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# Reshaping the International Monetary Architecture

## Lessons from Keynes' Plan

*Nadia F. Piffaretti*

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## Abstract

As the global economy undergoes profound changes, it is becoming apparent that the so-called "Revived Bretton Woods System" has increased the overall vulnerability of the global financial architecture. Therefore, it is 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. This note explores the main characteristics of Keynes' original plan, by revisiting his original writings between 1940 and 1944, and outlining its relevance to the current debate on the international financial architecture. The note suggests that reforms of the international financial architecture should include anchoring the international monetary system on sounder institutional ground.


This paper—a product of the Development Economics Vice Presidency—is part of a larger effort in the department to better understand the global economic crisis and its implications for development thinking. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at npiffaretti@worldbank.org.

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# Reshaping the International Monetary Architecture: Lessons from Keynes' Plan


Nadia F. Piffaretti[†]

*The World Bank*



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[†] Dr rer. pol. (University of Fribourg, Switzerland). The World Bank. Email: npiffaretti@worldbank.org

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## I. Introduction

In 1940, as World War II was still ravaging Europe, economists in both camps of the War were at work to prepare the seeds of a new world monetary and financial order that would support the international post-war economy. For Nazi Germany, which was still hoping for victory, the stakes were to provide a substitute to the sterling area. For the Allies, the stakes were to counter German propaganda while also preparing to reconstitute a new post-war world order on a sounder basis, able to support renewed intensive flows of international trade. Lord Keynes was among the economists who would put his brilliant mind at work, first to countering the German Funk-Schacht plan (1940-1942: the so called "German New Order"), and subsequently in 1943-1944 to contribute to elaborating a basis for the post-war order, the process which ultimately led to the creation of the Bretton Woods Institutions in 1944. After an inter-war period characterized by decreasing domination of sterling and the increasing domination of the US dollar[1], Keynes conceived the post-war order as a multi-polar international monetary system, centered around an international "clearing union". As it happened, the new world monetary order ended up by establishing the US dollar as the main reserve currency instead – supported by the US surplus current account – in a regime of fixed exchange rates with the dollar pegged to gold at $35 an ounce.  This system was abandoned in 1971. As we witness profound changes in the global economy and the rise of a multi-polar integrated global economy, and it appears clear that the current international

[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, anticipating the definitive fall in influence of Sterling. The inter-war period was characterized by shifts between US dollar and Sterling.

arrangements[2] may have been nothing more than a temporary and non-sustainable financing of the US structural imbalance, it is 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 1940-1944 writings, and we outline its relevance to the current debate on the long-term stability of the international financial architecture. This note argues that far-reaching reforms of the international 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 have international trade rest on a sound monetary basis. Section III 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 the reasons that argue for reconsidering a renewed international monetary architecture:

- Global imbalances have become an intrinsic feature of financial globalization, thereby increasing the risk of dramatic unwinding of the imbalances. The global role of the dollar has acted as an underlying factor of both the development of

[2] The current arrangements are oftentimes referred to as "Revived Bretton Woods System" (or "BW2"), as described in the influential paper by Dooley, Folkerts-Landau and Garber (2003): a feature of BW2 is the limitation of exchange rate fluctuation against the dollar, leading to accumulation of very large dollar reserves, particularly by Asian countries.

global imbalances accumulated between 2001 and 2007, and the 2007-2009 financial turmoil, with the subsequent contagion to Europe and emerging markets;

- While structural vulnerability and failures in the inter-bank markets are leading to the re-evaluation of the centrality of central banks and central clearing, and central banks are stepping up to their renewed role, the international system is dangerously left orphan.

Section V offers some thoughts on how Keynes' 1941 Plan could address some of the current challenges. Section VI concludes.

## II. The "Secular International Problem" of Balance of Payments Imbalances

Keynes' proposal for the establishment of a new World Order went beyond the need to suggest a framework for managing post-war relations. It originated from Keynes' realization that the use of money in international trade had, as Keynes put it, only "worked" for about "two periods of about fifty years each" in the past 500 years (Keynes 1940, p. 21). Hence, contrary to common wisdom, Keynes' work did not stem only from the desire to overcome the limitations of the inter-war periods of unrestrained exchange rate flexibility. In the final breakup during the War of the "international currency laissez-faire," Keynes saw not only a problem, but – in his own words - an *"opportunity"* to address the 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 the absence of an organized system of international payments as a key institutional weakness amid a disorderly international system. His response was first and foremost aimed at institution-building. By suggesting the introduction of an

international clearing union (among national central banks), he proposed to apply to international payments the same institutional arrangement governing payments within nations, centered around a system of banking clearing.

Keynes' Plan originated from the ambition to finally set international trade on a sound international monetary basis to support growing trade flows linked to increased international division of labor and exploitation of natural resources in other 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 payments imbalances (ibidem), pointing out that this failure could be traced to a *"single characteristic":* almost all the international monetary systems used in the past 500 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 based system of international clearing, the operation of which would facilitate the re-equilibration of global imbalances through a symmetric rebalancing involving countries in both debtor and creditor positions. "Symmetric rebalancing", which mimicked the action of national central banks, is the central feature of Keynes' framework, and the main element missing in the current regime of international exchange. It aimed at securing creditor adjustment while maintaining debtor discipline. *"The chief initiative"* would rest on the country that finds itself in a creditor position against the rest of the world, thereby 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 of a symmetric adjustment between deficit and surplus countries, which was very much influenced by the concern over avoiding spreading deflationary pressures, imbalances should not lead to corrections through contraction of imports in the deficit country, but would be better dealt with by expanding the opportunities for exports, made possible by adjustments on the surplus country side leading to an expansion of imports[3].

The objective of Keynes' 1941 work goes beyond the need to base a restored level of international trade on a sound arrangement for international payments, and extends to the need for providing a growing world with opportunities of growing flows of international investments. In his view, a sound system required the means to distinguish between *"floating funds"* and genuine investments for developing global resources (p. 53) – on the one hand – and, on the other hand, to distinguish between speculative movements of capital from deficit countries to surplus ones, and movements of capital favorable to the equilibrium, which flow from surplus to deficit countries.

## III. The Keynes Plan

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

[3] This reversed the logic of the traditional adjustment by the debtor country, which dominated and still dominates development policy, and that subsequently led to import-substitution policies in the 70s and to export-led promotion strategies from the 80s.

The Plan rested on the idea of generalizing the principle of national central banking to international transactions, i.e. *"the necessary equality of credits and debits, of assets and liabilities"* (p. 44), by creating an international clearing system. Central to this idea was the treatment of creditor countries. Keynes believed that *"the problems of the debtors can only arise if creditors are not choosing to make use of the purchasing power they have obtained"* (p. 211). He concluded that imposing on creditor countries to make use of this purchasing power would mitigate the difficulty of adjustments by deficit countries. In order to achieve this, Keynes suggested the application of rules on creditor countries. His plan also allowed remaining surpluses to be borrowed by debtor countries and used in international trade[4].

Keynes 1941 scheme suggested the creation by the US and the UK of an international clearing institution, which would manage an international monetary unit (*bancor*), used in the settlement of international balances. The value of the *bancor* was to be anchored to gold. The International Clearing Union (ICU) would entertain relations with all central banks of countries that wished to trade with members, and membership would be later opened to other countries. Clearance of balances between countries would be carried out by Central Banks through their accounts at the ICU. On the asset side of the its balance-sheet the ICU's would have its reserves and loans to central banks of member countries, with deposits of central banks (defined in *bancor,* as international currency issued by the ICU) on the liabilities side. Imbalances between nations would therefore be reflected in the ICU's accounts.

[4] This provision, which implies that the Clearing Union requirements also cover the need for financial intermediation between surplus and debtor countries, has often been 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 described in Rossi (2007).

Keynes' Plan aimed at "multilateralizing" national trade imbalances through intermediation by an international banking institution. The plan was accompanied by a complex set of rules to limit the creation of imbalances between countries and to facilitate adjustment. According to the ICU's draft articles of agreement, every member state would have a maximum debit balance determined by a quota related to its volume of trade. The ICU included built-in incentives and penalties against maintaining surpluses. Countries would be allowed overdraft facilities up to a definite amount, to allow time for the country to re-equilibrate its position. Members whose balance exceeded one-quarter of the quota would be defined as Deficit/Surplus countries. With Surplus countries that have exceeded half of the quota the ICU would discuss 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). In the case of large debtors (for which the debit's balance exceeds three quarters of the quota) further measures could be discussed, including the possible suspension of membership.

One of the key innovative features[5] of Keynes plan lay in the treatment of Surplus countries, and specifically in the following two features:

- Deficit countries would be allowed to borrow the balance of creditor countries;
- The ICU would discuss measures to restore equilibrium with Surplus Countries that have exceeded half of the quota.

[5] The centrality of the treatment of Surplus Countries is also the key elements missing from White's proposal for a Stabilization Fund (which, amended, gave rise to the IMF).

While this note limits its analysis to the proposal for an international clearing union, Keynes' proposal encompassed the institutional set up of a set of issues broader than international payments and the need of a central clearing union. Keynes' "International Bank" was meant to become the financial core of the architecture of a system of global economic governance. As outlined in his 1941 proposal the new international institution would also play the following roles (p. 91):

- 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.

While visionary in many aspects, Keynes' Plan never attracted support from the US Treasury, which prepared for the Bretton Woods Conference by producing its own plan under the direction of Harry Dexter White. White's paper advocated the creation of a Bank of Reconstruction and an Exchange Rate Stabilization Fund, with the task of stabilizing exchange rates. Based on different assumptions, the two plans presented three key differences. Firstly, White's plan did not feel it was necessary to challenge the

customary approach of putting the burden of adjustment on debtor countries and did not suggest mechanisms to encourage adjustments by creditor countries. Secondly, while the Stabilization Fund made loans out of the subscribed capital (as the current IMF does) in national currencies, the ICU had the ability to create overdrafts in Bancor, acting if needed as lender of last resort. Thirdly, while 1941 Keynes' Plan was not a truly multilateral arrangement (the ICU would have first be funded by the US and UK only, with possible extension to other countries at a later point), it provided a system for multilateral clearing. White's 1944 plan, on the contrary, while based on a truly multilateral agreement, kept a design for a world of bilateral payments arrangements: a country could borrow from the Stabilization Fund only to cover a deficit with the country whose currency is being borrowed.

In the frenetic months that preceded the Bretton Woods Conference, White's proposal came to dominate the discussions. The negotiations took a pragmatic turn, so that much of the visionary work of Keynes was not even reflected in the final round negotiation in Bretton Woods, New Hampshire. Nonetheless Keynes' support for the new Bretton Woods institutions was clear and vocal, as he saw in them the seeds of a future more complete new order. As it happened, these seeds never grew into an international monetary system regulated around an institutional setting and binding rules: the arrangements simply evolved into the "non-system" system depicted by Robert Triffin (1960), in which provision of international liquidity depends on the US current account deficit, generating large global imbalances, and which presents a deflationary bias of the process of adjustment of the balance of payments.

The reasons for Keynes' failure were rooted in the fundamental antithesis between a "visionary plan" and the pragmatic political approach that dominated the international debate. Keynes however also failed as his "market pessimistic views", as expressed by Skidelsky (2005), which were based on the belief of a superiority of rules versus discretion, was going against the renewed optimistic view of the market at that time. Keynes' plan was simultaneously too much ahead of his time, and behind the times. After more than two decades of market-pessimism, the market-oriented approach to economic institutions was back in fashion. Keynes' Plan was stillborn.

## IV. Relevance of the ICU's Proposal in the Current International Context

This section stresses the relevance of Keynes' Plan to the current debates on the international financial architecture. In the light of recent events and recent debates, Keynes' proposal represents much more than an interesting piece of the history of economic thinking. His plan addresses key issues that are relevant to both recent debates on addressing the inherent instability of the international monetary architecture *(section a),* and on the development of global imbalances *(section b).* What's more, Keynes' Plan is relevant to the most recent works on the re-evaluation of the centrality of central banks, and central clearing, in response to the structural vulnerability and failures in the inter-bank market, as it suggests a way to address the remaining shortcomings of clearing at the international level *(section c).*

*a. The instability of the current international monetary architecture*

Keynes' idea of an international clearing union represents an alternative design to the current international arrangements shaped by the concept of "key currencies", structured into a core (the US), and a periphery (EU, Japan, and more recently Asia). As currently operated, the system allows for international imbalances to continue to build up so long as the periphery supports the accumulation of US dollar denominated debt, while placing the burden of adjustment on debtor countries. The apparent stability of this arrangement prompted Dooley, Folkerts-Landau and Garber (2003) to claim the existence of an implicit "Bretton Woods 2" (BW2) regime. According to the proponents, the system reflects a mutually beneficial relationship among deficit and surplus countries. It allows the US to enjoy very low long-term interest rates while also accommodating successful development strategies in emerging countries. While BW2 developed since the early 1990s, in the last few years it has come to symbolize the relation between the US and China. The reserve role of the dollar supports the employment of chronic excess labor supply in Asian countries, by employing it in export-oriented production. Asian countries compensate for the chronic current account surplus by becoming a chronic surplus buyer of US securities.

An increasing number of authors have been voicing skepticism and various degrees of concern about the sustainability of the current arrangement and its destabilizing effects on the international financial architecture. Lawrence Summers qualified the system as a *"balance of financial terror"* (Summers 2004).

Recent years have witnessed the rise of a debate on whether the build-up of global economic imbalances is leading to a progressive change of the international currency

regime and the end of the sole domination of the dollar as global payment and reserve currency. The early debate (2003-2008) has been dominated by divergent views on the modalities and pace of progressive substitution of the dollar by other key currencies. Some authors predict a very long "soft landing" process not bound to cause any sudden change in the status of the dollar, which would lead to a multi-polar currency system (Lipsky 2008) in an orderly and progressive way. Others[6] warn of the increased likelihood of an abrupt adjustment through a possible collapse of the value of the US dollar.

On the other hand, there has been a growing literature investigating the link between global imbalances and growing financial vulnerability, especially in the home country of the US dollar. Gourinchas and Rey (2005) point out that the "exorbitant privilege" of issuing international currency has led to transforming the US from the World's Central Banker to the World's Venture Capitalist, with high-return risky investments on the assets side, and a considerably increased leverage ratio on the liability side, thereby increasing the likelihood of an abrupt adjustment. Caballero and Krishnamurthy (2009) offer a compelling analysis of the role of capital inflows in the US in facilitating the securitization boom, and rising leverage: excessive capital inflows in the US being mostly non-speculative and addressed to risk-free assets, the US financial system has increasingly intermediated domestic saving into assets that carries a higher cash-flow risk, with the result that the *"US increasingly specializes in holding 'toxic waste'"* (p. 3).

[6] See Obstfeld and Rogoff (2004), Eichengreen (2004), Godley (2005), Goldstein and Lardy (2005), Krugman (2006), Summers (2006), Roubini (2007b).

Roubini (2007a) warned that the economic and financial model behind the "revived Bretton Woods" arrangement 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"*.

While both optimistic and pessimistic authors pointed to the inherent vulnerability of the global financial architecture, few expected an unwinding of macro-imbalances through a deep global financial turmoil of the kind the world economy has been experiencing since late 2008. Among the few, Palley (2006) had correctly pointed to the related vulnerability of both the international and US domestic credit markets, as BW2 depends on the continuation of the US consumption boom, predicting that the burst of the housing price bubble would give rise to a global prolonged economic slump.

Whereas there is widespread agreement that global imbalances have been playing an intrinsic underlying role, and broad support for a call to review the international financial architecture, calls for far-reaching overhauls of the international architecture have been rare, with the notable exception of the United Nations, and the call for a Global Reserve Currency[7]. As the debate rages on, the stability of the current international monetary architecture, a reassessment of Keynes' approach could bring some elements of novelty to the discussion.

### *b. The current international monetary architecture as one of the factors underlying the 2007-2009 global financial turmoil*

[7] Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System, New York, June 24, 2009.

As macro roots of the current crisis are traced back to widening global imbalances, Keynes' Plan is relevant in addressing the existence of imbalances. The plan's multilateral feature is germane to addressing the multilateral nature of global imbalances, which cannot be simplistically reduced to the issue of the *bilateral* imbalance between the US and China. The problem is indeed multilateral: China's bilateral trade surplus with the US accounts for only about one-third of the US current account deficit, and by 2006 the financing of the US current account deficit absorbed more than three-fifths of all cross-border savings of the 67 countries that ran surpluses that year. Asian economies accumulated vast reserves partially by applying policies aimed at boosting exports. In doing so, they submitted themselves to the risk of contagion. Gross flows of trade remaining unchanged, generation of substantive net outflow entertained the illusion of protection against an international financial crisis, while at the same time, excessive dependence on export-led growth made emerging countries vulnerable to trade shocks.

While today's crisis is inextricably intertwined with a process of disorderly unwinding of global imbalances, we are just beginning to understand the full extent of the imbalances in the US domestic financial sector. The US dollar's status as the world's foremost reserve played a significant role in enabling the financing of the US external deficit beyond normally sustainable levels. The build-up of external imbalances in the US is a story of domestic financial imbalances that spilled out across sovereign borders staring in the early 1990s.

The growing imbalances have helped sustain a lower interest rate in the US economy, indirectly helping create the conditions that fed the housing boom. In a deregulated financial environment, low interest rates and abundant credit have a tendency

to spill over into non-traded goods sectors, including property markets. Evidence suggests that international capital inflows to the US have enabled 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 bonds 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 delay the need for the US to adjust to the internal saving-investment imbalance, increasing the 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.

The structural weaknesses of the current international monetary architecture also played a negative role in the unwinding of the 2007-2009 financial turmoil, by intensifying problems rather than helping mitigate them. On the one hand, by putting the burden of adjustment on the debtor country, unwinding of global imbalances might generate the same deflationary effects on demand and international trade that led Keynes to suggest a "symmetric" system, and that we addressed in Section 2. On the other hand, the global role of the dollar might fuel a continued "flight to quality" of capital into the US, which is increasingly seen as a destination of last resort. Finally, the crisis might encourage emerging markets to prevent future vulnerabilities by building up even vaster

amounts reserves, leaving the global economy vulnerable to possible future crisis involving a sudden stop of inflows of capital to the US.

While the current financial and economic turmoil is profoundly transforming the structure of the global financial system, the role of the dollar, the so-called "renewed Bretton Woods" system (BW2) and the euro zone are so far the only key structures of the global financial system that have remained intact. Dooley, Folkerts-Laundau and Garber (2009) assert in their most recent analysis that the incentives driving the durability of BW2 are still in place, despite the crisis. This conclusion could be supported by the appetite for accumulating US dollars and securities that has characterized the early aftermath of the 2008 financial turmoil. The current financial and economic crisis has however intensified the debate around the sustainability of the BW2 arrangement. There are factors at play that might lead US securities – as one of the few assets still perceived as risk-free – to keep their attractiveness throughout the crisis. On the other end, emerging markets might approach the post-crisis world by an increased accumulation of reserves in US dollars, to minimize vulnerabilities to future crisis.

Other scenarios are however equally plausible. Bibow (2009) suggests that the intensity of the crisis and the following US fiscal expansions might set the stage for a "twin deficits" scenario, where the assets accumulated by surplus countries (typically US Treasuries) will be the very same assets that sustain US excess of consumption. While the current crisis is not the crisis of the BW2 system that many predicted in the past few years - a sudden stop of flows of capital to the US, and the free fall of the dollar (accompanied by a substantive loss on securities in emerging markets) - *that* crisis is still

possible. As the global economy lives through turmoil of historical proportions, it is necessary to ask whether the willingness to bear this risk is justified.

A reform of the monetary architecture around the features of the Keynes' Plan would define a new institutional setting for banking that would better address these vulnerabilities.

*c. The need to re-establish the importance of central banking functions at both the national and international levels*

Internal structural vulnerability and recently emerged failures in the inter-bank market are leading to a necessary re-evaluation of the centrality of central banks in the national financial architecture. While central banks are carving for themselves a new, broader role, Keynes' suggestion of an institution of central clearing among national central banks constitutes the natural international element of this renewal of interest in 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' works are first of all a search for understanding of the mechanics of the economic system, representing a superb example of system analysis. 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 in academic circles, but national

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 central banks from the clearing activity contributed to propagate the sub-prime crisis to a generalized crisis: as recent evidence by Peydo and Iyer (2005) shows, the interbank market not only transmits, but also amplifies shocks, increasing the fragility of the whole system over and above the initial shock. Acharya, Gromb and Yorulmazer (2008) document the intrinsic vulnerability of the interbank market, suggesting that in times 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 consequent high reluctance of banks to access it, might have caused the FED to lose its balancing influence over the interbank market (despite the FED's effort to open new discount windows during the 2007-2008 period). Rochet and Tirole (1996) conclude that the systemic risk in the interbank market could be offset by centralized liquidity management, where the central bank acts as a counterparty providing final means of payment.

An international clearing union could assume the same role of crisis prevention and management which clearing houses[8] assumed from the mid-1800s (by functioning as "last resort" and issuing certificates which amounted to a form of deposit insurance) even before the establishment of the FED in 1914.

While the current financial turmoil has lead to the recognition that the development of the interbank market has not made redundant the need for a lender of last

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

resort institution in national economies, attention should now turn to the vulnerabilities of the international system, as there is no body of evidence that supports the emphasis 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 to very strong fluctuations, the global monetary architecture is being left vulnerable to the chaotic unwinding of global imbalances.

## V. A Reform of the International Monetary Architecture

Since the presentation of Keynes' Plan in 1941, there have been many suggestions for a renewal of the International Monetary Architecture based on Keynes' blueprint, most notably by Triffin (1960), Bernstein, Grubel (1963), Machlup (1966), Horsefield (1969), Schmitt (1973), and Cencini (1995). More recently, Rossi (2007) and Alessandrini and Fratianni (2008) have argued for the establishment of supranational bank money.

On the other hand, international monetary architecture has already been the object of attempted reforms in the past. In 1963, the IMF started moving timidly toward a multilateral scheme for international exchanges by introducing the instrument of Special Drawing Rights (SDRs). Unlike the Keynes' *bancor*, SDRs were not meant to be chiefly a system of payment settlement between countries, but to supplement the global stock of international liquidity, which was fundamental to the creation of the 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 quite different direction, and the SDR were left with the potential role of *"a safety net for future contingencies"*[9]. While the introduction of the SDR has mitigated the risk of shortage of international reserve currency, the international monetary system has been left vulnerable to the systemic coordination failures of commercial banks[10].

Recent efforts have tried to address the existing vulnerabilities. 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. Additionally, recent efforts include a possible renewal of the SDR's role: the G20-led effort for a coordinated answer to the global financial crisis is exploring the possibility of a new SDR allocation in 2009, which would provide unconditional liquidity to member countries by supplementing reserves.[11] While such an allocation could be a useful confidence-building response, a renewal of the role of SDRs would not directly address the core issues that the Keynes' Plan was meant to tackle through the introduction of a third-tier international central bank function: preventing the build-up of balance of payments imbalances and possible consecutive deflationary adjustments, and providing for the absence of the lender of a last resort function at the international level.

[9] Report of the Deputies of the Group of Ten, 1985, quoted in Polak (1998).
[10] Rochet and Vives (2004).
[11] The G20 proposal explores the possibility of ratifying the 1997 suggested SDR allocation, which never became effective as only 78% of the IMF shareholders have ratified the 1997 decision so far. The idea of building on the 1997 resolution could guarantee a rapid achievement of the required 85% of voting rights, and a rapid allocation.

How would a Keynes Plan work today? The creation of an International Clearing Union would need to take into account the existence of current large global imbalances, most notably between the US and Asian countries. This is not dissimilar from the situation in which Keynes was working, when after World War II the US presented a substantive surplus. The first phase would be to convert all holdings of reserves currencies[12] by national central banks – reserves that would be made redundant by the existence of the ICU - into credits at the ICU. In the spirit of Keynes' proposal, those credits would need to be made available for lending to deficit countries. This would "multilateralize" part of accumulated surpluses not yet invested in foreign obligations (like US T-bills), as well as any future buildup[13].

Once the ICU is in place, it would manage settling of international transactions among central banks (expressed in "Bancors", which as purely international unit would not have legal tender inside countries) and manage the remaining imbalances as prescribed by Keynes' Plan (see Section III). Credits corresponding to the external surplus would no longer be available to finance internal imbalances: reserved for international trade, they would just finance international purchases of deficit countries.

In concrete, while surplus of countries like China could still finance the US external deficit, payment would no longer automatically consist in the issuance of a debt recognition of one of the traders (the US dollars), but would be in ICU's bancors instead. The balance of international trade will not transfer into the internal financial market, but

[12] Conversion would not include "reserves" invested in national bills (e.g. T-Bills), these savings having already been intermediated to finance imbalances in national economies.

[13] It would be problematic to convert the part of reserves held in national bonds, as this would generate a massive negative effect on their demand. Note however that with the introduction of the ICU both accumulation of reserves in key currencies and holding of highly liquid treasury bonds will be redundant. In the medium term, surplus accumulated in T-bills would probably flow into Sovereign Wealth Funds type of funds.

will remain available for external trade. Surplus countries would no longer be paid by acquiring US *debts*, and would be paid by acquiring *credits* on the ICU

An ICU would bring about the suppression of the need to accumulate ample reserves in key currencies to cushion against drops in exports. On the other hand, excess balances would be reserved to finance future imbalances in international trade: surplus of one country would no longer finance *internal* imbalances of another country, as it is currently the case.

Management of international clearing through the ICU, through adjustment of both debtor and creditor, would impede build up of excessive and systematic imbalances. Through the provisions of the ICU surplus countries would be encouraged to increase their international spending of the newly acquired credits over the ICU, setting indirectly in motion a continuous stimulus for the global economy, through a stimulus of international trade.

In the past there has been much debate over a possible support function of last resort by the IMF (see for instance Mishkin 2007) to certain emerging markets. In a world with the ICU, if a domestic central bank lacks the resources to conduct emergency liquidity assistance to stop a financial crisis or promote a recovery, overdraft facilities could be granted to this institution, financed by countries having credit balances in their clearing accounts at the ICU. Compared to the IMF, the overdraft facilities offered by the ICU could more easily step in even in extremely exceptional situations[14], when needs could dwarf the resources that can be mustered by an institution like the IMF, in particular when in comes to support to the largest countries.

[14] Polak (1969) had first suggested the possibility of SDRs providing all financing during crises.

Could a reform of the international monetary system be achieved through the SDRs? This would imply changing their current nature, and way of issuance. While the Special Drawing Rights are not created out of existing assets, in their current form, they are issued to acquire an existing equivalent amount of foreign key currencies. In this respect they serve the main purpose of supplementing international reserves. For the SDR to become the centerpiece of a renewed international monetary architecture would require a far-reaching reform of this instrument, abandoning the current issuance through attribution of SDRs proportionally to quota, and substituting SDRs as a mean of settling international balances of payments, by creating a system of international clearing along the lines of the Clearing Union suggested by Keynes in 1941.

**VI. Conclusion: Keynes' Legacy**

The 2007-2009 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 present paper highlights that this work should include analysis of the future of global imbalances, their desirability, sustainability and compatibility with a less vulnerable international financial architecture.

Keynes' Plan is a blueprint for the institution of a multilateral international clearinghouse that would address the shortcomings of the national currencies reserve-based system. Keynes' aversion to the secular problem of imbalances stemmed from the contraction of imports caused by adjustment through the debtor. To avoid this dampening effect on trade, he advocated a system that would put the burden of adjustment on both surplus and credit countries, focusing on expansion of opportunities for exports. This

focus of Keynes should not be surprising, as in the early 1940s he was still very much worried by possible deflationary effects of adjustments of global imbalances (between the US and Europe at that time).

Keynes' work is a response to the institutional weaknesses at the international level that characterized the first era of globalization, and his work is foremost aimed at international institution-building. Keynes' monetary thought was elaborated in the 1920s, preceding the depression, and was chiefly devoted to understanding the nature of bank money and modern banking activity. Keynes' main legacy is in his analysis of the adequacy of the institutional arrangements underlying both national and international systems of exchange. The Keynes Plan is an attempt to ground the international system of trade in a sound monetary institutional framework. More than 60 years 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 institutional framework should start to be designed today.

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