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Back to which Bretton Woods? Liquidity and clearing as alternative principles for reforming international money

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In the face of the current crisis, there is growing demand for regulation, often invoked in terms of a 'return to Bretton Woods'. The Bretton Woods Conference of 1944 was indeed the last explicit attempt to define a rule for international settlements. In fact, post-World War II currency negotiations gave place to a confrontation between two alternative visions of the international monetary system. The two plans set forth by the U.S. and by the U.K. embody two alternative principles: the first aims at producing international *liquidity* on the basis of a reserve currency (White's plan for an International Stabilization Fund); the second aims at providing a pure means and measure for the multilateral *clearing* of current accounts in the form of a currency unit (Keynes's plan for an International Clearing Union). The former has undoubtedly prevailed. However, it is questionable whether it is the most appropriate way to manage global imbalances. Indeed, the principle eventually embodied in the Bretton Woods system, and persisting even after its demise, tends to identify money with a reserve asset, making possible, and even necessary, the accumulation of global imbalances, despite original intentions to reabsorb them. On the contrary, the principle that inspired the alternative plan was intended to deprive money of the character of a reserve asset, thus making it the rule for international exchanges, rather than an object of regulation among others. This paper outlines the two principles both in historical perspective and in the perspective of future reforms, particularly in relation to the recent proposal by the governor of the People's Bank of China to go back to the principles of the Keynes plan.

Key words: John Maynard Keynes, International monetary system, Bretton Woods, Clearing union, International Monetary Fund, Liquidity
JEL classifications: E12, E42, E52, F02, F33, F36

1. Introduction

The most direct and compelling motive for a 'return to Bretton Woods' comes not from a need of historical erudition, but from the present state of the economy. The current crisis, and the persistence of global imbalances *despite* the shock represented by the crisis, has raised the issue of the reform of the international financial system. Not only a certain number of scholars, but also many journalists, economic advisors

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and policy makers have advocated 'a new Bretton Woods' to assert the necessity of new rules. Too few, however, remember that the Bretton Woods Conference, besides defining the norms and designing the institutions that were to rule international finance, was also characterised by the deliberate intention of establishing that peculiar norm and institution that is international money.

This fact deserves, for at least four reasons, far more attention than it normally receives:

(i) money is the first economic norm and institution: without a money providing a common measure there is no stable condition for trade or finance; and the way money is designed deeply affects the structure of economic relations and the operation of all other norms and institutions;
(ii) the monetary system that was established in 1944 collapsed in 1971 and has not been replaced;
(iii) the lack of an international money is one of the major factors of current global imbalances; and
(iv) the institution of an international money is not something that happens by itself: Bretton Woods was the only instance in history in which it was deliberately accomplished by an international conference and it required then a great deal of thinking and negotiating.

Among G-20 countries, several have raised in particular the issue of reforming the international monetary system. The most explicit analysis and proposal on this front has come, perhaps, from the governor of the People's Bank of China, Zhou Xiaochuan, in a speech published in March 2009 on the official site of the bank, just before the G-20 summit in April (Zhou, 2009).[1]

The document goes straight to the point:

> The outbreak of the current crisis and its spillover in the world have confronted us with a long-existing but still unanswered question, i.e., what kind of international reserve currency do we need to secure global financial stability and facilitate world economic growth, which was one of the purposes for establishing the IMF? (Zhou, 2009, p. 1)

Before looking into the details of the proposal, it is possible to infer the two main characteristics of the new money advocated by Mr Zhou from the expression he uses to designate it. He speaks of an 'international reserve currency'. The new money is thus characterised by two qualifications that may seem rather obvious, but should not be taken for granted. The new currency, whatever form it may take, is intended by Mr Zhou to be:

(i) an *international* currency and
(ii) a *reserve* currency.

The first characteristic is strongly emphasised by Mr Zhou. The idea is that *international* economic relations require *international money* and that a real international money cannot and should not also be a national money. The use of a national money as an international money gives rise to an impasse that Mr Zhou describes, appropriately evoking the Triffin dilemma:

[1] Similar proposals have been set forth by representatives of other emerging countries, namely Russia (Iosebashvili, 2009) and Brazil (Simpkins, 2010). The Chinese proposal is analysed, in the perspective of establishing a sustainable financial system, by Jaeger *et al.* (2013).

Issuing countries of reserve currencies are constantly confronted with the dilemma between achieving their domestic monetary policy goals and meeting other countries' demand for reserve currencies. On the one hand, the monetary authorities cannot simply focus on domestic goals without carrying out their international responsibilities; on the other hand, they cannot pursue different domestic and international objectives at the same time. They may either fail to adequately meet the demand of a growing global economy for liquidity as they try to ease inflation pressures at home, or create excess liquidity in the global markets by overly stimulating domestic demand. The Triffin Dilemma, i.e., the issuing countries of reserve currencies cannot maintain the value of the reserve currencies while providing liquidity to the world, still exists. (Zhou, 2009, p. 1)

It is significant that the text presents the problem from the point of view of the country that issues the currency used as an international reserve asset. This may well be intended not only as a concession to the balance-of-payments problems of the USA, but also to suggest that China, as a rising economic power, does not intend to replace the USA in the uncomfortable position of having to provide a new international reserve asset with its own currency. It is as if Mr Zhou were saying that China is totally unwilling to enter, in the twenty-first century, in the same mess that has already troubled the economies of the UK in the nineteenth century and of the USA in the twentieth century. The possibility of issuing a currency that is accepted as international money has already proved to be an 'exorbitant privilege', a blessing that may turn into a curse (Eichengreen, 2011, pp. 153–77).

On the other hand, the second characteristic seems to be taken for granted by Mr Zhou. In fact, as a solution to global imbalances and as a way out of the Triffin dilemma, he suggests the establishment of an international *reserve* currency:

The desirable goal of reforming the international monetary system, therefore, is to create an international reserve currency that is disconnected from individual nations and is able to remain stable in the long run, thus removing the inherent deficiencies caused by using credit-based national currencies. (Zhou, 2009, p. 2)

It is at this point that Mr Zhou recalls the historical precedent of Bretton Woods:

Back in the 1940s, Keynes had already proposed to introduce an international currency unit named 'Bancor', based on the value of 30 representative commodities. Unfortunately, the proposal was not accepted. The collapse of the Bretton Woods system, which was based on the White approach, indicates that the Keynesian approach may have been more farsighted. (Zhou, 2009, p. 2)

This recollection has the merit of reminding us that at on the road to Bretton Woods there was not only one plan, but two radically different plans, based on two radically different principles, moreover suggesting that the plan adopted was perhaps the wrong one. This is why 'Back to Bretton Woods' cannot be simply a slogan, calling for a revival: it requires the reopening of a discussion in view of a decision. The question is, then: 'Back to which Bretton Woods?'

Mr Zhou seems to have no doubts in proposing a return to Keynes's plan. In principle we subscribe to this point of view and yet we must be sure to understand what Keynes really proposed.[2]

[2] Interest for the Keynes plan as a source of inspiration for reforming the international monetary system has grown among theoreticians, even more than among policy makers, in the wake of growing global imbalances and financial instability (see, e.g., Rossi, 2007; Alessandrini and Fratianni, 2009; Costabile, 2009; Piffaretti, 2009; Hudson, 2010; Fantacci, 2013).

In Mr Zhou's reconstruction, bancor seems to be confused with the tabular standard that Keynes had outlined in *A Treatise on Money* in 1930 (Keynes, 1930B, pp. 349–54). In fact, bancor is not a basket of commodities but a pure unit of account. Quite appropriately Mr Zhou refers to it as a 'currency unit'. However, as we shall argue, a 'currency unit' is not the same thing as a 'reserve currency', but is in fact incompatible with it. Throughout this paper we try to show that reserve currency and currency unit are mutually exclusive, both logically and historically. It is important therefore to distinguish between the two, in order to understand which one is needed to avoid the accumulation of global imbalances, allowing both goods to be traded and debts to be paid, and thus reconciling stability and growth.

Indeed, to provide a means to facilitate global trade and to absorb global imbalances was also the explicit goal of the American plan for Bretton Woods and of the agreement that was eventually signed, as expressed in Article 1. Now Mr Zhou suggests that Keynes's plan might have been more appropriate and effective to reach those same goals. Yet he fails to explain why. Our main argument is that Keynes's plan would have been better exactly because the money that it would have established, bancor, was not a *reserve currency* but a *currency unit*. Mr Zhou uses the two different expressions as synonyms, yet without asking whether they are in fact compatible.

This is precisely what we inquire, by going back to Bretton Woods or rather back to the theoretical elaborations and the political discussions that prepared the conference. However, we can anticipate here a definition of both kinds of currencies, in order to suggest the relevance of the distinction.

Whether it is national or international, a reserve currency is a *store of value*: this means that even if it is intended as a means of payment for the settlement of international debts, it is always possible for a country *not* to spend it and to accumulate it indefinitely, thus building up the global imbalances that it would be intended to reabsorb. Thus, for example, by hoarding international reserves as a protection against uncertainty, emerging countries (and China more than any other) produce deflationary pressures that eventually contribute to aggravate economic depression (Hudson, 2010, pp. 778–82).[3] Of course, normally, a reserve currency does not only perform the function of a store of value: it is also used as means of exchange in international transactions and as a unit of account for the denomination of prices and debts (Kindleberger, 1984, pp. 19–20). However, this does not mean that these functions cannot be separated. On the contrary, history provides a variety of examples of payments systems where the functions are separated, not only conceptually but also operationally: different functions are performed by different types of money (see, e.g., Fantacci, 2008). Indeed, the conflation of all the monetary functions in one and the same currency is the distinctive feature only of modern monetary systems (Amato and Fantacci, 2012, in particular ch. 4).

Instead, a currency unit, strictly speaking, is an *instrument for the denomination of debts*. It is therefore impossible by definition to own it or even more to accumulate it. It is of course possible to earn and accumulate credits denominated in the currency unit, by selling goods and services, and to use those credits as a medium of exchange, to purchase other goods and services. However, strictly speaking, the currency unit does not coincide with the medium of exchange. Indeed, following Keynes (1930A, p. 3), there is a distinction to be drawn between the name, which is used to denominate prices and debts, and the thing, which is used to discharge those debts (where the latter can be either goods or

[3] The problems implied by 'the safe asset quest' are also highlighted by Jaeger *et al.* (2013, pp. 24–5).

money). A currency unit is what Keynes called 'money of account', or 'money proper', and described as 'the primary concept of a theory of money' (ibid.). It is intended exclusively to measure the value of actual goods and services and to facilitate their exchange, but it is not itself a commodity. In this sense it allows imbalances to be created in order to facilitate trade, but it requires and allows those imbalances to be duly reabsorbed. It is not part of the wealth neither of a specific nation nor of the international community as a whole and it cannot be exchanged as if it were itself a commodity.

This is why we agree with Mr Zhou when he suggests that Keynes's plan might have been 'more farsighted'. In fact, bancor was not conceived only as an international currency as distinct from a national currency. It was also conceived as a currency unit as opposed to a reserve currency.

In this sense, the story of Bretton Woods, with respect to the goals that it was supposed to achieve, is the story of a failure: it is the story of how, instead of an international currency unit, a national reserve currency was eventually established as international money.

In the next sections we shall inquire how this happened (Section 2), what the implications were for the possibility of global imbalances (Section 3) and what possible remedies this story suggests (Section 4).

2. Bretton Woods: an international monetary system without an international money

In the diplomatic run-up towards Bretton Woods, the establishment of an international currency unit appeared to be, at least at a certain stage, a common concern of both the parties involved.[4] Both the British and the American proposals had, at least in certain drafts, provisions concerning the adoption of an international unit of account: bancor in the International Clearing Union and unitas in the International Stabilization Fund. It appears somewhat paradoxical that the adoption of an international unit of account should be discarded already in the course of the Anglo-American negotiations that lead to the publication, in April 1944, of the Joint Statement that eventually provided the working draft for the Bretton Woods conference. If both the British and the US representatives agreed on the opportunity of introducing an international unit of account, why did they discard this hypothesis in the course of their bilateral talks, even before submitting it to the other 42 delegations summoned at Bretton Woods?[5]

A possible answer may perhaps be sought for in the different roles assigned to the international unit of account in the two schemes. As Horsefield has pointed out: 'for

[4] The history of the currency plans and negotiations leading up to the Bretton Woods Conference has been the object of a broad literature covering a variety of aspects: from its presuppositions in terms of economic theory (Cesarano, 2006) to its implications in terms of international relations (James, 1996). Special attention has been dedicated to the role played by Keynes (Thirlwall, 1976; Skidelsky, 2003; Markwell, 2006). Expanding significantly on the documents already published (Horsefield, 1969B), important contributions to the reconstruction of the negotiations have been recently provided by the publication of the transcripts of the conference (Rosenberg and Schuler, 2012) and of a major research building on primary sources (Steil, 2013). In what follows, we concentrate on the works that are more relevant to the specific, yet crucial and largely neglected, issue of how the international unit of account was defined at Bretton Woods.

[5] Some of these delegations at Bretton Woods did advance proposals for the adoption of an international unit of account. The Egyptian delegation, for example, suggested introducing an international unit of value to be denominated 'val' and anchored to gold, reminding that a similar provision had been appropriately envisaged in both the American and the British plan: 'The introduction of an international unit into both the plans associated with the names of Mr White and Lord Keynes was based on sound principles'

Keynes this would have been a true medium of exchange … for White it was no more than a standard of value' (Horsefield, 1969A, p. 64).

Indeed, Keynes's declared intention, in designing the Clearing Union, was 'to sketch out … an ideal scheme which would preserve the advantages of an international means of payment universally acceptable' (Keynes, 1971–89, vol. 25, p. 32). When instead White proposed the adoption of an international unit of account (unitas), he understood it merely as a numéraire, i.e. as another name for a predetermined amount of gold. The difference lies in the fact that bancor is always a currency unit, temporarily a medium of exchange and never a store of value.

White's plan, by anchoring the unit of account (unitas) to the means of payment (gold), would have implied the existence of an international reserve asset. Instead, in Keynes's plan, there is a clear distinction between the unit of account used to denominate international debts (bancor) and the *ultimate* means of payment for those debts (namely the goods and services that are exchanged internationally). Bancor is indeed a medium of exchange, but a peculiar one, whose peculiarity comes from it being constructed in order *not to be* a reserve asset, since it does not act as a store of value: in fact, as we shall see, positive bancor balances cannot be held indefinitely without loss, but are subject to a charge, i.e. to a sort of 'artificial carrying cost' (see Keynes, 1936, p. 234).

In any case, the fact that the Clearing Union would have created purchasing power for member countries by providing overdraft facilities denominated in bancor is sometimes seen as a further confirmation of Keynes's alleged inflationary spur, as opposed to the sound principles of orthodox finance supported by White. According to this interpretation, the Keynes plan provided for the creation *ex nihilo* of a new international medium of exchange, whereas the White plan remained soundly anchored to the available quantity of the old international medium of exchange, i.e. gold.

It is true that the introduction of an international unit of account was essential to the Proposal for an International Clearing Union from the very first version, sketched out by Keynes in 1941, while, on the contrary, it was purely accessory to the White plan. The first Draft Proposal of the latter (dated April 1942) had no provision at all for an international currency. In fact, it was followed by a commentary that included a very sceptical section on 'A new international currency' (White, 1942). The adoption of an international currency is described by White as:

(a) *useless*, if it were to be introduced merely as a *numéraire* to supplement national currencies, since this would not reduce calculations in foreign trade nor exchange rate instability;
(b) *impracticable*, if it were to be introduced as a medium of exchange to *substitute* national currencies, since this would imply a renunciation of monetary sovereignty;
(c) *worthwhile*, if it were to be introduced as a medium of exchange to *complement* existing national and international currency.

(Bretton Woods Transcripts, Document 153, DP/5 Egyptian Delegation, Memorandum to be Submitted to Commission I (Committee 2), in Rosenberg and Schuler, 2012). Another similar proposal was made by the Norwegian delegation, which recommended 'that the books of the International Monetary Fund and the Bank for Reconstruction and Development shall be kept in a special international bookkeeping monetary unit, called (say) Demos, being defined as the equivalent of a certain gold weight' (US Department of State, 1948, p. 429). Such proposals, however, lacked the force to contrast an omission, which was clearly not due to mere distraction. The sponsors of the Fund did not just lack good reasons to introduce an international unit of account: they apparently had good reasons to refuse it.

This last point deserves closer consideration, since it appears as a substantial concession towards the essence of the Clearing Union proposal. As White explicitly states, it would have allowed to reabsorb global imbalances inherited from the war in the form of a concentration of gold in the USA:

> it may be worthwhile giving the Bank note-issuing powers—based on some gold reserve—solely in order to make the world's monetary gold stock do more work, and at the same time help correct the maldistribution of gold. (White, 1942, p. 79)

This was, indeed, one of the main purposes of the Clearing Union (the other being the purpose of rendering the reserve function of gold radically unnecessary). It was in view of attaining these two goals that, according to Keynes, an international currency was needed. And at least the first purpose was recognised by White:

> if the Bank were to be established and given the authority to issue notes [or, as we shall see, to provide overdraft facilities, in the logic of the Clearing Union], what unit should it be? It would be preferable to adopt a new unit. The adoption of a new international unit of currency of account [*sic*] would probably meet with little opposition, whereas an attempt to use any one of the existing currencies, such as dollars, sterling or francs for that purpose would be opposed on the grounds that it would seem to give the country possessing that currency some slight advantage in publicity or trade. (White, 1942, pp. 81–2)

Showing perhaps little intellectual honesty, White accused the Clearing Union of proposing an international unit of account as a *substitute* for national currencies (b), which was clearly to be refused, whereas it was in fact proposing it as a complement (c), which he himself recognised as desirable. And, showing little practical consistency, after having praised the idea of adopting an international currency as a *complement* to national currencies (c) in 1942, he pursued the idea of adopting a mere *numéraire* (a) in the later drafts.[6]

Unitas was introduced as the 'Monetary Unit of the Fund', in a separate section under this title, only in the third draft (dated 11 December 1942). Unitas was to have a fixed gold equivalent of $137^1/_7$ grams of fine gold, corresponding to a dollar equivalent of $10. The choice of a gold equivalent corresponding to a round dollar equivalent suggests that the second equivalent was considered more important than the first: unitas was just another way of saying $10. This is perhaps the reason why 'the significance of the Unitas in the Stabilization Fund was a source of some perplexity to the United Kingdom' (Horsefield, 1969A, p. 41). As Phillips observed, it was merely a unit of measure, except in the clause providing for deposits of gold, where it became 'a warehouse receipt for gold'—a clause that disappeared in the subsequent versions of 26 June and 10 July 1943, being substituted by the provision for gold convertibility of national currencies at par (ibid.).

What is the reason for introducing a monetary unit that is, in fact, nothing else than another name for gold? Perhaps it was only smoke in the eyes for the British, while US officials remained fundamentally critical against the introduction of an international currency. They feared the possible inflationary effects of an accumulation of balances and believed that there would be strong opposition against the use of government funds to purchase an international currency (different from gold), in view of sterilising its effects. Moreover, perhaps, White did not really manage to understand the logic of Keynes's proposal, which implied an articulation between unit of account and means of payment excluding any role for the reserve function.

[6] This was done, as we shall suggest, only to be able to more easily show the uselessness and to abandon the idea of a new international money altogether, in favour of surreptitiously promoting the dollar as an international currency.

At a meeting with US representatives in Washington in February 1944, Keynes proposed modifications to the Fund, in view of making unitas more similar to bancor. The objections of US officials revealed their opposition to the adoption of an international money as such: in their view, the British, 'unable to secure the redistribution of real gold, proposed to create a substitute out of thin air' (quoted in Horsefield, 1969A, p. 65).

By this time, US representatives appear to have already abandoned even the idea of an international money. It was the British who insisted on the adoption of unitas, in view of introducing and preserving the distinction between national and international money. The British feared that entrusting the Fund with members' currencies could threaten the autonomy of national monetary policy. On the contrary, White considered the adoption of an international unit of account, over which the USA would have no control, as a surrender of monetary sovereignty (thus implicitly suggesting that American monetary sovereignty would suffer no limitation).[7]

The issue remained unsettled throughout February and March. 'Keynes continued to fear, rightly, that with his own plan sidelined, the White Plan would erect a new international monetary edifice based entirely on the dollar' (Steil, 2013, p. 177). In a telegram dated 12 April 1944, the American Ambassador in the UK, J. G. Winant, communicated to the Secretary of State, Henry Morgenthau, that the same fears were shared by the majority of the directors of the Bank of England, who opposed the White plan: 'This opposition argue that if the plan is adopted financial control will leave London and dollar exchange will take the place of sterling exchange. ... The Prime Minister who has never felt that he had a real grasp of financial questions because of this opposition postpones decision on them' (US Department of State, 1967, pp. 110–11).

Indeed, British officials regarded it as a matter of such fundamental importance that it ought to be deferred to the decision of the ministers.[8] This in turn would have required a comprehensive revision of the problems arising from Clause VII of the lend–lease arrangement, and hence an attention that ministers could not afford, under the war events of spring 1944 (Horsefield, 1969A, p. 65). The British government was pressed by imminent needs to yield to American pressures for reaching an agreement and eventually accepted the version without unitas, which was published on 21 April as the *Joint Statement by Experts on the Establishment of an International Monetary Fund*. Article IV provided a definition of the international unit of account in the following terms: 'The par value of a member's currency shall be agreed with the Fund when it is admitted to membership, and shall be expressed in terms of gold' (US Department of State, 1948, p. 1633).

In Articles II and III, reference was made not only to gold but also to 'gold-convertible currencies' to indicate the types of reserves of member countries that should be considered for their subscription to and transactions with the Fund (ibid., pp. 1631–2). Keynes's request to clarify this ambiguous expression was resisted by White on the ground that the definition could be discussed 'at the formal conference if one is held' and that there was no need to provide for it in the Joint Statement. 'White would in the coming months repeatedly use this tactic of deferring matters on which his mind was

[7] See H. D. White, 'Some Notes on the Articles of Agreement of the International Monetary Fund', May 1946, Princeton Papers, Box 10, File 27 (Horsefield, 1969A, p. 65).

[8] This makes it all the more surprising that it should be settled, between Atlantic City and Bretton Woods, without even being discussed by the delegates, and reinforces the hypothesis, according to which the issue was passed under silence because it was too important to be left open to discussion (Van Dormael, 1978, pp. 200–3).

set, and on which Keynes was against him, until the conference, where he planned to isolate Keynes from the critical discussions' (Steil, 2013, p. 177)—as indeed he managed to do, as we shall see.

The publication of the Joint Statement in London on the following day was introduced by an 'Explanatory Note by United Kingdom Experts',[9] in which the functioning of the Fund was related to that of the Clearing Union and it was shown that 'these two arrangements represent alternative technical setups, capable of performing precisely the same functions' (Horsefield, 1969A, p. 129).

Even if this declaration may well have been inspired by political prudence, in the attempt to reach mediation, it is nonetheless true that the Joint Statement was still consistent with the main objectives of the Clearing Union. The fact that Britain eventually accepted to do without an international unit of account does not mean that they were willing to renounce their main goals: the autonomy of national economic policy and the possibility of reconciling the goals of domestic economy and the needs of foreign trade. The points on which British delegates insisted at Atlantic City seem to confirm this, being primarily aimed at preserving the right of members to modify their exchange rates as they may consider necessary or advisable in view of domestic balance (Horsefield, 1969A, pp. 82–3). More importantly, the expression of par values in terms of gold provided a common denominator for international exchanges, setting all countries, at least in principle, on a ground of parity. No national currency had the privilege of being used as international money. Even after having set aside bancor and unitas, gold could still serve as an international unit of account.

Between the Joint Statement and the Articles of Agreement, however, a sea change occurred in this very crucial aspect of the international monetary system: from gold as the only standard of value to a gold-dollar standard, in other terms from an international to a national reserve currency.[10]

This sort of alchemic transmutation in reverse mode, from gold to paper, was accomplished in two steps. Two subsequent changes were introduced in the definition of the international unit of account under Article IV: first, 'gold-convertible currencies' were added to 'gold'; then, 'the US dollar' was substituted to gold-convertible currencies. Both steps occurred quietly, smoothly, with hardly any discussion and with little trace in the proceedings of the conference—yet it was through these almost imperceptible changes that the dollar emerged from Bretton Woods as the global currency, achieving that privileged position that it has maintained until today.

Diplomatic records reveal that the Americans had determined from the beginning what the outcome should be and that they knew the objective could only be achieved if it was not laid out explicitly:

> White and his staff had already submitted a memo to Morgenthau in which all references to 'gold-convertible exchange' and 'holdings of convertible exchange' had been replaced by 'dollars'. But he submitted no amendment to the statement of principles, knowing that many delegations would object. He was instead determined to achieve the switch on the sly at Bretton Woods. (Steil, 2013, pp. 195–6)

The first step was probably made on the train trip towards Bretton Woods by the members of the US delegation who were responsible for preparing the draft to be

[9] Reprinted in Horsefield (1969B, pp. 128–31).

[10] The problems experienced several decades before with a 'limping bimetallism' could have contributed to dissuade from adopting a double standard.

submitted at the conference. The addition of a reference to 'gold-convertible currencies' (i.e., in 1944, only the dollar) to the article defining the 'common denominator' for international exchanges was presented as a joint US and UK amendment to the draft (US Department of State, 1948, pp. 37, 185), among other amendments proposed by other delegations that had had the opportunity to see the draft beforehand. It is however quite puzzling that, after having agreed on a common plan at their previous meeting, they should have also agreed to change it. It is comprehensible that the plan could be accompanied by amendments proposed by either the USA or the UK on specific points of divergence. But a joint amendment to a joint statement sounds rather dodgy.[11] It is easy to imagine that the British officials would have never backed it. In fact, they had already explicitly opposed any reference to 'gold-convertible' currencies.

The second step consisted in the outright substitution of 'gold-convertible currencies' with 'the US dollar' (thus excluding any other currency that should gain convertibility thereafter). This further amendment was decided hastily during the convulsive days of the conference, and incorporated in the draft agreement at night, by a special committee. Again without discussion. 'White never raised the issue of the dollar's role in any American delegation meeting, despite it being the most important one to him; he was determined to handle it below the radar, through his carefully chosen operatives' (Steil, 2013, p. 215).

The opportunity was provided, imprudently, by a member of the British delegation, Dennis Robertson, appointed on Committee 2 of the Fund Commission, which was responsible for discussions on the operations of the Fund. During the meeting of 13 July, at 2:30 p.m., the Indian delegate voiced the peremptory request to solve the ambiguity: 'It is high time that the USA delegation give us a definition of gold and gold convertible exchange'. Here, Robertson cut in with a proposal that might appear surprising, coming from a British delegate: 'I would like to propose an amendment to the text which is before us, according to which the criteria of payment of official gold subscription should be expressed as official holdings of gold and United States dollars'.

Robertson was expressly referring to the clause of Article III, concerning the initial payments to the Fund. As he went on to explain: the holdings of gold and dollars were to be regarded as the most accurate measure of the capacity of each country to contribute to the initial endowment of the Fund. Perhaps his fear was that, by leaving the concept of 'gold-convertible currencies' undetermined, it might be understood to include also the pound, thus penalising the countries of the sterling bloc and putting pressure on the British currency.

Whatever the reason for Robertson's proposal, the opportunity was promptly grasped by the US delegate to establish the identification between 'gold-convertible currency' and the dollar as a matter of fact: 'the practical importance of holdings of the countries represented here is so small that it has been felt it would be easier for this purpose to regard the United States dollar as what was intended when we speak of gold convertible exchange'. And White immediately closed the discussion: 'Unless there are any objections, this question will be referred to the special committee. Any objection? Then we pass to the next problem' (Rosenberg and Schuler, 2012, page numbers unavailable). The unconfessed goal of the American delegation had drawn unexpectedly

[11] That the amendment was proposed both by the British and the American delegation emerges from the proceedings of the conference: Document 166, Joint Statement IV, 1 (SA/1/20), as indicated in the index to the conference (US Department of State, 1948, p. 1798).

closer. 'White must have had difficulty concealing his flush of excitement. With Keynes preoccupied managing the World Bank proceedings, Robertson had walked straight into White's trap' (Steil, 2013, p. 216).

The machination, however, was not yet complete. The dollar had only gained a walk-on part in a marginal scene, concerning the determination of the initial contributions to the Fund (Article III). In order for the dollar to gain the lead role at the centre of the stage, it would have to appear in the definition of the international unit of account (Article IV). On the next day, 14 July, a plenary meeting of Commission I was scheduled at 10:00 a.m. with the task, among other things, of implementing the changes that had been agreed in the committees on the previous day. When the discussion came to Article III, Robertson demanded reassurance that 'gold-convertible exchange' would be substituted with 'US dollars' in this specific point. Edward Bernstein, a delegate from the US Treasury and chairman of the special committee for unsettled issues, proposed 'to refer to this change when the question of definitions arises'. White immediately picked up the proposal and turned it to Robertson: 'Would the delegate from the United Kingdom accept the definition that will come later without making any alterations here?' The issue was not at all trivial as it may seem: if the identification of 'gold-convertible exchange' with 'US dollars' was made in the definition, it would apply not merely to Article III, but to all occurrences throughout the entire Act. This, however, did not apparently occur to the other delegates, including Robertson. In any case, the issue was not discussed and White concluded ambiguously: 'Then the alteration is suggesting replacing "gold convertible exchange" with "US dollars",—without specifying whether the substitution should apply in general, or only to the case in point (Rosenberg and Schuler, 2012, page numbers unavailable).

Two days later, on 16 July, the Articles of Agreement were redrafted and the US dollar appeared in the place of 'gold-convertible currency', not only in Article III, where it had been agreed, but also in Article IV, where it had not even been proposed or discussed to include it: 'The par value of the currency of each member shall be expressed in terms of gold as a Common denominator or in terms of the United States dollar of the weight and fineness in effect on July 1, 1944' (US Department of State, 1948, p. 660). This is the formulation that remained in the Final Act (ibid., p. 945). It is on this meagre basis that the dollar became international money. It is commonplace to assert that the establishment of the dollar as international money was decided at Bretton Woods. In fact, it appears to be the only thing that at Bretton Woods was not decided: it was rather slipped in underhand by the American delegation.

'White never submitted the changes for consideration in Commission One, yet they would become an important part of the IMF Articles of Agreement. Keynes would only discover them after his departure from Bretton Woods' (Steil, 2013, p. 216). As Moggridge reports: 'despite the delay in finishing the Conference, there were still not complete copies of the Articles of Agreement ready when the delegates signed them at the end' (Moggridge, 1989, p. 96). This is confirmed by Keynes himself, in a memorandum on the International Monetary Fund (IMF) dated 29 December 1944:

> We, all of us, had to sign, of course, before we had had a chance of reading through a clean and consecutive copy of the document. All we had seen of it was the dotted line. Our only excuse was the knowledge that our hosts had made final arrangements to throw us out of the hotel, unhouselled, disappointed, unanealed, within a few hours. (Keynes, 1944, p. 149)

It is difficult not to read in this statement an attempt by Keynes to stand aloof of the agreement that had been reached. Indeed, if he had realised that the dollar had been deceitfully introduced as an international currency, it is easy to imagine that he would have objected fiercely, as he had done before during the bilateral negotiations. It is less straightforward to understand why he did not raise the issue afterwards, when he eventually had the opportunity to read through the Act and to grasp its implications. 'It may be that Keynes was simply too embarrassed by the discovery of an oversight this momentous to shine attention on it, understanding, as he must have, that White would not yield an inch of conquered diplomatic territory this valuable' (Steil, 2013, p. 252).

Even White, however, had to defend the agreements at home: between March and April 1945 he gave his testimony to Congress. The ambiguity of the system that had been established was a matter of some perplexity also in the USA. It was not clear whether it would be based on gold or on the dollar. In Washington, White could claim perhaps more overtly than he had done in Bretton Woods that it didn't really make a difference. When congressman Frederick Smith of Ohio asked him whether dollars would be the same as gold, he asserted without hesitation: 'there is no likelihood that the United States will, at any time, be faced with the difficulty of buying and selling gold at a fixed price freely' (quoted in Steil, 2013, p. 258). Only 15 years later, the Triffin dilemma started to cast doubt on the possibility of maintaining the equation (Triffin, 1960).

With the benefit of hindsight, the aporia of a national international currency has become apparent. Why, then, was an existing national currency eventually preferred to a new international unit of account? In order to answer, it is necessary to consider in detail the consequences of the two options for international economic relations. This is the object of the next section.

3. The flaws of Bretton Woods and the rise of global imbalances

What were the consequences of adopting as an international means of payment a national reserve currency rather than an international currency unit destitute of any reserve function? Let us analyse the operation of the two plans, paying particular attention to the way in which each of them deals with the common declared goal of allowing the imbalances implied by the physiological operation of international trade, but in view of their reabsorption.

A main concern of currency plans and negotiations towards the end of World War II was to provide a sufficient supply of international liquidity, i.e. of an easily accepted universal means of payment, such as to facilitate global trade and avoid persistent balance-of-payments disequilibria. This common objective was addressed in a quite different way by the Keynes plan, compared with how it was eventually dealt with by the Articles of Agreement signed at Bretton Woods.

The assessment of international monetary regimes may be based on an extension of the quantitative equation to the international sphere:

$$MV = PT$$

where V is constant. Accordingly, the relative merits of alternative monetary regimes may be measured primarily on their capacity to avoid *inflationary* ($\Delta P > 0$) or *deflationary* ($\Delta P < 0$) pressures, by adapting the *quantity* of international money (M) to the volume of global trade (T).

However, in the light of the current financial crisis and the countermeasures that have been hitherto adopted, it is worth questioning whether it truly makes any sense to characterise a monetary regime, or even a temporary monetary stance, as 'inflationary' or 'deflationary'. Indeed, both the crisis and the countermeasures make it difficult to speak univocally of a 'quantity' of international money, and still worse to assess its 'adequacy' to the requirements of global trade:

(i) on the one side, the 'liquidity crunch' suddenly 'dried up' liquidity from global financial markets, after years of superabundant and overflowing international liquidity; and
(ii) on the other side, the massive 'liquidity injections' have failed to bring the liquidity where it is needed, i.e. to those who require and deserve temporary financing for production, consumption and trade.

Both cases strongly suggest that the availability of money for international transactions is not exclusively a matter of quantity, but also a matter of how 'liquidity' works.

The preliminary indication that we may draw from these observations is that, in order to describe and compare different monetary regimes and to judge their respective merits in relation to the purpose of facilitating international transactions, we cannot be content with considering how each of them provides for the creation of liquidity, but we most also consider whether the liquidity created within each system is actually made to flow or not, in exchange for goods and services. There is liquidity and liquidity.

It may be useful therefore, in order to avoid all ambiguity, to introduce the distinction between 'liquidity' (intended as the peculiar *asset* that a country can spend in any direction, but also *withhold* from circulation, as a *store of value*) and 'liquidness' (intended as the *quality* of being liquid, i.e. of being ready to *flow* freely and continuously as a *means of payment*). In the light of this distinction, the main objective of an international monetary system may be restated in the following terms: to provide a source not of liquidity, but of money capable of maintaining its liquidness, i.e. its quality as a universally accepted means of payment.

In this perspective it is essential to consider not only the *sources* of money provided by alternative schemes, but also the existence and the capacity of *sinks* designed to discharge it.

Our purpose is therefore to analyse the Keynes plan for an International Clearing Union and the Articles of Agreement of the IMF, with particular attention to the various features by which they provide for the *creation* of money, on the basis of gold stocks and commodity flows, and for the *destruction* of money, through inducements to absorb credit balances and not to accumulate them indefinitely.

Keynes's proposal for the post-war international monetary regime envisaged the establishment of an International Clearing Union. Each country would hold an account with the Clearing Union. The accounts would be denominated in an international unit of account called bancor. The equivalence between bancor and the currency of each country would be set at a certain par. The initial balance of each account would be set to zero bancor. The settlement of trade balances between member countries would be made by transfers of a corresponding amount of bancor, from the account of the importing country to the account of the exporting country. To this end, instead of having to deposit a certain amount of reserve assets, each country would be granted an overdraft facility, i.e. the possibility of spending bancor that it had not yet earned, thus recording a negative balance with the Clearing Union. A country with a negative balance would be called a deficit country; a country with a positive balance would be called a surplus country. The bancor balance of each country with the Clearing Union would reflect the net position of its trade balance. Each country would be granted the possibility of accumulating a (negative or positive) balance up to the level of its quota equal to its relative weight in international trade.

Within the system thus designed, international money would be created every time a deficit country used the overdraft facilities provided by the Clearing Union to pay for its imports towards a surplus country. Money creation would thus take the form of an increase in the positive bancor balance of the surplus country with the Clearing Union. Symmetrically, a *destruction* of international money, and hence a reabsorption of the temporary imbalances, would occur whenever a payment would take place in the opposite direction, from a surplus country to a deficit country, reducing the positive balance of the former and the negative balance of the latter. Every other type of payment, from a deficit country to another deficit country or from a surplus country to another surplus country, would only involve a transfer of negative or positive balances, without affecting the overall volume of money outstanding.

Hence, in any given moment, the total amount of international money would be equal to the aggregate trade imbalances within the Clearing Union (i.e. to total deficits = total surpluses). Money creation would thus be closely tied to trade, with the purpose of providing financial breathing room for trade deficits. Within such a system it is not the availability of money that allows trade, but rather trade that gives rise to the money required (Costabile, 2009, p. 86).

Until now we have only considered the mechanisms for the creation of money. In this respect, the Clearing Union resembles a commercial bank. Indeed, the reason why Keynes chose 'bancor' as a suitable name for the new currency was precisely because it was inspired by the mechanisms that govern the creation of bank money. However, there are two main differences between the Clearing Union and an ordinary commercial bank.

First, the Clearing Union has no deposits, no reserves and no capital. Unlike the IMF, it does not require the payment of an initial subscription by member countries and it holds no guarantee. It is not surprising therefore that the Keynes plan should appear inflationary, as indeed it was accused to be by its critics. Of course, if this had been the entire plan, those critics would have been right. But this is precisely the reason why there is another distinctive feature that distinguishes the Clearing Union from a bank: the symmetric charges on debtors and creditors.

In fact, the Clearing Union was not intended to encourage *systematic* deficits, but only trade deficits of a *temporary* nature. Accordingly, to avoid the accumulation of permanent deficits, the Keynes plan included not only limits but also interests to be paid on negative bancor balances. Such interests were intended to serve as an inducement for deficit countries to converge towards a balanced trade.

However, the facilities provided by the Clearing Union were intended to serve the interests of both surplus and deficit countries, since they would have allowed the former to sell, just as they would have allowed the latter to buy, goods that could not have been exchanged without the existence of the Clearing Union. Hence, not only deficit countries, but also surplus countries were required to collaborate in re-establishing the balance of the system.

Accordingly, to avoid the accumulation of permanent surpluses and the ensuing stagnation of excess money, the Keynes plan included also limits and fees to be paid on positive bancor balances. Such fees were intended to serve as an inducement for surplus countries to contribute to the convergence towards a balanced trade and were designed to perform as a sort of drain for excess money (i.e. imbalances) within the Clearing Union. As previously observed, the application of charges on positive bancor balances would act as a form of carrying cost for money, a sort of negative interest rate, by which idle balances would be gradually depleted. Therefore bancor cannot be considered a reserve asset: it is not a store of value.

Of course, this feature of the Clearing Union, and more generally the close relationship that it is designed to ensure between money and trade, would be lost if it were possible for creditor countries to use bancor balances to purchase financial assets.[12] However, the Keynes plan excludes this possibility, since it is intended expressly to facilitate trade transactions and to restrict operations on capital account. 'In Keynes's plan to reconstruct the international monetary system short-term capital movements had no role to play' (De Cecco, 1979, p. 50). Therefore surplus countries could not easily escape the 'carrying costs' on their positive balances with the Clearing Union simply by investing them on international financial markets: capital movements would be subject to approval and would imply a commitment to long-term investments (Keynes, 1942, pp. 185–7).

Hence creditors would not have any possibility to retain their surplus in the form of 'liquidity', in the sense of a constant purchasing power, capable of maintaining itself intertemporally even if it is not actually used as a means of payment. They would have to choose between one of the following three options:

(i) hold bancor balances, which would indeed be liquid (in the sense of being readily convertible into goods and services), but at the cost of having their purchasing power reduced, as long as it was not spent, by the charge imposed on creditors to the Clearing Union;
(ii) invest bancor balances on a long-term basis in the form of foreign direct investments, hence surrendering liquidity in favour of uncertain returns and contributing to the capital development of other countries; or
(iii) spend bancor balances on the purchase of goods and services, thus contributing to the expansion of global trade and facilitating the return towards equilibrium of deficit countries.

Altogether these provisions appear to be inspired by the coherent design to encourage the continuous circulation of international money, to avoid the accumulation of idle balances and the generation of rents, to ensure an adequate funding for international trade and investment and to preserve the connection between financial and real variables (Jaeger *et al.*, 2013, pp. 21, 24). Once again, we could say that these provisions responded to the intention of renouncing the liquidity of a store of value in favour of the liquidness of a flowing means of payment.

On the basis of common sense, the fact of imposing on creditor countries the same obligations of debtor countries may appear arbitrary and unjust. However, this common sense is not an innate wisdom responding to a natural justice, but it stems from a peculiar conception of money, which in turn is tied to the historical embodiment of monetary institutions in the form of a reserve asset, i.e. of *liquidity*.

[12] As envisaged by certain authors who have recently proposed to revamp the Keynes plan and to overcome its supposed inflationary bias by allowing creditor countries to use bancor balances to purchase securities (Rossi, 2007; Alessandrini and Fratianni, 2009).

In fact, the obligation of the creditor is perfectly justified in a system where the balance is defined in terms of *clearing* (i.e. accounts equal to zero): since surplus and deficit countries are all out of balance, the burden of correcting the imbalances should be distributed symmetrically between them.

This is precisely the intention that inspires Keynes in designing this peculiar feature of the Clearing Union:

> a country finding itself in a creditor position *against the rest of the world as a whole* should enter into an obligation to dispose of this credit balance and not to allow it meanwhile to exercise a contractionist pressure against the world economy and, by repercussion, against the economy of the creditor country itself. This would give us, and all others, the great assistance of multilateral clearing. (Keynes, 1941, p. 47, original emphasis)

The credits do not arise from having spontaneously lent a previously hoarded money, which could have been used for any other purpose or even not used at all without loss, i.e. a reserve currency; they arise from having carried out a trade transaction that only the existence of the Clearing Union has made possible thanks to the existence of a currency unit. Hence, there is no reason to remunerate those credits. On the contrary, those credits have simply to be spent, i.e. to transform themselves in a *liquid means of payment*.

In fact, the credit required by international trade is not made available by surplus countries, but by the existence of the Clearing Union itself. This is the reason for imposing symmetric charges on debtor and creditor countries alike: both benefit from the facilitation provided by the Clearing Union to international trade, the former by being able to buy and the latter by being able to sell.

Keynes himself described the properties of his plan in the following terms:

> The peculiar merit of the Clearing Union as a means of remedying a chronic shortage of international money is that it operates through the velocity, rather than through the volume, of circulation. (Keynes, 1943, p. 31)

In other terms, referring to the quantity equation, we could say that the Clearing Union was designed to provide an adequate supply of international money by ensuring the liquidness (V), rather than by multiplying the amount of liquidity (M). Since he relaxes the assumption of a constant circuit velocity of money, we could rename the 'quantity equation' in Keynes's interpretation as a 'velocity equation', where what counts is indeed not the quantity but the velocity of money, i.e. not the liquidity but the liquidness. The institutional variable is not the quantity of money, determined exogenously by the monetary authority, but the velocity of its circulation, determined by the peculiar features of the monetary system itself.

If indeed, as Keynes suggests, the system 'operates through the velocity, rather than through the volume, of circulation', then the amount of money becomes irrelevant in the sense that the functioning of the Clearing Union and its capacity for supplying an adequate money for international transactions does not depend on the initial endowment of means of payments (e.g. in the form of gold reserves or reserve assets in general).

Keynes is not unaware of the current relations of power, reflected in the endowments of gold reserves and credits at the end of the war. The USA are the owners of over 80% of all global monetary gold; hence they have a legitimate interest that this gold accumulated under the old monetary law is not simply wiped out by the new. For this reason, Keynes envisages the possibility of converting the old money into the new, by depositing in the Clearing Union gold and receiving an equivalent credit balance in bancor. This is the only exception to the rule according to which initial positions of member countries should all be equal to zero. However, in order to ensure the enforcement of the new rule, Keynes also establishes that such a conversion should be irreversible. In other terms, gold should be convertible into bancor, but bancor should not be convertible into gold. The only shift that makes any sense is from the old to the new and not vice versa.

Hence, without disregarding the status quo and the given distribution of power, Keynes aims at inaugurating a new monetary order where the distribution of power responds to different rules from in the past. More precisely, the idea is to move from an institutional framework where (purchasing) power is by definition in the hands of the creditors to a system where the (purchasing) power is associated with a (purchasing) duty; more generally, power is associated with responsibility and both are shared by creditors and debtors.

By contrast, the plan approved at Bretton Woods depended from the outset on the collection of a predefined quantity of money in an International Monetary Fund. It did not create an international currency, but merely gave the possibility of swapping the national currencies deposited in the Fund in order to perform international settlements. The basket of gold and currencies collected in the Fund provided thus a sort of reservoir for international reserve assets, in the form of national currencies that could be exchanged one for the other within given limits.

Each country subscribed to a certain quota of the Fund, depositing the corresponding amount in the Fund: 25% in gold and 75% in its own currency. Each country was thus entitled to purchase from the Fund the currency of another country, for the purpose of effecting a payment towards that country. The amount of its own currency in the Fund increased accordingly. Deficit (and surplus) countries were therefore characterised by the fact of holding more than (or less than) 75% of their own quota in their own currency with the Fund.

However, the conditions for deficit and surplus countries in the Fund, unlike those in the Clearing Union, were strongly asymmetrical: a deficit country was obliged to repurchase its own currency from the Fund and was subject to a cost for the operation, which was structured, therefore, as a 'hidden loan'; instead, a surplus country was not subject to any obligation or to any cost and hence had no incentive to restore a balanced trade or to reabsorb previously accumulated imbalances. On the contrary, there is an incentive to maintain surplus balances in order to earn a rent.

The provisions of the Articles of Agreement to deal with persistent and widening surpluses were contained in the so-called 'scarce currency clause' (Article VII). It is often stated that creditor countries were not adequately involved in the adjustment of post-war imbalances, because this clause was never fully enforced. In fact, it was perhaps the most important and effective clause of the whole agreement. The real problem was that the application of this clause implied a suspension of the rest of the agreement. According to its provisions, if the currency of a country became scarce (because of a persistent trade surplus of that country that induces all other countries to demand its currency), the Fund may borrow or purchase the scarce currency and allow the other members to impose protectionist measures. All these provisions amounted to a perpetuation of international imbalances and to an organisation of global trade that contrasted sharply with the purposes of the agreement and with the instruments originally designed to accomplish them.

Moreover, the scarcity of a currency (namely the US dollar) was not only possible, but probable. Indeed, the total resources of the Fund were set at such a low level, that it had no chance of meeting the requirements of international trade. Hence, from the very beginning, post-war international settlements had to rely on an alternative reserve asset, in the form of the national currency of the greatest surplus country, namely the US dollar.

Perhaps at this point we have all the elements to explain why the reference to gold in the Articles of Agreement was inevitably bypassed by the reference to the dollar: gold reserves were insufficient to manage the imbalances required by the expansion of global trade and post-war reconstruction.

The shortfalls of the Articles of Agreement of Bretton Woods paved the way for a creation of international reserve assets denominated in US dollars. This occurred not within but outside the framework of the Fund, and without any restriction or link to the trade of actual goods, mainly through the development of the euro-dollar market. Unlike the Clearing Union based on bancor as a currency unit, the prevailing system based on the dollar as a reserve currency had no built-in mechanism designed to ensure both the circulation and drainage of international money. In other terms, despite their common goals, the latter was not capable of reabsorbing global imbalances, but rather allowed dollar balances to be indefinitely hoarded as reserve assets by foreign central banks.

This perspective may help understand post-war disequilibria not as the result of deviations from the rules of the game, but as an inevitable concomitant of the operation of those rules. In particular, the intrinsic flaws of a reserve currency system, which were present if not evident since the beginning, may help explain the apparent paradoxes of such a system: in particular, how it was possible to pass from a dollar shortage to a dollar glut, i.e. from a lack of international reserve assets to an excess of international reserve assets, and hence from a net creditor position to a net debtor position of the USA; and how, as shown by the outbreak of the crisis in 2007–2008, it is equally possible to revert from a superabundance to a sudden draught of international liquidity.

Moreover, the fact of having seen the limits inherent in a reserve currency may help understand the current political and scientific impasse in the face of growing global imbalances. When international money is conceived and implemented as a quantity of reserve assets, there seems to be always too little or too much of it and never an adequate measure. The reasons for this difficulty are manifold:

(i) it is difficult to estimate in advance how much international reserve currency is needed, especially when the need is not clearly defined;
(ii) it is difficult, once the requirements have been estimated, to adjust the actual amount accordingly or to define the rules of its creation, so as to accommodate the fluctuations in its requirements; and
(iii) the same quantity may result either insufficient or excessive according to its actual use in circulation: what counts is not the quantity of money (the amount of liquidity), but rather the actual use of whatever money is available as a means of payment (the liquidness).

On the other hand, the fact of having appreciated the virtues of the clearing mechanism based on an international currency union may help us to imagine a way out of the structural flaws of the present system, and not merely a way of containing its most dramatic effects. This allows us to reconsider more in detail the constructive part of Mr Zhou's proposal, with a better understanding of its actual scope and limits.

4. Proposals for an international money

The proposal advanced by Mr Zhou is to enhance the use of Special Drawing Rights (SDR) as an international reserve asset:

> The SDR has the features and potential to act as a super-sovereign reserve currency. Moreover, an increase in SDR allocation would help the Fund address its resources problem and the difficulties in the voice and representation reform. (Zhou, 2009, p. 2)

To this end, Mr Zhou recommends to:

> Actively promote the use of the SDR in international trade, commodities pricing, investment and corporate book-keeping [and to] create financial assets denominated in the SDR to increase its appeal. (Zhou, 2009, pp. 2–3)

The strengthening of the role of the SDR in international economic relations requires, moreover, a redefinition of the governance of its issuing process and of the balance between the countries and currencies supporting it. This is why Mr Zhou further suggests that:

> The basket of currencies forming the basis for SDR valuation should be expanded to include currencies of all major economies. (Zhou, 2009, p. 3)

The first part of the proposal was already endorsed by the G-20 in April 2009 and was implemented shortly thereafter. With a general SDR allocation taking effect on 28 August and a special allocation on 9 September 2009, the amount of SDRs has increased almost 10-fold, from SDR 21.4 billion to SDR 204.1 billion.

The use of SDR as a reserve asset can certainly serve to substitute part of the conspicuous reserves in dollars held throughout the world and particularly in Asia. It may therefore allow easing the bilateral tensions between China and the USA.

However, despite the extraordinary increase, total SDR allocations are still dramatically insufficient to reabsorb the global imbalances accumulated in over 60 years of dollar standard. Despite having increased by a factor of 10, they are still 10 times lower than the overall foreign exchange reserves of China alone and 15 times smaller than the foreign indebtedness of the USA.

Moreover, and more seriously, it is far from clear that even an expanded use of SDRs as a reserve asset would avoid the accumulation of *further imbalances*. In fact, unlike the provisions of the Clearing Union, the IMF rules do not impose on countries that accumulate SDRs in excess of their original allocation any kind of charge or constraint; on the contrary, if a member's SDR holdings rise above its allocation, it earns interest on the excess.

In addition, if the volume of SDRs should increase, there would also be an increasing concern to assure their acceptability. To avoid an inflation of SDRs it would be necessary, as the Chinese proposal suggests, to increase their use, not only as a means of payment for the actual trade of goods and services, but also to denominate financial assets. In any case, it would be essential to assure their constant convertibility into *equally appealing* national currencies. In other terms, it would be necessary to assure the liquidity of both the SDR and the currencies that are included in the basket and that represent *de facto* the ultimate form of international liquidity, as long as SDRs are conceived as a basket of national currencies.

It is for this reason that the Chinese request to include the renminbi in the SDR basket has been challenged by the counter-request to assure full convertibility of the

Chinese currency on foreign exchange markets. But this would amount to requiring the renminbi to increasingly assume the function of an international currency, which is exactly what the Chinese proposal intends to prevent, with a view to avoiding the substitution of current international imbalances with new international imbalances.[13]

A way out of this dilemma could be to transform the SDR from reserve asset to currency unit. Indeed, the use of SDRs to reform the international monetary system according to the principles of the Keynes plan:

> 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. (Piffaretti, 2009, p. 22).

This would involve at least the following steps:

(i) to make SDR the ultimate means of denomination and payment of international debts, i.e. the international money;
(ii) to establish, accordingly, a one-way convertibility, from national currencies into SDRs, but not from SDR to national currencies;
(iii) to introduce symmetric charges on SDR balances above and below original allocations; and
(iv) to link new issues of SDRs to international transactions or to the purchase of primary goods as real reserve asset by the IMF or by another international organisation.

In any case, the primary objective of a sound monetary regime should be to define the rules not only of money creation, but also of its circulation and destruction, in order to ensure that the imbalances are always reabsorbed. This implies that the liquidity created may always remain liquid, i.e. that money cannot be hoarded and thus must be spent. In order to achieve this objective, as we have tried to show in this paper, two crucial features are required:

(i) not only the distinction between international money and national currencies,
(ii) but also the existence of an international unit of account that cannot by definition serve as a reserve asset.[14]

At Bretton Woods, the conjunction of these two features allowed Keynes to design an international financial system in which the interests of each single country are not set at variance with those of other countries and with the well-being of international trade as a whole. This plan was rejected in favour of a system that was supposed to serve the same goals while in fact its operation has led in the diametrically opposite direction. The oft-invoked new Bretton Woods should perhaps not merely repropose the Keynes

[13] Despite this intention and despite obvious difficulties, the index of renminbi internationalisation has continued to increase steadily after Zhou's statement (International Monetary Institute, Renmin University of China, 2014, p. 11).

[14] For further indications that can be drawn from the Keynes plan to address current global imbalances and reform the monetary system, both at the international and at the local level, see Fantacci (2013).

plan, but it ought to reinterpret its main principles according to the present economic and political situation of the world.

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