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Financial architectures and Development: Resilience, Policy Space and Human development in the global south

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Abstract: The current crisis is proving to be productive of institutional experimentation in the realm of financial architecture(s) in the developing world. The drive toward experimentation arose out of the East Asian financial crisis of 1997-98, which provoked some developing countries to take steps to insulate themselves from future turbulence, IMF sanctions, and intrusions into policy space. I argue that there are diverse, unambiguous indications that the global financial architecture is now evolving in ways that contribute to a new institutional heterogeneity. In some policy and institutional innovations we see the emergence of financial architecture that is far less US- and IMF-centric than has been the norm over the past several decades. Moreover, the growing economic might, self-confidence and assertiveness on the part of policymakers in some developing countries (and, at the same time, the attendant uncertainties surrounding the economies of the USA and Europe) is disrupting the traditional modes of financial governance and dispersing power across the global financial system.

In making these arguments it is important not to overstate the case. It is far too early to be certain that lasting, radical changes in the global financial architecture are afoot, or that the developments now underway are secure. Nor am I arguing that all regions of the developing world either enjoy the opportunity and/or have the means to participate in the process of reshaping the global financial architecture. Rather, my goal is more modest. I show here that today there are numerous opportunities for policy and institutional experimentation, and there are clear signs that these opportunities are being exploited in a variety of distinct ways. As compared to any other moment over the last several decades, we see clear signs of fissures, realignments and institutional changes in the structures of financial governance across the global South. I have elsewhere characterized this current state of affairs as one of "productive incoherence." I use this term to capture the proliferation of institutional innovations and policy responses that have been given impetus by the crisis, and the ways in which the current crisis has started to erode the stifling neo-liberal consensus that has secured and deepened neo-liberalism across the developing world over the past several decades.

The productive incoherence of the current crisis is apparent in the emergence of a denser, multi-layered and more heterogeneous Southern financial architecture. The current crisis has induced a broadening of the mission and reach of some existing regional, sub-regional, bilateral, and national financial institutions and arrangements, and has stimulated discussions of entirely new arrangements. In some limited cases these institutions and arrangements substitute for the Bretton Woods institutions. This substitution is most pronounced in cases when the Bretton Woods institutions have failed or have been slow to respond to calls for support, or when they have responded to such requests with conditionality that has been overly constraining of national policy space. But in most cases, the institutions and arrangements that I discuss here complement the global financial architecture. I will argue in what follows that recent changes in the Southern financial landscape increase its potential to promote financial stability and resilience, support the development of long-run productive capacities, advance aims consistent with human development, and expand national policy space. Moreover, the emergence of a vibrant Southern financial architecture is not simply additive. Rather it may prove transformative insofar as the Bretton Woods institutions are pushed to respond to long-standing concerns regarding their legitimacy, governance, and conditionalities.

Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
ALBA	Bolivarian Alliance for the Peoples of Our America (Spanish acronym)
AMRO	ASEAN+3 Macroeconomic Research Office
ArMF	Arab Monetary Fund
ASEAN	Association of Southeast Asian Nations
ASEAN+3	Association of Southeast Asian Nations plus China, Japan, and South Korea
BDS	Bank of the South
BNDES	National Bank of Economic and Social Development (Portuguese acronym)
BRIC	Brazil, Russia, India, China
CAF	Andean Development Corporation (Spanish acronym)
CPCR	Agreement on Reciprocal Payments and Credits (Spanish acronym)
CDB	China Development Bank
CMI	Chang Mai Initiative
CMIM	Chang Mai Initiative Multilateralisation
EACMU	East African Common Monetary Union
ECB	European Central Bank
EU	European Union
FLAR	Latin American Reserve Fund (Spanish acronym)
FONPLATA	Financial Fund for the Development of the River Plata Basin (Spanish acronym)
FSB	Financial Stability Board
FSF	Financial Stability Forum
G-20	Group of Twenty countries
G-7	Group of Seven countries
G-8	Group of Eight countries
GDP	Gross Domestic Product
IADB	Inter-American Development Bank
IMF	International Monetary Fund
LDC	Less Developed Countries
MERCOSUR	Southern Common Market (Spanish acronym)
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OECD-DAC	OECD - Development Assistance Committee
SBA	Stand-by Arrangement
SML	System of Payment in Local Currency (Spanish acronym)
SUCRE	Unified System for Regional Compensation (Spanish acronym)
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development

1. Introduction

Over the past three decades developing countries have experienced economic and financial crises with disturbing frequency. It is now clear that the financially turbulent landscape was the product of a policy and an ideational environment that reified the liberalization of internal and external financial flows. Certainly, liberalized financial flows (coupled with lax oversight of the financial sector) also induced the current crisis, which began in 2008.

The 2008 crisis originated in the markets, institutions and failed regulatory architecture of the world's financial center, the USA. It had and indeed continues to have many secondary and tertiary epicenters, including but not limited to countries on the southern and eastern peripheries of Europe, and increasingly in some of the core European economies. The fallout of the crisis has affected many developing countries (such as via the decline and/or increased cost of trade credit, a general slowdown in lending by international banks as they attempt to protect reserves, a decline in inflows of remittances and official development assistance, ODA, and the loss of export share). The stand-by arrangements (SBAs) that the International Monetary Fund (IMF) has signed with some developing countries and a large number of countries on the European periphery are very similar to those signed in prior decades insofar as they require pro-cyclical macroeconomic policy adjustments, constrain policy space, and frustrate the possibilities for economic, social and human development.[1]

But the crisis of 2008 is in many ways distinct from its predecessors. What is most notable about the crisis, which will concern us throughout the paper, is the way in which it is proving productive of institutional experimentation in the realm of financial architectures in the developing world. We will see momentarily that in fact the drive toward experimentation arose out of the East Asian financial crisis of 1997-98, which provoked some developing countries to take steps to insulate themselves from future turbulence, IMF sanctions, and intrusions into policy space. I will argue that there are diverse, unambiguous indications that the global financial architecture is now evolving in ways that contribute to a new institutional heterogeneity. In some policy and institutional innovations we see the emergence of financial architecture that is far less US- and IMF-centric than has been the norm over the past several decades. Moreover, the growing economic might, self-confidence and assertiveness on the part of policymakers in some developing countries (and, at the same time, the attendant uncertainties surrounding the economies of the USA and Europe) is disrupting the traditional modes of financial governance and dispersing power across the global financial system.

In making these arguments it is important not to overstate the case. It is far too early to be certain that lasting, radical changes in the global financial architecture are afoot, or that the developments now underway are secure. Nor am I arguing that all regions of the developing world either enjoy the opportunity and/or have the means to participate in the process of reshaping the global financial architecture. Rather, my goal is more modest. I will show here that today there are numerous opportunities for policy and institutional experimentation, and

[1] SBAs are the IMF's basic short-term loan agreement. Note that in the European cases, the European Commission, the European Central Bank (ECB), and a few Northern European governments have partnered with the IMF on SBAs.

there are clear signs that these opportunities are being exploited in a variety of distinct ways. As compared to any other moment over the last several decades, we see clear signs of fissures, realignments and institutional changes in the structures of financial governance across the global South. I have elsewhere characterized this current state of affairs as one of "productive incoherence" [Grabel, 2011a]. I use this term to capture the proliferation of institutional innovations and policy responses that have been given impetus by the crisis, and the ways in which the current crisis has started to erode the stifling neo-liberal consensus that has secured and deepened neo-liberalism across the developing world over the past several decades.

The productive incoherence of the current crisis is apparent in the emergence of a denser, multi-layered and more heterogeneous Southern financial architecture. The current crisis has induced a broadening of the mission and reach of some existing regional, sub-regional, bilateral, and national financial institutions and arrangements, and has stimulated discussions of entirely new arrangements (as we will see in section 4). In some limited cases these institutions and arrangements substitute for the Bretton Woods institutions. This substitution is most pronounced in cases when the Bretton Woods institutions have failed or have been slow to respond to calls for support, or when they have responded to such requests with conditionality that has been overly constraining of national policy space. But in most cases, the institutions and arrangements that I discuss here complement the global financial architecture. I will argue in what follows that recent changes in the Southern financial landscape increase its potential to promote financial stability and resilience, support the development of long-run productive capacities, advance aims consistent with human development, and expand national policy space. Moreover, the emergence of a vibrant Southern financial architecture is not simply additive. Rather it may prove transformative insofar as the Bretton Woods institutions are pushed to respond to long-standing concerns regarding their legitimacy, governance, and conditionalities.

2. The productive effects of the East Asian financial crisis

The drive toward institutional innovation that is the focus of this paper has its roots in the East Asian financial crisis. On the one hand, the East Asian crisis deepened the move to neo-liberal reform in the developing world through a variety of policy and ideational mechanisms [see Singh, 1999; Grabel, 2003, 2007; Wade, 2007], even in East Asian countries whose own development experiences were very much at odds with this model. Indeed, East Asian SBAs with the IMF conditioned assistance on stringent macroeconomic policy contraction, market flexibility, privatization, economic openness that provided foreign investors with access to formerly protected areas such as banking, and a strengthened commitment to export-led growth.

Given the common diagnoses of the East Asian crisis offered by influential analysts, it is not surprising that the IMF and the G-7 leaders in the post-crisis environment promoted reforms in economic and financial governance through a variety of forums that focused on greater dissemination of information, increased monitoring and surveillance, the adoption of universal standards and codes, arms-length corporate governance, regulatory and institutional harmonization around Anglo-American norms, and an associated enhanced role for market discipline, market-adjustment mechanisms and private actors (such as credit rating agencies) in financial governance. The East Asian crisis therefore amplified the pressures toward neo-liberal conformance in a great many countries, even if a few countries, most notably China, bucked these trends. In fact, reform in the post-Asian crisis environment in both wealthy and in many developing countries cohered in the direction of enhancing neo-liberal, market-led, private financial governance.[2]

On the other hand, and precisely because of the constraints on policy space that followed the East Asian crisis, the crisis created momentum around the idea that developing countries had to put in place strategies and institutions to prevent a repeat of the events of the late 1990s.

The IMF emerged from the Asian crisis a greatly weakened institution in regards to its credibility around the world, the adequacy of its own financial resources, the size of its staff, and the geographic reach of its programs. Indeed, an important consequence of the Asian crisis and subsequent changes in the global economy was the loss of purpose, standing and relevance of the IMF. Indeed, prior to the current global financial crisis, demand for the institution's resources was at an historic low. In fiscal year 2005, just six countries had SBAs with the Fund, the lowest number since 1975 [Kapur and Webb, 2006]. From 2003 to 2007, the Fund's loan portfolio shrunk dramatically: from $105 billion to less than $10 billion, while just two countries, Turkey and Pakistan, owed most of the $10 billion [Weisbrot et al., 2009a]. After the loans associated with the Asian crisis were repaid, the scope of the Fund's loan portfolio contracted dramatically since those countries that could afford to do so deliberately turned away from the institution. [3] This trend radically curtailed the geography of the IMF's influence. Indeed, with some exceptions, the Fund's portfolio after the Asian crisis comprised loans to countries that were not able to self-insure.

Critics on both the left and the right railed against the institutions' mission creep, heavy handedness, domination by the USA, and its myriad failures in East Asia prior to and following the crisis. Policymakers in a number of Asian countries and in other successful developing countries (particularly in Latin America) sought to insulate themselves from the hardships and humiliations suffered by Asian policymakers at the hands of the IMF (see section 5 below). The explicit goal was to escape the IMF's orbit. They did this by relying on a diverse array of strategies: self-insuring against future crises through the over-accumulation of reserves; a new reliance on trade finance, foreign direct investment, lending, and ODA from fast-growing developing countries such as China and Brazil; and the establishment of bilateral swap arrangements among central banks.

The dramatic decline in the IMF's loan portfolio after the Asian crisis indicates the degree to which these escapist strategies proved to be successful. Even in the context of the current crisis, countries did their best to stay clear of IMF oversight. Indeed, during the current crisis, South Korea would have been a good candidate for a new type of (precautionary) Flexible Credit Line

[2] The Enron, Long-Term Capital Management and other financial scandals in the USA in the 1990s were also resolved on the side of those favoring more information, transparency and market discipline.

[3] See Weisbrot et al. [2009a], Kapur and Webb [2006], and Lerrick [2007] for further discussion of the turn away from the Fund.

with the Fund. But it did not apply for the credit line, presumably because of its prior experience and to avoid the stigma of being one of the IMF's clients [Wade, 2010:fn10]. Instead, it negotiated a reserve swap with the US Federal Reserve.

The Asian crisis not only stimulated interest in strategies that protected developing countries from the Fund, but it also turned attention in the region to the creation of a new institution that could serve as a counterweight or an alternative to the IMF. Interest in an Asian alternative to the IMF began in the summer of 1997, as the Asian crisis was beginning to unfold.[4] In that context, Japan's Ministry of Finance proposed the creation of an Asian Monetary Fund, a new institution that would provide emergency financial support—sans the IMF's conditions--to countries in the region that were caught up in the crisis. Though the proposal was never fully articulated, it was to be capitalized with an initial $50 billion contribution by Japan and another $50 billion in contributions from other Asian nations. The Asian Monetary Fund proposal grew out of frustration in Japan and in the region with economically harsh and politically intrusive IMF conditionality in the crisis countries, and more broadly with the limited voice of Asian countries at the Fund. The proposal was eventually tabled in the wake of tensions between Japan and China, tensions that were adroitly exploited by the IMF and the US government.

We revisit the failed Asian Monetary Fund initiative in section 4. As we will see, the spirit of this initiative re-emerges in the Chiang Mai project, an initiative that has been given new force by the current crisis. We will also see that other types of Southern financial institutions and arrangements share a partial common ancestry in the Asian crisis experience. Some of these involve giving new life to largely dormant arrangements, others to scaling up existing arrangements, and some involve new institutional structures that are very much works in progress.

3. The current crisis and global financial governance

The current crisis has been good to the IMF [Chorev and Babb, 2009]. It has rescued the institution from the irrelevance that followed the East Asian crisis by re-establishing its central place as first responder to financial crisis. This re-empowerment has come about for a number of reasons. Even with reduced staffing the Fund still holds a monopoly position when it comes to experience in responding to financial distress in poorer countries. Moreover, events in and on the periphery of Europe have contributed substantially to the IMF's resurrection as a consequence of the need of the European Union (EU), European Community and the ECB for the Fund's expertise, financial assistance and authority.[5]

The IMF's rescue was also facilitated by G-20 decisions during the crisis. Representatives at the April 2009 meeting of the G-20 gave the IMF pride of place in global efforts to respond to the crisis. The message was not lost on the Fund's former Managing Director, Dominique Strauss-Kahn who, at the meeting's end said: "Today is the proof that the IMF is back" [Landler, 2009]. The meeting not only restored the IMF's mandate but also yielded massive new funding

[4] Details in much of this paragraph are drawn from Kirshner [2006] and Grimes [2009a].

[5] Lütz and Kranke [2010] argue that the EU has "rescued" the IMF by partnering with it on bailouts and by channeling its harsh conditionality circa the 1980s and 1990s.

commitments to the institution to support its crisis response (even if upon close examination these commitments are less than advertised, as Chowla [2009] demonstrates). Representatives committed $1.1 trillion in funds to combat the financial crisis, with the bulk of it, namely, $750 billion, to be delivered through the IMF. The global crisis has reinvigorated not only the IMF, but also other multilateral financial institutions, such as the World Bank, the Inter-American Development Bank (IADB), and the European Bank for Reconstruction and Development.

At the same G-20 meeting several developing countries committed to purchase the IMF's first issuance of its own bonds: China committed to purchase $50 billion while Brazil, Russia, South Korea and India each committed to purchase $10 billion. Thus, $90 billion of the $500 billion in new resources for IMF lending come from countries that have traditionally not played an important role in Fund governance. The support for the Fund coming from developing countries is surely a landmark event at the institution. For our purposes what is most important about these new commitments is that they not only contribute to the Fund's resurrection, but that they reflect the global economic power and autonomy of these rapidly growing economies (see section 5). At present, the Fund is continuing to seek additional resources: indeed, as of January 2012 the institution's management has sought to raise an additional $500 billion in funding from its members. The Fund's Managing Director, Christine Lagarde has made a particular point of calling on developing countries to step forward with additional commitments in light of the unfolding crisis in Europe, though this request has so far been greeted coolly by developing country (and wealthy country) policymakers [see Grabel, 2011b; Reuters.com, January 19, 2012].

But if the crisis has resurrected the IMF and ushered in a substantial change in the sources of IMF funding, it has also marked a substantial diminution in the geography of the institution's influence. Those developing countries that have been able to maintain their autonomy during the crisis have used the resulting policy space to pursue a variety of counter-cyclical macroeconomic policies and capital controls, and to expand existing or create new financial institutions and arrangements.[6] Equally important for the matter at hand, the behavior of these autonomous states (such as Brazil, China, and India) has served as an example for less powerful states which, in turn, have reacted to the crisis in ways that were taken to be unimaginable in previous crises.

As of this writing, the countries that have emerged as new contributors to the Fund have had only the most (exceedingly) modest effects on formal governance reforms at the IMF and World Bank.[7] In October 2010 the G-20 Finance Ministers agreed to transfer 6% of the voting rights at

[6] There is some evidence that the Fund is beginning to face competition from other institutions. For instance, Wade [2010:fn10] points out that the IMF is losing new business to the World Bank outside of the European rescues. And he notes that even in Europe, Turkey broke off negotiations with the Fund in early March 2010 because of the severity of its conditions. A few weeks later the country negotiated a $1.3 billion loan with the Bank.

See Grabel [2011a] on the normalization of capital controls during the current crisis.

See Ocampo et al. [2010] on the use of counter-cyclical policy tools in a range of developing countries during the current crisis.

[7] An examination of IMF governance and reform is outside the scope of this paper. See Woods [2010], Wade [2011] and Vestergaard and Wade [2011] for detailed analyses of these matters, including the issue of voting rights and quotas at the IMF and World Bank. Various non-governmental organizations and even an Executive Director at the

the Fund to developing countries by October of 2012 and to double IMF quotas. Under the agreement the top ten shareholders of the Fund will represent the ten largest economies in the world, which now include China, Brazil, India and the Russian Federation. European representatives also agreed to cede two seats on the Executive Board. Under the proposal, all Executive Directors will be elected by late 2012. The IMF ratified the G-20's governance proposal in November 2010, though it may be that powerful countries within the institution stall its implementation.

However, it may be that the developing countries that are now being asked to contribute anew to the Fund use this opportunity to press more aggressively on governance reform (as appears to be the case, Grabel [2011b]). It is also the case that the regular meetings of the executive directors of the BRIC countries (namely, Brazil, Russia, India and China) at the IMF and World Bank help to create new channels of influence over time (as Wade [2011] notes). These (and other types of networks) that are emerging among dynamic developing countries may well lay the groundwork for more significant changes at the Bretton Woods institutions.[8]

In sum, then, the IMF has discovered new vitality as a first-responder to economic distress at the same time as it has faced diminished territory over which it can dictate economic policy. The newly resurrected institution faces a changed landscape. It no longer enjoys wall-to-wall influence across the developing world. The geography of its influence is now significantly curtailed as a consequence of the rise of relatively autonomous states in the developing world. Equally important, the institution now finds itself dependent on raising new resources from vibrant developing countries. Even if this new role for developing countries does not translate into formal changes in the institution's governance in the near term (as seems likely), it cannot be dismissed since it reflects broader changes in economic power that may well be reflected in other ways. As we will see below, we may expect institutional innovations in the global South that gradually reduce the centripetal status of the IMF, World Bank, and the US dollar in global financial governance.

The G-20 Leaders' meetings and the expansion of the Financial Stability Board (FSB) are also best seen as reflecting modest (and yet contested) efforts to increase the voice of a small group of large developing countries in discussions of global financial governance during the current crisis.[9] In the early months of the crisis the G-20 Leaders' meetings seemed to signal the

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IMF have voiced concerns about the serious limits of recent governance reforms, and about the efforts of leading members to stall even the modest reforms agreed to in 2010 [e.g., see Nogueira Batista Jr., 2012] Civil society groups have argued rightly that Africa is still inadequately represented in IMF decision-making, and that the new agreement on voting shares "leaves in place the US unilateral veto over some IMF decisions" [Bretton Woods Project, 2010]. This continued frustration with Fund (and World Bank) governance plays an important role in motivating the innovations discussed in section 4.

[8] See the essays in Martinez-Diaz and Woods [2009] on the transformative potential of myriad new networks among developing country policymakers.

[9] The FSB is successor to the Financial Stability Forum (FSF). "The FSB is mostly a coordinator. According to its Charter, the FSB has been established 'to coordinate at the international level the work of national financial authorities and international standard setting bodies in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies.' In addition, the institution is to work with the international financial institutions to 'address vulnerabilities affecting financial systems in the interest of global financial stability' ….It [i.e., the FSB] is designed to act more as a loose network of various national policy makers

emergence of a new global financial architecture that was more pluralistic and inclusive than the old one, dominated as it was by the US, other wealthy countries, and the IMF. The G-20 gave the leaders of countries such as Brazil, Argentina, China, India, Saudi Arabia, and South Africa a seat at the table, along with the usual G-8 countries. However, some observers were disappointed from the start with the organization's lack of inclusiveness (see Payne [2010]) and its timidity, see Woods [2010]). Others remain cautious (see Helleiner and Pagliari [2009], Helleiner and Porter [2009], and Helleiner [2011]). In fact, the early promise of the G-20 has largely given way to disappointment and frustration. For example, Ocampo [2010c] argues that the G-20 still reflects an "elite multilateralism"; for Vestergaard and Wade [2012] and Wade [2011] it is an illegitimate and non-representative body that has failed to accomplish what it set out to do, and even what its spokespeople claim that it has achieved; and similarly for Rachman [2010] the body is "divided, ineffective and illegitimate." [10]

At this point we can conclude that the G-20 has come to resemble a larger, somewhat more unruly G-8. The body is prone to issuing general communiqués in the face of unfolding crises while failing to take action on key issues [Grabel, 2011c]. Moreover, the G-20 began in June 2010 to resemble the G-8 in calling for the restoration of fiscal balance [see e.g., Fitoussi et al., 2011:Part I].[11] In 2012 the leadership of the body shifted to Mexico. Given the neo-liberal inclinations of the leadership in the country at present, we have reason to be pessimistic about momentum coming from G-20 leadership on the matter of reforming the global financial architecture in a way that promotes greater inclusiveness and voice for developing countries, expanded policy space for development, and the advancement of human development.

It is too early to tell whether the modest expansion of seats on these formal bodies will translate into real influence, greater inclusiveness, and a commitment to enhance the policy autonomy of developing countries. But certainly there is reason to be hopeful that the new networks and relationships that are forming within these and other bodies (such as the Commission for Africa, the BRIC Leaders' Summits, etc.) increases the opportunity for dialogue, capacity building, and influence on the part of a broader group of developing countries

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(from ministries of finance, central banks, supervisory and regulatory authorities) and international officials concerned financial stability issues rather than a substantial inter-governmental institution...'" The membership of the FSB expands significantly on that of the FSF. In 2009, the small club of countries - the G-7 countries, Australia, Hong Kong, the Netherlands, Singapore, and Switzerland (the European Central Bank has also been a member) – has now been joined by the rest of the G-20 countries, Spain and the European Commission. Like the FSF, the FSB also includes representatives of international financial institutions (the IMF, World Bank, Bank of International Settlements, Organisation for Economic Co-operation and Development (OECD)) as well as key standard-setting and central bank bodies" [FSB Charter and quotation from Griffith-Jones, Helleiner, Woods, 2010:6-7; see also Helleiner, 2010b].

Developing country representation on other bodies that constitute the global financial regulatory architecture (such as the International Accounting Standards Board, the Technical Committee of the International Organisation of Securities Commissions, and the Basel Committee on Banking Supervision) has also been expanded modestly (as Helleiner and Porter [2009] note).

[10] For a discussion of an alternative to the G-20, see the Global Economic Council proposal in Vestergaard and Wade [2012] and Wade [2011]. See also numerous papers in the collection edited by Dervis and Lombardi [2011].

[11] One policy area where the G-20 has distinguished itself productively is in its support for the right of countries to utilize capital controls [see Gallagher, 2011; Grabel, 2011c].

[Martinez-Diaz and Woods, 2009]. More importantly, and turning to the heart of the paper, the financial resources and the financial architectures that are taking root in the developing world are indicative of the ways in which the financial landscape is changing in ways that increase its ability to speak to economic and human development needs in the global South.

4. New financial architectures in the global South

As with the Asian crisis, the current crisis has promoted interest in alternative modes of financial governance. Indeed, the current crisis has stimulated the expansion of existing institutions and arrangements and the emergence of new ones in the global South. Collectively these innovations suggest the emergence of a multi-nodal, dense, and heterogeneous financial arena (though certainly we do not expect all of the arrangements under construction to prove tenable in the long run). In what follows we will see that the current crisis has been far more productive than the Asian crisis in terms of propelling institutional innovations that may ultimately lead to more decentralized, pluralist, inclusive, and developmental financial architectures that can respond to the myriad, diverse challenges facing developing countries. Moreover, changes in patterns of global economic growth and reserve accumulation since the Asian crisis have provided the resources necessary to scale up some older Southern and South-South institutional arrangements and to provide funding for newer ones. These changes in the financial architecture of the global South both substitute and complement the Bretton Woods institutions, while also having the potential to create pressure on them to change in ways that can increase their legitimacy, efficacy, and inclusiveness.

Many observers have viewed the Asian and the current crises as catalysts for rethinking the global financial architecture. These crises revealed the inadequacies of existing arrangements and provide support for the view that such regional, sub-regional and multilateral arrangements should play a greater, complementary role in promoting financial stability, financial inclusion and long-term development. For example, writing after the Asian crisis Mistry [1999] argues that regional crisis management capacity could usefully complement national and global measures. This view was articulated forcefully in the 2002 Monterrey Consensus of the International Conference on Financing for Development (UN, 2002).[12] Writing before the current crisis and based on experiences in Europe and the Andean region, Griffith-Jones, Griffith-Jones and Hertova [2008] conclude that there is a need for new or expanded regional and sub-regional development banks to fill gaps in the international financial architecture.[13]

[12] The Monterrey Consensus emphasized the central role that regional and sub-regional banks can play "in serving the development needs of developing countries and countries with economies in transition." It also stressed that these institutions should "contribute to providing an adequate supply of finance to countries that are challenged by poverty and should also mitigate the impact of excessive volatility of financial markets". Equally importantly, the Monterrey Consensus argued that "[s]trengthened regional development banks and sub-regional financial institutions add flexible financial support to national and regional development efforts, enhancing ownership and overall efficiency. They can also serve as a vital source of knowledge and expertise on economic growth and development for their developing member countries." [UN, 2002: paragraph 45, with additional discussion in UNCTAD, 2011b:115].

[13] Their preliminary calculations show that regional development banks could provide additional annual lending of approximately $77 billion if developing countries allocated just 1% of their reserves (which at the time they wrote equaled $32 billion) to paid-in capital for expansion of existing or the creation of new regional development banks.

Similarly, in the early days of the crisis the Stiglitz Commission [UN, 2009, ch.V] called for a new global monetary system built from the bottom up through a series of agreements among regional arrangements. In a related vein, Ocampo [2010a] argues that improving economic and social governance necessitates the creation of a dense, multilayered network of world, regional and national institutions. In this view, regional and sub-regional institutions play an important role between global and national financial arrangements [see also Ocampo 2011a, 2011b, 2010b, 2006; essays in Volz and Caliari, 2010].[14] The Fund's Strauss-Kahn, who during the crisis embraced regionalism and argued that the IMF should promote it, echoes this view. In his words: "….we might look at ways to collaborate with regional reserve pools. We…do not see such funds as 'competitors.' Indeed, they can be a positive and stabilizing force…At its most ambitious, such collaboration could even include Fund resources serving as a backstop to regional pools" [Strauss-Kahn, 2010].[15] Finally, UNCTAD [2011b] usefully articulates a concept of "developmental regionalism" to frame contemporary discussions about the need to promote forms of South-South cooperation that are organized around lines that are quite distinct from those associated with European financial regionalism.

Many observers highlight the gradual transformations that are now underway across the financial landscape of the global South. Tussie [2010] argues that we are in the middle of a period of transition to a more diverse and multi-tiered global financial and monetary system. Chin [2012] believes that the crisis has had a catalytic, though gradual, effect in promoting a deeper form of regionalism in Asia (particularly because both China and India are increasingly engaged in this process). He further argues that the crisis is stimulating the development of a more diverse and multilayered global financial and monetary system [see also Chin, 2010; Helleiner, 2010a; Woods, 2010].

Some observers are less sanguine about signs of an emergent regionalism in financial architectures. For example, Chin [2010], Eichengreen [2010], and Cohen [2010) conclude that regional responses so far are modest, especially in connection with lender of last resort assurances, financing for balance of payments crises, or currency stabilization. They also note that when the crisis emerged, East Asia and South America turned quickly to unilateral and bilateral rather than to existing regional mechanisms. Conceding that point, I will nonetheless argue below that it does not undermine the case for discontinuity and change at the current juncture.[16]

Regional and sub-regional financial initiatives across the developing world

The regional, sub-regional, and national initiatives discussed here suggest that the financial crisis is serving as the mid-wife to more diverse, inclusive, and developmental financial

[14] This conception of regional and sub-regional institutions might be likened to Wade's [2008] discussion of the need for "middleware" in the global financial architecture. Middleware refers to software that allows different families of software to communicate with one another, thereby avoiding the need to utilize a single, centralized platform.

[15] I thank Luis Rosero for this point.

[16] Note also that Chin [2012]—who was skeptical of signs of emergent regionalism in 2010—today highlights the catalytic effects of the crisis in the on-going and gradual process of regionalization in Asia.

architectures in the global South. Some of the institutions and arrangements that we consider here have a single objective, e.g., the provision of longer-term project/development finance, the promotion of financial stability through liquidity support, trade and/or financial integration, or a reduction in the US dollar's role in the region via a new currency or payment arrangements. Others combine some or all of these objectives. Moreover, the crisis has stimulated many institutions to expand their operational objectives. For example, we will see that some institutions that traditionally focused on trade promotion or project finance have moved into liquidity support. Finally, there is good reason to question the traditional distinction between project finance and liquidity support. Project finance provided during crises serves a counter-cyclical role since at such moments long-term finance becomes scarce and expensive. The provision of trade credit or the ability to settle trade in the national currency supports intra- and/or inter-regional trade, which can promote financial stability during a crisis. The maintenance of stable trade patterns during a crisis may also increase a country's access to project finance.

It is also important to note that many of the institutions and arrangements discussed here are characterized by governance structures that differentiate them from the Bretton Woods institutions. The Bretton Woods institutions have long (and correctly) been criticized for giving undue weight, indeed veto power, to wealthy nations, particularly the USA. For this reason, many of the institutions and arrangements across the global South are organized to promote greater inclusiveness, though there is considerable divergence in the degree to which this is achieved. In addition, many are distinguished from the Bretton Woods institutions by their approach to conditionality.[17] In some cases, there is an explicit commitment to avoid all forms of conditionality while in others the matter is being actively debated, and in others conditionality is minimalist and highly country specific. Finally, we will see that for the most part the institutions and arrangements considered here are more agile than the Bretton Woods institutions insofar as they respond quickly to economic challenges in their field of operations.

In Asia

The East Asian crisis awakened interest in regional financial architectures in the developing world. That crisis gave voice to an aborted proposal for an Asian Monetary Fund that eventually formed the basis in 2000 for the bilateral swap agreements that are at the heart of the Chiang Mai Initiative (CMI). The CMI involves the central banks of the Association of Southeast Asian Nations (ASEAN), plus China, Japan and South Korea (the so-called ASEAN+3).[18]

[17] The common defense of the conditionality put forward by the Bretton Woods institutions is that it prevents moral hazard by errant borrowers and creates the foundation for economic renewal. Decades of studies have found that this is not the case, and that conditionality compromises policy autonomy. In particular, IMF conditionality has negative effects on economic performance, redistributes income upwards, has disproportionately negative effects on women and children, and empowers the financial community and external actors over national policy makers and vulnerable groups. See Vreeland [2003] on conditionality in the period prior to the current crisis. See Weisbrot et al. [2009b] for similar evidence on the effects of IMF programs during the current crisis. Ortiz et al. [2011] find that austerity programs during the current crisis have disproportionate negative effects on children and other vulnerable groups.

[18] ASEAN comprises Malaysia, Singapore, Thailand, Indonesia, Philippines, Brunei Darussalam, Vietnam, Laos, Myanmar, and Cambodia.

The current crisis has motivated incremental though certainly consequential architectural innovation among the ASEAN+3 members. Indeed, decisions taken in May 2012 by policymakers in these countries underscores the way in which the global crisis is stimulating a broadening and deepening of regional financial arrangements despite obstacles that some analysts had previously seen as insurmountable.

The global financial crisis has been a powerful impetus for deepening the CMI in important respects on two occasions. The first time was in early 2009. At that time the CMI was "multilateralized," such that it is now known as the Chiang Mai Initiative Multilateralisation (CMIM). This involved the creation of a $120 billion regional currency reserve pool from which member countries could borrow during crises.[19] China, Japan and Korea provided (and today still provide) 80% of the CMIM's resources (with China and Japan each contributing 32% to the pool). The "plus three countries" together hold 71.6% of the voting power within CMIM. Decisions regarding renewals of and disbursals from the fund are decided on the basis of a weighted majority two-thirds voting system (in which each country receives 1.6 basic voting shares plus additional voting shares based on the size of its contribution to CMIM). In practice, this means that despite the significant block of votes held by both China and Japan neither country alone can veto disbursal decisions.[20] The largest economies within CMIM (namely, China and Japan) can borrow an amount that is equal to no more than 50% of their contribution to the fund; Korea can borrow an amount equal to the size of its contribution; better-off ASEAN members can borrow up to 250% of their individual contributions; and the five smallest economies can borrow up to 500% of their contribution.[21]

The transformation of the CMI to the CMIM was significant because it increased the potential scope of central bank currency swaps and reserve pooling arrangements in the region. This introduced the possibility that countries that are members of the CMIM may not need to turn to the IMF when they face liquidity crises in the future. However, at the behest of creditor countries within the arrangement (up until May 2012), disbursals from the CMIM in excess of 20% of the credits available to a country require that a borrowing country must be under an IMF surveillance program (smaller disbursals from CMIM did not require a country to be involved with the IMF). Grimes [2009b] calls the CMIM-IMF link an "elegant solution" to the difficult political problem of regional surveillance since "it allows the lending governments to elide responsibility for imposing conditions by delegating conditionality to the IMF" [Grimes

[19] Note that from the perspective of neo-classical economics, regional reserve pooling arrangements may be seen as puzzling from the perspective of risk diversification since economic shocks are likely to be shared across regions [Basu and Kannan, 2010]. Evidence from Latin America suggests that this is not necessarily the case as the demand for resources within a region may, in fact, be sequential [see Ocampo and Titleman, 2012].

[20] Reflecting the power (and wealth) dynamics of the region, China and Japan have the same voting weight, Korea half the voting weight of each of the two countries, and ASEAN countries a weight disproportionate to their financial contributions [ADB, 2010].

[21] Description of CMI and CMIM drawn from ADB [2010], Eichengreen [2010], Grimes [2009a, 2009b, 2011], Sussangkarn [2011], [Ciorciari, 2011], Capannelli [2011], and Henning [2009].

2009b:12]. In this sense, CMIM's operation could be seen to reinforce rather than challenge the IMF [Grimes, 2011].[22]

But since the 2009 decision to multilateralize the CMIM, ASEAN+3 members have continued to wrestle with and deepen the arrangement with an eye toward the original vision that inspired it. On January 30, 2012—after much politically fraught discussion (involving the selection of a site and a director)—the ASEAN+3 Macroeconomic Research Office (AMRO) was opened in Singapore [see Ciorciari, 2011: 945-46]. AMRO is charged with conducting IMF Article IV-type monitoring of members (though presumably with a greater degree of regional and national sensitivity).[23] AMRO's own website describes it as the "regional surveillance unit of the CMIM….Its purposes are to monitor and analyse regional economies and to contribute to the early detection of risks, swift implementation of remedial actions and effective decision-making of the CMIM."

Some analysts have noted that the naming of AMRO itself reflects the tension over regional surveillance. On this matter, Eichengreen [2011:4] observes: "Even the name, which refers to the new entity as a 'research' office shies away from giving it concrete oversight of national policies. These limitations are indicative of the continuing reluctance in Asia to criticize the policies of regional neighbors and thus of the obstacles to conducting firm surveillance. This is probably the main obstacle to a more significant role for CMIM."[24] Observers of the region remain somewhat skeptical as to whether AMRO will evolve into a true regional surveillance body, though this is obviously the key to CMIM's evolution as a competitor to the IMF [Kawai, 2010; Financial Times, January 11, 2011; Grimes, 2011; Azis, 2011]. Chin [2012:7] is somewhat more optimistic, seeing AMRO's progress as a possible "second step" on the way to a gradual loosening of the CMIM's link with the IMF, and a step in the process of evolution towards something approximating an Asian Monetary Fund.

In May 2012, CMIM members took a number of important steps to expand its size and scope. Together these changes move CMIM further toward the Asian Monetary Fund proposal that is its intellectual antecedent. The following critical decisions on CMIM were announced at the May 3, 2012 ASEAN+3 meeting [AMRO, 2012].

(1) The size of the currency swap pool was doubled, to $240 billion.

(2) For 2012-13 the need to be under an IMF program does not become operative until the swap drawn equals 30% of the maximum for the country (and 40% in 2014, pending discussion and conditions at the time).

[22] The CMIM does not literally realize the Asian Monetary Fund proposal (at this point) since the latter was developed with the goal of displacing the IMF in the region. See Grimes [2011] for a discussion of the important differences between these initiatives.

[23] The first director, Mr. Wei Benhua of China, was unanimously appointed on April 11, 2011.

[24] Some have also suggested that early tensions over the very naming of AMRO apparently centered on whether the word "and" should appear between "Macroeconomic" and "Research," and that this tension reflected the deep divisions over the granting of regional surveillance power (private communication, February 2012).

(3) The maturity of both the IMF-linked and the de-linked swaps were lengthened.

(4) And, for the first time, a "Precautionary Credit Line" facility was introduced to CMIM. The Precautionary Credit Line allows members to draw on swaps of the size governed by the country-size formula that already exist in CMIM (based on what appear at this time to be vague macroeconomic criteria). The Precautionary Credit Lines, too, have IMF-linked and de-linked components.[25]

The May 2012 decisions underscore the dynamic character of the process of financial regionalization among CMIM members. They also highlight the continued and complex efforts to build an institutional framework that reduces the role of the IMF in the region.

Writing before the May 2012 decisions, some long-time analysts of power politics in Asia such as Grimes [2011] and Cohen [2010] suggested that great power rivalries and regional security tensions are so deep seated that the IMF will continue to be seen as a necessary "neutral third party in CMIM matters" [Grimes, 2011]. In addition, many CMIM skeptics note that the swaps available under both the CMI and now the CMIM have yet to be activated.[26] Instead, CMIM members are negotiating bilateral swaps between their own central banks and those of non-CMIM member countries (such as the US), while continuing to hoard official reserves on a national basis.[27] Another oft-cited obstacle to the full realization of the CMIM is the link to the IMF. The IMF link means that governments in the region will not utilize CMIM resources owing to experiences during the Asian crisis [Sussangkarn, 2011]. Certainly the decisions taken in May 2012 in regards to loosening the IMF link is a step in the right direction. A final criticism concerns the size of the CMIM swap pool. Many analysts have previously noted that the pool is small relative to the likely need during a crisis [ADB, 2010; Cohen, 2010]. For example, Chin [2012:6] noted (before the May 2012 decisions) that CMIM resources represented just 2.4% of the almost $5 trillion in international reserves held by central banks in Asia the end of 2011, and were relatively small as well when compared to the $586 billion crisis-response package deployed in China in November 2008. Indeed, recognition of the limited firepower of CMIM (a fact made plain by the Eurozone crisis) led many analysts and officials over the last two years to call for a significant expansion in the size of its resources [see ADB, 2010; Talley, 2012; Dow Jones Newswires, 2012]. This call was heeded in May 2012.

In my view, there is reason to take seriously the real obstacles involved in breaking the CMIM-IMF link, particularly since this is rooted in deep-seated historical experiences. But if the current crisis reveals anything, it is that unexpected developments happen when the need arises. Moreover, CMIM and AMRO are new, and as recent developments make clear, there is no good reason to believe that their scope is fixed. It is therefore premature to conclude that

[25] The Asian Bond Market Initiative was also expanded in May 2012.

[26] South Korea and Japan agreed to a $70 billion currency swap in October 2011 as the European financial crisis deepened, $10 billion of which is to come from CMIM. However, the swap itself has not yet been activated. The Korean government appears to see it as an emergency line of credit intended to stabilize foreign exchange markets, and as something to be utilized only as a last resort [Bloomberg.com, October 19, 2011].

Moreover, CMIM skeptics note that member countries continue to rely upon swaps with the US. For example, in October 2008 South Korea negotiated a one-year swap arrangement with the US Federal Reserve for $30 billion rather than avail itself of the $3.7 billion available to it under the (then) CMI. Accessing the full amount available to it, namely $18.5 billion, would have necessitated that Korea submit to an IMF agreement [Sussangkarn, 2010.]. Experience with the Fund during the Asian crisis made that politically infeasible. Around the same time, Singapore also requested a bilateral swap with the US Federal Reserve instead of utilizing funds available under CMI.

[27] Regarding this tendency, Cohen [2010:21] argues that "since CMIM was announced, both Japan and China have been energetically negotiating or expanding their own bilateral local currency swaps in the region even while planning to incorporate their existing bilateral dollar swaps into CMIM. Each government, in effect, appears to be competing to line up as many regional clients as possible, offering access to the yen or yuan as bait. "

the CMIM will fail to adapt as the demands placed on it evolve. That its swaps have yet to be activated and the central banks of the region's larger economies continue to accumulate official reserves ought not be taken as indicators of failure. The May 2012 expansion of CMIM's scope and size underscores the dynamism of the arrangement and policymakers' continued commitment to push its boundaries. CMIM may therefore best be understood as a vital part of an evolving process of regionalization and experimentation,[28] one that may ultimately lay the groundwork for more significant cooperation among central banks in this and other regions.

Developments in Europe may give CMIM the boost it needs to develop further along the lines of the vision that inspired it. The evident costs of the EU's failure to resolve the surveillance matter may well give CMIM members the motivation to accelerate their efforts. In fact, the scale and intractability of the Eurozone's problems in 2012 likely played a role in recent decisions taken by CMIM members. The IMF's (and the "Troika's") actions in Mediterranean Europe surely resonate with Asian policymakers, given their experiences with the IMF. And recognition that the IMF's resources are insufficient to handle the fallout in Europe may have driven the decision to double the size of the CMIM pool.

In Latin America

Among regions in the developing world, Latin America has long had the greatest number of regional and sub-regional institutions in its financial architecture. It is therefore unsurprising that the crisis has moved the region further in this direction. In addition, the re-emergence of more populist governments and the success of large commodity exporters in the region have also stimulated the growth of regional, sub-regional, bilateral, and unilateral initiatives.

One such initiative is the Latin American Reserve Fund (FLAR). FLAR was founded in 1978 as the Andean Reserve Fund to serve countries in the Andean region. It is based in Colombia, and its members include Bolivia, Colombia, Costa Rica, Ecuador, Perú, Uruguay and Venezuela. As of December 2011, FLAR has a capitalization of just over $2.3 billion. Like CMIM, FLAR is a regional reserve pooling arrangement. FLAR acts largely as a credit cooperative that lends to members' central banks in proportion to their capital contributions [Chin, 2010:fn40]. It maintains five different credit facilities; for details on them, see Ocampo and Titleman [2012:18-19]. The majority of its loans (including third party loans) to central banks are for liquidity support and guarantees in the event of balance of payments or foreign exchange pressures [ibid]. FLAR also supports central banks through assistance in improving the liquidity of and return on international reserve investments, and facilitating the restructuring of public debt [McKay, Voltz, and Wolfinger, 2010]. FLAR's website also states more broadly that the institution contributes to the harmonization of exchange rate, monetary and financial policies of its members [FLAR, 2011]. This occurs principally through small regional conferences and an annual conference it has hosted since 2006 [Ocampo and Titleman, 2012]. FLAR also created a sub-regional currency, the Andean peso, which is intended to be used as a short-term reciprocal

[28] Writing before the 2012 decisions, Grimes [2009a, 2011] argued that CMI and CMIM (as well as the ASEAN+3 Asian Bond Markets Initiative) reflect the maturing of ASEAN+3 cooperation. Relatedly, Arner and Schou-Zibell [2011] see CMIM as providing the outlines of a crisis management structure and a potentially important liquidity mechanism in the region [see also Ciorciari, 2011].

credit among member central banks, plus the central banks of Argentina and Chile. But it has not been used to this point [ibid].

Each member of FLAR has one vote in the institution. Disbursal of support funds by FLAR requires the assent of at least 5 of its 7 members (though the three largest contributors, Colombia, Perú, and Venezuela, each have 21% of the vote, giving them an effective veto). This straightforward disbursement criterion is seen by many analysts as an important factor in the institution's ability to respond rapidly to requests for support.[29] Lending by FLAR is not in any formal way linked to the IMF, and this contributes to the high degree of perceived legitimacy of the institution among members.[30]

There are some important differences between CMIM and FLAR. FLAR, a far older and far less well-capitalized institution, has a broader mandate than does CMIM. FLAR members must deposit funds with the institution, whereas CMIM members can put forth letters of commitment enabling them to manage their contributions independently. The leadership issues that stymie CMIM do not obtain in FLAR; indeed, FLAR lacks a clear leader [Ciorciari, 2011]. Most importantly, the critical issue of surveillance that has plagued CMIM has largely been resolved within FLAR. It has a surveillance and monitoring unit, the Economic Studies Division, which provides regular country surveillance and monitoring. Central banks seeking FLAR support for balance of payments problems are required to present information on the monetary, credit, exchange, and fiscal and trade measures that it intends to deploy to mitigate the problem that motivates the support request.[31] To this point, FLAR has not denied support to a member on the basis of the plans for policy reform put forward by a central bank requesting assistance for balance of payments support.[32] But there is one instance wherein FLAR did mandate a loan condition that is familiar to students of the IMF. A FLAR loan to Ecuador in 2006 required the government to run a primary budget surplus of at least 2% of GDP during 2006-08 [Rosero, 2011].

There has never been a default on a loan made by FLAR, something that is thought to reflect the level of "ownership" that members have in the institution. Member governments appear to treat FLAR as a preferred creditor, though it does not formally have this status. This has resulted in the institution's sterling credit rating. In fact, FLAR's credit rating is higher than the rating of any individual member nation and is slightly above that of CAF and even regional star (non-member) Chile [FLAR, 2011].

Prior to the current crisis, FLAR lending to member countries was significant in comparison to IMF lending: indeed, from 1978 to 2003, FLAR loans of $4.9 billion were almost 60% of the size of the ($8.1 billion in) loans from the IMF to the same countries [Chin, 2010:fn41]. During the

[29] Eichengreen [2011] argues that moving to a simple majority vote on disbursals would speed FLAR's response time.

[30] Details in this and the next paragraph drawn from Eichengreen [2011], McKay, Voltz and Wolfinger [2010], and FLAR [2011] except where noted.

[31] Eichengreen [2011] notes that it is unclear if the Economic Studies Division is privy to a good deal of confidential national economic information.

[32] There is no such surveillance required for short-term credit support [McKay, Volz and Wolfinger, 2010].

financial crises of the 1980s and the 1998-99 period, FLAR provided more financing than did the IMF [Ocampo and Titelman, 2009-10:261]. In some cases FLAR contributed stabilizing resources when the IMF did not or when member governments declined to engage the Fund (e.g., in Peru in 1988, Colombia in the 1980s and 1990s, and Costa Rica recently) [Ocampo and Titelman, 2012]. And though the resources of FLAR are relatively small, for some members the institution's resources are quite significant. For example FLAR has lent resources equal to 35% of Bolivia's foreign exchange reserves in 1985-86, 28% of Ecuador's in 1998, and 30% of Colombia's in 1984 [Ocampo and Titelman 2009-10:262]. As Ocampo and Titelman [2009-10:262] also note, FLAR's lending has been redistributive on the sub-regional level. Bolovia and Ecuador received 55% of FLAR's disbursements (and they are granted privileged terms with respect to borrowing capacity). The timeliness and speed with which FLAR has been able to disburse funds is also notable [Ocampo and Titelman, 2009-10:262].[33] FLAR has also twice issued bonds—a 3 year bond for $150 million in 2003 and a 5 year bond for $250 million in 2006 [ibid].

FLAR lending to member countries has also been significant during the current crisis. Between 2008 and 2011 FLAR lent $480 million to member countries [Ocampo and Titelman, 2012].[34] During the same period, the IMF made no loans to member countries, although it did provide Colombia with a large flexible credit line (in the amount of $10.4 billion) in 2009 [ibid].

FLAR's potential is nonetheless limited by the fact that it involves a small number of countries, and the region's largest economy, Brazil, is not a member and has kept itself at a distance from the institution (as well as from the Bank of the South) [Chin, 2010]. The same can be said about the other large economies in the region, namely, Mexico, Chile and Argentina. Their absence necessarily limits the resources available to FLAR. Research by Rosero [2011] finds that given the rather stagnant levels of capital subscribed to FLAR, it is of most use now to the smaller countries that are its members (namely, Bolivia, Ecuador, and Costa Rica). This perhaps contributes to the institution's distributive success as earlier noted by Ocampo and Titelman [2009-10]. At present, larger countries in FLAR (Venezuela, Colombia, and Peru) are relying on bigger pools of resources from other sources, such as the contingency line of credit that Venezuela has with China [Rosero, 2011:109]. In this connection, Eichengreen [2011] notes that even Colombia, where the institution is based, declined to engage or enlarge FLARs resources during the crisis.

Certainly, then, FLAR is insufficiently capitalized to respond to the needs of larger economies, especially in view of current market uncertainties. Many analysts have called for an expansion of FLARs resources—increasing its capitalization by as much as three times [Eichengreen, 2011].[35] Ocampo and Titelman [2009-10] argue that the institution has the potential to expand its membership in the Americas and the Caribbean, though they do acknowledge the possible

[33] See FLAR [2011] for details on its lending over time, and see Rosero [2011] for detailed case studies of FLAR lending to Colombia in 1999, to Costa Rica in 2003, and to Ecuador in 2006.

[34] Excluding Venezuela, FLAR lent 35% more than did the IMF to member countries from 1978-2011. The exception during this period was 1989-93 [ibid].

[35] See Ocampo and Titelman [2012] for discussion of proposals to increase the capitalization and membership in FLAR.

incentive problems that may frustrate efforts to increase membership. They (and others) also argue that it can also increase its reach by connecting directly with other existing and nascent sub-regional and regional arrangements and multilateral institutions (see below for discussion). Others argue that FLAR could expand its resources through larger paid-in quotas by its members, and by establishing contingent lines of credit with member central banks, private banks or even by intermediating funding from the IMF [Rosero, 2011].

Despite its limited reach, the many achievements of FLAR during its relatively long tenure should not be dismissed. The institution has a high level of perceived legitimacy among its members (notably around the issue of surveillance); its loans have all been repaid; and it has been able to respond rapidly to funding requests, which has improved economic conditions in recipient countries [Rosero, 2011; Ocampo and Titelman, 2009-10].[36] In addition, its activities have spoken (at least partly) to sub-regional distributional issues, generated savings for recipients by offering better terms than other international institutions, and catalyzed support from other lenders [ibid]. Finally, by providing support during balance of payments crises, FLAR contributes to financial stability for member countries and, as a consequence, may promote intra-regional trade during downturns [Agonsin, 2001].

Though the matter has not been researched, we may reasonably expect that both FLAR and CMIM are having behavioral effects on the central banks of smaller member countries. For these countries, access to FLAR resources may be reducing the pressures (and concomitant opportunity costs) of accumulating excessive foreign exchange reserves. We should also acknowledge that in the context of a rapidly evolving Southern financial landscape FLAR is best seen as one among many institutions in a complex network of unilateral, bilateral, regional, sub-regional, and multilateral institutions and arrangements [per Ocampo, 2006]. As such it should be understood to complement and fill gaps in the existing financial architecture. Thus, it does not make sense to evaluate FLAR (or CMIM) against the benchmark of whether it substitutes for the IMF or for bilateral swaps or contingent lines of credit, especially for larger economies.

Another institution in Latin America that bears mention is the Andean Development Corporation (CAF).[37] Founded in 1968, CAF is a multilateral, regional development bank that focuses mainly on medium- and long-term lending [Ocampo and Titelman, 2009-10]. A large number of Latin American countries and some countries in the Caribbean are now CAF members.[38] CAF is owned almost exclusively by developing countries (with the exception of Spain and Portugal, both of which are also members). As of 2011, member countries own 97% of its assets (which is quite different from the ownership structure of other regional multilateral lenders) [ft.com, February 6, 2012]. As of the end of 2010, CAF had assets of $5.6 billion. Andean countries receive the majority of CAF loans (i.e., 69% of total loans in 2007) [Ocampo and Titelman, 2009-10: 256]. CAF lends broadly throughout its membership; in contrast to FLAR, a significant percentage of its recent loans have provided project finance to larger

[36] The average approval time for FLAR loans is 32 days [Ocampo and Titelman, 2012].

[37] CAF has recently been renamed the Latin American Development Bank. But the acronym is still used for legal reasons, and so we use it in what follows.

[38] Members include Bolivia, Colombia, Ecuador, Peru, Venezuela, Mexico, Chile, Trinidad and Tobago, Brazil, Panama, Paraguay, Jamaica, Argentina, Uruguay, Costa Rica, Spain, Dominican Republic, and Portugal.

countries. In 2010, 15.3% of its loans went to Argentina, 18.8% to Brazil, 9.4% to Colombia, 16.1% to Peru, and 15.6% to Venezuela [CAF, 2010]. [39]

In terms of lending volume CAF is among the most dynamic of all of the multilateral development banks. Ocampo and Titelman [2009-10:252] report that CAF lending grew fourfold between 1991 and 2007, whereas during the same period lending by the IADB doubled and World Bank lending to South America grew by only 40%. CAF loans have grown substantially since 2000, and notably have continued to grow through the global downturn. During 2010, CAF approved loans of $10.5 billion, a record figure that represents an increase of over 15% over 2009 approvals [CAF, 2010]. [40]

More than half (57%) of the loans approved in 2010 by CAF were medium- and long-term in nature, and almost half of the total loans approved (45.5%) were for infrastructure projects [CAF, 2010]. Since 2001, CAF has been the main source of multilateral project financing for Andean countries (providing over 55% of multilateral financing), and since 2006 over 50% of its lending went to infrastructure [Griffith-Jones, Griffith-Jones, and Hertova, 2008]. Given the scarcity of medium- and longer-term finance in developing countries, CAF's role as a source of stable long-term finance should not be overlooked. This has been particularly important during the global crisis insofar as funds for longer-term project finance in the developing world have contracted severely. In this sense, we can see finance from CAF (as well as from FLAR) playing an important counter-cyclical and developmental role since it provides stable sources of lower-cost finance to member nations, something that is particularly important during crises.

Like FLAR, country ownership (both literally and figuratively) in CAF is seen to account for its very high loan recovery rate.[41] For this reason (and as is also the case with FLAR), CAF's credit rating is higher than that of its individual member countries. Aside from the importance of its lending activities to a broad range of countries, CAF issues a large percentage of bonds in Latin American currencies. Regional and international investors hold these bonds. For example, in June 2004 CAF issued bonds in Colombian pesos (which was a first for Latin America), and it did so again in December 2008 and April 2009. More recently it issued similar bonds in Peruvian, Mexican and Venezuelan currency.[42] Indeed, in 2007 32.9% of CAF bonds were issued in Latin American currencies (whereas the IADB issued 14.9% of its bonds in Latin currencies in the same year) [Ocampo and Titelman, 2009-10:Table2]. This practice reduces exchange rate risk

[39] The Financial Fund for the Development of the River Plata Basin (FONPLATA] is a smaller institution (with a narrower remit) that operates in a manner that is similar to CAF [see Chin, 2010:705, 709; Ocampo and Titelman [2009-10:251, 258-59]. Ocampo and Titelman [2012] discuss another sub-regional development bank, the Central American Bank for Economic Integration.

[40] However, thanks to implicit guarantees by the US and other rich countries, the World Bank and the IADB are better able to respond with a larger volume of loans in times of crisis (a pattern that was evident in the 1980s, late 1990s, and during the current crisis). CAF loan approvals in 2008 were $7.9 billion, in 2009 were $9.1 billion, and in 2010 were $10.5 billion. By contrast, the World Bank approved loans to Latin America of $4.6 billion, $14 billion, and $13.9 billion, and the IADB approved loans of $11.2 billion, $15.5 billion, and $12.4 billion in 2008, 2009, and 2010, respectively [Ocampo and Titelman, 2012:15].

[41] There were very few defaults on CAF loans from 1999-2003 despite the fact that these were difficult years for the region [Desai and Vreeland, 2011:115]

[42] I thank Luis Rosero for information on bond issuance by CAF.

for CAF and borrowing countries. But perhaps more importantly it promotes the development of local currency bond markets, which may have numerous positive spillovers from the perspective of financial stability and access to long-term credit absent the common problem of locational mismatches.

Another Latin American initiative that warrants attention is the Agreement on Reciprocal Payments and Credits (CPCR). The CPCR has functioned since 1966. It is an arrangement that involves bilateral lines of trade credit between 12 of the central banks that are members of the Latin American Integration Association.[43] The CPCR essentially involves a payment guarantee to exporters that is made by the members' central banks (to be settled every four months in dollars in terms of net intra-regional trade).[44] During the CPCR's life the number of intra-regional transactions and the CPCR's coverage of total intra-regional trade have varied widely (for data on transactions and coverage, see Ocampo and Titelman [2012] and UNCTAD [2011a]).

The agreement was given new life during the current crisis when intra-regional trade declined significantly. In April 2009 guaranteed payment coverage under CPCR was increased from $120 million to $1.5 billion. However, as of 2010 CPCR still played a small role in intra-regional trade. In 2010 around 5% of intra-regional trade was covered by CPCR (which amounted to about $5 billion in intra-regional transactions that were channeled through the mechanism) [Ocampo and Titelman, 2012:Figure 1]. The main benefit of CPCR is that it reduces transactions costs for intra-regional trade—something that may help stabilize trade during periods of turbulence [UNCTAD, 2011a:37].

Recently Brazil--which to date has not expressed interest in FLAR or in the Bank of the South (see below)--has directed attention to the CPCR [Chin, 2010:705]. Indeed, Argentina and Brazil have bilaterally taken a step that goes beyond the dollar-centric CPCR. They agreed to settle their bilateral trade with one another in local currencies. Extending this practice across CPCR countries (and to others in the region, were CPCR membership to expand) would be of significant benefit to intra-regional trade and broader efforts to decouple Latin American economies from the US dollar.

Ocampo and Titelman [2009-10] suggest that an expanded FLAR could manage and extend the CPCR. In addition, they argue that the CPCR could also be embedded in other initiatives (such as the sucre currency plan, see below). This would be consistent with the broader objectives of the Latin American Integration Association, within which the CPCR is nested.

Two new (and related) Latin American initiatives that bear mention are the Bank of the South (BDS) and the Bolivarian Alliance for the Peoples of Our Americas (ALBA). The ultimate

[43] Members of the Latin American Integration Association are Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Paraguay, Perú, Uruguay, Venezuela and Cuba. Cuba is the only member of the Association that is not a subscriber to the CPCR. CPCR functions in a manner that is similar to the European Payments Union in the 1950s [Gnos, Monvoisin, and Ponsot, 2009]. Details on CPCR drawn from Chin [2010], Gnos, Monvoisin and Ponsot [2009], Ocampo and Titelman [2012], and UNCTAD [2011a].

[44] For details, see http://www.aladi.org/NSFALADI/arquitec.nsf/vsitioweb/sml.

significance of these initiatives is unknown at this time insofar as each is in its infancy (and there are many difficult matters to be resolved before operations of BDS can even begin).

The BDS is an institution developed by Venezuelan President Hugo Chavez and headquartered in the country. BDS has received a great deal of attention because it has been situated rhetorically as a rival to the IMF. At this point, however, the rivalry remains aspirational rather than practical. The BDS was founded in 2007, and was officially launched in 2009 when the 4 member countries of MERCOSUR (namely, Argentina, Brazil, Paraguay, and Uruguay) and the Union of South American Nations (Bolivia, Ecuador, and Venezuela) agreed on the details necessary to get the Bank off the ground.[45] The BDS is an outgrowth of proposals advanced by the Ecuadorian Presidential Commission for the New Financial Architecture. According to the agreement, Argentina, Brazil and Venezuela will capitalize the Bank with contributions of $2 billion each, Uruguay and Ecuador with $400 million each, and Bolivia and Paraguay with $200 million each. As of 2008, the seven countries involved in the BDS have committed $20 billion to the institution [Desai and Vreeland, 2011:117].

Some observers view the BDS as the main component of a new regional financial architecture with several components. This architectural vision involves reserve pooling; greater cooperation in the region via the increased use of its currencies; the operation of a new unit of account, the sucre, to be used as a regional payments settlement mechanism; a regional central bank; and a regional development bank that provides low cost, stable credit to projects of developmental importance [Pérez; 2009-10; Marshall and Rochon, 2009-10; Marshall, 2010].[46] Marshall [2010] rightly argues that the success of the more ambitious visions for the BDS necessitate complementary national financial reforms that enhance the operation of domestically-owned banks, especially public banks. Notwithstanding these ambitious aims, it bears noting that by the time of its launch in 2009, the mandate of the BDS had been narrowed to the provision of project-finance in the region (i.e., longer-term lending for development projects in agriculture, energy, health care, infrastructure, and trade promotion) [Chin, 2010]. Lender of last resort emergency finance is not included in its existing mandate. The precise functions and goals of BDS are still being debated among member nations.

The BDS plans to grant all of its member countries equal voting power, though loans of more than $70 million will require approval of countries that represent at least 2/3 of the bank's total capital (something that Brazil apparently insisted upon) [Phillips, 2009]. The designers of BDS insisted on a "no conditionality" clause for lending. Thus, the institution's staff will determine the capacity of members to borrow and will not place restrictions on borrowers beyond the established terms of the loan [Desai and Vreeland, 2011:117]. BDS enters into force in 2012 when the parliaments of member countries ratify the institution's founding agreement.[47]

[45] Details on membership, funding, and voting rights at the BDS are drawn from Phillips [2009] and the International Center for Trade and Sustainable Development [2009]. Discussion of the mission of the BDS draws on Desai and Vreeland [2011], Gnos, Monvoisin and Ponsot [2009], Vernengo [2010], Desai and Vreeland [2011:117], and Marshall and Rochon [2009-10].

[46] Sucre is the Unified System for Regional Compensation.

[47] Some countries have already ratified the BDS agreement. E.g., Argentina ratified it on September 7, 2011 [Mander and Webber, 2011].

As of this writing, the BDS is not yet operational and its scope and prospects remain quite uncertain. One hurdle that must be overcome is competing visions for the institution. While some members such as Brazil envision it as a regional development bank that complements existing domestic, regional and sub-regional institutions, others such as Venezuela see it in far more ambitious and multi-faceted terms.[48] The debate about the vision of the institution is not surprising, given its recent vintage and the important ideological differences among its members [Hart-Landsberg, 2009]. As noted earlier, Brazil has kept itself at a distance from BDS (and FLAR), something that may ultimately constrain the success of the initiative [Chin, 2010:706]. Some analysts suggest that Brazil joined the BDS--despite its misgivings—only to be able to shape it into something that more closely approximates the European integration model that centers on liberalizing flows of capital, labor and goods [Hart-Landsberg, 2009:14].

The vitality of the BDS may very much depend on the future performance of the Venezuelan economy inasmuch as the institution's funding at present depends on the country's oil revenues [Desai and Vreeland, 2011:117]. One other consideration is whether BDS will be able to raise funds on international capital markets, and if so, at what cost. This is a concern because of the credit ratings of some of its members, and also because the rating agencies are likely not to look favorably on the institution due to the no-conditionality clause within the Bank's charter [Desai and Vreeland, 2011; Quintana, 2008].

The related ALBA initiative also stems from the work of the Ecuadorian Presidential Commission. ALBA involves nine countries in Latin America and the Caribbean. It is led by Venezuela, Cuba and Bolivia, though Nicaragua, Honduras, the Commonwealth of Dominica, Ecuador, St. Vincent and the Grenadines, Antigua and Barbados are members as well. This is a regional initiative designed to promote new, non-market structures organized around Latin American solidarity, collaboration, and social equity; and the creation of an integrated trade and monetary zone in which obligations will be settled both in local currencies and in the newly created sucre currency to be managed by the ALBA Bank [see Hart-Lansberg, 2009, 2010; Artaraz, 2011]. Decisions made by ALBA will be by consensus and no conditionality will be imposed as part of loan agreements [Janike, 2008].[49]

Sucre exist now as a virtual currency (i.e., a unit of account), and are being used to a very limited extent to clear trade payments for specific commodities, mainly between Ecuador and Venezuela. The first sucre-denominated transaction involved Venezuelan rice exported to Cuba in Jan 2010; in July 2010, Venezuela and Ecuador conducted their first trade in sucre (Venezuela paid 1.89 million sucre to Ecaudor for rice); and between July and December 2010, $40 million dollars worth of trade between Venezuela and Ecuador were settled in the currency [Dow Jones Newswires, 2010; Venezuelaanalysis.com]. As of 2011, sucre have been used to clear $198.7

[48] See Marshall and Rochon [2009-10] and Pérez [2009-10] for discussion of an ambitious vision for BDS that nests it in the plans that came out of the Ecuadorian Presidential Commission for the New Financial Architecture. They also relate it to Keynes' proposal for an International Clearing Union. See Rosero and Erten [2010] for discussion of the competing visions for BDS.

[49] A systematic discussion of the ALBA, BDS and CPCR can be found in UNCTAD [2011a] (see also UNCTAD [2009]). On ALBA, see also www.alba-tcp.org, www.sucrealba.org, www.bancodealba.org, and Venezuelaanalysis.Com.

million in trade transactions [Ocampo and Titelman, 2012]. At the 11th ALBA Summit in February 2012, members committed to allocate 1% of their reserves to the ALBA Bank (established in January 2008) to create a reserve fund.[50]

While it is far too early to judge the performance or potential of the BDS and the ALBA/sucre initiatives, they are important exemplars of the financial experimentation that is underway in the global South. These two efforts are joined by a broad counter-hegemonic goal of reducing the role of the dollar in the economies of Latin America, developing arrangements that more closely knit the region's economies together, and creating institutions of trade and finance that reflect the political voice(s) of Latin America's diverse leadership.

In Africa

Within East Africa one nascent initiative bears mention.[51] Members of the East African Community (Kenya, Uganda, Tanzania, Burundi and Rwanda) plan to launch the East African Community Monetary Union (EACMU) in June 2012 (and a common market by 2015). At present it seems highly unlikely that the monetary union will be launched on schedule owing to sudden inflationary spikes in the region, issues relating to the timeline of the unionization process, and new concerns about currency unions that have arisen in the context of European difficulties.[52]

Delay is perhaps for the best since the architecture of the EACMU cannot be described as developmental regionalism. Indeed, it is of a piece with the Eurozone in its impulse toward fiscal contraction and low inflation. East African member nations have agreed to macroeconomic convergence criteria that limit budget deficits and inflation to 5% of GDP. The architecture of the EACMU is thin insofar as there are no set criteria for reserve adequacy, and no provisions for reserve pooling, crisis management, or fiscal policy harmonization [Kamau, 2011]. The EACMU aims to liberalize capital flows and to harmonize capital market infrastructure among members (including regulations, taxation, and accounting) [Yabara, 2012]. At this point, this nascent initiative bears little resemblance to the goals and structure of the CMIM and the Latin American initiatives discussed above.

In the Arab world

The Arab Monetary Fund (ArMF) was founded by central bankers from the Arab world and began operating in 1978. Today it has 22 members and a relatively small amount of paid-in capital, approximately $2.8 billion.[53] It takes deposits from member country central banks and monetary agencies. The ArMF has a broad developmental and financial stability remit, like FLAR

[50] Indeed, after the February 2012 ALBA summit the Nicaraguan President committed 1% of the country's reserves to the ALBA Bank. The head of the Nicaraguan central bank is reported to have resigned in objection to this decision.

[51] Metzger [2008] surveys the scope of regional economic integration and the mechanisms of trade and financial cooperation in Africa.

[52] I thank Leonce Ndikumana for insights and resources on this currency union. For recent discussions that suggest the plan is on a slow track, see IMF [February, 28, 2012] and Ihucha [2012].

[53] Members comprise Jordan, United Arab Emirates, Bahrain, Tunisia, Algeria, Djibouti, Saudi Arabia, Sudan, Syria, Somalia, Iraq, Oman, Qatar, Kuwait, Lebanon, Libya (suspended), Egypt, Morocco, Mauritania, Yemen, Comoros, and the Palestinian Authority. Description of the Arab Monetary Fund draws particularly on McKay, Volz, Wölfinger [2010:20-22], but also on UNCTAD [2007:ch. 5], Corm [2006], Ciociari [2011], and Eichengreen [2011:114].

and the main regional development banks (see below). The parallel with FLAR results from the breath, formalized operations, size of secretariat, and institutional tenure of the ArMF. The ArMF's broad policy mandates include the provision of financial support to members experiencing balance of payments problems; the promotion of exchange rate stability, monetary policy coordination, financial market deepening, intra-regional trade, and current account liberalization; the eventual establishment of a common currency; and since 2009, support for countries facing short-term liquidity problems caused by difficulties in accessing international financial markets during the global crisis.

The ArMF has several different lending facilities. "Automatic" and "ordinary loans" finance balance of payments deficits. (Automatic loans grant up to 75% of paid-in capital. Ordinary loans grant up to 100% of paid-in capital, and are combinable with automatic loans to reach 175% of paid-in capital.) "Extended loans" are for cases when the balance of payments problem is of a structural nature, and therefore requires a longer repayment period running up to seven years. "Compensatory loans" are expected to bridge unexpected shortfalls in export receipts. A "structural adjustment facility" was launched in 1997 to support reforms in government finance and in the financial and banking system, and a short-term liquidity facility was created in 2009. These different loan types are disbursed with varying degrees of speed. Automatic loans have a rapid processing time since they neither require a country mission nor any sort of conditionality. Ordinary and extended loans generally are disbursed within one to six weeks of a request. They do require a mission, conditionality and monitoring. However, the conditions on these loans are less stringent than those associated with the IMF [Corm, 2006:309]. The 50 person technical staff is considered highly competent; however, there is some question about whether monitoring is sufficiently stringent in view of overdue interest (of $188 million as noted in the 2009 ArMF annual report; see McKay, Volz, Wölfinger [2010]).

From its establishment through the end of 2009, the institution made 146 loans totaling $5.6 billion to 14 countries, around ¾ of which were for balance of payments support [McKay, Volz, Wölfinger, 2010].[54] In 2009, the Fund made two loans for stabilization purposes, totaling around $140 million, the largest amount for such purposes since 2001 [ibid]. In the same year, the ArMF made five loans totaling $470 million under the new short-term liquidity facility [ArMF, 2009].

The ArMF's structure is similar to that of the IMF and other multilateral development banks. Country votes on the Executive Board are in proportion to the size of contribution. There are 8 voting seats on the Board; 3 countries hold over 1/3 of the votes (namely, Saudi Arabia has 13.58% of the votes, and Algeria and Iraq each possess 11.96% of the votes).

The institution has no formal relation to the IMF, and does not borrow from it or from other multilateral institutions. The institution's Articles of Agreement charge it with providing complementary lender of last resort finance to members experiencing balance of payments difficulties. For this reason, members are expected to seek complementary support for ordinary and extended loans from regional and multilateral institutions. This explicitly complementary role no doubt reflects the small pool of resources presently available to the ArMF. The resources of the ArMF can surely be increased, given the foreign exchange and sovereign wealth fund assets possessed by the oil-exporting nations among its members (see section 5 below). Nevertheless the complementary role envisioned by ArMF's architects is also consistent with the idea of a layered, multi-dimensional financial architecture.

Regional (multilateral) development banks

Prior to the current crisis, the Asian Development Bank (ADB) was already lending more than the World Bank inside the region, and the IADB and FLAR were already providing more crisis-related financing in South America than the IMF [Woods, 2010]. The crisis accelerated this trend. The ADB, IADB, and the African Development Banks (AfDB) have responded to the crisis in their regions in some cases more quickly and with larger loans than we have seen from the IMF and the World Bank, and they have also introduced new types of temporary rapid financing programs and counter-cyclical lending facilities to support developing and low-income countries [Chin, 2010; Woods, 2010].

The activism of the main regional development banks was facilitated by the G-20's decision in April 2009 to devolve a portion of the new financial commitments made to the IMF to the main regional institutions.[55] Indonesia proposed in April 2009 that a portion of the IMF's new financing be devolved to the ADB. With G-20 backing, the ADB introduced a new countercyclical instrument, the Counter-cyclical Support Facility, to provide support of up to $3 billion to economies affected by the crisis in Asia. In total, the ADB approved $8.8 billion in crisis support through a range of programs to countries in the region [ADB, 2009]. Between 2008 and 2009, ADB's lending commitments grew by 42% and disbursements by 33% [Ocampo et al., 2010].

[54] Data reported by UNCTAD [2007:Table 5.2] show that in 2005-06 only 6% of its loans were for trade facilitation, while 74.2% of its loans during the same period were for balance of payments purposes.

[55] Details in this paragraph from Chin [2010], except where noted.

Regional development banks in other parts of the developing world quickly followed the ADB's example, and were granted a portion of the new funds committed to the IMF to establish new regional lending facilities to promote rapid counter-cyclical support within their regions [Chin, 2012].

The IADB and the AfDB also responded to the crisis in their respective regions. The IADB established a $6 billion rapid disbursal emergency fund to support the countercyclical efforts of member governments. It also increased callable capital by $4 billion; increased its commitments by 38% in 2009 (having already increased disbursements significantly in 2008), and disbursed 60% more in 2009 than in 2008 [Ocampo et al., 2010:51]. The IADB also signed an agreement with the Export-Import Bank of China to provide up to $200 million in trade finance for commerce between China and Latin America that will allow trade to be financed in a range of currencies [IADB, September 2011].

The AfDB established a $1.5 billion emergency liquidity facility during the crisis. Between 2008 and 2009 it increased its lending commitments by 137% and its disbursements by 125% (which is the largest increase in disbursements of any of the main regional development banks) [Ocampo et al., 2010:52]. The AfDB also deployed lines of credit to two banks in the region (approximately $62 million to Banco Africano de Investmento in Angola and $12 million to the Bank of Kigali [AfDB, November 2011]. In June 2011, the AfDB and the ADB began to cooperate with one another on the provision of trade finance to support African trade [ADB, June 2011].[56]

During the crisis the main regional development banks provided a good deal of counter-cyclical support through a variety of mechanisms (as discussed above). Though they are often only thought of as project lenders, these institutions have provided a significant and growing amount of ODA to developing countries. This, too, obviously contributes to their countercyclical role. This trend is in line with the transformed or expanded operations of other institutions during the crisis. In 2009, the regional development banks together provided 18.4% ($3.4 billion) of the ODA provided by all multilateral institutions, a 42% increase over the same figure in 2005 (see table 1). ODA from regional development banks may become more important to low-income countries in the coming years (as may South-South ODA, see below) as policymakers in wealthy countries curtail aid commitments because of domestic economic and political challenges.

Table 1. Multilateral ODA to LDCs, gross disbursements

(Millions of 2009 dollars, constant price)

	2005	**2009**
Total multilateral donors	13,787.0	18,812.0
Main regional development banks	1,783.4	3,468.2
African Development Bank	173.6	148.9
African Development Fund	1,017.8	1852.2
Asian Development Fund	510.3	896.7
Caribbean Development Bank	…	14.2
Inter-American Development Bank, Special Fund	81.6	556.3
Main regional development banks as a share of total multilateral ODA (%)	12.9	18.4

Source: UNCTAD, 2011b:115

Drawing on a proposal first advanced by World Bank President Robert Zoellick [2008], Griffith-Jones [2011:section III] and UNCTAD [2011b:ch. 4] propose that the activities of existing and new regional and sub-regional development banks could be bolstered significantly by a modest

[56] See Ocampo et al. [2010] and Griffith-Jones, Tyson, and Calice [2011] for discussion and data on the European Investment Bank's response to the crisis.

reallocation (on the order of 1%) of the growing pool of sovereign wealth fund assets held by developing countries (see section 5 for discussion of this proposal and of Southern sovereign wealth funds).[57] These new resources could be utilized to enhance the traditional lending operations of the main regional development banks, but they might also be used to scale up ODA to low-income countries.

Bilateral financial initiatives across the developing world

The crisis has stimulated numerous bilateral financial mechanisms across the global South. These provide diverse types of financial support to developing countries outside the framework of the IMF, the US, and the regional and sub-regional institutions discussed above. These bilateral initiatives comprise currency swaps, trade finance, ODA, loans, and lines of credit. For the most part, these do not involve the provision of emergency liquidity support.[58]

Bilateral currency swaps

Of all of the nations in the global south, China has been most active in negotiating currency swaps during the current crisis.[59] While the swaps are no doubt driven by many aims, most important among them is the protection of bilateral trade flows and the maintenance or expansion of market access (including access to strategic natural resources). They allow the country's trading partners to maintain reliable access to the currency during the economic downturn (so that they can continue to pay for imports from the country in RMB rather than in US dollars). The swaps also ensure that Chinese firms can pay for goods from trading partners in their currencies. Thus, these swaps may well have been motivated by precautionary efforts to stave off actual or anticipated foreign exchange and liquidity pressures, especially in important current and future trading partners. Foreign policy considerations are another likely driver of these swaps in that they provide a means to expand influence in the developing world, cement foreign relations, and internationalize the domestic currency.

China's swaps extend over three-years. China has signed bilateral currency swap deals of over 1.3 trillion RMB with over 15 countries, and allowed importers and exporters to settle 2.7 trillion RMB in cross-border trade deals in RMB [news.xinhuanet.com, January 7, 2012]. For example, as of June 2011 China has signed three–year currency swaps with South Korea (360 billion RMB)[60], Hong Kong (400 billion RMB), Malaysia (80 billion RMB), Belarus (20 billion RMB), Argentina (70 billion RMB), Indonesia (100 billion RMB),[61] Singapore (150 billion RMB), Uzbekistan (.7 billion RMB), Mongolia (5 billion RMB), Thailand (70 billion RMB), and Pakistan[62] (10 billion RMB) [Chinaoffshore.com, January 28, 2012; Financial Times/beyondbrics, June 13, 2011; Financial Times, October 26, 2011; Bloomberg.com, November 21, 2011].[63] China's

[57] Notably, the matter of a BRICs (development) Bank is to be discussed at the BRIC Summit in late March 2012 [Bloomberg.com, February 26, 2012]. Details on this proposal are not available at this time.

[58] Chin [2010] notes the enduring reliance on bilateral (and national) over the regional provision of finance in the first two years of the crisis. Recent developments have caused him to take greater note of regionalist impulses [Chin, 2012]. Eichengreen [2011] highlights the continued centrality of bilateral responses to which the US is a party (over and above South-South bilateralism).

[59] The Bank of Japan and especially the US Federal Reserve were active in negotiating currency swaps during the crisis. Since October 2008 the Federal Reserve has opened temporary swap agreements with fourteen central banks, including those of South Korea, Singapore, Brazil, Mexico, Canada, and New Zealand. The swaps with Singapore, Brazil, Mexico and South Korea in October 2008 were each for $30 billion. Singapore and Brazil did not end up drawing on the facility, Mexico drew on it once, and Korea drew on it over several quarters [Moreno, 2011]. The US swaps with the Bank of Canada and the Bank of Mexico built on long-standing arrangements.

[60] South Korea also negotiated a two year $20 billion swap with Japan [Chin, 2010].

[61] The Chinese-Indonesian swap was negotiated after the US Federal Reserve rebuffed Indonesia [Sussangkarn, 2011:214].

[62] Pakistan and Turkey also negotiated a bilateral three-year currency swap equivalent to $1 billion in local currency in November 2011 [Dawn.com, 2011].

[63] In July 2009, China also started to allow selected firms in five Chinese cities to use RMB to settle transactions with businesses in Hong Kong, Macau and ASEAN countries. Foreign banks are allowed to buy or borrow Chinese

bilateral swap arrangements do not challenge the role of the IMF or the dollar directly since the central banks of these countries cannot use the RMB to intervene in foreign exchange markets, import merchandise from third countries,[64] or pay foreign banks or foreign bondholders because the currency remains inconvertible [Eichengreen, 2009].

Other types of South-South bilateral financial flows

It is outside the scope of this paper to address in any depth the significant increase in South-South ODA during the current crisis. It is difficult to get comprehensive, precise statistics on South-South ODA for two reasons. First, aid by developing countries is often channeled via a range of instruments (such as grants, concessional loans, mixed loans, export-import banks, and technical assistance). Second, China, India, Brazil, and South Africa do not report to the OECD-Development Assistance Committee, and hence OECD statistics on South-South ODA do not include flows from these countries.[65] (OECD data do include ODA from Korea, Thailand, Turkey, the United Arab Emirates, other Arab countries and related multilateral institutions.[66]) Despite data limitations, it is indisputable that China, India, Brazil and South Africa have become critically important in the provision of ODA in the developing world, particularly following the establishment of new initiatives that promote these efforts, such as the Forum on China-Africa Cooperation in 2000, the Africa-India Forum Summit in 2008, and the India, Brazil, and South Africa Partnership in 2003 [UNCTAD, 2011b:ch.4].

At year-end 2011, the China Development Bank (CDB) had assets that exceed $952 billion (over 6 trillion RMB) [CDB, 2011]. It lent actively in the domestic market during the crisis. In 2010 its domestic lending focused on infrastructure, transportation, energy, agriculture and forestry. In 2011 its domestic lending was heavily weighted toward projects in involving housing, water, rural development, and various “green” initiatives, such as green credit, low carbon finance, solar energy [CDB, 2011].

During the crisis China has launched a variety of other bilateral financial initiatives in Asia, Africa, Latin America and the former Soviet bloc countries through its “policy banks,” especially the CDB, but also the China Export-Import Bank. Between 2009 and 2010, the CDB and the Export-Import Bank lent at least $110 billion to developing country governments and companies, a figure that exceeds total World Bank loans to the developing world by $10 billion from mid-2008 to mid-2010 [Financial Times, January 17, 2010]. By the end of 2010, the CDB had made loans to more than 90 countries, whose total indebtedness reach $141.3 trillion [ibid]. Examples of China’s loans to the developing world include a $2.2 billion loan for a gas pipeline in Uzbekistan in 2011, $85 million for modernization of coal mines in Ukraine in 2012, $50 million for electronic infrastructure in Peru in 2011, $200 million for infrastructure in Vietnam in 2011, at least $1 billion to build a hydroelectric plant in Ecuador in 2009, and a $10 billion loan to Brazil’s national oil company in 2009. During spring 2009, China doubled a

currency from mainland lenders to finance such trade. During the crisis, Brazil and China also signed an agreement to settle trade using the RMB and the real.

[64] The only exception is that the RMB can be used in cross-border trade with China’s immediate neighbors or the special administrative regions of Hong Kong or Macao.

[65] See Bräutigam [2009] for a meticulous empirical examination of China’s ODA to Africa.

[66] OECD data show that South-South ODA was over $900 million in 2009, which represents a four-fold increase in real terms over the last decade [UNCTAD, 2011b:chart 34].

development fund in Venezuela to $12 billion. [67] Unsurprisingly these loans and lines of credit appear to be driven by the same range of objectives as the country's currency swaps, particularly access to key resources and markets.

Bräutigam [2009] provides extensive detail on China's loans (and other financial flows) to Africa. By the end of 2011, the CDB had made $7 billion in loans to more than 30 countries in Africa [allAfrica.com, January 27, 2012]. Gallagher, Irwin, and Koleski [2012] provide equally exhaustive analysis of China's new role as a dominant lender to Latin America.[68] Gallagher et al. [2012] find that since 2005 China has provided loans of over $75 billion to Latin America. Two-thirds of these loans were directly related to oil, and 91% of the loans were made to just four countries (Venezuela, Brazil, Argentina, and Ecuador).[69] They find that the country's loans of $37 billion to Latin American in 2010 were more than the combined loans made to the region in the same year by the World Bank, the IADB, and the US' Export-Import Bank.

CDB loans do not carry the same conditionalities as loans from the Bretton Woods institutions. However, Chinese loans are not without "strings," such as requirements that loans be used to purchase Chinese goods [Gallagher et al., 2012]. Notably, this study also finds that the interest rates on loans offered to Latin American borrowers by the CDB are generally higher than that offered to the region by the World Bank. This finding challenges the conclusion that South-South loans are in all respects more advantageous to recipients than are loans from regional or multilateral sources.

Brazil's National Bank of Economic and Social Development (Portuguese acronym, BNDES) was founded in 1952; it eclipses all other national lending institutions in Latin America in terms of its assets. As of September 30, 2011 its assets totaled $341.9 billion [BNDES, 2011]. This places the institution's assets very far ahead of the region's major multilateral bank, the IADB, which had assets of $87.2 billion in December 2010, and the World Bank, which had assets of $282.8 billion in June 2010 [Foldes Guimaraes, 2011:19]. The only development bank with larger assets is the CDB, which had assets of $774.1 billion in December 2010 (during which time BNDES had assets of $329 billion) [ibid]. BNDES is a federal institution charged with providing long-term finance to Brazilian firms, primarily private ones, and also coordinates actions with private banks to support distressed firms [Torres Filho, 2011]. One of its most important goals is to support the globalization of Brazilian firms (via exports or operations abroad) [Ocampo and Titelman, 2009-10].

BNDES has been an extremely active lender during the crisis. It played a critical role in providing finance when private domestic lenders in Brazil contracted their operations in 2008 [Chandrasekhar, 2011] and all but froze lending from September 2008 to January 2010 [Torres Filho, 2011].[70] Taken together, public banks in Brazil provided 73% of all credit growth during this period. BNDES alone provided 37% of credit growth in the country, other state-owned banks provided 36% of credit growth, while private banks provided only 27% of credit growth [Torres Filho, 2011]. This speaks to the counter-cyclical role played by BNDES, though the institution is often seen more narrowly as a development finance institution. Between mid-2009 and mid-2011, BNDES lending to the country's producers grew by 70% and the total volume of its lending was equal to 3.3% of Brazil's GDP [Ghosh, 2011]. As a result of these activities, the ratio of credit to GDP rose after the crisis [Chandrasekhar, 2011:8]. In 2010, BNDES lent a record of $96.3 billion, which was 33.3% higher than the previous record level of lending in 2009 [Foldes Guimaraes, 2011:3]. Notably, 67% of bank loans with a maturity of over 5 years were made by BNDES in December 2009 [Torres Filho, 2011], an important contribution given that long-term credit becomes especially scarce during crises.

BNDES has also moved outside the country and outside the region. In August 2009, it opened its first branch office in South America, in Montevideo, Uruguay [Chin 2010:710]. BNDES loans to developing countries from 2008 through the first quarter of 2010 reached $1.5 billion (though foreign aid from Brazil is channeled via other mechanisms as well), and BNDES' rate of new lending now far exceeds that of the World Bank disbursements.[71] Since the start of the crisis, BNDES has lent some $15 billion to countries in the region [Woods, 2010].

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[67] Details on these Chinese loans are drawn from allAfrica.com [January 27, 2012], Interfax news agency [2011, 2012], Asia Pulse [December 29, 2011], Thai press reports [December 26, 2011], Romero and Barrionuevo [April 16, 2009], and Chin [2010]. See Bräutigan [2009] and Gallagher et al. [2012] for further examples.

[68] The findings of Gallagher et al. [2012] regarding Chinese loans to Latin America are consistent with the earlier study by Bräutigam [2009] on the country's loans to Africa.

[69] Venezuela, Argentina, and Ecuador have difficulty accessing international capital markets. See Gallagher et al. [2012] for details on the terms and composition of some of these loans.

[70] The Brazilian government made a loan of approximately $55 billion to BNDES during the crisis, a capital injection that certainly facilitated the institution's ability to continue lending [Torres Filho, 2011].

[71] See Ghosh [2011] and Economist [July 15, 2010] on BNDES and Brazilian aid more generally.

As with the CDB, it has also provided a growing amount of finance to countries in the Caribbean and Africa [Chin 2010:697]. As of 2010, BNDES has approximately $2 billion of projects in Africa [Foldes Guimaraes, 2010],[72] some of which were made possible by a 2008 stimulus program for Brazilian companies active in Africa (an initiative known as Program Integration with Africa] [World Bank-IPEA, 2011:5]. Examples of BNDES' loans to facilitate joint ventures in Africa include $500 million to a Brazilian and an Angolan firm seeking to use sugar cane to produce sugar, ethanol and power, and $260 million loan to a Brazilian and a Ghanaian firm to produce ethanol [World Bank-IPEA, 2011:81].

BNDES has also begun to cooperate with other multilateral and regional development banks. It signed a Financial Cooperation Agreement with the presidents of the development banks of China, India, Russia and South Africa as part of its continuing engagement with the BRIC countries [BNDES, April 14, 2011]. The World Bank has also partnered with BNDES to arrange new financing packages: the World Bank arranged for a $4 billion in new loans in Brazil, including a three-way loan for Brazil in partnership with the IADB and BNDES [Chin 2010:710].

The crisis seems to be stimulating South-South bilateral financial initiatives in one other way, which concerns efforts to settle trade without using the US dollar as a vehicle currency. As noted previously, China has been pursuing this measure, and Brazil and Argentina have established a mechanism for settling their trade transactions with one another in their own currencies rather than using the US dollar as an intermediary.

In October 2008 Argentina and Brazil began operating a bilateral "System of Payment in Local Currency" (Spanish acronym, SML), which allows exporters and importers from both countries to settle their transactions in Brazilian real and Argentine pesos for transactions of up to 360 days [Gnos and Ponsot, 2009]. Under this settlement mechanism, exporters can set prices in their home currency, and thus be insulated from foreign exchange risk, particularly because the transactions clear relatively quickly. In practice, the SML tends to involve Brazilian exporters (Argentinean importers). Indeed, in the 16 months up until January 2010, 94% of transactions cleared through SML were Brazilian [UNCTAD, 2011a:40]. To this point, use of the SML has been extremely modest: only 1.1% and 2.2% of bilateral trade has been cleared through this mechanism in 2009 and 2010, respectively [Ocampo and Titelman, 2012:11]. However, the mechanism has proven useful to small- and medium-sized enterprises since their size makes it difficult and costly to access the foreign exchange market [UNCTAD, 2011a]. The expectation is that other members of MERCOSUR will utilize the SML. When and if this occurs, it would reduce the role of the dollar in the region more broadly.

Summing up: Transformations across the financial architecture of the global South

We have seen that in a variety of ways the financial architecture of the global South has evolved during the current crisis. These institutions and arrangements are best seen as part of a gradual process of financial transformation. These innovations are not likely to displace or even challenge the Bretton Woods institutions. It is best to think of them as complementing and deepening the global financial architecture. To the extent that they do so they may also result in changes in the Bretton Woods institutions.

We might pause to reflect on the diverse, explicit objectives of the institutions and arrangements considered here. In doing so, we can see that these range from multilateral reserve pooling, the multilateral provision of liquidity so as to enhance financial stability, longer-term project or development finance, support for regional trade and/or financial integration, and support for new currencies and payment arrangements that may ultimately reduce the centripetal role of the US dollar [see table 2]. Table 2 summarizes somewhat imperfectly the key findings of section 4.

[72] This figure includes trade financing through an export-import subsidiary and foreign direct investment by Brazilian companies supported by BNDES.

Table 2: The explicit goals of diverse aspects of the Southern financial architecture

	Explicit Goals					
Institution/ Arrangement	Multilateral rsv. Pooling	Prov. of liquidity/ counter-cycl. fin. support	Project/ dev. Finance	Trade and/or fin. integration	New currency	De-dollar-izatior efforts via loc currency bonc or paymei mech-anisms)
CMIM	✓	✓*				
FLAR	✓	✓		✓	✓*	
CAF			✓	✓		✓*
CPCR				✓		
Brazil/Argentina SML				✓*		✓*
BDS	P*	P*	P*	P*	P*	P*
ALBA	✓	P		P	✓*	✓*
EACMU					P*	
ArMF	✓	✓		✓	P*	
Main regional development banks (AfDB, ADB, IADB)		✓	✓	✓		
Bilateral finance through CDB and BNDES			✓	✓		✓*
Bilateral currency swaps among LDC central banks				✓		✓*
South-South ODA			✓	✓		

Notes: see list of abbreviations on p. 3 of this paper; ✓=action undertaken; ✓*=see limitations as described in preceding text; P=planned for the future; P*=planned, though implementation is uncertain. (In the case of BDS, liquidity provision and reserve pooling are often mentioned in connection with future operations of the nascent institution, though these functions appear to have been dropped from its institutional mandate.)

As noted earlier, in some cases institutions have a rather narrow set of stated objectives (e.g. multilateral reserve pooling and the provision of liquidity as with CMIM, support for intra-regional trade as with CPCR); in others they have multiple objectives (e.g., the provision of liquidity and development finance as with the main regional development banks, development finance and support for trade integration as with BNDES and the CDB); and in still others they have quite a broad range of objectives (as with the ArMF). We have seen that the activities of all of these institutions and arrangements have evolved rapidly during the current crisis. We have also seen that the fulfillment of one explicit objective (such as the provision of development finance or support for trade integration) can promote financial stability. Finally, some of the initiatives discussed here (such as the BDS, ALBA, the EACMU and the currency vision of the ArMF) are in the earliest stages of development.

Recall that dissatisfaction with the governance and conditionality of the Bretton Woods institutions has played an important catalyzing role in the Southern initiatives considered here. It should therefore not be surprising that some of the institutions and arrangements surveyed have diverse (and, in some cases, complicated) decision-making structures. This reflects the necessary and real tension between two pressures: the demands of the larger countries that provide the bulk of financial support to these initiatives, versus the commitment to a greater degree of inclusiveness when it comes to smaller, poorer countries. Similarly, the matter of "getting conditionality right" continues to be a key challenge in the institutions and arrangements surveyed here. Some have renounced conditionality altogether (as in the nascent BDS), some have conditionality in certain circumstances (as in, e.g., the ArMF, the CMIM), some have a surveillance apparatus that works with borrowing governments in ways that are distinct from the IMF's top-down approach (as in FLAR), and still others are actively wrestling with the issue (as with CMIM).

What we can say is that for those regional and sub-regional institutions that do deploy some form of conditionality, there is a greater emphasis on pragmatism over ideology, and on ensuring that conditionality is narrow and appropriate to the country. This is one important benefit of a more devolved financial architecture. Institutions that lend closer to home are more likely to design programs that are politically sensitive and economically appropriate. And evidence from FLAR and CAF suggests that what may be seen as "light touch surveillance" does not necessarily lead to moral hazard. Recall that loan defaults have never occurred in FLAR and only very rarely in CAF. The extent to which these agreements produce alternative conditionalities might mean that the IMF can learn and adjust its notions of conditionality, or some degree of institutional competition might force it to do so.

5. Underwriting relative autonomy: Reserve accumulation and sovereign wealth fund assets in the global South

In a most remarkable twist of fate and in reflection of how much the world has changed, some of the same developing countries that used to be unwilling clients of the IMF now find themselves being courted for a second time by the institution to assist with crisis alleviation in Europe (see section 3). Never one to miss a chance to note ironies, Brazil's Finance Minister Guido Mantega quipped during IMF Managing Director Lagarde's visit to the country: "[i]t's a great satisfaction to us that this time the IMF did not come to Brazil to bring money like in the past but to ask us to lend money to developed nations" [Financial Times, December 2, 2011].

As discussed in section 2, the experience of the East Asian crisis and IMF intervention in the region has had powerful behavioral effects that extend well beyond the region. Not just Brazil and China, about which we hear so much, but also Turkey, South Korea, Argentina, South Africa, Russia and several other rapidly-growing developing countries have amassed massive pools of foreign exchange reserves in order to enhance the prospects of financial stability and to self-insure against future IMF conditionality. This is often referred to as the precautionary or self-insurance motivation for excess reserve accumulation. Large holdings of foreign exchange reserves are held by governments to reduce the likelihood that speculators will identify the national currency as vulnerable to depreciation, give policymakers the means to protect the national currency if a speculative attack is nevertheless initiated, and obviate the need to turn to the IMF in the face of economic turmoil. In addition to the self-insurance and financial stability motives, foreign exchange reserve over-accumulation is also intended as a means to facilitate and protect export-led growth strategies. This is because reserves permit sterilized interventions that are necessary to maintain an undervalued exchange rate. This is often referred to as "modern mercantilism" [Ghosh, Ostry, Tsangarides, 2012].

From 2000 to 2011 (third quarter), global foreign exchange reserves have gone from $1.9 trillion to $10.1 trillion (a 431% increase). [See table 3] Emerging and developing countries (with reserves of $6.8 trillion in the third quarter of 2011) account for 74.1% of the increase in global reserves during that time. Foreign exchange reserve holdings relative to GDP have also increased dramatically over the last three decades. In the 1980s, foreign exchange reserve holdings by developing countries were equal to about 5% of their GDP. This figure has doubled every decade since then, reaching around 25% of GDP by 2010 [Ghosh, Ostry, and Tsangarides, 2012:3]. These figures are in stark contrast to reserve holdings in OECD countries: in 2000 OECD countries held reserves of $1.3 trillion (5.1% of GDP), and by the start of 2011 OECD reserves had grown to $3.4 trillion (8.1% of GDP) [Dadush and Stancil, 2011]. From 2000 to the start of 2011, the nominal stock of foreign exchange reserves in developing countries increased from around $750 billion (11% of GDP) to nearly $6.3 trillion (29% of GDP) [Dadush and Stancil, 2011]. Reserve holdings are highly concentrated among regions in the developing world and are also concentrated within particular developing countries [see table 4]. In fact, over 90% of developing country reserves are held in the 20 largest holders (which now have enough reserves to cover over a year of imports or their short-term debt nearly five times over] [Dadush and Stancil, 2011].

Table 3. Official foreign exchange reserves: Advanced versus emerging and developing economies (US $ billion)

	2000	2005	2008	2009	2010	2011 (3rd quarter, prelim.)
World Total	1,936.2	4,320.1	7,337.3	8,162.5	9,258.1	10,176.6
Advanced economies	1,217.2	2,078.7	2,491.4	2,778.8	3,092.7	3,335.0
Emerging and developing economies	719.0	2,304.4	4,950.4	5,596.9	6,481.2	6,841.6

Source: IMF, COFER database

Table 4: Official foreign exchange reserves held by developing countries in 2010, regional breakdown (US $ billions)

Central and Eastern Europe	335.5
Commonwealth of Independent States	**566.8**
Russia	456.2
Excluding Russia	110.5
Developing Asia	**3,658.4**
China	**2,889.6**
India	292.3
Excluding China and India	476.5
Latin American and the Caribbean	**651.4**
Brazil	287.5
Mexico	120.3
Middle East and North Africa	**1,107.5**
Sub-Saharan Africa	161.6
Excluding Nigeria and South Africa	85.7

Source: IMF, World Economic Outlook, April 2011

The over-accumulation of reserves by some developing and emerging countries has been made possible by a variety of circumstances: the boom in commodity prices; the ability of some countries to maintain current account surpluses; the persistent appetite for imported energy, (low-cost) consumer goods, and capital goods in wealthy countries (itself a consequence of many factors, such as deindustrialization, energy policy, income inequality and wage compression); and the need to find an outlet for the vast pools of liquidity that were created during the recent long boom.[73] The hoarding of foreign exchange reserves has important opportunity costs for the nations holding these reserves and also for other developing countries (as Rodrik [2006] and others have argued; see also IMF [2011]). This is because the resources

[73] The first two of these factors is treated extensively in Aizenman and Lee [2008].

held in foreign reserves might be more productively deployed. They could be used to lower the cost of longer-term finance in developing countries. These resources could also be used to provide much needed finance for national and/or regional initiatives that ameliorate economic and social ills and promote long-term productive capacity (such as through the structures discussed in section 4). This might involve a significant scaling up of the contributions made to existing and to new national, sub-regional and regional development banks (per the proposal by Griffith-Jones [2011]). These reserves could also be used far more efficiently to promote regional and sub-regional financial stability by significantly increasing the resources devoted to reserve pooling through the CMIM, FLAR, and the ArMF, nascent initiatives such as ALBA and the BDS, and other reserve pooling arrangements yet to be developed (see section 4). Finally, reducing the tendency for excess reserve accumulation by developing countries would benefit global financial stability (insofar as global imbalances contribute to fragility).

Data on official reserves held by developing countries does not provide a complete picture of the resources available for the purposes discussed above. Indeed, as Griffith-Jones [2011:9] correctly notes, some developing countries also hold massive pools of assets in sovereign wealth funds, which tend to be managed autonomously from official reserves. Developing countries with large reserve holdings generally transfer a portion of them to sovereign wealth funds to be managed so as to maximize the returns on these assets. Generally sovereign wealth fund managers invest in longer-term, less liquid assets (though Norway's sovereign wealth fund is exceptional since it reportedly holds 40% of its assets in equities) [Griffith-Jones and Ocampo, 2008]. Though the explicit function of sovereign wealth funds is not to promote financial stability, a speculative attack against a country's currency is less likely to occur if speculators know that a government's assets are so large as to justify cleaving off some of them to capitalize a sovereign wealth fund.

According to data by the Sovereign Wealth Fund Institute, globally sovereign wealth funds are estimated to have about $4.3 trillion in assets at the end of 2010. Oil-producing countries hold three quarters of all sovereign wealth fund assets. At the end of 2010 developing and emerging economy funds held the majority of sovereign wealth fund assets ($3.5 trillion), and $800 billion alone is held by funds in East Asia.[74] As of March 2011, there were forty-one sovereign wealth funds maintained by developing and emerging economies. Ten sovereign wealth funds held assets between $100 and $627 billion. The largest was the Abu Dhabi Investment Authority with $627 billion in assets; the smallest were the Indonesian Government Investment Unit and the Mauritanian National Fund for Hydrocarbon Reserves, each with $0.3 billion in assets.[75] (Table A1 presents additional data on sovereign wealth fund assets held in particular developing and emerging economy funds.) Note that in 2011 the governments of India, Peru, Colombia, Panama, and Bolivia began to discuss launching their own sovereign wealth funds [Singh, October 31, 2011; ft.com, September 23, 2011].

[74] Data in this paragraph and table 4 from the Sovereign Wealth Fund Institute, cited in Griffith-Jones [2011:8-9 and UNCTAD, 2011b:ch. 4].

[75] Data on sovereign wealth funds are closely held and their operations are therefore somewhat opaque. Hence, we should recognize that the data presented here and in table A1 may well underestimate the resources in these funds.

A proposal by Zoellick [2008] is suggestive of the developmental potential of these funds. In 2008 he proposed that sovereign wealth funds invest one percent of their holdings in sub-Saharan Africa. He argued that this would increase the availability of long-term finance in the region, and thereby increase investment and growth [see also Ochoa and Keenan, 2009]. Griffith-Jones [2011:section III] builds on this idea. She estimates that channeling just 1% of sovereign wealth fund assets held by developing countries to regional and sub-regional development banks would increase paid-in capital to these institutions by $35 billion. In turn this increase in capital would correspond roughly to an additional lending capacity of over $84 billion by regional and sub-regional financial institutions. "This figure would be higher than the total lending disbursements to developing countries by all multilateral and regional development banks — including the World Bank, the ADB, the IADB, the AfDB and the external lending of the European Investment Bank to developing countries — in 2009, the year when their lending activities peaked (at $64 billion) due to the extraordinary credit requirements caused by the global financial crisis" [Griffith-Jones, 2011:18].

In sum, considerable resources are available in both official reserves and sovereign wealth funds held by developing countries. Though these are often seen to serve different roles (namely, financial stability and exchange rate management in the case of official reserves, investment and return maximization in the case of sovereign wealth funds) there is no practical reason for thinking of them in such a differentiated fashion. A portion of the resources from both pools of capital could be redeployed to support the provision of national and regional public goods; to provide stable, low-cost, and long-term capital to projects that enhance economic and human development and enhance productive capacities; to promote financial stability and resilience through the expansion of reserve pooling arrangements; and to increase the reach of the institutions and initiatives surveyed in section 4. Moreover, the long-term nature of sovereign wealth fund management makes these funds particularly suitable as a source of long-term development finance, the provision of which is especially important during economic downturns when such funds are in short supply.

6. Conclusions

Crises generally present opportunities as well as challenges. Sometimes, they necessitate even fundamental institutional adjustment that is marked by a period of productive incoherence. We are in such a period today, in the context of recurring financial crisis. The Asian crisis and the current crisis have created the conditions for new patterns of resource accumulation, a growing diversity of financial architectures across the global South, and shifting power in the domain of the governance of development finance. This is indeed an opportune moment for developing countries to press forward with the institutional innovations and experiments that we have surveyed here.

It is of critical importance that this moment not be wasted. The current environment poses many risks for developing economies. Both the IMF and the World Bank have recently projected growth slowdowns in both the developing world and wealthy nations. Many analysts suggest—quite reasonably—that emerging markets are due for a correction, triggered by the safe haven effect that is bringing capital back to the USA, the overheating of LDC commodity exporters, the decline in commodity prices, inflationary pressures and bubbles caused by speculation in some developing country financial and real estate markets, the decline of remittance inflows, and the weakening of markets for exports. In this context some have even begun to speculate openly about a possible hard landing for China triggered by the deflation of real estate bubbles and the bad debt problems of its banking system. Indeed, capital flows to the developing world have already started to reverse. Justin Lin, Chief Economist of the World Bank recently said: "The largest economy in the world [the EU] is weakening….The message for developing countries is to start preparing" [Lowrey, January 18, 2012:B3]. All of this portends difficult times ahead for the developing world.

Unlike in the past, any new economic difficulties across the developing world are likely to be met with a wide range of new initiatives and institutional innovations that mark a further break with the crisis responses of the neoliberal era. Just as the Asian crisis laid the groundwork for institutional developments that have deepened only in the current crisis, so might this crisis catalyze further innovation along the lines already in place, and in directions not yet imagined, when the next period of instability emerges. To the degree that this happens, we might come to recognize the present conjuncture as one marking a fundamental turn in the developing world--a turn toward resiliency to crisis and increased policy space that permits genuine and sustainable human development.

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Table A1: Sovereign wealth funds of developing and emerging economies (March 2011)

Country	Fund name	Assets ($US billions)	Inception	Fund Origin
UAE-Abu Dhabi	Abu Dhabi Investment Authority	627.0	1976	O
Saudi Arabia	SAMA Foreign holdings	439.1	n/a	O
China	SAFE Investment Company	347.1	1997	NC
	China Investment Corporation	332.4	2007	NC
China-Hong Kong	Hong Kong Monetary Authority Investment Portfolio	292.3	1993	NC
Kuwait	Kuwait Investment Authority	260.0	1953	O
Singapore	Government of Singapore Investment Corporation	247.5	1981	NC
China	National Social Security Fund	146.5	2000	NC
Singapore	Temasek Holdings	145.3	1974	NC
Russia	National Welfare Fund	142.5*	2008	O
Qatar	Qatar Investment Authority	85.0	2005	O
Libya	Libyan Investment Authority	70.0	2006	O
Algeria	Revenue Regulation Fund	56.7	2000	O
UAE-Abu Dhabi	International Petroleum Investment Fund	48.2	1984	O
Kazakhstan	Kazakhstan	38.6	2000	O

	National Fund			
South Korea	Korea Investment Corporation	37.0	2005	NC
Malaysia	Khazanah Nasional	36.8	1993	NC
Brunei	Brunei Investment Agency	30.0	1983	O
Iran	Oil Stabilisation Fund	23.0	1999	O
Chile	Social and Economic Stabilisation Fund	21.8	1985	Copper
Azerbaijan	State Oil Fund	21.7	1999	O
UAE-Dubai	Investment Corporation of Dubai	19.6	2006	O
UAE-Abu Dhabi	Mubadala Development Company	13.3	2002	O
Bahrain	Mumtalakat Holding Company	9.1	2006	O
Brazil	Sovereign Fund of Brazil	8.6	2009	NC
Oman	State General Reserve Fund	8.2	1980	Oil and gas
Botswana	Pula Fund	6.9	1994	Diamonds and minerals
East Timor	Timor-Leste Petroleum Fund	6.3	2005	Oil and gas
Mexico	Oil Revenues Stablization Fund of Mexico	6.0	2000	O
Saudi Arabia	Public Investment Fund	5.3	2008	O
China	China-Africa Development Fund	5.0	2007	NC
Trinidad and Tobago	Heritage and Stabilization Fund	2.9	2000	O
UAE-Ras Al	RAK Investment	1.2	2005	O

Khaimah	Authority			
Venezuela	FEM	0.8	1998	O
Vietnam	State Capital Investment Corporation	0.5	2004	NC
Nigeria	Excess Crude Account	0.5	2004	O
Kiribati	Revenue Equalization Reserve Fund	0.4	1956	Phosphates
Indonesia	Government Investment Unit	0.3	2006	NC
Mauritania	National Fund for Hydrocarbon Reserves	0.3	2006	Oil and gas
UAE-Federal	Emirates Investment Authority	n/a	2007	O
Oman	Oman Investment Fund	n/a	2006	O
UAE-Abu Dhabi	Abu Dhabi Investment Council	n/a	2007	O

Notes: *includes funds from Russia's Oil Stabilization Fund
Fund origins: O=oil; NC-non-commodity
Source: Sovereign Wealth Fund Institute, http://www.swfinstitute.org/fund-rankings; table appears in Griffith Jones [2011:16-17]