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Piffaretti, Nadia F.

World Bank

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Reshaping the International Monetary Architecture and Addressing Global Imbalances: Lessons from the Keynes Plan

Nadia F. Piffaretti[†]

The World Bank

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Abstract: As we witness profound changes in the global economy, and as it becomes apparent that the so-called “Revived Bretton Woods System” may be nothing more than a temporary non sustainable financing of the US structural internal imbalance, favored by the global role of the dollar, which has increased the overall vulnerability of the global financial architecture, it’s worth revisiting the origins of the Bretton Woods conference, and pointing out the relevance for today’s framework of Keynes’ original 1942 plan for an International Clearing Union. In this note we explore the main characteristics of Keynes’ original plan, by revisiting his original writings between 1940 and 1944, and we outline its relevance to the current debate on the international financial architecture. We’ll argue that reforms of the international financial architecture should include anchoring the international monetary system on a sounder institutional ground.

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[†] These are the views of the author and need not reflect those of the World Bank or any affiliated organization. Email: npiffaretti@worldbank.org

I. Introduction

In 1940 as World War II was still ravaging Europe, economists in both camps were at work to prepare the seeds of a new world monetary and financial order, which would have supported the post-war order. For the Nazi Germans, who were still hoping for victory, the stakes were to provide a substitute to the sterling area they were so willing to annihilate, for the Allies, the stakes were to counter the German propaganda, while also preparing to reconstitute on sounder basis a new post-war world order, able to support a renewed very intensive flows of international trade. Lord Keynes, was among the economists who would put his brilliant mind at work to first countering the German Funk-Schacht plan (1940-1942), the so called “German New Order”, and subsequently in 1943-1944 to contribute to elaborating the basis of the post-war order, which led to the creation of the Bretton Woods Institutions in 1944. After an interwar period characterized by decreasing domination of the sterling and the increasing domination of the US dollar¹, Keynes conceived the post-war order as a multipolar international monetary system, centered around an international “clearing union”. As it happened, the new world monetary order ended up centering on establishing the American dollar as the only dominating currency instead – supported by the US excedentary current account - in a regime of fixed exchange rates, with the dollar pegged to gold at \$35 a ounce. The system was abandoned in 1971. As we witness profound changes in the global economy, and the raise of a multipolar integrated global economy, as it appears clear that so-called “Revived Bretton Woods System” as described in their influential paper by Dooley, Folkerts-Landau and Garber (2003) (in which many countries, particularly in Asia, limit

¹ In their recent study, Eichengreen and Flandreau (2008) point out that the dominance of the US dollar started as recently as in the mid of the 1920s, preceding therefore the definitive fall of the influence of the Sterling. The interwar period was characterized by shifts between the US dollars and the Sterling.

exchange rate fluctuation against the dollar, accumulating as a consequence enormous reserves in dollars) may have been nothing more than a temporary non sustainable financing of the US structural internal imbalance, which has increased the overall instability of the global financial architecture, it's worth revisiting the origins of the Bretton Woods conference, and pointing out to the relevance for today's framework of Keynes' original 1942 plan for an International Clearing Union. In this note we explore the main characteristics of Keynes' original plan, by revisiting his original writings between 1940-1944, and we briefly outline its relevance to today's current debate on the international financial architecture, stressing that reforms of the financial architecture should include reshaping the international monetary system.

Section II covers the origins of Keynes Plan, the 'secular problem' of international imbalances, which had plagued the pre-war era of globalization, and Keynes' ambition to set the international trade on sound monetary basis. Section 3 provides a brief description of the key elements of Keynes Plan and the design of the International Clearing Union.

Section IV addresses the relevance of Keynes Plan to the current debate on the international financial architecture, and lists three reasons that justify a call for an inclusion of the renewal of the international monetary architecture:

1. Global imbalances have become structural to financial globalization, hereby increasing the risk of dramatic unwinding of the imbalances: the global role of the dollar as acted both as underlying condition for the development of global imbalances accumulated between 2001 and 2007², and the 2007-2008

² Reaching almost six percent of global GDP in 2007, this includes both deficits and surplus. It has been accompanied by a tripling of the total of foreign exchange holdings in US dollars ((DECPG calculations).

financial turmoil, with the following contagion to Europe and the emerging markets;

2. Structural vulnerability and failures in the inter-bank markets are leading to the re-evaluation of the centrality of central banks, and central clearing. While Central Banks are stepping up to their renewed role, the international system is dangerously left orphan;
3. The current “regulation” versus “laissez faire” debate is only a proxy for a more central question: the “adequacy” versus “inadequacy” of the institutional arrangements underlying the international exchanges.

II. The “Secular International Problem” of Balance of Payment Imbalances

Keynes’ proposal for the establishment of a new World Order went beyond the need for managing post-war relations, but originated from Keynes’ realization that the use of money in international trade has only “worked” for about “two periods of about fifty years each” in the past five hundred years (Keynes 1940, p. 21). Contrary to common wisdom Keynes’ work didn’t stem only from the need to overcome the limits of the interwar periods of unrestrained exchange rates flexibility. Keynes sees in the final break up during the war of the “international currency laissez-faire” not only a problem, but – in his own words - an “*opportunity*” to address a most fundamental question of the institutional weaknesses of the first era of globalization, which had been brought to an end by the two World Wars and the Depression. Keynes saw in the un-orderly international laissez-faire, based on the absence of a system of international payments, an institutional weakness. Keynes’s work was first and foremost aimed at institution-

building. By suggesting an international clearing union, he was proposing to adopt to the international payments the same institutional arrangement ruling the payments within nations, and in particular the need of a banking clearing (operated by an international clearing bank).

Keynes plan originated in his *ambition to finally set the international trade on sound monetary basis*, supporting the evolution toward an international division of labor and the exploitation of natural resources in foreign countries. Keynes considered such reform critical to the post-war world order. He blamed “*impoverishment, and social discontent and even wars and revolutions*” on the “*secular international problem*” of balance of payment imbalances (ibidem), pointing out that this failure can be traced to a “*single characteristic*”: almost all the international monetary settings used in the past five hundred years “*throw the main burden of adjustment on the country which is in the debtor position on the international balance of payments*” (p. 27).

Keynes suggested a new institutional framework, in the form of a US-UK founded system of international clearing, the operation of which would facilitate re-equilibration of global imbalances, by stressing the need of a symmetric rebalancing which would involve both countries, in debtor and creditor position. The aim was to secure creditor adjustment while maintaining debtor discipline. “*The chief initiative*” would rest on the country which finds itself in a creditor position against the rest of the world, hereby avoiding the “*contractionist pressure against the world economy and, by repercussion, against the economy of the creditor country itself*” (p. 47). Following the Keynesian logic, global imbalances should not lead to corrections through contraction of imports, but would be better dealt with by expansion of opportunities of exports.

The objective of Keynes analysis goes beyond the need to restore the international trade on a sound system of international payments, and extend to the need of providing a growing world with opportunities of growing flows of international investments. A sound system will require the means of distinguishing between “floating funds”, and genuine investments for developing the world resources (p. 53) – on the one hand – and on the other hand, distinguish between speculative movements of capital from deficiency countries to surplus ones, and movements of capital favorable to the equilibrium, which goes from surplus countries to deficiency countries.

III. The Plan Keynes

By the author’s own admission the Plan Keynes was an “*ideal scheme*”, “*complicated and novel and perhaps Utopian*” (p. 33). Nonetheless Keynes strongly believe it was “*right*”, and best corresponded to the new need of grounding international trade on the spirits of trust and international cooperation. Suggestively, he described it “*as a measure of financial disarmament*” (p. 57)).

The Plan rested on the fundamental idea of generalizing the principle of national banking to international transactions, i.e. “*the necessary equality of credits and debits, of assets and liabilities*” (p. 44), by creating an international clearing. Central to this idea was the treatment of creditor countries. As Keynes puts it (p. 211): “*the problems of the debtors can only arise if creditors are not choosing to make use of the purchasing power they have obtained*”. Encouraging creditor countries to make use of this purchasing

power will mitigate problems encountered by countries in a debtor position. On the other hand, the plan would have allowed surpluses to be borrowed by debtor countries³.

Keynes 1941 scheme suggests the creation by the US and the UK of a clearing institution, which would manage an international monetary unit (*bancor*), used in the settlement of international balances. The *bancor* would be based, as all other currencies at that time, on gold. The Clearing Union (C.U.) would entertain relations with all central banks of countries that wish to trade with members, and membership would be later opened to admission of other countries. Clearance of balances between Countries would be carried out by Central Banks through their accounts at the C.U. On the assets' side of the its balance-sheet the C.U.'s would have its reserves and loans to central banks of member countries, while deposits on central banks (defined in *bancor*, as international currency issued by the C.U.) on the liabilities side. The imbalances between nations would therefore be reflected in the C.U.'s account.

The Plan Keynes aimed at “mulilateralizing” the national imbalances, through their handling within an international banking institution.

The management of imbalances would be operated through the following mechanism. Countries would be allowed overdraft facilities of a definite amount, to allow a time to let the country re-equilibrate its position. Every member state would be allowed to an amount of maximum debit balance determined by a quota related to its volume of trade. Members whose balance exceeds one quarter of the quota would be defined as

³ This provision, which implies that the C.U. provisions also cover the need to a financial intermediation between surplus and debtor countries, is often neglected in the recent analysis of the Plan Keynes. We believe that a correct application of this provision would prevent possible inflationary effects of the Plan Keynes as described in Rossi (2007).

Deficiency/Surplus countries. The C.U. would discuss with Surplus countries that have exceeded half of the quota about measures to restore equilibrium (e.g. appreciation, expansion of domestic demand, reduction of barriers to import, loans to developing countries, payment of liquid reserves to a Reserve Fund)⁴. In the case of large debtors (for which the debit's balance exceeds three quarters of the quota) further measures can be discussed, including the possible suspension of membership.

The innovation of the plan lay in the treatment of Surplus Countries, and specifically in the following two features:

- Deficiency countries would be allowed to borrow the balance of creditor countries.
- The C.U. would discuss with Surplus Countries that have exceeded half of the quota, about measures to restore equilibrium.

The centrality of this feature is also the central missing element of White's proposal for a Stabilization Fund (which, amended, gave rise to the IMF).

While in this note, we limit our exposure to the proposal of an international clearing union, the idea of an "International Bank" went however beyond the clearing union, to become the financial core of the architecture of a system of global economic governance. According to Keynes 1941 proposal, the Institution would play many roles (p. 91):

⁴ The provisions of the Plan Keynes might seem to be ad odds with the management of chronically surplus countries like oil exporters. In reality, the mechanisms of the C.U. encourage countries to adjust, they also contain provisions for the handling of persistent surplus, by requiring payments into reserve funds, which can be borrowed by debtor countries. This mechanism amounts to a "multilateralized" version of the current development of sovereign wealth funds. A key difference is that the surplus of oil exporters countries would be reserved in bancors, instead of US dollars. These funds would therefore be reserved to fund international trade. Note however, that other provisions of the C.U. like devaluation and increase of imports could be considered, with also possible useful results to minimize "Dutch disease" effects.

- Finance an international body in charge of post-war relief and reconstruction, supplementing contributions from other donors. Overdraft facilities could be granted to this body, financed by countries having credit balances in their Clearing Accounts;
- The Bank might finance an international body in charge of preserving peace;
- It might set up an account in favor of international bodies charged with the management of commodities, and might finance stocks of commodities held by such bodies;
- The Bank might link with a Board of International Investment (or a Development Corporation) and be closely associated with an anti-depression board.

In the frenetic months that followed the White paper and preceded the Bretton Woods Conference, Keynes tried – without success – to address White proposal’s shortcomings by suggesting setting up a separate International Investment Scheme (p. 399). As we know, the negotiations took a very pragmatic turn, and much of the visionary work of Keynes wasn’t reflected in the final discussions in Bretton Woods, New Hampshire. Nonetheless Keynes’ support for the new Bretton Woods institutions was clear and vocal, as he clearly saw in them the seeds of the new order. As it happened, these seeds never grew into an international monetary system, which was left into the “non-system” system depicted by Robert Triffin (1960).

The reasons of Keynes’ failures where not only rooted in the fundamental antithesis between a “visionary plan”, and the pragmatic political approach that

dominated the international debate. Keynes also failed as his “market pessimistic views”, as expressed by Skidelsky (2005), based on belief of a superiority of rules versus discretion, was simply going against the renewed “esprit du temps”. Keynes’ plan was simultaneously too much ahead of his time, and behind the times, as the market oriented approach to economic institutions was back into fashion, after more than two decades of pessimism. Keynes Plan was stillborn.

IV. Relevance of the CU’s proposal in the current international financial context

a. The instability of the current international monetary architecture

The current design of the international financial architecture is shaped by the regime of the “key currency”, which structure it into a core (the US), and a periphery (EU, Japan, and more recently Asia and Latin America). As currently set, the system allows for international imbalances to continue build up, so long as the periphery supports the accumulation of dollars. The apparent stability of this arrangement has prompted Dooley, Folkerts-Landau and Garber (2003) to claim the existence of an implicit “Bretton Woods 2” regime. Other authors have voiced more skepticism and various degrees of concern, with Lawrence Summers depicting it as “balance of financial terror”.

Recent years have seen a multiplication of authors that detect in the current economic evolution the seeds for a progressive implosion of the international “non-system” of international payments, with the end of the sole domination of the dollar as global payment and reserve currency. Most of the new works stem from the debate around the sustainability of the US current account deficit, which developed since 1989.

Views diverge on the modalities and pace of progressive substitution of the dollar by other key currencies. Some authors see it as a very long “soft landing” process not bound to cause any sudden change in the dollar status, which will orderly lead to a multipolar currency system (Lipsky 2008), while others⁵ warn of the increased likelihood of an abrupt adjustment through a potential collapse of the dollar. Gourinchas and Rey (2005) points out that the “exorbitant privilege” of issuing international currency has lead, since the break up of the Bretton Woods System, to a transformation of the US from the World Central Banker, to the World Venture Capitalist, with high return risky investments on the assets side, and a considerably increased leverage ratio, hereby increasing the likelihood of an abrupt adjustment.

b. The current international monetary architecture as one of the underlying conditions of the 2007-2008 global financial turmoil

The current global financial turmoil raises the question of the role of the global imbalances, and the global role of the US dollar, as possible underlying conditions. Among the most vocal authors, Roubini (2007a) warns that the economic and financial model behind the so-called “revived Bretton Woods” was leading to “*excessive monetary and credit growth, asset bubbles in stock markets, housing markets and other financial markets that will eventually lead to a build up of financial vulnerabilities*”.

But just how much the current situation was made possible by the international monetary arrangements as underlying factor?

⁵ See Obstfeld and Rogoff (2004), Eichengreen (2004), Goldstein and Lardy (2005), Krugman (2006), Summers (2006), Roubini (2007b).

The international role of the dollar helped sustained a lower interest rate in the US economy, indirectly helping creating the conditions that fed the housing boom, as in a deregulated financial environment, low interests and abundant credit have a tendency to spill over into non-traded goods sector, including property markets. Recent evidence suggests that international capital inflows to the U.S. (most notably accumulations by the Bank of Japan and the People's Bank of China) have favored long term lower interest rates, offsetting the effect of factors pointing toward higher long term rates like the fiscal deficit and the tightening of monetary policy: Warnock and Warnock (2006) estimated that had there been no foreign official flow into US government bond from 1984 to 2005, the 10 year yield would have been 90 points higher in 1996. On the other side, the high demand for US dollars in the 2005-2007 period, which kept increasing despite the ongoing deficit and the evident imbalances, helped delaying the need for the US to adjust the internal saving-investment imbalance, increasing likelihood of a sharper adjustment and the risk of a more severe crisis. The flow of funds from emerging markets hinged on the willingness of both central banks and private financial intermediaries to take on the risks which were being generated in both the external position of the US and the internal financing of indebted households. Quiet ironically, the mid-September 2008 collapse of the core financial institutions in the US has not stopped the process, but seem to have accelerated it, causing a strengthening of the dollar (which we believe might end up being as powerful as short-lived), and more recently even hints to a possible weakening of the Chinese Rmbimbi.

In addition, the status of the dollar is playing a role in transmitting the financial shock globally. As pointed out by Canzoneri, Cumby, Diba and Lopez-Salido (2008), the

key currency system heightens the inner vulnerability of the global financial architecture, as shocks emanating from the key currency country have the potential to lead to a global shock and can be a greater source of instability. Goldberg and Tille (2008) on the other hand show that the conduct of monetary policy in the center has substantial impact on countries at the periphery, even when direct trade links are absent. As Asian economies accumulated huge reserves by partially applying “mercantilist” policies that kept their exchange rate under evaluated, boosting exports, they submitted themselves to the risk of contagion: with gross flows of trade remaining unchanged, the exposure to impact from international troubles was also substantially unchanged, and the generation of a substantive net outflow just entertained the illusion of protection against an international financial crisis. At the same time, excessive dependence on export led growth made emerging countries vulnerable to trade shocks.

c. A renewed interest for the key role of central banking

Lastly, the establishment with the C.U. of the seeds of an international central bank is coherent with the current rediscovery of the centrality of central banking.

Keynes’ pivotal idea of a clearing union lay in adopting for the international exchanges the same principles of two-tier banking that ruled most of the national systems. The originality of Keynes’ approach stems in his theoretical works on the nature of money and banking: Keynes’ work are first of all a search for understanding of the mechanics of the economic system, representing a superb example of the kind of “system analysis” that has fallen out of fashion in the last decades. Keynes’ central idea was that international exchanges should rely on the same sound banking structure that was ruling

exchanges within nations. History moved in the opposite direction. Not only the idea of grounding international trade on an international banking system never went beyond the level of debate among academics, but banking systems shifted away from the centrality of central banks, as large banking conglomerates and interbank markets developed in the last decades. It is interesting to observe that this disengagement of the central banks from the clearing activity contributed to propagate the sub-prime crisis: as recent evidence by Peydo and Iyer (2005) shows, the interbank market not only transmits, but amplifies shocks, increasing the fragility of the whole system over and above the initial shock. Acharya, Gromb and Yorulmazer (2008) documented this intrinsic vulnerability of the interbank market, by finding that in time of crisis surplus banks can strategically exert market power and exploit banks in difficulty – starting a “silent bank run” - unless a discount window is available at the Central Bank. The stigma attached to the FED’s discount window, and the following bank’s very high reluctance to access it, might have caused the FED to lose its balancing influence over the interbank market (despite the FED’s effort to issue new discount windows during the 2007-2008 period). Rochet and Tirole (1996) concluded that the systemic risk in interbank market could be offset by centralized liquidity management, where the central bank acts as counterpart and guarantees finality of payments.

An international clearing union could assume the same role of crisis prevention and management, which clearing houses⁶ assumed from mid 1800s (by functioning as “last resort” and issuing certificates which amounted to a form of deposit insurance) before the establishment of the FED in 1914.

⁶ Clearing houses would clear payments among banks during normal times, and helped sustain bank’s liquidity and solvency during crisis (Gorton and Huang (2002)).

In 1963, the IMF started moving timidly in this direction by suggesting the introduction of Special Drawing Rights (SDR). By the time of their first allocation (1970) however the “Bretton Woods System” was already crumbling. The global shortage of reserves that the SDR were supposed to address never materialized, and the SDR never managed to gain significance. The following widespread development of lending to sovereign debtors by commercial banks ended up steering the evolution in a quiet different direction, and the SDR were left with the potential role of “a safety net for [improbable] future contingencies”⁷. While mitigating remarkably the risk of shortage of international reserve currency, this evolution left the international monetary system vulnerable to systemic coordination failures of commercial banks⁸, which caused the current global dry up of liquidity: on October 29, 2008 both the FED and the IMF resorted to new instruments, the FED expanding swap arrangements with countries outside the G10 group, and the IMF introducing a new short term financing facility. Both schemes do not however apply to more vulnerable developing countries.

While the current financial turmoil has led to the recognition that the development of the interbank market has not made redundant the need of a lender of last resort institution, little attention has been paid on the international monetary system. Attention should now turn to the vulnerabilities of the international (non-)system: probably too much emphasis (and hope) is currently being put on the effectiveness of coordinated action by Central banks. In the absence of a sounder global institutional grounding, and with currencies, including the US dollar, being left dangerously exposed

⁷ Report of the Deputies of the Group of Ten, 1985, quoted in Polak (1998).

⁸ Rochet and Vives (2004).

to very strong fluctuations, the global monetary architecture is being left vulnerable to possible chaotic unwinding of global imbalances.

V. Conclusions: Keynes' legacy and a new Bretton Woods

The 2007-2008 global financial turmoil has prompted a renewed interest in the need to review the global financial architecture, and the role of the Bretton Woods Institutions in such a renewed framework. The Group of 20 has taken on this debate and planned to address it through working groups, which might echoes (at some level) the kind of preparatory works that led to the 1944 Bretton Woods Conference, which had seen Keynes supporting the works of the UK treasury (through his plan) to counter the plans of the US Treasury. It is rather surprising that this work does not include at the moment any analysis of the future of global imbalances, whether they are sustainable, and whether their existence is desirable, and compatible with a less vulnerable international financial architecture. Failure to address at technical level this politically sensitive issue could lead to potentially incomplete reforms.

At another level, the current global financial turmoil and its initial policy responses have spurred a debate on the need of more regulation, the role of the State and the Central Bank in managing the financial sector, and on the level at which the financial turmoil should lead to a review of the tenants of the “laissez faire” approach in the financial sector⁹. It is not doubtful that the crisis will give raise to a new body of research, some of which might lead to the rethinking of some of the received common wisdom. In this respect, we believe that the current “regulation” versus “laissez faire” debate is only

⁹ Demirguc-Kunt and Serven (2008), and Caprio, Demirguc-Kunt and Kane (2008) offer an excellent overview of these discussions, while also stressing the need for balanced and evidence-based approach to this, at times, heated debate.

a proxy for a more central question: the “adequacy” versus “inadequacy” of the institutional arrangements underlying the monetary and financial architecture of the global economy. While Keynes has sometimes been described as “market pessimist”, not least by one of his prominent biographers like Skidelsky (2005), Keynes’ approach is rooted in much more than the skepticism generated by the depression in the 30s: Keynes’ work is a response to the institutional weaknesses that have characterized the first era of globalization, and his work is foremost aimed at institution-building. Keynes monetary thought was elaborated in the 1920s, preceding the depression, and was chiefly devoted at understanding the nature of bank money (which proved to be very different than metallic money) and of modern banking activity. Keynes’ main legacy lays in his analysis of the adequacy of the institutional arrangements underlying both the national and international system of exchanges. The Plan Keynes is an attempt to ground the international system of trade a sound monetary institutional framework. More than sixty year after this failed attempt, Keynes Plan remains the chief blueprint for any further attempt.

There is finally a very important lesson to be learned from Keynes 1940-1944 activities. By putting his mind at work on the details of a post-war monetary order in the early days of 1940 already, when victory was still far away from being acquired, he stressed the need for adequate advanced preparations for the new order. Tomorrow’s international monetary order shall start to be designed today.

References

- Acharya, V., D. Gromb, and T. Yorulmazer (2008), *Imperfect Competition in the Interbank Market for Liquidity as a Rationale for Central Banking*, Mimeo.
- Alessandrini, P. and M. Fratianni (2008), *Resurrecting Keynes to Revamp the International Monetary System*, mimeo.
- Calomiris, C. (2008), *The Subprime Turmoil: What's Old, What's New, and What's Next*, Mimeo, October 2008.
- Canzoneri, M., R. Cumby, B. Diba and D. Lopez-Salido (2008), *The Macroeconomic Implications of a Key Currency*, NBER Working Paper 14242.
- Caprio, G., A. Demirguc-Kunt and E. Kane (2008), *The 2007 Meltdown in Structured Securitization. Searching for Lessons not Scapegoats*. World Bank Policy Research Working Paper 4756.
- Demirguc-Kunt, A. and L. Serven (2008), *Are All the Sacred Cows Dead? Implications of the Financial Crisis for Macro and Financial Policies*. The World Bank, Mimeo.
- Dooley, M., D. Folkerts-Laundau, and P. Garber (2003), *An Essay on the Revived Bretton Woods System*, NBER Working Paper 9971.
- Eichengreen, B. (2004), *Global Imbalances and the Lessons of Bretton Woods*. NBER Working Paper 10497.
- Eichengreen, B. and M. Flandreau (2008), *The Rise and Fall of the Dollar, or When did the Dollar Replace Sterling as the Leading Reserve Currency?*, NBER Working Paper 14154.
- Goldberg, L. and C. Tille (2008), *Macroeconomic Interdependence and the International Role of the Dollar*, NBER Working Paper 13820.
- Goldstein, M. and N. Lardy (2005), *China's Role in the Revived Bretton Woods System: A Case of Mistaken Identity*. Institute for International Economics Working Paper Series 05-2.
- Gorton, G. and L. Huang (2002). *Banking Panics and the Origin of Central Banking*. NBER Working Paper 9137.
- Gourinchas, P.-O. and H. Rey (2005), *From World Banker to World Venture Capitalist: the U.S. external adjustment and the exorbitant privilege*, NBER Working Paper 11563.
- Iwamoto, T. (1997), *Keynes Plan for an International Clearing Union Reconsidered*, Kyoto University.
- Keynes, J. M., *Activities 1940-1944, Shaping the Post-War World: The Clearing Union*, The Collected Writings of John Maynard Keynes, Royal Economic Society, Mac Millan and Cambridge University Press, Vol. XXV, London 1980.
- Keynes, J. M., *Activities 1944-1946, The Transition to Peace*, The Collected Writings of John Maynard Keynes, Royal Economic Society, Mac Millan and Cambridge University Press, Vol. XXIV, London 1980.
- Krugman, P. (2006), *Will There be a Dollar Crisis?*, mimeo.
- Lipsky, J. (2008), *Perspective on the Global Economic Landscape and the Role of the Dollars*, Address at the Brookings Institutions, Washington, D.C., July 22, 2008.
- Obstfeld, M. and K. Rogoff (2004), *The Unsustainable US Current Account Position Revisited*, NBER Working Paper 10869.

- Peydo, J. L. and R. Iyer (2005), *How Does a Shock Propagate? A Model of Contagion in the Interbank Market Due to Financial Linkages*, EFA 2005 Moscow Meetings Paper.
- Polak, J. J. (1996), *Impasse on the Role of SDR*, in J. A. Frenkel and M. Goldstein (eds), *Functioning of the International Monetary System*, International Monetary Fund, Vol. 2, 927-941.
- Rochet, J.-C. and J. Tirole (1996), *Interbank Lending and Systemic Risk*, *Journal of Money, Credit and Banking*, Vol. 28, No. 4, Nov. 1996, Part 2.
- Rochet, J.-C. and X. Vives (2004), *Coordination Failure and the Lender of Last Resort: Was Bagehot right after all?*, *Journal of the European Economic Association*, Vol. 2(6), December: 1116-1147.
- Rossi, S. (2007), *The Monetary-Policy Relevance of the International Settlement Institution: The Keynes Plan 60 Years Later*. In: A. Giacomina and M.C. Marcuzzo (eds), *Money and Markets: a Doctrinal Approach*. London and New York: Routledge.
- Roubini, N. (2007a), *Asia is Learning the Wrong Lessons from Its 1997-98 Financial Crisis: The Rising Risks of a New and Different Type of Financial Crisis in Asia*, mimeo, May 2007.
- Roubini, N. (2007b), *The Instability of the Bretton Woods 2 Regime*, mimeo, July 2007.
- Skidelsky, R. (2005), *Keynes, Globalisation and the Bretton Woods Institutions in the Light of Changing Ideas about Market*. *World Economics*, Vol. 6, N. 1, January-March: 15-30.
- Summers, L. H. (2006), *Reflections on Global Account Imbalances and Emerging Markets Reserve Accumulation*, L.K. Jha Memorial Lecture, Reserve Bank of India, Mumbai, India, March 24, 2006.
- Triffin, R. (1960), *Gold and The Dollar Crisis*. New Haven: Yale University Press.
- Warnock, F. E. and V. C. Warnock (2006), *International Capital Flows and U.S. Interest Rates*, NBER Working Paper 12560.