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# Building an SDR-Based Global Reserve System

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## Introduction

Many voices have been heard since 2009 on the need to reform the global monetary system. The most prominent ones have been those of the Chinese central bank governor (Zhou, 2009) and the Commission of Experts convened by the President of the UN General Assembly on Reform of the International Monetary and Financial System, chaired by Joseph E. Stiglitz (United Nations, 2009). Before the crisis, there were significant concerns about the implications of global imbalances and escalating U.S. net liabilities with the rest of the world, and a heated debate on its implications for global financial stability, but few saw a significant problem in the global monetary system as such.<sup>1</sup> Some even saw it turning into a stable “Second Bretton Woods” (Dooley *et al.*, 2003).

The recent calls for reform reflect the fact that the system contains, in fact, fundamental flaws and must, therefore, be reformed. These arrangements arose out of the unilateral decision of the U.S. in 1971 to abandon the gold-dollar parity established in Bretton Woods, and can be characterized as essentially based on a fiduciary U.S. dollar. Other currencies can compete with the dollar as international means of payments and potential foreign exchange reserve assets, but this competition has been weak, as over 80% of foreign exchange transactions and about two-thirds of non-gold international reserves are managed or held in U.S. dollars. This is due to the “network externalities” in the use of money and the fact that the U.S. has the largest market for liquid Treasury securities. The other feature of the system is that alternative reserve currencies float against each other.

The fundamental problems are related to both the instabilities and inequities of this arrangement. From the point of view of global macroeconomic stability, the system tends to generate inflationary and recessionary<sup>2</sup> biases during different phases of the world business cycle, with the latter now being the predominant feature. From the second perspective, the system generates growing inequities associated with the fact that, in response to global financial instability and the lack of appropriate “collective insurance” against balance of payments crises, developing countries were led to accumulate massive amounts of reserves as “self-insurance”. Although massive reserves proved their usefulness for building resilience of many developing countries during the recent global financial crisis, they also contribute to the generation of global imbalances. So, the inequities of the system feed into its instabilities. These problems will interact

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<sup>1</sup> My contributions and those of my colleagues at the United Nations were some of the few that tied these problems with the instability and inequities of the global reserve system. See Ocampo *et al.*, (2007, ch.IV), which was based on a previous UN report (United Nations, 2005), and Ocampo (2007-08). Another important exception was Stiglitz (2006, ch. 9).

<sup>2</sup> I prefer this term to “deflationary”, that is generally used in debates on this issue, as this pressure is more likely to be reflected today in world economic activity than in price deflation.

with others in the immediate future, particularly with the implications of rising public sector debts in all major industrial countries.

There are essentially two possible reform paths. The first and, in a sense, inertial solution would be to let the system evolve into a multicurrency arrangement. The second and better path would be to fulfill the aspiration of transforming the Special Drawing Right (SDR) into the dominant global reserve asset, as well as the instrument for funding IMF emergency financing during crisis. This reform can be complemented with other features: enhancing the use of SDRs, launching a substitution account, and creating regional reserve pools. And, of course, it has to be matched by a more ambitious reform of IMF quotas and governance. The renewed interest in this instrument of international cooperation shown by the G-20 in 2009 makes this reform agenda a viable one.

There are, of course, other alternatives. A new institution, either Keynes' International Clearing Union or a Global Reserve Bank, could be launched,<sup>3</sup> but negotiating the creation of a new global institution would be quite a difficult task. A minority has also suggested that we should return to placing gold at the center of the system. But going back to this "barbarous relic", in Keynes' terminology, would be swimming against the tide of history.

In the next section, I will take a closer look at the problems of the system, which must be taken into account in any meaningful reform. After a brief analysis of the multicurrency alternative, I will move into analyzing what features a SDR-based system should have and the complementary reforms that could be undertaken. The paper ends with a short section of conclusions.

### **The Flaws of the Current System**

The essential flaws of the system can be understood in terms of three issues that were raised sequentially in policy debate since Second World War.<sup>4</sup> The first is that emphasized by Keynes (1942-43) during the debates that led to the creation of the Bretton Woods institutions: the fact that any international monetary system that places the burden of adjustment to payments imbalances on deficit nations generates global recessionary effects. It can therefore be called the *anti-Keynesian bias*. This feature is not specific of the current international system, as it has characterized all systems that we have known through history. Actually, as we will see below, the present system may actually exhibit inflationary features during some phases of the business cycle. So, the anti-Keynesian bias is a major issue during crises, when the threat of capital flight and/or the lack of adequate financing forces deficit nations to adjust, while surplus nations do not face a

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<sup>3</sup> This is what is implicit in Stiglitz (2006, ch. 9).

<sup>4</sup> A fuller discussion of these issues can be found in two previous papers (Ocampo, 2010a and 2010b).

similar pressure. This problem has certainly been present during the current crisis, as reflected, for example, in the different pace of adjustment of surplus (Germany) vs. deficit members (Greece, Ireland, Spain) of the European Union.

This problem is enhanced by the fact that any individual country has an incentive to “beggar thy neighbor” during crisis, to use old terminology—i.e., to try to improve its current account to help boost domestic economic activity. This problem is also present in the current conjuncture. For example, if we are to believe IMF (2009) projections, the accumulated current account surpluses of the world economy would increase by almost one trillion dollars between 2009 and 2012. This is, of course, impossible, as surpluses and deficits must add up in the world economy. It is simply a sign of the recessionary force hanging over the world economy—i.e., of weak global demand.

The second problem of the system is derived from the use of a *national* currency as the major *global* currency. It has been called the *Triffin dilemma*, in honor of the Belgian economist who formulated it in the 1960s (Triffin, 1961 and 1968). The source of the problem is that the provision of international liquidity becomes hostage to the balance of payments of the country issuing the dominant currency, which is an “erratic” or “capricious” system of providing global liquidity, to use adjectives common in the debates of the 1960s. The nature of the problem has, of course, significantly changed since then. The threat that the depletion of U.S. gold reserves would force this country to adopt contractionary policies that would then lead to an inadequate provision of world liquidity is clearly not present now. Rather, during boom periods, there are now no significant limits to the creation of global liquidity through deficits of the country issuing the dominant currency, thus creating an inflationary bias, a problem that was clearly perceived during the 2003-07 boom. More generally, however, the world economy becomes subject to cycles of confidence in the major reserve currency, a phenomenon reflected in the large swings in real value of the dollar over the past four decades and the even more intense variations in the U.S. current account balance. As U.S. authorities have been unwilling so far to take any action to smooth out these fluctuations, a major result has been that the dominant global currency lacks what should be the essence of the reserve asset at the center of the system: a stable value.

The third flaw is the *growing inequity bias* that characterizes the system. Since developing countries foreign exchange reserves are invested in assets issued by industrial countries, and particularly by the U.S. government, reserve accumulation by these countries is nothing else than lending to rich countries at low interest rates. This problem has considerably worsened by the strong procyclical pattern of capital flows to developing countries that has been a distinguishing feature of financial globalization in recent decades. In the face of balance of payments and domestic financial crises generated by large reversals of

capital flows during crises, developing countries reacted building up a strong war chest of foreign exchange reserves since the 1990s and, particularly, since the Asian crisis. Indeed, up to the 1980s, developing countries held reserves equivalent to about 3% of GDP, a similar level to that of industrial countries; by 2007, low income and middle income countries (excluding China) held foreign exchange reserves equivalent to 20.6% and 16.2% of their GDP, respectively, and China had accumulated reserves equivalent to 46.7% of its GDP (Ocampo, 2010a).

This “self-insurance” or “self-protection” policy involves not only accumulating reserves to face an eventual “sudden stop” in external financing but also absorbing through reserve accumulation a large part of what countries consider excess capital inflows. A basic rationale for this policy is avoiding large current account deficits during years of booming capital inflows, as past crises indicate that such deficits are a strong predictor of strong recessions during the downswing of the capital account cycle –a prediction that was confirmed, once again, during the recent global financial crisis. In turn, this involves avoiding what countries consider an excessive appreciation of their exchange rate and indeed a perceived exchange rate misalignment is the trigger of most interventions in foreign exchange markets, and thus the way countries identify an “excess” capital inflow. So, in a broad sense, self-insurance is nothing other than a prudential or counter-cyclical macroeconomic policy aimed at moderating the domestic effects of procyclical capital flows. A similar policy leads countries facing terms of trade booms to absorb part of the windfall gains through the accumulation of foreign exchange reserves or of windfall fiscal revenues in sovereign wealth funds, a policy response that has always been considered part of adequate macroeconomic management.

Self-insurance has a strong rationality for individual countries, and indeed it helped many developing countries withstand the recent global financial turmoil much better than previous crises. However, there is a major “fallacy of composition” in this reaction: if most and, particularly, major developing countries do this, they contribute to the generation of global imbalances. So, in a world characterized by global financial volatility, this inequity of the system contributes to its instability. I have called this problem the *inequity-instability link*.

A global reform agenda should design a system that helps correct these flaws. None of the foreseeable systems is likely to do so in a full way, but a properly designed SDR-based global reserve system goes a long way in that direction.

### **Advantages and Flaws of a Multicurrency System**

As already noted, although the multicurrency features are already present in the current system, they are still secondary, as the U.S. dollar continues to play the dominant role. Whether the alternative multicurrency system would become a reality is, of course, a major question today, as the recent crisis has clearly shown that there is no alternative in the world to the market for U.S. Treasury securities in terms of liquidity and depth. In contrast, the lack of a true eurobond market and the sense that the euro is backed by a heterogeneous group of countries of unequal strength has made this regional currency a poor substitute for the U.S. dollar.

The basic advantage of a multicurrency arrangement is that it would allow all reserve holders to diversify the composition of their foreign exchange reserve assets, and thus to counteract the instability that characterizes all individual currencies under the current system. But, aside from this, none of the other deficiencies of the system would be addressed. In particular, the benefits from the reserve currency status would still be captured by industrial countries, so the system would continue to be inequitable, there would be no reduction in the anti-Keynesian bias, nor would there be any reduction in developing countries' demand for self-insurance.

Paradoxically, exchange rate flexibility among alternative reserve currencies would be both an advantage and a potential cost of such a system. Not being subject to fixed exchange rate parities would indeed be an advantage, as this characteristic doomed both bimetallism in the nineteenth century and the fixed gold-dollar parity of the original Bretton Woods arrangement. However, if central banks around the world actively substitute among currencies to enjoy the benefits of diversification, this could increase exchange rate volatility among major reserve currencies. Reestablishing fixed parities among these currencies could become necessary, but this would be a herculean task under the current world of free capital movements and it would eliminate, at the end, the flexibility of the system, which is one of its virtues.

### **An SDR-based Global Reserve System**

The alternative reform route would be to design an architecture based on a truly global reserve asset, particularly by fulfilling the objective that was included in the IMF Articles of Agreement of "making the special drawing right the principle reserve asset in the international monetary system" (Article VIII, Section 7 and Article XXII).

Although U.S. current account adjustments may reduce in the immediate future the net supply of dollar assets to the rest of the world, the major problems today are probably not associated with the inadequate provision of international

liquidity, the problem that was at the center of post-war debates. But the world still needs a less “erratic” and “capricious” system for providing global reserves, particularly one that is not hostage to the balance of payments and macroeconomic policies of the U.S. This, plus the stability of the major reserve currency, is precisely what the Chinese central bank governor called for: “an international reserve currency should first be anchored to a stable benchmark and issued according to a clear set of rules, therefore to ensure orderly supply; second, its supply should be flexible enough to allow timely adjustment according to the changing demand; third, such adjustments should be disconnected from economic conditions and sovereign interests of any single country” (Zhou, 2009).

SDR allocations could follow either of the two different approaches that have been suggested over the years. The best would be issuing them in a counter-cyclical way (United Nations, 1999; Camdessus, 2000; Ocampo, 2002). The second approach would be regular allocations, reflecting the additional global demand for reserves. The United Nations Commission proposed allocations equivalent to US\$150 to US\$300 billion a year (United Nations, 2009, ch. 5), and there seems to be agreement that this is an appropriate range. The two approaches can be made complementary, for example by making regular allocations but withholding them during booms until the world economy goes into a downturn, following preset criteria.

By itself, a simple reform such as this would make a major contribution to correcting some of the flaws of the current system. It would certainly help create a more orderly international monetary system, would partly correct the Triffin dilemma and the inequities of the system and, if the alternative of counter-cyclical issuance of SDRs is chosen, would contribute to counteract the anti-Keynesian bias. Nonetheless, some of these benefits could be enhanced if the system includes additional features that would increase the use of SDRs in the international system, utilize them as the essential-and even the only-mechanism for IMF financing, and adopts allocation rules for the issuance of SDRs that take into account the very diverse demand for international reserves by developing vs. industrial countries. I turn to each of these issues next.

SDRs can continue being essentially a reserve asset, as initially conceived. However, as the supply of this global reserve asset increases, some rules may have to be established to guarantee an adequate demand for it, such as the commitment of all countries to maintain an increasing proportion of their foreign exchange reserves in SDRs when they are not borrowing from the IMF or intervening to counteract depreciation pressures of their currencies. Penalties can be established to ensure these rules, for example by reducing the allocation to countries that do not meet them.

An alternative route, which has been that suggested by several authors through the years (see, for example, Kenen, 1983), would be to allow the use of

SDRs in private transactions, thus turning it into a true global monetary instrument. One simple reform could be allowing deposits by financial institutions in central banks (either reserve requirements or excess reserves) to be held in SDRs. It is possible that the capacity of the SDR to transform itself into the major world reserve asset would depend on the broader use of SDRs. However, this would make the transition more costly for the U.S. and it is therefore likely to face greater resistance in this country. So, in the short-term it may be useful to concentrate on reforming the global *reserve* system, which means that the U.S. dollar would continue being the major international means of payment, a function that by itself would generate a demand for U.S. dollar denominated assets.

Concentrating issuance during crises would help circumvent the recessionary pressures that the world economy faces during crises due to the asymmetric pressure on deficit vs. surplus countries to adjust. But the SDRs received by most deficit countries are unlikely to meet the demand for funds they face during crises. So, reducing the anti-Keynesian bias would be enhanced by improving the “collective insurance” that the IMF provides. This should actually be matched by moving to entirely SDR-funded IMF lending, which would reduce the deficiencies associated to the two traditional ways of providing resources to the IMF: quotas and “arrangements to borrow”. The latter was the route chosen by the G-20 to finance the IMF during the recent crisis, including now the novel mechanism of SDR-denominated notes subscribed by major emerging economies (see below). Quotas imply that the IMF is forced to manage a multiplicity of currencies, most of which cannot be used to fund IMF programs. Arrangements to borrow give additional power to countries providing funds, which undermines the true multilateral character of the institution.

There are two alternative ways to devise a fully SDR-funded IMF lending. One way would be that suggested by the IMF economist Jacques Polak three decades ago: IMF lending during crises would create new SDRs (similar to the way lending by central banks creates domestic money), but such SDRs would be automatically destroyed once such loans are paid for (Polak, 1979). This would be an entirely counter-cyclical financing mechanism, complementary to the counter-cyclical issuance of SDRs as reserve assets. The other would be to treat the SDRs not used by countries as deposits in (or lending to) the IMF that could then be used by the institution to lend to countries in need (Ocampo, 2010a). Either of these proposals would involve eliminating the division between what are called the General Resources and the SDR accounts (Polak, 2005, part II).

For any of these solutions to work, it is, of course, essential that the size of IMF credit lines, their conditionality and the stigma associated with borrowing from this institution be overcome, to both reduce both the asymmetric pressure that the deficit countries face during crises, as well as the demand need for developing countries to accumulate large amounts of reserves as self-protection.

Important steps in this direction were taken in March 2009 with the creation of the Flexible Credit Line (FCL) for crisis prevention purposes, doubling other credit lines, improving the use of stand-by agreements as a preventive tool (the so called “high-access precautionary arrangements”) and eliminating the ties between structural conditionalities and loan disbursements. However, more seems to be required. In particular, the limited demand for the FCL may in fact indicate that the three countries that soon demanded it did so more as a matter of good will (perhaps under friendly suggestion by some industrial countries) than of true willingness to use it. A more ambitious reform would be to adopt at least one part of Keynes’ original plan for a post-war arrangement: the creation of an overdraft (drawing) facility that can be used *unconditionally* by *all* IMF members up to a certain limit and for a pre-established time period.

Such a facility would contribute to making the system more symmetric between surplus and deficit countries, so as to overcome the anti-Keynesian bias. Some rules for SDR allocation could also contribute to this purpose, particularly penalizing countries with large surpluses and/or excessive reserves by suspending their right to receive SDR allocations.<sup>5</sup> Of course, the definition of “excessive reserves” would have to take into account the exceptional demand for reserves by developing countries.

This exceptional demand must be taken into account if the reform is going to limit the inequities of the current system as well as the inequity-instability link associated with self-insurance, but also if the reform adopted is going to satisfy the growing demand for reserves. Indeed, one of the implications of the growing divergence in the demand for reserves by industrial vs. developing countries is that at most 40% of SDR allocations according to IMF quotas go to countries that have a high demand for reserves; the rest, which is the share received by industrial countries, go to countries with low demand for reserves.

What this implies is that an ambitious reform that really aims at matching the creation of SDRs with the demand for reserves would have to include a “development link” in SDR allocations. The best solution would be to include the demand for reserves as one of the basic criteria in SDR allocations. A simple solution is that suggested by Williamson (2010): allocating a certain proportion to developing countries (say around 80%), and then assigning the shares of the allocation among developing and industrial countries, respectively, according to IMF quotas. More complex formulae could include income per capita (lower issues for countries with a higher income per capita), the instability of trade and capital flows and the existing level of reserves relative to the estimated demand.

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<sup>5</sup> The discussions of the early 1970s could be illustrative in this regard. The US backed at the time a “reserve indicator” system, under which each IMF member would have been assigned a target level of reserves and forced to adjust to keep reserves around that target.

An alternative to an asymmetric allocation rule is the development link suggested by the United Nations Commission (United Nations, 2009, ch. 5), following a variant of proposals made by the group of experts convened by UNCTAD in the 1960s (UNCTAD, 1965). According to this rule, the IMF would be allowed to buy bonds from Multilateral Development Banks (MDBs) with the SDRs not utilized by member states. These funds would then finance developing countries' demands for long-term financial resources. This proposal has the additional advantage that there is no stigma associated to borrowing from MDBs and there is, therefore, a broader group of developing countries that are willing to borrow from the MDBs than from the IMF. Still another alternative would be to use the SDRs allocated to industrial countries to finance additional aid for the poorest countries and the provision of global public goods. But, although this proposal has many virtues, it does *not* contribute to solving the problem of how to match the supply and the demand for reserves. It is also strictly a fiscal transaction that would probably require approval by national parliaments on every occasion.

Of course, whatever system is introduced must continue solving the problem of the redistribution of IMF quotas which, despite recent marginal improvements, do not reflect the realities of the world economy today. In a fully SDR-based IMF, "quotas" would of course have entirely different connotations, as they would not involve actual contribution of resources, but would still help determine the shares of countries in SDR allocations, their borrowing limits and, together with basic votes, their voting power.

### **Complementary Reforms**

As pointed out by Bergsten (2007) even before the crisis, time has also come for the idea launched in the debates of the late 1970s of creating an IMF "substitution account", which would allow countries to transform their dollar reserves into SDR-based assets issued by the Fund. This instrument would provide stability to the current system and would be an essential transition mechanism of an ambitious reform effort (Kenen, 2010b). The July 1<sup>st</sup> 2009 IMF decision to issue SDR-denominated notes to some emerging economies (now Brazil, China, India and Russia) could be considered a step in that direction. An essential issue is how to distribute the potential costs of this mechanism, the problem that blocked its adoption three decades ago. However, these costs are not necessarily very high. Simulations by Kenen (2010a) based on historical data for 1995-2008 indicate that those costs would have been small during that period.

Regional monetary arrangements could also play a useful complementary role. Indeed, as I have argued before (Ocampo, 2002), the IMF of the future should be conceived as the apex of a *network* of regional reserve funds. A system

such as this would be closer in design to that of the MDBs, where the World Bank coexists with several regional development banks and, in some parts of the world, with several sub-regional institutions. It would also be closer in design to the European Central Bank and the Federal Reserve System. By providing complementary forms of collective insurance and fora for macroeconomic policy dialogue among regional partners, regional arrangements would help increase the stability of the global monetary system. Such arrangements would also give stronger voice and ownership to smaller countries, and are more likely to respond to their specific demands (Ocampo, 2006). The UN Commission has even suggested that it would be possible to build the new global reserve system bottom-up, through agreements among regional arrangements (United Nations, 2009, ch. 5).

Regional arrangements can take different forms—payments agreements, swap lines, reserve pools, common central banks—and exhibit different degrees of multilateralization. A small but very successful institution of its kind has been the Latin American Reserve Fund (FLAR, according to its Spanish acronym), made up of the Andean countries, Costa Rica and Uruguay. The Chiang Mai Initiative is the most ambitious of all, and made a significant step towards full multilateralization in December 2009. Although there has been skepticism that contagion may make these instruments relatively useless, the experience of FLAR indicates that members of a regional fund are sufficiently heterogeneous to guarantee that their demand for liquidity does not exactly coincide in time, reflecting the fact that there is no perfect correlation among the macroeconomic variables of major Latin American countries, including FLAR members (Machinea and Titelman, 2007; Ocampo, 2006). They can also help serve as a collective line of defense against attack on any of its individual members. So, these institutions can have important stabilizing properties.

## **Conclusions**

The most desirable and viable reform involves moving to a fully SDR-based IMF with a clear counter-cyclical focus. This would include counter-cyclical *allocations* of SDRs and counter-cyclical IMF *financing*, made entirely in SDRs, that provides in the latter case both unconditional (the overdraft facility) as well as conditional lending to countries facing balance of payments crises. It would also involve designing criteria for SDR allocations that take into account the very different demand for reserves by industrial vs. developing countries, as a way to correct both the inequities of the system and the strong demand by developing countries for self-insurance. Complementary reforms would include a substitution account, which would allow IMF members to substitute foreign exchange by Fund-issued SDR-denominated assets, and by encouraging strong regional

monetary arrangements. Any reform would also imply deepening IMF governance reforms.

Although a reform along these lines is viable, it is necessary that it should also be politically attractive (Helleiner, 2010). Attractiveness for the U.S. is key. This is enhanced today by the fact that the U.S. may find current account deficits highly undesirable and that would like to maintain full macroeconomic policy autonomy to manage its current difficulties. This also means that ideas that are attractive to the U.S. should be clearly on the agenda, such as keeping SDRs largely as a reserve asset, and thus maintaining a significant role of the U.S. dollar as an international means of payment and reserve currency. Mechanisms such as the substitution account that would help manage in an orderly way shifts by world central banks away from dollar reserves would also be essential. Also, although moving to a fully SDR-based IMF may be attractive to most if not all of its members, and its counter-cyclical functions have actually been subject to a strong emphasis in recent debates, including in the special SDR allocation of 2009, other features may be more difficult to negotiate. This is particularly true of a special formula for SDR allocation that takes into account the diverging demands from industrial vs. developing countries. For this reason, alternative development links, such as allowing the IMF to buy bonds from the MDBs, should be on the agenda.

## References

- Bergsten, C. Fred (2007), "How to Solve the Problem of the Dollar", *Financial Times*, December 11. Available at:  
<http://www.iie.com/publications/opeds/oped.cfm?ResearchID=854>
- Camdessus, Michel (2000). An agenda for the IMF at the start of the 21<sup>st</sup> century. Remarks at the Council on Foreign Relations, February, New York.
- Dooley, Michael P., David Folkerts-Landau and Peter Garber (2003), "An essay on the revived Bretton Woods system", *NBER Working Paper No. 9971*, September.
- Helleiner, Eric (2010), "The New Politics of Global Reserve Currency Reform", *Journal of Globalization and Development*, this issue.
- IMF (International Monetary Fund) (2009), *World Economic Outlook*, October.
- Kenen, Peter (1983), "Use of SDR to supplement or substitute for other means of finance", in George M. von Furstenberg (ed.). *International Money and Credit: The Policy Roles*, International Monetary Fund, Washington, DC, ch. 7.
- \_\_\_\_\_ (2010a), "Reforming the Global Reserve Regime: The Role of a Substitution Account," *International Finance*, Vol. 13, No. 1.

- \_\_\_\_\_ (2010b), “An SDR-based Reserve System”, *Journal of Globalization and Development*, this issue.
- Keynes, John M. (1942-43). The Keynes plan. Reproduced in J. Keith Horsefield (ed.). *The International Monetary Fund 1945-1965: Twenty Years of International Monetary Cooperation. Vol. III: Documents*. International Monetary Fund, Washington, D.C., 1969, pp. 3-36.
- Machinea, José Luis and Daniel Titelman (2007), “Less Volatile Growth? The Role of Regional Financial Institutions”, *CEPAL Review*, No. 91, April.
- Ocampo, José Antonio (2002), “Recasting the international financial agenda”, in John Eatwell and Lance Taylor (eds). *International Capital Markets: Systems in Transition*. Oxford University Press, New York.
- \_\_\_\_\_ (2006), “Regional financial cooperation: Experiences and challenges”, in José Antonio Ocampo (ed.). *Regional Financial Cooperation*. Brookings Institution and ECLAC, Washington D.C., chapter 1.
- \_\_\_\_\_ (2007/08), “The instability and inequities of the global reserve system”, *International Journal of Political Economy*, 36 (4), Winter.
- \_\_\_\_\_ (2010a), “Reforming the global reserve system”, in Stephany Griffith-Jones, José Antonio Ocampo and Joseph E. Stiglitz (eds). *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*, Oxford University Press, New York, chapter 16.
- \_\_\_\_\_ (2010b), “Why Should the Global Reserve System Be Reformed?”, *Briefing Paper 1*, Friedrich Ebert Stiftung, January.
- \_\_\_\_\_, Jan Kregel and Stephany Griffith-Jones (2007), *International Finance and Development*. Zed Books, London.
- Polak, Jacques J. (1979), “Thoughts on an International Monetary Fund based fully on SDR”, *Pamphlet Series No. 28*, International Monetary Fund, Washington, DC.
- \_\_\_\_\_ (2005), *Economic Theory and Financial Policy: Selected Essays of Jacques J. Polak 1994-2004*, edited by James M. Boughton, M. E. Sharpe, Armonk, NY.
- Stiglitz, Joseph E. (2006), *Making Globalization Work*, W.W. Norton, New York.
- Triffin, Robert (1961), *Gold and the Dollar Crisis* (revised edition), Yale University Press, New Haven.
- \_\_\_\_\_ (1968), *Our International Monetary System: Yesterday, Today and Tomorrow*, Random House, New York.
- UNCTAD (United Nations Conference on Trade and Development) (1965), *International Monetary Issues and the Developing Countries: Report of the Group of Experts*, United Nations, New York.

- United Nations (1999), *Towards a new international financial architecture: Report of the Task Force of the Executive Committee on Economic and Social Affairs of the United Nations*. Available at: <http://www.un.org/esa/coordination/ecesa/ecesa-1.pdf>.
- \_\_\_\_\_ (2005), *World Economic Situation and Prospects 2005*, United Nations, New York.
- \_\_\_\_\_ (2009), *Report of the Commission of Experts convened of the President of the UN General Assembly on Reforms of the International Monetary and Financial System* (Stiglitz Commission), United Nations, New York, September. Available at: [http://www.un.org/ga/econcrisissummit/docs/FinalReport\\_CoE.pdf](http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf)
- Williamson, John (2010), “The Future of the Reserve System”, *Journal of Globalization and Development*, this issue.
- Zhou Xiaochuan (2009), “Reform the international monetary system”, People’s Bank of China, Beijing.  
<http://www.pbc.gov.cn/english/detail.asp?col=6500&ID=178>