnerability to boom-bust cycles in external financing and other external shocks has been exacerbated by the lack of suitable mechanisms for providing timely and adequate emergency financing. This has led many countries to move in the direction of “self-insurance” through the accumulation of foreign exchange reserves, which has proved to be an effective but far from the most efficient option for protecting against the vagaries of the world economy. Reserve pooling or swap arrangements among central banks could provide more efficient alternatives, as they facilitate access to a larger volume of foreign exchange reserves and thus constitute a form of collective insurance against crises. The successful experience of Latin America in this area is associated with the Latin American Reserve Fund (FLAR); an unsuccessful one was a similar arrangement in Central America, FOCEM, which as we have seen collapsed in the 1980s.[11] Although limited in size and membership, FLAR has been a unique mechanism of its kind in the developing world which has provided extremely useful support to its members for over three decades. It can be seen as the seed for a broader form of cooperation that may emerge, in particular out of the current political push to deepen South American integration.

FLAR was created in 1978 as the Andean Reserve Fund (Fondo Andino de Reservas, FAR), to serve the countries of the Andean Group (now Community): Bolivia, Colombia, Ecuador, Peru, and Venezuela (by that time, Chile had already left the Andean Group). In 1991 it became the Latin American Reserve Fund, to allow other countries in the region to join, but so far it has only succeeded in attracting Costa Rica (1999) and Uruguay (2008). Its capital as of December 2011 is US$2,344, of which US$2,034 is paid-in capital. Paid-in capital is distributed in shares of 20% each for its largest members (Colombia, Peru and Venezuela) and 10% each for its four smaller members; the rest are reserves and retained profits. Its three main organs are the Assembly, made of Finance Ministers of member countries; the Board, made up of central bank governors; and the Executive Presidency. Capacity to approve loans is shared between the Board and the Executive President.

According to its charter, it has three major objectives: (i) to provide balance of payments support to member countries by granting loans or guaranteeing third-party loans; (ii) to improve the conditions of international reserve investments made by member countries; and (iii) to help harmonize its member countries’ exchange rate, monetary and financial policies (FLAR, 2011a, 2011c).

To fulfill the first of these functions, it operates as a credit cooperative in which the member countries’ central banks are able to borrow in proportion to capital contributions. For that purpose, it has designed five major facilities, which are summarized in Table 2. As we will see in the next section, the two major facilities in terms of use have been balance of payments loans, with a three-year maturity and a one-year grace period, capped at 2.5 times the paid-in capital contributions, and liquidity credits, for a term up to one year and

[11] There is also among some ALBA members that idea of creating a Common Reserve Fund of the South, but this initiative has not gone much beyond a general formulation.

capped at the paid-in contributions. Two additional facilities that have been used less frequently are credits for restructuring the external national debt, with a three-year maturity and a one-year grace period, capped at 1.5 times the paid-in contributions, and contingency loans, issued for a term of up to six months, capped at twice the paid-in capital.[12] FLAR can also approve short-term Treasury credits, but this facility has never been used. Longer-term facilities must be approved by the Board but the Executive President has the power to approve the shorter-term loans.

Table 2
FLAR's Credit Facilities

Conditions	Balance of Payments	Liquidity	Debt Restructuring	Contingency	Treasury
Maturity	3 years+1 year of grace for capital subscriptions	Up to 1 year	3 years + 1 year of grace for capital subscriptions	6 months renewable	1-30 days
Access limits*	2,5 times paid-in capital	Paid-in capital	1.5 times capital-in paid	2 times paid-in capital	2 times paid-in capital
Interest Rate	3-month LIBOR + 400 bp	3-month LIBOR + 150 bp	3-month LIBOR + 400 bp	3-month LIBOR + 150 bp	
Prepaid commission	30 bp	10 bp	30 bp	10 bp	
Attribution for approval	Board	Executive President	Board	Executive President	Executive President

* In the case of balance of payment credits, debt restructuring, liquidity, and contingency, Central Banks from Bolivia and Ecuador have 0.1 additional access relative to paid-in capital compared to the other members.
Source: FLAR

FLAR also created in 1984 a subregional currency, the Andean peso, basically an accounting unit created to facilitate payment among central banks and other authorized holders (the Andean institutions plus the central banks of Argentina and Chile).[13] US$80 million were issued at the time: US$20 each to Colombia, Peru, and Venezuela, and US$10 each to Bolivia and Ecuador. The used Andean pesos have to be repaid in hard currency 180 days after being used with an interest of Libor plus 25 basis points, and so this mechanism operates as a short-term credit facility. This currency was actively used in 1985–90, with accumulated transactions for US$158.3 million, but then ceased to be utilized. Peru and Ecuador were the largest users, and Colombia was the only country that did not utilize it. Andean pesos were essentially used to pay for balances within the LAIA payments agreement (about 55% of total transactions) and for paying obligations to FLAR itself, and thus serving in the latter case as a 180-days rollover of obligations. FLAR also ran for several years an export credit facility, but it was suspended

[12] In the case of balance of payments, foreign debt restructuring, liquidity, and contingency loans, the central banks of Bolivia and Ecuador can obtain 0.1 times more in terms of paid-in capital than the other member countries.

[13] For a contribution to the debates on payments mechanism in the Andean Group in the 1980s, see Ocampo (1983).

as it was found incompatible with balance of payments financing, the institution's core function (FLAR 2009).

Aside from its own capital, FLAR has also issued bonds on two occasions: a three-year bond for US$150 million in 2003 and a five-year bond for US$250 in 2006. With its current capital and conservative leverage ratio, it is estimated that it can lend up to US$3,051 million, which can cover the borrowing capacity of all smaller members plus 29% that of the larger ones (FLAR 2011c). The member countries have always paid their loans to FLAR, even when they were in default with other creditors, including other international financial institutions. This is particularly true of Ecuador and Peru during different periods in the 1980s and 1990s. This shows the strong preferred creditor status that it has enjoyed, which reflects the sense of ownership of the organization as well as the recognition that it provides excellent service to member countries. As we will see below, it also has an advantage over IMF, not only in terms of timeliness but even in the scale of financing.

At present FLAR has the best credit rating of Latin America. Table 3 shows the credit ratings from the three major regional financial institutions compared with countries in the region ranked with investment grade. FLAR enjoys the best ratings in the region, slightly on top of the Latin American Development Bank and significantly above most of its member countries. Indeed, most FLAR members have lacked investment grade status during most of the period analyzed here. The high rating also reflects the quality, safety and liquidity of its investment, the lack of (and even negative) correlation of the returns on those investments with returns on emerging markets portfolios, the high liquidity and low leverage ratio of the institution, and the recognition that it has a legal status that is separate from that of its member countries (FLAR 2011c). The high ratings also clearly reflect the preferred creditor status of the institution, as recognized by the rating agencies themselves: "FLAR member countries have consistently honored their obligations, even while encountering severe economic stress and being in default to their commercial creditors" (Standard & Poor's 2003); and "FLAR has maintain a zero default record in its core loan operations" (Moody's 2008).

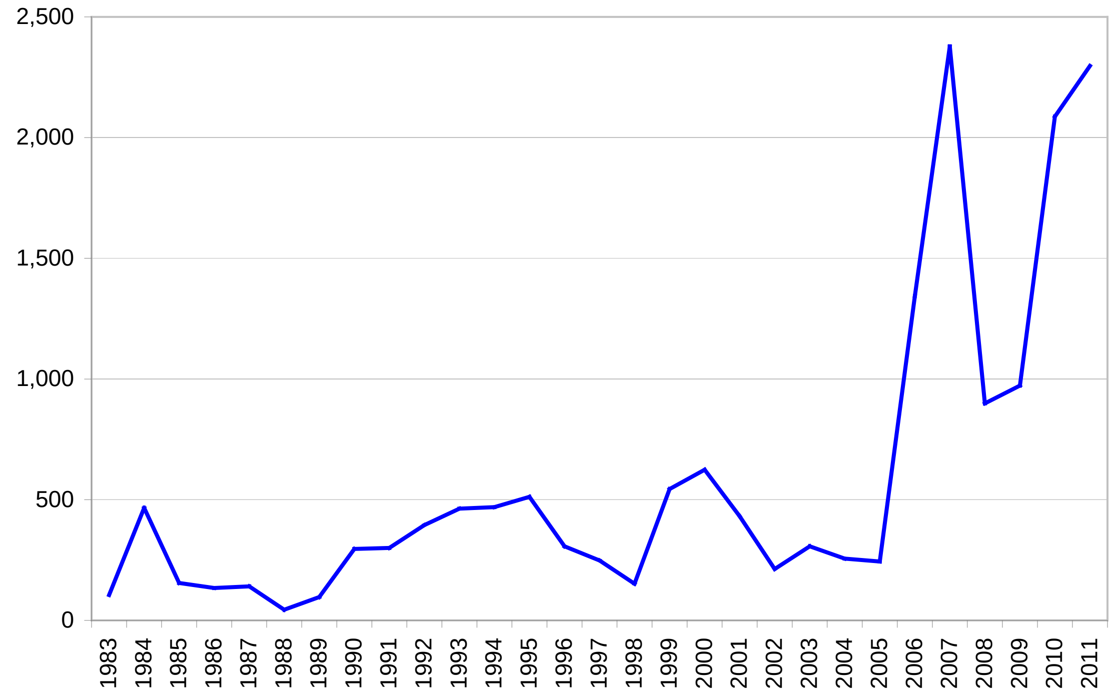
Table 3
Credit ratings of long-term external public debt with investment grade
(As of February 14, 2012).

MOODY'S		STANDARD & POORS		FITCH	
Aaa		AAA		AAA	
Aa1		AA+		AA+	
Aa2	FLAR	AA	FLAR	AA	
Aa3	CHILE	AA-		AA-	
A1	CAF	A+	CAF	A+	CAF
			CHILE		CHILE
A2	BCIE	A		A	
A3		A-	BCIE	A-	BCIE
Baa1	MEXICO	BBB+		BBB+	
Baa2	BRAZIL	BBB	MEXICO	BBB	MEXICO
Baa3	PERU		BRAZIL		BRAZIL
	COSTA RICA		PERU		PERU
	COLOMBIA	BBB-	COLOMBIA	BBB-	COLOMBIA

SOURCE: Respetive credit rating agencies

Among the other two functions of FLAR, international reserve management has gained increasing importance in recent years. The institution can handle not only central bank foreign exchange reserve portfolios but also those of other public sector institutions. This is a key difference with the IMF, and underpins not only FLAR's financial capacity but also is character as a credit union. It also provides advice on portfolio management and training services in this area. This is reflected in the rapid growth of deposits in the institution, which increased gradually since the 1980s and very rapidly since 2006 (Figure 3). Indeed, given that the strong balance of payments situation of member countries have reduced the demand for loans from the institution, this has become an increasingly important activity.

Figure 3
Deposits in FLAR (Million dollars)



Source: FLAR

In the area of harmonization of member countries' exchange rate, monetary and financial policies, the role of FLAR has been limited. It has participated in some regional macroeconomic dialogues, which are limited in scope, and organizes since 2006 annual economic conferences, which count with participation of central bank governors and high level technical staff. It also organizes conferences on investment of sovereign debt funds and central bank lawyers.

3.2 Credit History

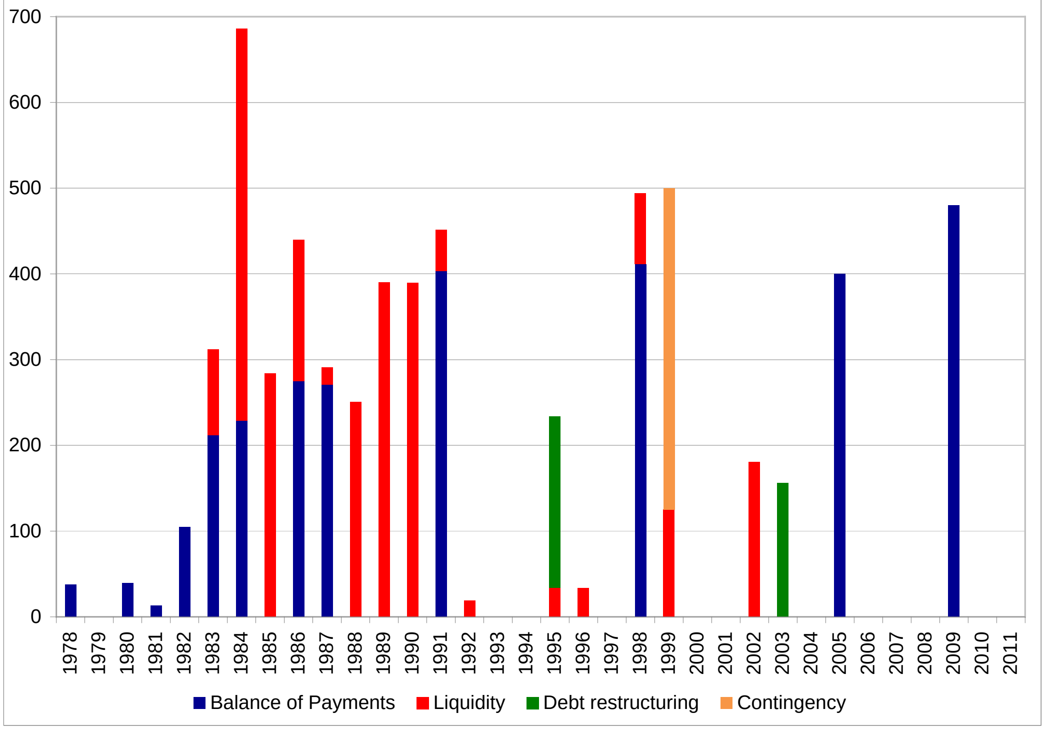
FLAR's lending has had five distinctive features. First, its financing has been clearly counter-cyclical and thus concentrated in times of crisis, as it is expected of an institution of its kind. Second, it has benefited *all* its members (the only exception being so far Uruguay, which is only a very recent member). Third, its major beneficiaries have nonetheless been the smallest Andean countries, Bolivia and Ecuador, which have been members since the creation of the institution. However, this may be in the interests of the larger countries, to the extent that it helps maintain intraregional trade flows. Fourth, resources provided have been quite comparable to those facilitated by the IMF, indeed larger if Venezuela is excluded. Finally, lending has been very timely and has involved no conditionality.

Figure 4 summarizes the history of lending, both by credit lines (panel A) and by recipient country (panel B). Lending has concentrated in crisis periods: the debt crisis of the 1980s (up to 1991), 1998–99 and 2009, with a large concentration in the first of them. Most of the operations have been liquidity and balance of payments loans. Two loans for debt restructuring have been granted, to Ecuador in 1995 and Costa Rica in 2003, both in inter-crises periods. The only contingency credit was granted to Colombia in 1999 but was not used. There were also a few loans through the history of the organization that were not used, and can thus be considered implicitly to have operated as contingency loans.[14]

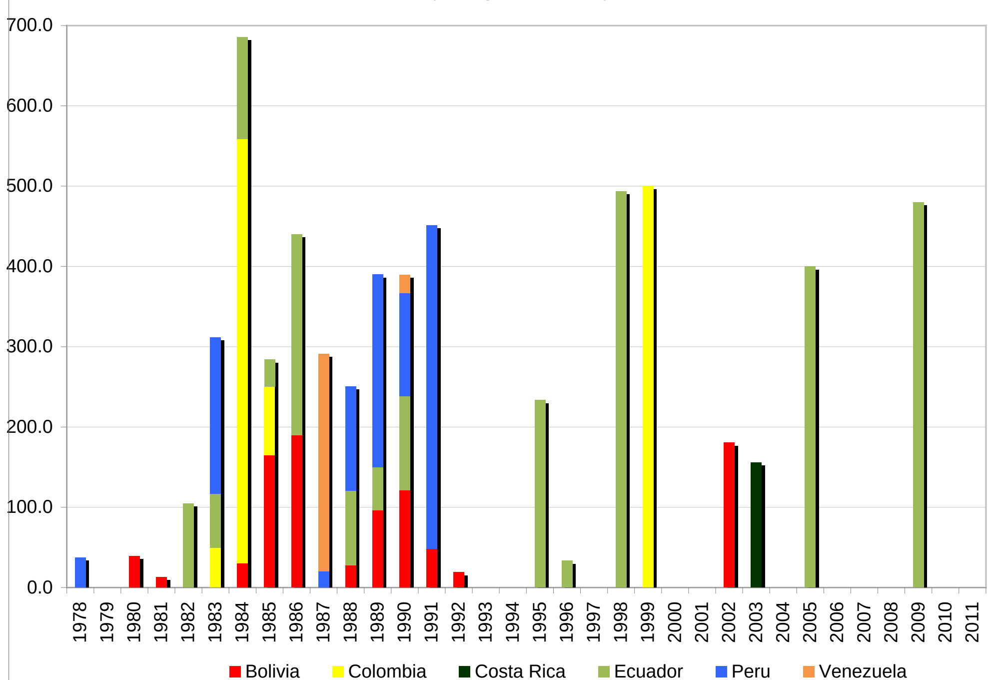
What is equally interesting, as panel B in Figure 4 indicates, all members benefited from support during the worst crisis of the period, the debt crisis of the 1980s. This indicates that even a crisis that hits all countries (including Colombia, the only Latin American country not to restructure its external debt in the 1980s but still hit by contagion), all members can benefit because their needs may not coincide exactly in time, i.e., because the demand for resources is actually sequential. In later crisis, although all countries have been hit, the mechanism has worked even better because not all countries have demanded FLAR resources. So, the view expressed by Levy-Yeyati and Cohan (2011), according to which a Latin American reserve fund could not work because of the lack of a large member that does not demand resources from the pool, is actually incorrect. Nonetheless, as we will see below, a fund of the current size could not satisfy sizable demands by the larger members.

[14] The three cases are a balance of payments credit to Peru for US$403 billion in 1991, a liquidity loan to Colombia for US$125 million in 1999 (on top of the contingency line) and a liquidity loan to Bolivia for US$180.7 million in 2002.

Figure 4
FLAR financing (million dollars)
A. By credit line



B. By recipient country



Source: FLAR

The most frequent borrowers have been the smaller members of the Andean Community, Bolivia, and Ecuador. Ecuador has also been the largest user in terms of resources. This, together with the point made at the end of the previous paragraph indicates that a regional fund not only should but actually *must* operate, explicitly or implicitly, with redistributive rules. Indeed, as we will see in the next section, regional funds of even relatively limited size can fully cover the needs of the smaller Latin American countries.

Table 4 compares the history of FLAR lending to that of the IMF. FLAR has surpassed the global institution during several periods, including the critical years of the debt crisis, the emerging market crisis of the late 1990s and early 2000s, and the recent global financial crisis. Indeed, for the period as a whole, it has surpassed the IMF, if we exclude Venezuela from the estimates. In some cases, FLAR was the only institution to contribute resources in crisis conditions. This was the case for Peru in 1988, when its GDP fell by 8.4% and FLAR disbursed resources worth US$130 million, whereas the IMF contributed no emergency financing. For entirely different reasons, Colombia also chose to use FLAR rather than IMF resources during both the 1980s and 1990s. This is also true of Costa Rica since it joined FLAR and of Ecuador in recent years.

Table 4
FLAR and IMF loans to FLAR country members
(Million US dollars)

Subperiod	FLAR Approved	FLAR Disbursed	IMF Disbursed	FLAR/IMF Disbursed
1978-1982	195	190	984	0.19
1983-1988	2,263	2,263	1,089	2.08
1989-1993	1,250	847	4,279	0.20
1994-1997	267	267	1,012	0.26
1998-2002	1,174	494	403	1.22
2003-2007	556	556	244	2.28
2008-2011	480	480	0	
Total	6,186	5,098	8,011	0.64
Excluding Venezuela	5,893	4,804	4,370	1.10

Note: Cummulative loans by subperiods. In the cases of Costa Rica and Uruguay, IMF lending includes only those years for which they were FLAR members.
Sources: FLAR and World Bank, World Development Indicators

The major period in which IMF has trumped FLAR financing was 1989–93 and associated with large borrowing from the IMF by Venezuela; this can be said to a lesser extent of the IMF loan to Peru of 1993. This case, as well as that of large IMF contingency financing to Colombia since 2009, indicates that FLAR, at least in its current size, certainly cannot meet the demands of its largest members. This is, in a sense, a case parallel to that of the multilateral development banks, where the World Bank is in a much better position to respond to large counter-cyclical demands for financing than regional institutions, even those that do provide counter-cyclical financing, such as the Latin American Development Bank.

Table 5 provides, in turn, a breakdown of credits by borrowing country and credit line, and comparison with IMF financing for individual countries. As can be seen, Ecuador has been by far the main borrower, benefiting from about 40% of FLAR financing through its history (close to half of disbursed funds). Colombia, Peru and Bolivia follow, with shares of under 20% of the total (about 15% each if we focus on disbursements), with Venezuela and Costa Rica (a more recent member) being the smaller users of the facilities. Bolivia and Colombia have favored liquidity financing, whereas Peru and, particularly, Ecuador, have used a relatively larger share of the balance of payments credit line; indeed, Ecuador has used more than half of resources channeled through that credit line in the history of FLAR.

Table 5
FLAR and IMF Loans to FLAR Country Members, 1978-2011
(Million dollars)

	Liquidity	Balance of Payments	Debt Restructuring	Contingency	Total FLAR	%	FLAR disbursements	Total IMF	FLAR / IMF
Old Members									
Bolivia	779	153	0	0	931	15.1%	750	998	0.75
Colombia	560	229	0	375	1,164	18.8%	664	0	
Ecuador	700	1,588	200	0	2,488	40.2%	2,488	1,159	2.15
Peru	519	636	0	0	1,154	18.7%	746	2,213	0.34
Venezuela	23	271	0	0	294	4.7%	294	3,642	0.08
New Members									
Costa Rica	0	0	156	0	156	2.5%	156	0	
Uruguay	0	0	0	0	0	0.0%	0	0	
Total	2,579	2,876	356	375	6,186	100.0%	5,098	8,011	0.64
%	41.7%	46.5%	5.8%	6.1%	100.0%				

Note: in the case of Costa Rica and Uruguay, financing from both FLAR and IMF refers to the period since it is a FLAR member.
Sources: FLAR and World Bank, World Development Indicators

Countries also show a significant difference in their demand for FLAR vs. IMF financing. Both Bolivia and Ecuador may be said to have used both institutions in a complementary way, with a strong preference for FLAR in the second case. In contrast, Colombia through the 1980s and 1990s and Peru in the second half of the 1980s had a strong preference for FLAR and, as pointed out above, this is also true of Ecuador in recent times and Costa Rica since it joined FLAR. Thus, IMF has been the dominant lender only when large-scale funding is involved, as in the cases of Venezuela in 1989–91, Peru in 1993, and the recent IMF contingency lending to Colombia through the Flexible Credit Line.

Finally, it must be underscored that the average approval period has taken historically 32 days, and lending has been made without conditionality, though based on the financial program presented by the borrowing central bank (FLAR 2011c, Annex 2). The preference of several members for borrowing from FLAR is associated, no doubt, to both the speed and the lack of conditionality. No loan request has been rejected; only a lending operation to Peru was delayed in the late 1980s while the country negotiated its arrears with other international financial institutions.

Therefore, the essential advantage of FLAR is that it provides “useful, counter-cyclical and timely” support to member countries (FLAR 2011a). It can be added that it also had a redistributive role—benefitting more the smaller countries—and that it has facilitated a differentiation of countries’ borrowing strategies—between those with strong preference for FLAR vs. those willing to mix FLAR and IMF lending. Overall, it has been highly complementary to the IMF, with FLAR having a strong capacity to serve the smaller countries but larger members requiring the IMF for sizable loans.

3.3 Feasibility of Expanding FLAR Functions and Regional Coverage

The positive experience of FLAR suggests the possibility of further strengthening it. This should be done by expanding its functions, size and membership, perhaps with the objective of creating in the long term a Latin American Monetary Fund.

In terms of functions, the first obvious step is to expand its credit facilities and improve existing ones. Following Agosin and Heresi (2011), since the liquidity and balance of payments lines that they suggest are already in place, the two major steps could be to strengthen the contingency line and to create a compensatory facility for countries experiencing terms of trade deterioration. The first one could be extended for up to two years, as the IMF has already done with its own facility, the Flexible Credit Line. The second would be facilitated by the fact that the correlation of the terms of trade of Latin American countries is not as high as commonly thought (see below). Of the traditional lines, a more extended balance of payments line could be considered, and the line for debt restructuring could be maintained. The Treasury line could probably be discontinued.

Strengthening its role in management of foreign exchange reserve funds and those from other public sector institutions, and associated services, seems a logical step to expand FLAR’s functions, given its recent success in that area. Its contribution to the macroeconomic policy could be enhanced, first by more explicitly incorporating a dialogue on macroprudential policies, including management of pro-cyclical capital flows by countries, and possibly adopting some common principles or even practices in this area. If it evolves into a full-fledged Latin American Monetary Fund, it would have to move into an explicit surveillance of member countries’ macroeconomic policies, a function that is of course highly developed in the case of the IMF, and is being put in place in the Chiang Mai Initiative.

In terms of new functions, creating a link with intraregional payments agreements is a first possibility. The logical step in this regard, again if it evolves into a Latin American fund, is to consolidate the LAIA payments agreement within FLAR. The clearing mechanism as such could still be managed by an agent central bank (Peru in this case) but FLAR could be an instrument to provide full liquidity by creating a credit line that would finance unpaid balances under explicitly determined circumstances. Beyond that, the LAIA system could evolve into a full-fledged system in which importers can pay in local currencies their intraregional purchases—a mechanism that, as we have pointed out, would benefit small and medium-sized enterprises involved in intraregional trade. In this case, it would be essential to avoid the accumulation of currency risk by adopting very frequent clearance, as is done under the current Argentinean-Brazilian arrangement. Movement into a regional currency could be a further step, but it would only make sense if it can be used by the private sector for current transactions. The Andean peso and SUCRE effectively operate as short-term reciprocal credits among member central banks and do not add much value, but they could be used as a mechanism to finance payments balances in intraregional trade settlements, as it was the case of the Andean peso in the second half of the 1980s. In any case, a full-fledged development of payments in local currencies or an eventual regional currency only make sense if it is accompanied by full services to trading firms in those currencies, comparable to those that exporters today receive from commercial banks when they trade in dollars. Since exporters can of course access credit lines in their own currencies, the basic issue is the development of future markets for national currencies in partner countries, which are today missing.

Two further ideas that have been explored are moving into budget financing and investment in regional bonds. FLAR (2011c) has correctly raised skeptical views on both issues. The first could be a function of development banks (though project and program financing are better alternatives already in use) and should certainly not be a function of a reserve fund. Given that the main criterion for investing of common reserve resources is that there should be a lack or even negative correlation of the associated portfolio with macroeconomic variables affecting member countries (a criterion that FLAR clearly meets today), the idea of investing in regional bonds is also not very attractive. This is even less so if the bonds in which FLAR invests are denominated in local currencies, as it would add exchange-rate risks that are absent today in its portfolio. However, the experience of the Asian bond market initiative should be explored – though the fact that it did not go further than the initial steps is not encouraging.

The issues of size and expanded membership should be discussed simultaneously. An early paper by Agosin (2001) indicated that during the 1980s and 1990s even a relatively modest fund, equivalent to 15% of Latin America's foreign exchange reserves (which were at the time much lower than they currently are), could have provided financing to cope with capital outflows equivalent to the entire short-term debts of all countries except Mexico. In a more recent paper, Agosin and Heresi (2011) have estimated that a fund equivalent to 15% of the 2008 reserves of the 12 largest countries in the region would have covered the financial capital outflows after the Lehman Brothers collapse of all countries, except those of Brazil. On a more permanent basis, such a fund would cover the M_1 of all countries except Brazil and Mexico, and the M_2 of all except those two countries and Chile.

A minimum step in the case of FLAR is obviously to increase the quotas of its members, which are smaller than those in the IMF, particularly for its largest members, and now minute relative to their foreign exchange reserves. This is also true of a reserve fund with broader membership. An illustrative exercise for a South American fund has been made by FLAR (2011b), with contributions by Brazil twice as large as those of the current larger FLAR members, and the addition of Argentina and Chile to the large members, and the other smaller South American countries. This exercise indicates that a fund with three times the level of current contributions would provide US$14 billion in capital and a credit potential of US$21 billion, still small relative to the short-term debt of the large and medium-sized members, and thus a larger size would be preferable. Agosin and Heresi's proposal of 15% of 2008 reserves would generate a fund of US$70 billion. Part of the additional resources could come in the form of a multilateralized swap arrangement, such as that developed in East Asia by the Chiang Mai Initiative Multilateralization (CMIM).

As new countries become members of the regional fund, current governance would need to be adjusted. A new governance scheme would probably require moving away from the "one country, one vote" system under which FLAR operates today toward a system where voting power is associated with contributions to the reserve pool. For the largest countries, which are likely to be net lenders under any scheme, it may be possible to allow them to make larger relative contributions in terms of swap credit lines –which could then be associated with smaller voting power than contributions to the reserve pool.

The ability of a reserve fund to address external shocks depends on negative events not being correlated across participating countries, since positive correlations imply that they would need to draw on the fund simultaneously. In this regard, the evidence indicates that correlation of the terms of trade of different Latin American countries is actually mixed: most bilateral correlations are not statistically significant and those that are statistically significant actually have both negative and positive signs (Agosin and Heresi 2011; FLAR 2011c, Annex 4; Machinea and Titelman 2007). The basic reason for some significantly negative correlations is the presence of both oil exporting and importing countries in the region. What is even more surprising at first sight is the fact that correlation of financial flows (private capital flows, excluding FDI) is not particularly high. Agosin and Heresi (2011) have estimated such correlations for the largest 12 countries in 1960–2009, finding out that out of 66 possible correlations, 20 are positive at the 90% confidence level, and 11 are actually negative, leaving more than half of them as not statistically significant. Analyzing ten economies of the region in the period 1990–2005, Machinea and Titelman (2007) also conclude that, although private capital inflows show positive correlations, they are generally far from unity.

It should be noted, however, that even with positive correlations of capital flows (contagion), reserve pooling can still be useful if either one of the following conditions is met: (i) demand for emergency financing is sequential, as it can actually be true even in a global crisis that affects all countries, as demands for resources may not come at the same time, as FLAR's experience during the 1980s indicates; (ii) shocks affect member countries with different intensities, as this allows countries experiencing weaker impacts to support those suffering more severe effects; or (iii) there are significant externalities associated with trade, so that emergency financing could prevent or mitigate the multiplier effects of the crisis through the contraction of intraregional trade.

A second approach to the analysis of FLAR´s benefits to member countries is by analyzing the degree of protection offered by pooling foreign exchange reserves –the so called "coverage ratio", which is defined as the ratio of the level of reserves to their standard deviation. When a country joins a reserve pool, it will gain by having access to higher reserve holdings and by the lower volatility of the partners' reserve holding, if it is lower than that of its own reserves. At the same time, however, countries with relatively high stability of reserves may lose if the volatility of other countries' reserves is higher than its own. While in the former case the two factors that affect the coverage ratio move in the positive direction; in the second case, they move in opposite ways.

There have been two recent exercises of this type. The first one, by Machinea and Titelman (2007) explores this issue for six members of FLAR (current members excluding Uruguay) plus Argentina, Brazil, Chile and Mexico. As already pointed out, the analysis of these authors of terms of trade and capital flows indicates that they are not high and positive. In the same direction, they conclude that the correlations of the de-trended series of foreign exchange reserves of these ten countries in 1990-2005 tend to be low and not statistically significant.[15] The authors then estimate coverage ratios to estimate which countries would be winners and losers from a reserve pool. The exercise indicates that the countries with the lowest reserve volatility, Chile and Colombia, could lose by joining the reserve pool, but the rest would improve their situation with pooling, with Mexico being a potential winners followed by Ecuador and Peru.

The second exercise, by Rosero (2011), explores the seven largest economies in the region for a more recent period, 1999–2008. It indicates that the evolution of coverage ratios with reserve pooling has opposite effects on different countries. According to his estimations, Chile, Colombia and Mexico would be losers (a basic difference in the case of Mexico is, of course, that the 1994 crisis is not covered in this author's exercise but it is included in that by Machinea and Titelman). An added value of this exercise is the simulation of potential additional gains taking into account the reduction in the variability that reserve pooling could generate, essentially by reducing contagion risks. The exercise indicates that the reduction of such variability would have to be sizable for Chile (68%) to make reserve pooling attractive, but more moderate for Colombia and Mexico (22 and 27%, respectively).

[15] De-trended series were used to tackle the fact that a common upward trend in the reserve accumulation pattern of all countries could be influencing the correlation coefficients.

These results imply that expanding the membership of the Latin American Reserve Fund is possible but not straightforward, as there might be incentive problems for countries with high foreign exchange reserves relative to their volatility. In any case, estimates of benefits through the analysis of reserve coverage ratios do not include other sources of external vulnerability, particular real exchange rate volatility. Indeed, the more flexible the exchange rate is, the less the external vulnerability would be reflected in the variation of foreign exchange reserves, and the more it would be reflected in variations in the real exchange rate. These exercises also exclude other potential benefits of reserve pooling, particularly through the potential reduction of the procyclical behavior of intraregional trade.

Still a third exercise is that of FLAR (2011c), which estimates the benefits that its members have received by reserve pooling through the history of the institution. Benefits are estimated as the cost of accessing FLAR during times of crisis vs. those of accessing private capital markets. According to this exercise, all countries have benefited but particularly the smaller members, notably Ecuador. A backward exercise of this type obviously reflects the use of FLAR credit facilities in the past, but does not fully take into account the reduction in contagion risks and the externalities involved. For example, Colombia has benefited from the greater stability of Ecuador through the important trade relation with her neighbor.

Overall, these exercises speak positively of the possibility of building a larger institution upon the successful history of FLAR, both in terms of size and membership. An institution of this type could eventually fully take under its responsibility emergency financing to the smaller and even medium-sized countries in the region. Some countries may be unclear winners if we concentrate only on estimates of reserve coverage ratios, but there may be other benefits (reduced exchange rate volatility) and the externalities involved may be important, and not only those associated with financial contagion but also with intraregional trade. A larger regional fund type would definitely need to be complemented by a global institution in the support of its largest members. Given its large potential support for smaller members, the strong sense of ownership and the speed and efficiency with which FLAR has operated in the past, there are significant potential complementarities with the IMF from which this global institution benefits.

For this reason, it would also be good to explore explicit links between the two institutions, such as those suggested by Ocampo (1999, 2002): giving regional funds explicit access to IMF financing, and counting contribution to common reserve funds as one of the criteria in the allocation of the Fund's Special Drawing Rights (SDRs). Swap credit lines could also be extended by non-members, as the Federal Reserve did with Brazil and Mexico after the collapse of Lehman Brothers, and the Peoples' Bank of China has been recently doing with some South American countries.

4. CONCLUSIONS

The countries of Latin America and the Caribbean have succeeded in building a system of regional monetary cooperation, including clearing agreements for intraregional trade, subregional development banks (in some cases with counter-cyclical financing capacity) and balance of payments support. The regional experience indicates that these institutions can enhance the work of global institutions, particularly in a world characterized by financial volatility and large gaps in the international financial architecture. Existing institutions have enjoyed, in particular, a strong sense of ownership and preferred creditor status and have been able respond faster than global institutions. They also enjoy higher credit ratings than member countries, indicating that their capacity to improve access to financial markets and spread risk is valued positively. It can be added that they have had a redistributive role at the regional level, have permitted a differentiation of countries' borrowing strategies, and have high complementarities with intraregional trade agreements.

In any case, regional monetary cooperation is still limited in scope and membership and must work in a complementary way with global institutions, in particular to manage the eventual problems faced by the largest countries. There are also some failed experiences, associated with Central American clearing agreements and balance of payments support, which collapsed in the early 1980s.

In the case of clearing arrangements, the experience indicates that they can be very useful mechanisms in times of scarcity of foreign exchange but its advantages are less evident when central banks have ample liquidity. Intraregional payments in local currencies would also face the challenge of competing in services currently provided in dollars by commercial banks to exporters. The major problem in this regard is coverage of exchange rate risks for local currencies' cross-exchange rate variations. In terms of providing counter-cyclical financing the Latin American Development Bank has made a significant advance, but this issue remains a challenge for the CABEI.

A major step in regional monetary cooperation would be to build upon the positive experience of FLAR to create a larger institution, hopefully with full regional membership. Such an institution could expand its role in balance of payments support, even providing all the support needed by small and even medium-sized countries, and eventually move to encompass broader macroeconomic policy surveillance and cooperation, including a dialogue on macroprudential policies. Its resources can be expanded not only through reserve pooling itself, but also through swap arrangements among the region's countries and with extra-regional central banks, and eventual access to IMF credit lines and even SDR allocations.

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