

## 6.2 John M. Keynes: Proposal for an International Currency Union

Keynes formulated his Bancor plan as a solution for the period after the Second World War. During the interwar period there was a lot of irritation to the global financial markets and the stock market crash of October 1929 was the beginning of the collapse of the system and made it necessary to search for a system that improves the whole financial stability of the world. The financial system should work autonomously and should not need continued discussions on current accounts, financial accounts and exchange rates. The later-established Bretton Wood System did not fulfil such a criteria, see section 3.3. Many clearing operations and the goodwill of most surplus countries were necessary to keep the whole system going. The international clearing union should work imbalances out and therefore make the system more in tune with global financial needs.

The Bretton Woods system was based on the proposals of John M. Keynes and Harry Dexter White, but mainly White's proposal came into force. According to Boughton (2002) it was more a political decision than a decision based on economic theory. White's proposal was in favour of monetary policy and price stability but keeping all authority by the national governments. Keynes' proposal, on the other hand, called for more dramatic changes and would give away part of local authority to the 'International Currency Union', even their governors would be nominated by member countries. More on this in section 6.2.3.

Keynes proposed the establishment of a "*an International Clearing Union, based on international bank money, called (let us say) bancor<sup>29</sup>, fixed (but not unalterably) in terms of gold and accepted as the equivalent of gold by the British Commonwealth and the United States and all members of the Union for the purpose of settling international balances.*" (Keynes, 1980, p. 121)

The basic idea is simple. Countries should hold accounts that would have the same role as reserves, mainly gold in the early 20<sup>th</sup> century and dollars or other foreign exchange reserves nowadays. With the account, at the International Clearing Union, countries do not have to shore up these reserves. They are free to borrow from the International Clearing Union in times of need and lend if they export more than they import. The deflationary bias caused by trapped reserves, which cannot turn into effective demand, would vanish. Keynes also mentioned some measures to prevent a piling up of credits or debits so the system should lead to self-equilibrium in the long run.

de Vegh (1943) summarises the purposes of the Plan to seven point:

1. "[...] an instrument of international currency to make bilateral arrangements superfluous,
2. an orderly method of determining foreign exchange values,
3. a quantum of international currency that is subject to deliberate expansion and contraction,
4. a stabilizing mechanism to exert pressure on countries whose payments tend to become unbalanced,
5. starting off every country after the war with a stock of reserves appropriate to its importance in world commerce,
6. a central institution to support other international institutions,
7. a means of reassurance that methods of restriction and discrimination will be unnecessary."

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<sup>29</sup>which stands for bank gold ('or' French for gold)

### 6.2.1 Principals of the Bancor Plan

The following principals are from the latest draft of the original "Proposals for an International Clearing Union" in August 1942. Some details that are of organisational nature are left aside since they are not really important and probably do not fit into the 21<sup>st</sup> century.<sup>30</sup> (see Keynes, 1980, pp. 168 - 195):

1. The founding countries will agree on a value of their currency in terms of Bancor and in terms of gold. Other joining countries will have to agree on their exchange rate with the Governing Board of the ICU. These rates can vary only slightly without the permission of the Board. Huge changes are possible but only with approval of the Board. This should be easier during the first years because unforeseen circumstances might occur.
2. Each member state will have a maximum allowed debit balance with the ICU that is called its *quota*. This quota initially should be the sum of each member's imports and exports at average of the past three years, but there should also be exceptions be allowed for countries where this formula might be inappropriate. This quote should be adapted every year according to the weighted average of export and imports to account for changes in a country's openness structure. Keynes also mentioned that other calculation formulas containing additional factors could be taken into account.
3. If a member country has an excess surplus or debit of one quarter on its Clearing Account it should be charged 1 per cent per annum to the Reserve Fund of the Clearing Union and an additional 1 per cent for the amount exceeding half of its quota. This should avoid build-ups of debits or surpluses on the Clearing Accounts and these funds can be used for global aid, even though they are not necessary for the purposes of the plan.<sup>31</sup> Member states in debit would also have the possibility to borrow from surplus countries in order to avoid these payments.
4. If a country wants to increase its debit balance by more than a quarter of its quote it needs the permission of the Governing Board. If a country's debit balance exceeds more than a quarter in average of at least one year, the country should devalue its currency in terms of Bancor by not more than five percent without the Governing Board's permission. To allow a country to increase its debit balance to more than half its quota *"the Governing Board may require (i) a stated reduction in the value of the member's currency, it seems that to be the suitable remedy, (ii) the control of outward capital transactions if not already in force, and (iii) the surrender of a suitable proportion of any separate gold or other liquid reserve in reduction of its debit balance."* (Keynes, 1980, p. 174) Further the Governing Board may give guidelines to the country to restore international balance. A country with a debit of three-quarters of its quote will be asked by the Governing Board to take measures to improve its status and can only draw on its Clearing Account with permission of the Board.
5. On the other side, countries in surplus have to take measures to reduce their surpluses if it exceeds one half of its quota in average of one year. These can include: *"(a) Measures for the expansion of domestic credit and domestic demand; (b) The appreciation of its local currency in*

<sup>30</sup>This is especially true for the location of the Board of Managers and the nomination of Governing Board members. These details are of minor interest for an economical analysis of the Bancor plan.

<sup>31</sup>There are many possible uses for these payments but the main idea behind the Bancor Plan is to solve balance of payment problems and not to fund aid.

*terms of bancor, or, alternatively, an increase in money wages; (c) The reduction of tariffs and other discouragements against imports; (d) International loans for the development of backward countries.*" (Keynes, 1980, p. 175)

6. There will be a one-way convertibility of gold into Bancor credit but countries cannot demand gold for their Bancor credits. The Government Board can distribute gold to countries with credits on their clearing accounts in order to reduce these credits.
7. Non-member countries can and should have a clearing account at the ICU, but they are not allowed to have overdrafts and have no vote on the board.
8. Countries can resign from the Union with one year's notice but have to make sure that they discharge any debit balance. Also the Governing Board can ask countries to resign with the same procedure.

## 6.2.2 Advantages of the Plan

Countries that do not wish to use their surplus immediately can store it at the Clearing Union without a deflationary and contractionist pressure on the world. The IMU is in this respect similar to a global banking system where the credit account of one nation can be used by other nations leading to expansionist pressure on world trade.<sup>32</sup> Like on an ordinary bank account the creditor is not worse off if the bank lends his money to a debtor, especially if the debtor will use the money to import goods from the surplus country, overcoming the otherwise created deficit in effective demand. This could also be generated by hundreds of bilateral arrangements but a global system would be easier and smaller countries with little bargaining power will probably be better off in a general framework. A country does not have to be in balance with all its trading partners but with the Union in general over a period of time.

The Plan also includes capital controls: *"There is no country which can, in future, safely allow the flight of funds for political reasons or to evade domestic taxation or in anticipation of the owner turning refugee. Equally, there is no country that can safely receive fugitive funds, which constitute an unwanted import of capital, yet cannot safely be used for fixed investment."* (Keynes, 1980, p. 185) Of course Keynes does not want that *"international investment should be brought to an end."* But there should be a distinction between capital flows that are for FDI or in order to maintain equilibrium between surplus and deficit countries and speculative capital flows.

Since the ICU would be a real international body, Keynes also announced some other possible fields of activity for the ICU. It could for instance have similar functions as the WTO has nowadays and also elements of the IMF and the WB. These are beyond the scope of this work.

<sup>32</sup>One might argue that countries do not bury their exchange reserves in deep holes but hold T-Bonds or other assets so that the purchase power is still in circulation. Even this might be true for most of the reserves, they could be used far better with a system that does not require the countries to invest in low yield bonds that probably do not even pay of for inflation and exchange rate variations.

### 6.2.3 Why White won

Keynes' proposal was for the greater good of all nations. He saw that the British Commonwealth and especially London was losing weight in international economics. Great Britain and the pound was the long-time leading currency in the world and Keynes has known the mixed blessing that is combined with the state of being the reserve currency country. During the war the United States became the new economic power of the West and it was obvious that the dollar will gain and the pound will lose importance. It was time for a change, a change for the greater public good and that was in Keynes eyes an International Clearing Unit that did not directly belong to any country. Since the winners write the history and make the decisions it was the United States that had the main voice in the coming architectural solution for international currency relations. Britain had John Maynard Keynes with his International Clearing Union and the United States had Harry Dexter White with his Stability Fond that was mainly constructed in the negotiations in Bretton Woods, New Hampshire. The Stability Fond was very appealing during the time after the war when a high demand for European reconstruction was necessary and when large balance of payment deficits would be necessary for European countries. The Stability Fond would lend money for the reconstruction period and beyond. The International Clearing Unit would try to eliminate these imbalances but it would also be possible through bilateral negotiations to make money or Bancor credits available for countries in need. The result that White's plan came into force was a political decision that reflects the U.S. dominance of the negotiations and is not because White had the better plan. (see Boughton, 2002) .

### 6.2.4 The Economics behind the Bancor Plan

The main crux is the difference in reserve holding and creation. Gold reserves or foreign exchange reserves can only be created by digging or through exports of goods. Therefore these reserves are hard-earned and not like the clearing account which is nearly costless. The setting aside of gold and foreign exchange reserves blockades the use of this purchasing power and therefore leads to a leak in effective demand depressing the world economy. With increasing global trade and volatility on global financial markets with speculations on different currencies, countries have to increase their reserve stock with costs for them as mentioned in section 2.4.

*"In effect, an ICA [International Clearing Agency similar to the ICU] would eliminate over-the-counter foreign exchange activities of large multinational banks, ending the wasteful reign of the vast (\$1.5 trillion daily volume) foreign exchange casino and curbing the volatile movements in currency values that frustrate real economic activity. The new ICA would bar speculators from raiding the world's currency reserves by requiring that those reserves be held by the Agency and by periodically using changes in reserve levels to determine adjustments in exchange rates."*D'Arista (2003, pp. 737)

### Solving the Currency Assymetry

The Bancor Plan also solves the currency asymmetry problem. No country would be able to charge seigniorage to any other country, "[i]n other words, countries would not need to buy - with goods - the currency of one particular country" (Costabile, 2007, p. 21). Nor could the key currency country change its wealth position by changing the exchange rate, because there would be no key currency country. No country will be able to nominate foreign debt in its own currency, but in Bancor, because countries will be in debt or credit with the Currency Union and not with a particular country.

Further, countries "would neither need to compress domestic demand below domestic production, nor would they experience a downward pressure on domestic production" (Costabile, 2007, p. 8) because it does not need to build up reserves or suffer from a lack in effective demand because of other country's reserve holdings.

Costabile (2007) summaries Keynes symmetric monetary system:

*(i) the link between the gold and international liquidity is severed, in the sense that the distribution of international liquidity becomes independent from the distribution of gold reserves among countries; (ii) national currencies stand on par, since none of them is allowed to work as the international currency; (iii) finally, any remaining imbalances between countries (now made symmetric by the operation of the system), would be kept under control via the penalties envisaged by the Plan. Only the combination of these measures gives rise to international symmetry, while each measure taken in isolation is unable to generate this result. (Costabile, 2007, pp. 20)*

### Does Bancor produce higher Global Inflation?

One of the most critiqued points of the IMCU was that it would lead to higher global inflation because of the increase in effective demand more product will be purchased and therefore prices would rise and the world would get nearer to potential output with less unemployment. That might bring some changes especially in the first period where exchange reserves will run down, but central banks can also influence money supply and drying up excess liquidity that should reduce inflationary pressures.

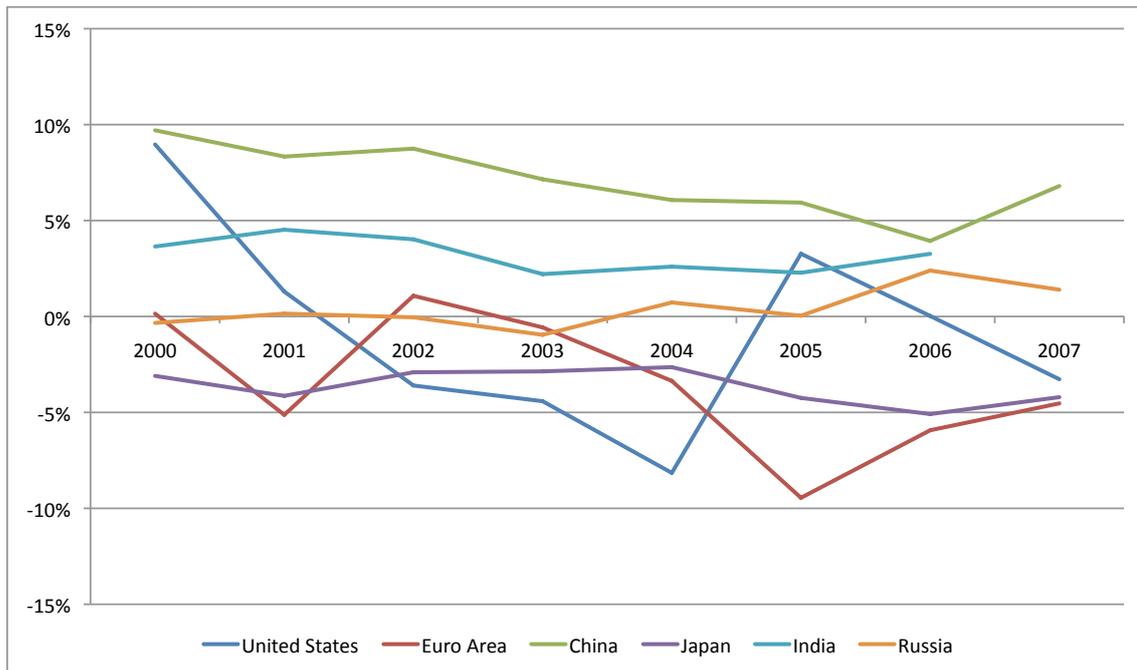
Many countries may benefit from less exchange rate volatility and therefore increasing economic activity increasing FDI and domestic demand that all will reduce unemployment and increase inflationary pressure, but overall welfare should increase with higher purchasing power all over the world.

### Will Bancor block Foreign Direct Investment?

The main purpose of Keynes' proposal is to stabilise the current account. Leaving the capital account aside, the financial and the current account must be equal and since the current account should be balanced the capital account should be balanced as well. This means that assets held abroad and foreign assets held in the domestic country should be equal and there would not be any net wealth transfer from one nation to another if the system is balanced.

Figure 6.1 shows the actual net direct investment position of selected countries. The quota is calculated as Keynes proposed as the average sum of imports and exports of the last three years. Countries that received direct investments are China, India and in recent years Russia (positive area). All countries are far away even from Keynes first suggested barrier: one quarter of the quota and therefore there is no need to fear that the Bancor plan will block Foreign Direct Investment.

Figure 6.1: Net Direct Investment in Percent of Keynes Quota



Source: International Financial Statistics, IMF

But Bancor would certainly limit the amounts of speculative money that is more disturbing for an economy than it generates welfare.

### 6.3 Paul Davidson: Proposal for an International Money Clearing Unit

Paul Davidson<sup>33</sup> proposes an architectural solution that is very similar to Keynes' 'Bancor Plan'. (Davidson, 2000, 2002, 2004a,b, 2006) Davidson updated Keynes' plan with a more moderate version that does not require a supranational central bank which is, for him, "political neither feasible nor necessary" (Davidson, 2002, p. 231).

*"What is required is a closed, double-entry bookkeeping clearing institution to keep the payments 'score' among the various trading nations plus some mutually agreed-upon rules to create and reflux liquidity while maintaining the purchasing power of the international currency. (Davidson, 2002, p. 231)*

Davidson has eight provisions that can establish the needed fundamentals for an global economy of the twenty-first century:

1. Installation of an 'International Money Clearing Unit' (IMCU), which is the ultimate reserve asset and can be held only by central banks of participating member states.
2. Central banks of a currency union or nation should provide one-way convertibility from IMCU deposits to domestic money. IMCU will be the only liquid reserve asset for international financial transactions and can only be changed between central banks and the International Clearing Union. There will be no draining of reserves from the system and *"all major private international transactions clear between central bank accounts in the books of the international clearing institution."* (Davidson, 2002, p. 232)
3. The exchange rate between IMCU and the local currency will be set a priori by each nation.
4. Cross boarder contracts are denominated according to local law and acceptance of the contracting parties. Contracts in foreign currency will require publicly commitments of the central bank to the availability of foreign funds.
5. Member countries will have the possibility to lend short-term on other member countries' credits by terms of the *"pro bono public"* clearing union managers. (Davidson, 2002, p. 234)
6. If a member country accumulates "excessive" credit balances according to international agreements by running current account surpluses it has three options to spend this credits: *"(1) on the products of any other member of the clearing union, (2) on new direct foreign investment projects, and/or (3) to provide unilateral transfers (foreign aid) to deficit members."* (Davidson, 2004b, p. 600)
7. To stabilize the long-term purchasing power of IMCU the exchange rate between IMCU and local currency will be fixed and only altered if efficiency wages change. The IMCU value in local currency will change with domestic inflation rate.
8. If a country has a permanent current account deficit, although the country is at full employment, then this is a sign that the country is living beyond its means. If the country is poor, than the

<sup>33</sup>Dr. Davidson is the Editor of the Journal of Post Keynesian Economics, more on his person on <http://bus.utk.edu/econweb/davidson.html> accessed May 27, 2008

rich nation should support this country. If it is relative rich, it should correct its balance of payment through devalue its exchange rate.

Davidson's proposal is quite in line with Keynes'. He even puts more pressure on the surplus countries and only pressure on deficit countries if they are rich. Since the identity: 'One country's surplus equals other country's deficits' always holds, the CA of all nations would be balanced. Further the exchange rates should not be biased by speculative attacks, therefore Davidson only allows exchange rates to change with efficiency wages. The limitation of IMCU holdings only by central banks does not allow individuals to use the international assets as a store of value. This plan would solve the currency asymmetry and would release stored reserves to be turned into effective demand.

Davidson keeps his proposal simple and remarks that all countries should have an incentive to join, if they realise that the vanishing deflationary bias will have positive effects on the expansion of the global economy and that will bring gains to former surplus as well as deficit countries.

## 6.4 Stiglitz and Greenwald: A Modest Proposal for International Monetary Reform

In his book: "Making Globalization Work", Stiglitz (2006, pp. 245) proposed a change in the 'Global Financial System'. Also in his article for the 'Harvard International Review' (2003) "*Dealing With Debt – How to Reform the Global Financial System*"<sup>34</sup> and two online available working papers together with Bruce Greenwald (Greenwald and Stiglitz, 2008; Stiglitz and Greenwald, 2003), he offers a similar proposal.

The main reasons for Stiglitz to change the global financial architecture are the following:

*"The global financial system fails to provide what economic theory predicts; namely to shift money from rich countries where it is in abundance to poor countries where it is scarce and therefore leading to high returns (interest rates) and shifting the risk burden on countries which are able to bear it – the rich ones. It fails to provide global economic stability through providing money to countries on rainy days."*(Stiglitz, 2003)

Joseph Stiglitz together with Bruce Greenwald (2006; 2008) analyse the main problems that they summarise in the following way:

1. *"The efficacy and stability of the present system depends on continuing and growing U.S. foreign payment deficits.*
2. *These foreign payment deficits exert a powerful deflationary effect on the U.S. domestic economy which can only be offset by aggressive U.S. government fiscal and monetary policy.*
3. *These difficulties are exacerbated chronic surplus countries whose behavior is difficult to control within the context of the current system.*
4. *These surplus countries tend to export deflationary tendencies not only to the United States, but to other national economies"*(Greenwald and Stiglitz, 2006, p. 11)

For them any reform of the international financial architecture should correct this by following these principals:

1. *"decoupling reserve accumulation from the deficit positions of any reserve currency countries,*
2. *providing some means of disciplining surplus countries and*
3. *providing a more stable store of international value than the dollar or any other reserve currency."*(Greenwald and Stiglitz, 2006, p. 11)

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<sup>34</sup>In this contribution to the improvement of the global financial system, Stiglitz also proposes the introduction of general bankruptcy laws for heavily indebted nations and their industries in order to get out of the vicious circle of indebtedness, even this topic is important for various, especially developing nations, it is beyond the scope of this work.

### The Global Greenback Plan

Stiglitz and Greenwald suggest using the already existing '*Special Drawing Rights*' (SDRs) as international reserve assets. They could be expanded in line with world trade without causing U.S. payment deficits. Their calculations lead to about \$200 billion in SDR to reach global demand and could easily be credited to the already existing IMF accounts.

Further they suggest to tax surplus countries with "*50 percent (or some other appropriate fraction) per unit of current account surplus up to the full amount of a country's allocation.*"(Greenwald and Stiglitz, 2006, p. 12) The generated revenue should be used for global financial aid.

Since SDRs are a weighted average of a currency basket of the U.S. Dollar, the EURO, Japanese YEN and Pound Sterling (IMF, 2008) it will be more stable than any single currency and might be used "*as a stable international unit of account for pricing international commodities such as oil.*"(Greenwald and Stiglitz, 2006, p. 12)

Greenwald and Stiglitz (2008, p. 34) cannot accept that the richest country in the world is living beyond its means by borrowing from poor countries. This is a net transfer from poor to rich while the risk burden is also more on the poor than on the rich. The introduction of the new system should be piecemeal with some countries start to form a 'club' that is holding the new reserve asset called 'Global Greenbacks'<sup>35</sup>. After more and more countries join, there would be a big incentive also for former reserve currency countries to join the 'club'.(Greenwald and Stiglitz, 2008, pp. 37) The club should work the following way:

*"Every year, each of the members of the "club" would contribute a stipulated amount to the GRF (global reserve fund), and at the same time, the GRF would issue Global Greenbacks of equivalent value to the country, which they would hold in their reserves. There is no change in the net worth of any country; it has acquired an asset (a claim on others) and issued a claim on itself. Something real however has happened: it has obtained an asset which it can use in times of an emergency. (And at the same time, it has agreed to let others call upon its resources in times of emergency.)*(Greenwald and Stiglitz, 2008, p. 38)

This change in the global financial architecture would lead to no more '*bury[ing] in the ground*' of purchasing power therefore releasing the deflationary bias from reserve currency countries and their need for net imports. It would also improve the global economic stability. In times of a crises countries can change their Global Greenback to hard currency in order to support their currency.<sup>36</sup>

<sup>35</sup>This name might not be a good choice since there could be widespread rejection from many countries. Therefore a more neutral name would be better choice. Also SDR is not a proper name for an international reserve currency!

<sup>36</sup>SDRs were developed for a time with fixed exchange rates therefore there might be a problem with the value of the Global Greenback with the variable exchange rate system. The authors propose that Global Greenbacks are only held by central banks, so speculators can not disturb the market because there is none. The official exchange rate can differ from current market rates and central banks are only allowed to change at this rate if there is a clear sign that the country is in a crisis "*a major change in the country's exchange rate, output, or unemployment rate.*" (p. 39). It would also be possible to introduce "global greenback" also available to hold by public. This would make them a real global currency that could be treated like any other currency.(see Greenwald and Stiglitz, 2008, pp. 38)

### 6.4.1 Cost and Benefits of a Global Greenback System

The United States would be a great loser at the beginning because it would *"forego its monopoly on issuing paper claims for real goods and services. However, Britain enjoyed such a partial monopoly prior to Bretton Woods and Keynes rightly recognized that it represented a very mixed blessing. The benefits of seigniorage were perhaps more than offset by the adverse consequences of chronic net foreign deficits through their deflationary effect on the domestic British macroeconomy. The United States has avoided many of these effects by running large, persistent government deficits to sustain full-employment, but that policy too has potential adverse consequences."* (Greenwald and Stiglitz, 2008, pp. 39)

The same would be true for the Euro area, when the Euro becomes more important as a reserve currency. But the European countries through the 'Stability and Growth Pact' (Maastricht Criteria) have less options to countervail the deflationary effect.

For central banks SDRs (or "Global Greenback") would provide them with more stable reserve assets that they can use in their diversification, further it would reduce the current U.S. current account deficit and therefore the pressure on the U.S. dollar values and foreign countries would no longer have to depress their currency in order to acquire reserves that would stabilise exchange rate dynamics.

Countries would be able to run current account deficits in line with their receiving reserves with limited risk for a crises. This limited risk could help developing countries to overcome the problem of 'original sin'. All countries would gain from such a solution that reduces the deflationary bias. The proposed tax on the surplus countries and the redistribution to developing countries would support global economic development. (see Greenwald and Stiglitz, 2008, pp.40)

#### George Soros on SDR

George Soros, the famous and successful speculator, also proposes a more extensive use of SDRs (see Soros, 2002, p. 177 - 182). In his proposal developed nations should donate their SDR allocation to developing countries for certified programs on health care, education, information and legal systems.<sup>37</sup> His intention behind the plan is on the one side the promotion of foreign aid to a higher level with a more co-ordinated system away from corrupt developing countries' governments and on the other side the solution of the reserve problem with the depressing pressure on global demand. World trade is growing faster than the global GDP therefore more and more reserves would be needed. The allocation of SDRs, like in the Greenwald and Stiglitz proposal would give countries more freedom in their use of export earning than to set aside an amount for building up reserves.

In opposite to the proposal above, Soros would issue new SDRs on an anti-cyclical basis in order to prevent inflationary pressures from SDR issuing and to promote the global economy in times of need. Williamson (Summer 2004) would also agree to an extension of SDR allocations.

<sup>37</sup>Soros does not mention other parts of infrastructure, but they could also be in the program.

### **6.4.2 The End of the Dollar as Reserve Currency?**

Greenwald and Stiglitz (2008, pp. 42) also note that a reserve currency should be a good store of value. The U.S. dollar served as the reserve currency for most of the 20th century and even with a lot of troubles (see section 3) it did a quite good job. In recent years the dollar has a tendency to depreciate, reducing the wealth of foreigners. With the huge CA deficit and also government deficits many investors lose confidence in the value of the dollar and diversify into other currency, weakening the dollar even further. The solution will not be a multiple reserve currency system, since this might lead to real high fluctuations of major exchange rates like the Dollar-Euro exchange rate that is detached from economic fundamentals disturbing global price relations. Therefore something has to be changed, away from a national reserve currency to an international reserve asset that represents also a global standard of value.

From a political point of view, Stiglitz's proposal might be more feasible than the 'Bancor' or Davidson's 'IMCU' plan. The proposed surplus tax might be hard to implement especially at the proposed high rate but as soon as the United States recognise that the deflationary bias of the current system depresses the American economy they can start to agree to SDRs allocations. That would already have major consequences for the whole world and reducing the pressure on American or other reserve currency countries' current accounts.

## 6.5 Gesell, Keynes, Davidson or Stiglitz?

For a better overview table 6.1 should make similarities and differences of the three proposals more clear.

### Gesell

Gesell's proposal builds on the quantity theory of money that was popular during his time. From that point of view with helicopter money determining the price level, the framework could work. Since money is created through credits, the framework does not seem so simple. Central banks still monitor the money supply but look more at inflation and make adjustments mainly according the inflation rate and other economic indices. The introduction of two different currencies in a country, even if they have the same value at the introduction could make the development of the exchange rate mainly dependent on the expectations of the persons in the economy. If they think that their own currency will depreciate in value they might try to change their wealth into the other currency depressing their own currency. As noted in section 6.1 Gesell had an other currency in mind that does not allow or make it unprofitable to store huge amounts of money, therefore it might be less disturbing with his free money. The adjustment process would be through nominal wage cuts which are unlikely. Trade Unions would want to fix their wages in terms of Iva and I doubt that the system would solve the problem that easily. Only changes of the unemployment rate will reduce trade unions bargaining power in order to allow wages to drop. In this respect the problems look similar to that of a SGC in section 7.1.2.

From a political point of view the proposal does not look feasible and probably it would also not solve the problem since countries could manipulate the mechanism in order to keep their exchange rates unchanged.

### Keynes

The Bancor plan does provide a global framework that could be used for more than the pure management of the clearing accounts. It would solve the problems of the current system by relieving pressure on reserve currency countries and introducing pressure on surplus countries. Stiglitz and Greenwald also want to generate a more stable store of value, there the possibilities of Bancor are limited, because it can not be held by the public. Therefore they can not use it for the accrument of private savings. But the whole framework will be more stable since exchange rates adjustments will be due to economic fundamentals and not according to speculators' activities. Also the variances are limited to five percent p.a. without approval of the governing board.

The introduction of the Bancor plan does not look very likely, since a lot of power be taken away from local governments to the ICU and the governing board. Especially for big countries like the United States that would lose their reserve currency with all its pros and cons unless they understand the deflationary pressure on their economy, and on the opposite China with their export-led growth strategy, probably are not willing to agree to such a system.

Table 6.1: Comparison between Keynes, Davidson and Stiglitz proposals for a New Financial Architecture

	<b>Gesell</b>	<b>Keynes</b>	<b>Davidson</b>	<b>Stiglitz</b>
<b>Clearing Unit</b>	Iva	Bancor	IMCU - International Monetary Clearing Unit	'global greenbacks' similar to SDR
<b>Institution</b>	IVA - International Valuta Association	International Clearing Union	International Monetary Clearing Union	International Monetary Fund or new institution
<b>Reserve Holding</b>		book entry at the ICU	book entry at the IMCU	global greenbacks
<b>Monetary Parity</b>	automatic through absolute valuta and currency drain	fix but alterable - not more than 5 percent without approval	fix but alterable	market driven
<b>Quotas</b>	20 percent of the national money supply	average of exports and imports of the last 3 years		according to IMF
<b>Credit Limit</b>	no limit	no limit but excess credit above 50 percent of the quote leads to measures by the governing board	no explicit limit	tax on allocation, if a country has a surplus
<b>Debt Limit</b>	since a country only has 20 percent of international 'Iva' notes, it will have to pay interest as soon as it has run out on these notes, putting pressure on the central bank to change the value of the domestic currency	payment of 1 percent of debit above one quarter of the quota and additional 1 percent for debit above half of the quota - additional measures by the governing board. Above three quarters the country can only make new debts with the approval of the governing board	no explicit limit	according to SDR allocation
<b>Adjustment Mechanism</b>	Deficit countries are running out of Iva - reduced money supply should lead to declining prices (deflation) and increasing competitiveness this should clear the CA	Countries with CA deficit are asked to take measures to improve their terms of trade in order to gain competitiveness and reduce the CA deficit - on the other side surplus countries should reduce their competitiveness by wage increase or change of the exchange rate, or increasing local demand, or give loans to deficit countries	If a poor country is in permanent deficit it is up to the rich to help the country out, if it is a rich country it should devalue its exchange rate. Surplus countries have to use their surplus for imports, FDI projects or unilateral transfer (foreign aid). Therefore no surplus build up is possible and therefore no deficits are possible either.	Adjustment through market forces but without the need for a chronic deficit for reserve currency nations because they are not necessary any more. But surplus countries could be taxed by 50 percent per unit of CA surplus up to the full amount of SDR allocation, making CA surpluses unattractive.

**Davidson**

The proposal by Paul Davidson does reflect the main ideas of Keynes' Bancor-Plan. Unlike Stiglitz's proposal, it is an architectural solution to the problem. The establishment of an IMCU is different than Keynes' ICU only in the establishment of a 'double-entry bookkeeping clearing institution'. It does not require a governing board that tells countries out of balance what to do, but it requires countries to keep their clearing account balanced.

Since the authority that countries have to give up in order to join the IMCU are more limited than in the Bancor proposal it might be more politically feasible than the original Keynes plan. Changing international demands for reserve currency and the rise of the Euro might bring the United States to agree to a fundamental change in the global financial architecture.

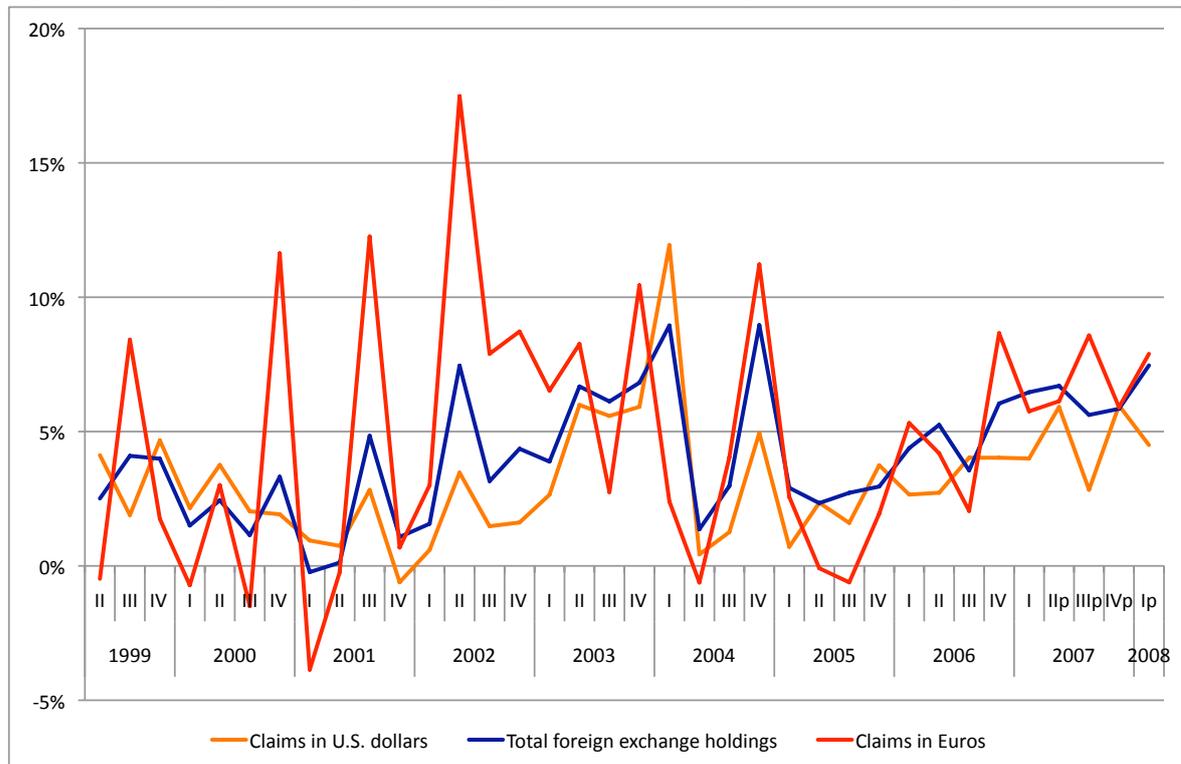
**Stiglitz**

The extension of SDRs and the proposed changes from Greenwald and Stiglitz to 'Global Greenbacks' sound like an easy solution to the current problems of the financial architecture. A successful pressure on surplus countries with the proposed 50 percent tax on SDR allocations are the crucial point in their proposal. Without this tax the whole framework does not solve current account imbalances in an active way but only through the loss of the necessity to earn foreign exchange reserves for 'rainy days.' The implementation of this crucial point might be refused by surplus countries, especially by countries that try to growth through a beggar-thy-neighbor strategy.

## 6.6 The Sub-prime Crises and Beyond

In 2007 the United States experienced a bursting of the housing price bubble. Some also call it a 'market correction', the effect of this burst and the aftermath are still present, leading to huge changes in America's policy, away from mainly liberal standpoints to more controls and regulation for financial institutions and a huge bail-out plan for institutions in troubles packed with a massive bailout by the Federal Reserve Bank and other liquidity injections from all major reserve banks around the globe. This goes way beyond the scope of this diploma thesis but the proposals would also have a huge correcting effect on future development and would avoid future downturns caused by financial institutions. One important point that the United States and probably the whole world has realised, and which is important to understand why the financial architecture has to be changed is the following: The current global reserve system fails to be stable on its own – therefore it needs regulation and speculative capital flows must be limited. Nearly all proposals have some sort of regulations and would improve performance with a new financial architecture.

Figure 6.2: **Change in Foreign Exchange Reserves Holdings in Percent of previous Quarter**

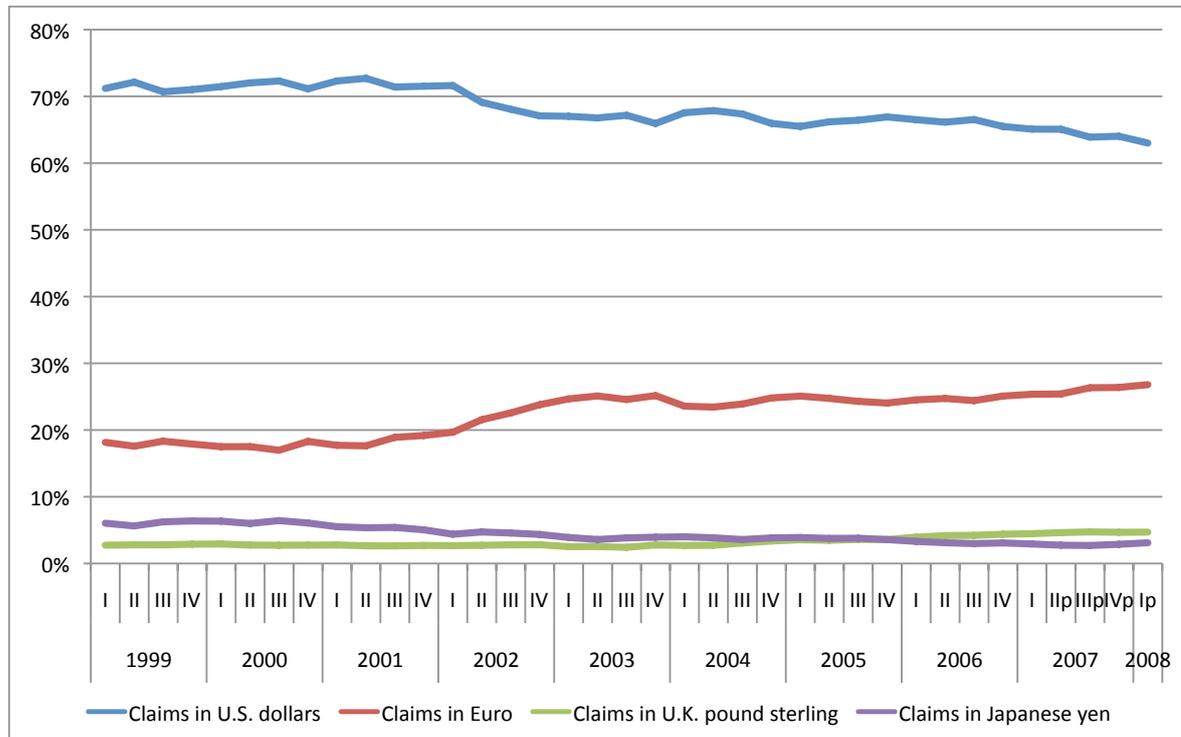


Source: IMF COFER Data

There is a line between the U.S. dollar as reserve currency and the building up of bubbles - especially credit bubbles in the United States. The massive build up of foreign exchange rates, that are mainly held in U.S. bonds, increases the available financial funding and decreases interest rates in the United States. This led to declining saving rates in the United States, because individuals faced very low interests on borrowing as well as on lending. In such circumstances it is worthwhile for individuals to take on cheap credits for financing consumption and credit institutes have an incentive to give more persons access to loans. With rising house prices more people could afford

higher mortgages on their homes and finance and refinance them after house prices had risen.<sup>38</sup> After a decline of house prices many debtors could not get new loans and many loans, especially loans of debtors with low reputations (sub-prime loans) had variable interest rates on their loans. The declined wealth of American households due to the fallen house prices started a vicious cycle: American households financed part of their consumption by mortgages on their houses, since with falling house prices households could not take on new an higher mortgages their consumption was reduced. The reduced consumption had negative effects on domestic demand leading to a higher unemployment especially by sub-prime mortgage borrowers. Many individuals had to give up their homes because they could not afford higher interest rates, increasing the amount of available homes which further reduced house prices and let to a decline in the construction industry and therefore reduced GDP growth expectations. This also had effects on the international financial markets. Main international creditors and sovereign wealth funds feared a reduced dollar value because of the possibility of a recession and the massive current account deficit. The reduced wealth of American

Figure 6.3: Share of different Currencies as Percent of Total Allocated Foreign Exchange Reserves



Source: IMF COFER Data

households led to a reduction of imports that resulted in a decline of the CA deficit. China also tried to diversify their massive growing dollar nominated reserve assets but could not reduce their dollar purchases because of their dollar peg. Even someone could expect that the demand for dollar nominated foreign exchange reserves would decline, the opposite is true as figure 4.1 shows. But there are effects, demand for dollar nominated exchange reserves is developing slower than for other currencies and total reserve holdings as shown in figure 6.2. The importance of the U.S. dollar as the

<sup>38</sup>The expectation of rising house prices has the incentive to buy a house rather sooner than later boosting house prices even more.

leading foreign exchange reserve decreased in the last decade, slowly but continuously, as figure 6.3 shows.

If there is no fundamental change in the financial architecture the increasing importance of the Euro as reserve currency and other developments for Currency Unions around the globe could resolve the current situation but will not solve the problems of 'Currency Asymmetry' for the whole world. More reserve currency countries might have the possibility to gain from seigniorage but there will still be a huge lack in effective demand because there will still be a need for global reserves also with capital controls and other sanctions and controls that might be come into force due to the experience made in the last two years.

Keynes' proposal for an 'International Clearing Union' or as a more moderate version: Davidson's proposal for an 'International Monetary Clearing Unit' would be a good solution to solve the basic problems with a 'New Financial Architecture', while Stiglitz and Greenwald's reform proposal would be a good 'plumbing' solution for the current financial architecture.

The basic changes that would take the burden of countries that are not reserve currency countries to increase their foreign exchange reserves and the related cheap credits to reserve currency countries would reduce the liability for bubbles. Probably the financial centres, especially the United States would have adjustment problems because only an increase in the domestic savings rate could provide the necessary funding for their activities, that are now financed by other countries deposits. The lack of effective demand would be compensated by increase in demand by countries that are now in surplus. They could use their wealth (exchange reserves), according to the Plan of Keynes and Davidson, for international aid but will probably use it for improvements in the domestic economy by increasing the welfare in their countries. This is not only applicable to China but to Germany as well.

### 6.7 The International Clearing Agency

Very similar to Keynes and Davidson’s proposals, D’Arista (2003) made a proposal for the establishment of an International Clearing Agency (ICA). The main principals are equal but her plan would give the ICA more power than they have in the ICU or ICMU proposals.

*”[I]nternational payments would take place through the simultaneous debiting and crediting of: (a) reserve account held by commercial banks with their national central banks; and (b) the reserve account of national central banks held with the international clearing agency. No payments would be made directly between national central banks. Nor would national central banks provide foreign currency to private sector financial and non-financial institutions. All international reserves would be held by the international clearing agency and denominated in a weighted basket of currencies. (D’Arista, 2003, p. 743)*

Therefore there would not be a ‘Bancor’ or ‘ICMU’ equal clearing unit, but an clearing unit similar to the calculated value of SDRs.

Figure 6.4: The Clearing Function

	COUNTRY A				International Clearing Agency		COUNTRY B			
	National Commercial Bank		National Central Bank		ASSETS	LIABILITIES	National Central Bank		National Commercial Bank	
	ASSETS	LIABILITIES	ASSETS	LIABILITIES			ASSETS	LIABILITIES	ASSETS	LIABILITIES
1		\$ +B								\$ -B
2	+D	\$ -B \$ +A	\$ +B	+D						
3			\$ -B +I		\$ +B	+A				
4					\$ -B	+B	\$ +/-B -I	+D	-D	-D
	+	+	+	+	0	0	-	-	-	-

KEY											
	Currency Deposit		Reserves		International	<b>A</b>	Country A	<b>B</b>	Country B	<b>D</b>	Domestic

Source: D’Arista (2003, p. 745)

D'Arista (2003, pp. 742) made a very good illustration of the '*Clearing Function*' (see figure 6.4) and the '*Adjustment in Reserve Holdings*' (see figure 6.5), which are repeated for readers convenience: In her example, she starts with an purchase of Country B from Country A (either investments, goods or services). A country B firm writes a cheque in favour of a country A firm. This firm gives the cheque to its commercial bank in return of the equivalent value in domestic currency. The commercial firm hands the cheque over to the national central bank in return of a credit to its reserves account. The central bank further demands an increase in international reserves from the ICA which will decrease the international reserves of country B's national central bank. While this will demand from the national commercial bank and further to the county B firm. The circulation is equal to a cheque drawn in any country with one additional step: the ICA and with different denominations.<sup>39</sup> As the bottom line shows there is no drain of international reserves at the ICA, only the wealth of country A and B has changed.

The system looks like it would be less restrictive in allowing the build up of debts or credits, but actually D'Arista allows the ICA to change the exchange rate with the build up credits and debts according to agreed regulations that could be 5 percent change in international reserves for more than 30 days. This would entitle the ICA to change the exchange rate through an increase or reduction of the relevant countries' government securities according to the actual value of the countries' reserves.

Normally local central banks should be able to deal with effects of exchange rate changes, but this could lead to pro-cyclical capital flows. The ICA would be able to prevent further exchange rate fluctuations through adjustments in reserve holdings of different countries, as shown in figure 6.5. There the example of figure 6.4 increased reserves in country A and reciprocal decline in reserves in country B. The ICA can now sell government securities to country A central bank by debiting their international reserve account and buy government securities from country B central bank by crediting their international reserve account without an change in overall assets or liabilities hold by the ICA. This would extend the ability of local central banks to serve the domestic economy with open market operations to fight contractionary or expansionary pressures. The ICA itself could also use open market operations direct through buying or selling government bonds from residents. A direct buy/sell of government bonds by the ICU would put an expansionary/contractionary effect on the economy with an increase/decline in assets and liabilities of the commercial and central bank and an increase/decline in the international reserve account. This action would increase/shrink global liquidity, this is different from the mechanism described in figure 6.5. (see D'Arista, 2003, p. 742 - 750)

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<sup>39</sup>The Clearing Function would be very similar in the Bancor Plan and one could think of international payments nominated in 'Bancor' for the convenience of participating actors.

Figure 6.5: Adjustment in Reserve Holdings

	 National Central Bank A		 International Clearing Agency		 National Central Bank B	
	ASSETS	LIABILITIES	ASSETS	LIABILITIES	ASSETS	LIABILITIES
<b>Stocks</b> of assets and liabilities after clearing transactions	 Other* 	 Other** 	 	 	 Other* 	 Other** 
	105%	105%	200%	200%	95%	95%
<b>Flows</b> in reserve adjustment process	 		 	 	 	
<b>Stocks</b> of assets and liabilities after reserve adjustment process	 Other* 	 Other** 	 	 	 Other* 	 Other** 
	105%	105%	200%	200%	95%	95%
<b>KEY</b>						
			<b>D</b> Domestic	<b>A</b> Country A	* Other includes loans and discounts to domestic financial institutions and holdings of other domestic securities.	
Government securities	Reserves	Currency in circulation	<b>I</b> International	<b>B</b> Country B	** Other includes government deposits and other domestic liabilities.	

Source: D'Arista (2003, p. 747)