José Antonio Ocampo<sup>1</sup> Professor, School of International and Public Affairs Columbia University

The current global reserve system evolved out of the unilateral decision by the U.S. in 1971 to abandon the gold-dollar parity and convertibility of dollars for gold for governments and central banks established at Bretton Woods. Although other currencies can compete with the US dollar as international means of payments and potential foreign exchange reserve assets, this competition has been weak due to the "network externalities" in the use of currencies and the fact that the USA has by far the largest market for liquid Treasury securities. Thus, according to the International Monetary Fund (IMF) data on the composition of allocated foreign exchange reserves, in third quarter of 2013, 61.4% were held in US dollars, 24.2% in euros and 14.4% in other currencies. On top of that, over 80% of foreign exchange transactions are managed in US dollars. So, in a significant sense, the current system can be called a *fiduciary* dollar standard. The other feature is that alternative reserve currencies float against each other – an issue that links to the debate on the exchange rate system (or, rather, "non-system"), an issue that would not be discussed here.

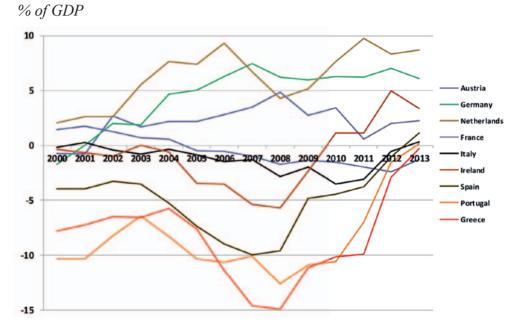
# The Problems of the System

This system can be characterized as facing three distinct problems, which in fact may be said to have arisen (or at least identified) in a historical sequence (Ocampo, 2010a and 2010b). The first is the problem that Keynes (1942/43) emphasized in his proposals for a global monetary system in the years leading to the Bretton Woods agreement, and that, as he pointed out, was also a feature of all international monetary systems that we have known: the asymmetric adjustment pressures that it

<sup>&</sup>lt;sup>1</sup> Also, Fellow of the Committee on Global Thought and co-President of the Initiative for Policy Dialogue at Columbia University. Formerly Under-Secretary-General of the United Nations for Economic and Social Affairs, Executive Secretary of the UN Economic Commission for Latin America and the Caribbean and Minister of Finance, Planning and Agriculture of Colombia. This paper draws in part from a WIDER Annual Lecture given by the author (Ocampo, 2011).

imposes on deficit versus surplus countries. As the former are forced to adjust, whereas the latter are not, this creates a clear recessionary pressure on the world economy. This problem is, of course, felt with particular severity during global recessions, when deficit financing dries out. This problem may be called asymmetric adjustment problem.<sup>2</sup>

Chart 1: Current Account Balances of Euro Area Countries



Source: International Monetary Fund, World Economic Outlook Database.

There is perhaps no better example in history of this problem than the experience of the euro area countries during the current crisis. As chart 1 shows, the peripheral countries –Greece, Spain, Portugal and Ireland, in that order – have experienced massive current account adjustments since 2007, in the order of 9 to 14 percentage points of GDP. Italy has more recently joined this trend, though in much smaller amounts. In contrast, surplus countries – Germany, Netherlands and, to a lesser extent, Austria –have not reduced their surplus in any significant amounts and some have even increased it.

<sup>&</sup>lt;sup>2</sup> I have also referred to before as the or the "anti-Keynesian bias" of the system.

The second problem is that generated by use of a *national* currency, the US dollar, as the major *international* currency. It was formulated in the 1960s by the Belgian economist Robert Triffin and thus came to be known as the "Triffin dilemma" (see Triffin, 1961 and 1968, and for a recent formulation, Padoa-Schioppa, 2011). The essential issue is that provision of international liquidity requires the reserve issuing country (or countries) to run a balance of payments deficit(s), either in the current or the capital account, which could eventually lead to a loss in the confidence in that currency. In the 1960s this was reflected in a tendency of the USA to gradually lose gold reserves, it would have generated a scarcity of international liquidity. After failing to manage the loss of gold reserves through the Gold Pool (Eichengreen, 2007, chapter 2), the USA finally took the decision to abandon convertibility of dollars for gold in 1971.

This changed the nature of the Triffin dilemma. The USA was essentially left with no effective constraint to run balance of payments deficits. This generated both a long-term trend toward rising current account deficits, and strong fluctuations in the exchange rate of the dollar against other currencies. Both problems are shown in chart 2. The first could be said to generate world expansionary (and, under some conditions, inflationary) pressures during the periods when the USA is running deficits; in turn, reductions of the US current account deficit have always been associated with global slowdowns or recessions (1980-82, 1990-91, 2008-09, but much less in 2001). Thus, the system may be said to alternate between expansionary and recessionary biases. The instability of the US dollar exchange rate may be understood, in Triffin's terms, as cycles in the confidence in the US dollar as a reserve currency. It also means that the dollar lacks since the early 1970s what should be an essential feature of the currency that is at the centre of the global monetary system: a stable value.

Being at the centre of the system generates, of course, several advantages for the U.S.: the appropriation of seigniorage from the use of the dollar as a global currency, the ability to borrow at low interest rates and an increased demand for the services provided by its financial industry. But it also has costs, particularly if it involves current account deficits, as it normally has in recent decades, as this is a leakage in aggregate demand. This means, in turn, that the effectiveness of its expansionary policies is reduced by the spillovers it generates on the rest of the world during periods of dollar appreciation. This is what happened in the aftermath of the Lehman Brothers collapse in September 2008, which implied that part of the stimulus of US expansionary policies was exported to the rest of the world.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> This problem for the reserve-issuing country that has been highlighted by Stiglitz (2006, chapter 9), and can be seen as a lack of control by the reserve-issuing country over its balance of payments, as underscored by Greenwald and Stiglitz (2010).

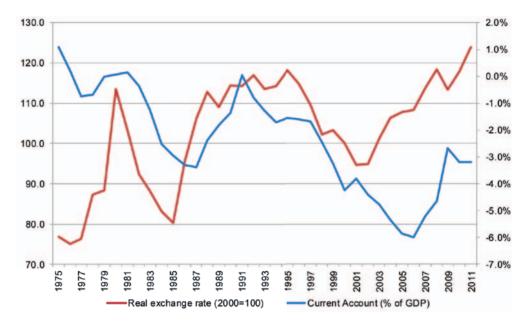


Chart 2: US Current Account and Real Exchange Rate

*Note:* The real exchange rate is depicted here to show an increase when there is a real depreciation (the opposite convention to that used by the IMF).

Source: IMF, International Financial Statistics.

The third problem is the inequities generated by the need that developing countries face to accumulate foreign exchange reserves to manage the strong pro-cyclical swings of capital flows, which are nothing other than transfers of resources to reserve-issuing countries. This *inequity bias* became very visible in the 1990s and, particularly, in the aftermath of the sequence of emerging country crises that started in East Asia in the late 20<sup>th</sup> century. As chart 3 indicates, until the 1980s the foreign exchange reserves of low-income and middle-income countries were not unlike those of high-income countries: around 3% of GDP. Since then, they started to diverge, and sharply so since the Asian crisis. Prior to the recent (and, in a sense, still ongoing) North-Atlantic financial crisis (end of 2007), middle-income countries, excluding China, held on average reserves equivalent to slightly over 20% of GDP, and low-income countries over 13%. With the exception of Japan, high-income countries continued to hold reserves equivalent to around 3% of GDP.

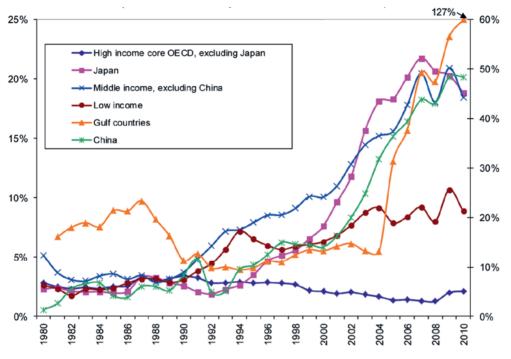


Chart 3: Foreign Exchange Reserves by Level of Development

This phenomenon, which has come to be known as "self-insurance", involves not only accumulating reserves to face an eventual "sudden stop" in external financing but also absorbing through reserve accumulation large part of what countries consider excess capital inflows. The basic rationale for this policy is avoiding appreciation pressures and growing current account deficits during periods of booming capital inflows which, as past experience indicates, are strong predictors of crises during the downswing of the capital account cycle. There is increasing evidence that strong reserve positions and avoidance of overvaluation and current account deficits significantly contributed to relatively good performance of developing countries during the North-Atlantic financial crisis.<sup>4</sup> So, in a broad sense, self-insurance is nothing else than a prudential or counter-cyclical macroeconomic policy aimed at moderating the domestic effects of pro-cyclical capital flows. Despite this positive

Note: Left-hand scale except China and the Gulf Countries.

Source: Total reserves minus gold series, World Bank, World Development Indicators, based on information from the IMF.

<sup>&</sup>lt;sup>4</sup> See, among many others, Frankel and Saravelos (2010) and Llaudes et al. (2010).

effect, it must be emphasized that this policy generates "fallacy of composition": if many countries adopt a policy aimed at generating surplus or small current account deficits, they contribute to the generation of global imbalances.

# **Reforming the System**

These deficiencies of the global monetary system are, in variable ways, at the center of the reform proposals formulated in the beginning of the crisis. They included the proposal by the central bank governor or China to gradually eliminate the role that the US dollar plays at the center of the system (Zhou, 2009). In turn, the Stiglitz Commission, convened by the President of the UN General Assembly, proposed that reforms of the global reserve system should be at the center of the global reform agenda (United Nations, 2009). The Palais Royal Initiative (2011), convened by the French government, also presented a series of reform proposals. However, actions have been limited and the reforms of the international monetary system did not fully enter into either G-20 or IMF debates.

There are essentially two ways forward, which in fact can be mixed in a complementary solution.<sup>5</sup> The first one, which in a sense is the inertial solution, is to enhance the potential multicurrency character of the current system. The increasing use of the euro for global transactions and as a global reserve asset is one of the possibilities – though the recent crisis has shown that this currency has to overcome the sense that it is an imperfect substitute for the US dollar, as it is backed by a heterogeneous group of countries with uneven strength and there is in fact no homogeneous Eurobond market. The internationalization on the renminbi is a complementary possibility. It is a process that is being pushed by market forces and facilitated by Chinese authorities, particularly by allowing Hong Kong to play the role of intermediary in the process. The constraints are given here by limitations of domestic financial development in China and by the inconvertibility of the renminbi (Yu, 2014). However, full convertibility may not be necessary for the renminbit to play the role of reserve asset (though full convertibility for central banks that hold renminbi as reserves would be essential) and may be inconvenient for the Asian giant, as it can lead in the transition to destabilizing forces which other developing countries are familiar with. On top of the euro and the renminbi, other currencies can play a secondary role, and local currencies can be used in a broader scale for

<sup>&</sup>lt;sup>5</sup> There are, of course, other alternatives. One would be going back to some form of gold standard, or at least to a greater use of gold as a reserve asset. But this goes against long-term trends toward moving away from this "Barbarous relic", to use Keynes' terminology, which includes the growing demonetization of gold since the 1970s. It would also go against the "embedded liberalism" of the post-Second World War arrangements, as emphasized by Eichengreen (2008).

intra-regional trade, following several successful experiences of the sort that sprang up during the recent and past crises.

The basic advantage of a multicurrency arrangement is that it allows reserve holders – notably, as we have seen, emerging economies— to diversify the composition of their foreign exchange reserve assets, and thus counteract the instability that characterizes all individual currencies under the current system. In this regard, however, exchange rate flexibility among alternative reserve currencies would be an advantage but also a potential risk. Exchange rate flexibility would make the system more resilient than the fixed gold-dollar parity that led to the collapse 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. For this reason, a multicurrency arrangement may actually need an IMF "substitution account" to serve as a stabilizing mechanism, which means that it may have to rely on at least some elements of the second solution (see below).

This reform would also not address any of the other deficiencies of the current system. The benefits from the reserve currency status would still be captured by industrial countries and eventually by China, so the system would continue to be inequitable. It would not solve the asymmetric adjustment bias of the current system either, nor would it reduce emerging and developing countries' demand for self-in-surance. Finally, in the light of the growing demand for reserves, the dominance of the U.S. dollar could worsen the net external liability position of the U.S. and associated problems highlighted by the Triffin dilemma.

The second alternative is to move toward a global currency, possibly in the first stage only as a reserve asset. Although other possible routes may be considered,<sup>6</sup> the best is unquestionably the use of Special Drawing Rights (SDRs) issued by the IMF, indeed fulfilling the aspiration that was written in the Fund's Articles of Agreement when this instrument was created of "making the special drawing right the principle reserve asset in the international monetary system" (Article VIII, Section 7 and Article XXII).<sup>7</sup> As Triffin (1968) envisioned, this would complete the transition since the nineteenth century of placing fiduciary currencies at the center of modern monetary systems.

Proposals for periodic SDR allocations follow two different models. The first are counter-cyclical allocations, thus concentrating them in periods of world financial stress and possibly partially destroying them once financial conditions normal-

<sup>&</sup>lt;sup>6</sup> The reform could also be implemented by creating a new institution (a Global Reserve Bank) or a network of regional arrangements. See, in this regard, United Nations (2009, chapter 5). But creating new institutional frameworks would be time-consuming and may not be politically viable.

<sup>&</sup>lt;sup>7</sup> See Solomon (1982, chapters 4–8) for a history of the debates on global monetary issues that led to the creation of SDRs.

ize (United Nations, 1999; Camdessus, 2000; Ocampo, 2002; Akyüz, 2005). This would develop a counter-cyclical element in world liquidity management. The second model proposes regular allocations in proportion to the additional global demand for reserves. Most estimates indicate that allocations for the equivalent of USD 200–300 billion a year would be reasonable.<sup>8</sup> Even such allocations would only increase the share of SDRs in non-gold reserves to somewhat above 10% in the 2020s, indicating that they would still largely complement other reserve assets.

Under current rules. IMF makes allocations of SDRs on the basis of a long-term need a global character, and with the purpose of supplementing existing reserve assets. So far there have been four general SDR allocations: the original one, in 1970-72, for SDR 9.3 billion; a second in 1979-81 for SDR 12.1 billion; a third proposed in 1997, partly to allocate SDRs to members that had joined after 1981. was not effective until the Fourth Amendment of the IMF Articles of Agreement (of which it was part) was approved by the US Congress in 2009; and a fourth, and largest in history, for USD 250 billion (SDR 161.2 billion) agreed by the G-20 in 2009 as one of the measures to boost international liquidity during the global financial crisis. Allocations are made according to IMF quotas, and therefore are much larger for high-income countries. Table 1 indicates that the share of high-income countries has gradually declined through time, but was still close to 70% in 2009, with the falling share of OECD countries partly compensated by the rise of high-income non-OECD (mainly Gulf) countries. Middle-income countries have increased their share in allocations by 6 percentage points since the early 1970s. with China taking more than half of that. In contrast, low-income countries have seen their share reduced from in any case marginal levels.

SDRs are defined by the IMF as an "international reserve asset".<sup>9</sup> However, under the current rules, countries have to pay interest on allocations of SDRs, but receive interest on holdings. In this sense, SDRs are peculiarly both an asset and a liability. Moreover, since countries that use them make net interest payments to the Fund, they should perhaps be considered as a credit line which can be used unconditionally by the holder –i.e., an unconditional overdraft facility. However, the fact that all central banks accept SDRs makes them effectively an international reserve currency. Use of SDR allocations is quite active and works rather smoothly, with developing countries making a frequent use of them but also industrial countries at different critical conjunctures (Erten and Ocampo, 2013).

<sup>&</sup>lt;sup>8</sup> See a survey of different estimates in Erten and Ocampo (2013).

<sup>&</sup>lt;sup>9</sup> See, for example, http://www.imf.org/external/np/exr/facts/sdr.htm.

## Table 1: SDR Allocations by Level of Development

#### Millions of SDRs

	Allocations (in mil.SDRs)			Allocation to each group by		
				percent of total allocations		
	1970-72	1979-81	2009	1970-72	1979-81	2009
High income: OECD	6,818	7,956	114,905	73.8%	66.2%	62.9%
Japan	377	514	11,393	4.1%	4.3%	6.2%
Excluding Japan	6,441	7,442	103,512	69.8%	61.9%	56.7%
United States	2,294	2,606	30,416	24.8%	21.7%	16.7%
High income: nonOECD	41	363	10,797	0.4%	3.0%	5.9%
Gulf countries	1	286	8,835	0.0%	2.4%	4.8%
Excluding Gulf countries	40	77	1,962	0.4%	0.6%	1.1%
Middle income	2,144	3,359	53,347	23.2%	28.0%	29.2%
China	0	237	6,753	0.0%	2.0%	3.7%
Excluding China	2,144	3,122	46,594	23.2%	26.0%	25.5%
Low income	230	338	3,604	2.5%	2.8%	2.0%
Total allocations	9,234	12,016	182,653	100.0%	100.0%	100.0%

Source: IMF; International Financial Statistics.

Perhaps the most important and simplest reform that can be adopted would be to finance *all* IMF lending and in fact to make all IMF operations with SDRs, thus making global monetary creation similar to how central banks creates domestic money. This idea goes was suggested by the IMF economist Jacques Polak (1979) more than three decades ago. According to his proposal, IMF lending during crises would create new SDRs, but such SDRs would be automatically destroyed once such loans are paid for. The alternative, I have suggested 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 that is an inheritance of the debates of the 1960s and make SDRs a relatively limited instrument of global monetary cooperation (Polak, 2005, part II).

If SDRs are used to finance IMF programmes, this would also help correct the significant imbalances that have been built up by lags in increasing the size of the Fund in relation to that of the world economy, and particularly of international capital flows (IMF, 2010). An additional problem is that, despite the reallocation of quotas agreed to since 2006, and particularly in 2010, quotas do not reflect the shares of different countries in the world economy today. The under-representation of developing countries in quota allocations enhances the inequities associated with the fact that the largest demand for reserves essentially comes from developing countries.

This implies, of course, that efforts to reform quota allocations must continue. The inequities can also be partially corrected with a mix of two types of reforms (since they are not mutually exclusive). The first is an asymmetric issuance of SDRs, which would imply that all or a larger proportion of allocations would be given to those countries with the highest demand for reserves –i.e., essentially developing countries. One simple formula that Williamson (2010) has proposed is giving 80% of allocations to emerging and developing countries, and 20% to industrial countries, with allocations within each group determined according to IMF quotas. The second would be to create a "development link" in SDR allocations. One alternative would be to allow the IMF to use the SDRs that are not utilized by member states to provide or, better, leverage financing for development, for example by allowing unused SDRs to be used to buy bonds from the multilateral development banks or institutions that provide global public goods (such as climate mitigation and adaptation) (United Nations, 2009).<sup>10</sup>

A reform such as this would go a long way to correct some major problems of the current system, particularly the *Triffin dilemma* and the inequity bias, but it would not solve the asymmetric adjustment bias. This problem could be partly solved by two complementary reforms: (i) the creation of at least a moderate version of Keynes' overdraft facility;<sup>11</sup> and (ii) withdrawing allocations of SDRs to countries with "excessive reserves", using a definition of such "excess" that would take into account the high demand for reserves that developing countries have.

As already indicated, SDRs should also be used to create a "substitution account" similar to that proposed in the debates of the late 1970s, which would allow countries to transform their dollar reserves (or those denominated in other currencies) for SDR-denominated assets issued by the Fund (Bergsten, 2007). This instrument would provide stability to the current system and, as already pointed out, may actually prove essential to manage some of the instabilities generated by the multicurrency arrangements; it would also be an essential transition mechanism of an ambitious reform effort (Kenen, 2010b). Of course, it is essential to negotiate how to distribute the potential costs of this mechanism, but backward simulations by Kenen (2010a) based on historical data for 1995–2008 indicate that such costs may be small.

<sup>&</sup>lt;sup>10</sup> There is also the possibility of using the allocation to industrial countries to directly finance additional official development assistance and the provision of global public goods (Stiglitz, 2006, chapter 9). In the same line of reasoning, IMF Managing Director Strauss-Kahn raised during its tenure the possibility of using them to finance programmes to combat climate change. These proposals have many virtues but pose the problem that such transfers are fiscal in character, and may thus require in every case the approval of national parliaments.

<sup>&</sup>lt;sup>11</sup> As already indicated, a possible interpretation is that SDRs, as currently designed, are in fact such facility (Erten and Ocampo, 2013).

The reform could also include more currencies into the SDR basket (notably the renminbi) and could allow the broader use of SDRs in private transactions, as some authors have suggested through the years (Kenen, 1983; Eichengreen, 2007; Padoa-Schioppa, 2011). One simple reform could be allowing deposits by financial institutions in central banks (either reserve requirements or excess reserves) to be held in SDRs. However, the system could also work as one in which the only uses of SDRs are as a reserve asset and a means of financing of IMF lending, so long as central banks keep the basic commitment to convert SDRs into convertible currencies when asked to do so, which is what makes the SDRs an effective monetary instrument for transactions among central banks. Furthermore, allowing the broader use of SDRs would make the reform costly for the USA and therefore likely to face greater resistance from this country, and could make SDRs subject to the instability that characterizes private markets. In any case, it may be necessary to embed the reform in rules that make holding SDRs attractive for central banks (an adequate return) and/or other rules that guarantee that there is an active demand for SDRs (e.g., commitments not to reduce SDRs held by individual central banks below certain limits relative to the allocations they have received, obviously if they are not borrowing from the Fund).

## Conclusions

The most desirable reform of the current global reserve system 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. In the first case, it could include criteria for SDR *allocations* that take into account the very different demand for reserves by industrial vs. emerging and developing countries. The use of SDRs to finance IMF programs would help consolidate the reforms of the credit lines that have been introduced during the recent global financial crisis, particularly the creation of contingency credit lines and the much larger levels of financing relative to quotas. The introduction of a substitution account by which central banks can exchange for SDRs the reserves in currencies they do not want to hold would make the latter a complement to the multicurrency arrangement that may be emerging. The introduction of a substitution account would in fact make the SDR complementary to a multicurrency system, a fact that would make the reforms more attractive for the USA. This mix is probably the best practical option for moving forward.

## References

- Akyüz, Yilmaz (2005), Reforming the IMF: Back to the Drawing Board, Third World Network, *Global Economy Series*, No. 7.
- Bergsten, C. Fred (2007), How to Solve the Problem of the Dollar, *Financial Times*, 11 December.

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 21st Century, Remarks at the Council on Foreign Relations, New York, February.
- Eichengreen, Barry (2007), Global *Imbalances and the Lessons of Bretton Woods,* Cambridge: MIT Press.
- Eichengreen, Barry (2008), Globalizing Capital: A History of the International Monetary System, 2<sup>nd</sup> edition, Princeton: Princeton University Press.
- Eichengreen (2011), Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System, New York: Oxford University Press.
- Erten, Bilge and José Antonio Ocampo (2014), Building a Stable and Equitable Global Monetary System", in: José Antonio Alonso, Giovanni Andrea Cornia and Rob Vos (eds.), *Alternative Development Strategies for the Post-2015 Era*, New York: Bloomsbury, United Nations Series on Development, chapter 9.
- Frankel, Jeffrey, and George Saravelos (2010), Are Leading Indicators of Financial Crises Useful for Assessing Country Vulnerability? Evidence from the 2008– 2009 Global Crisis, NBER Working Paper, No. 16047.
- Greenwald, Bruce, and Joseph E. Stiglitz (2010), A Modest Proposal for International Financial Reform, in: Stephany Griffith-Jones, José Antonio Ocampo and Joseph E. Stiglitz (eds), *Time for a Visible Hand: Lessons from the 2008 World Financial Crisis*, New York: Oxford University Press.
- IMF (International Monetary Fund), "Fourteen General Review of Quotas: The Size of the Fund: Initial Considerations", 12 March.
- Kenen, Peter B. (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*. Washington DC: International Monetary Fund, chapter 7.
- Kenen, Peter B. (2010a), Reforming the Global Reserve Regime: The Role of a Substitution Account, *International Finance*, 13(1).
- Kenen, Peter B. (2010b), An SDR-based Reserve System, *Journal of Globalization and Development*, 1(2): Article 13.
- Keynes, John M. (1942-43), The Keynes Plan, reproduced in: J. Keith Horsefield (ed.) (1969) The International Monetary Fund 1945–1965: Twenty Years of International Monetary Cooperation, Vol. III: Documents, Washington, DC: International Monetary Fund, pp. 3–36.
- Llaudes, Ricardo, Ferhan Salman, and Mali Chivakul (2010), The Impact of the Great Recession on Emerging Markets, *IMF Working Paper*, WP/10/237.

- Ocampo, José Antonio (2002), Recasting the International Financial Agenda, in John Eatwell and Lance Taylor (eds.), *International Capital Markets: Systems in Transition*, New York: Oxford University Press, pp. 41–73.
- Ocampo, José Antonio (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, ch. 16.
- Ocampo, José Antonio (2010b), Special Drawing Rights and the Reform of the Global Reserve System, in Jomo Kwame Sundaram (ed.), *Reforming the International Financial System for Development*, New York: Columbia University Press, ch. 13.
- Ocampo, José Antonio (2011), *Reforming the International Monetary System*, 14<sup>th</sup> WIDER Annual Lecture, Helsinki: United Nations University World Institute for Development Economics Research (WIDER).
- Padoa-Schioppa, Tomasso (2011), The Ghost of Bancor: The Economic Crisis and Global Monetary Disorder, en Jack T. Boorman y André Icard (eds.), *Reform of the International Monetary System: The Palais Royal Initiative*, New Delhi: SAGE Publications, chapter 6.
- Palais Royal Initiative (2011), Reform of the International Monetary System: A Cooperative Approach for the 21st Century, in Jack T. Boorman and André Icard (eds.), *Reform of the International Monetary System: The Palais Royal Initiative*, New Delhi: Sage Publications, ch. 2, pp. 7–26.
- Polak, Jacques J. (1979), Thoughts on an International Monetary Fund based fully on SDR, *Pamphlet Series* No. 28, Washington D.C.: International Monetary Fund.
- Polak, Jacques J. (2005), *Economic Theory and Financial Policy: Selected Essays* of Jacques J. Polak 1994–2004, edited by James M. Boughton, Armonk: M. E. Sharpe.
- Solomon, Robert (1982), *The International Monetary System 1945–1981*, New York: Harper & Row.
- Stiglitz, Joseph E. (2006), Making Globalization Work, New York: W.W. Norton.
- Triffin, Robert (1961), *Gold and the Dollar Crisis* (revised edition), New Haven: Yale University Press.
- Triffin, Robert (1968), *Our International Monetary System: Yesterday, Today and Tomorrow,* New York: Random House.
- 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, January 21.

- United Nations (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.
- Williamson, John (2007), The Future of the Reserve System, *Journal of Globalization and Development*, 1(2): Article 15.
- Yu, Yongding (2014), How Far Can Renminbi Internationalization Go?, Asian Development Bank Institute, *Working Paper*, No. 461, February.
- 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.