

## A New International Financial Architecture

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### Introduction

As a result of the increasing emphasis on the debate respecting matters of international economics and the structure of the international monetary system, I have taken some time, over the past months, to look into these issues with a greater degree of care than I had done previously. Since then, I have posted a number of reports on international economic theory. Now, after reviewing some of the standard literature on international finance and monetary relations, I have decided to put forward an proposal respecting the organization of the international monetary system.

### Problems With the Three Primary International Monetary Systems

Before presenting my proposal for a new international monetary system, I will briefly outline the current principal systems by which nations establish monetary relations. I do not consider the question of international backing of currencies by commodities like gold. I believe that society has moved beyond the need back currency with legal rights to redeem commodities- whether the currency is held domestically or abroad.<sup>1</sup>

The three principal kinds of international monetary systems are: Fixed exchange rate, floating exchange rate, and single currency.

In a fixed exchange rate system, the relative prices of the various national currencies are held constant over some interval of time agreed upon by the governments involved. The constant rate of exchange might be maintained by a government through the buying and selling of its own currency in the international currency market, or by establishing rules about how its currency is to be brought in and out of its country- such as by mandating that all movements of money in and out of the country are to be made through a central bank which determines the rate at which the domestic currency will be exchanged for a foreign one. Generally, fixed exchange rate systems only function if multiple governments are in agreement as to the maintenance of a certain rate.

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<sup>1</sup> It should be noted that a government can back its currency for international holders of that currency, while not backing it for domestic holders of that currency and visa versa. For example: After WWII, and until the early 1970's, US dollars were redeemable in gold, but only for international holders of USD- while domestic holders had no legal right to redeem gold from the government of the United States with their USD.

In a floating exchange rate system, no government action is taken with the (sole) purpose of altering the exchange rate of the currency- no buying or selling of its own currency or establishing other rules by which the currency is to be held at constant exchange rates with foreign currencies.

In a single currency system, multiple countries use the same currency, eliminating the need to consider the pros and cons of the fixed versus floating exchange rate systems.

A few of the problems with the fixed exchange rate system are as follows. Imagine that two countries have a fixed exchange rate agreement between them. Say that these countries, in order to establish a fair exchange rate, decide to fix the rate of exchange based on an index of prices of the most important and abundant goods within each country. Imagine that this rate turns out to be one to one. Then, imagine that, after, this exchange rate is established, one of the countries engages in bad economic policies which result in high inflation and reductions of production. That country would be able to purchase a greater amount of wealth from the other country (which did not undergo economic decline) than it could give back in return, simply because of the fact that the exchange rate had been fixed while real purchasing power had not been. This would represent an unfair situation, and would probably lead to conflicts between the two nations.<sup>2</sup> The same situation could arise if one country were to grow faster than the other. Fixed exchange rates could also provide greater opportunities for disruptive goods arbitrage. This would reward a country for failure and punish a country for success. For example, if two countries start with an exchange rate which is reflective of the relative prices in each country, then no goods arbitrage would occur. Imagine, then, that one of those countries increased productivity to increase the real wealth obtainable per unit of national currency. Because the exchange rate would still be fixed, merchants in the poorer country could buy more product in the country which advanced than they could at home, and subsequently resell that product in their home country. This would deprive the advanced economy with the wealth due to it, while also harming the sales of the productions firms in the less advanced economy.

On the other hand, fixed exchange rates eliminate the economic waste associated with currency speculation. Related to this, they also provide security to long term investors- and especially for

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<sup>2</sup> It should be noted, however, that, if the exchange rate of the currencies were fixed by government market intervention, the maintenance of the exchange rate of the currency of the depressed economy could only come at the expense of that government. That government would need to give up international reserve currency, valuable commodities, or something else in order to maintain the currency value. Thus, it would not really be unfair to the rest of the world if the currency was maintained in that particular way, since it would be purchased from the rest of the world at the price of the reserves etc. expended in the maintenance of the exchange rate. However, if the exchange rate were to be established through some sort of agreement, and not by market intervention, then the situation described would, indeed, be unfair to the countries which were not having economic problems.

investments secured by the stated commitments of the relevant governments to maintaining a fixed exchange rate over the time interval in which the investment is to reach maturity.

The pros and cons of the floating exchange rate system are essentially the inverse-correlates of the pros and cons of the fixed exchange rate system.

The single currency system eliminates the problems associated with both the fixed exchange rate system and the floating exchange rate system, but introduces the serious problem of the elimination of control over the domestic currency by the national governments of the countries involved. If the government of a country does not have the ability to control its own money supply, then, not only is it no longer capable of engaging in monetary policies which could improve economic conditions, but the country becomes vulnerable to economic manipulations, through the control of money, on the part of whomever it is that does, in fact, control the supply and distribution of the international currency.

All this considered, we are confronted with the following practical question of international monetary theory: How are we to create a system in which the “market mechanism” of arbitrage is capable of bringing currencies into their “proper” exchange ratios, while ensuring that, at the same time, the door is not opened for speculation and the pernicious effects thereof? In other words, how do we ensure that the exchange rates of currencies will reflect only the demands of the trade of actual goods and services, while remaining closed to speculative activity?

We might ask, on our way to finding an answer to that question, how do we allow the “free market” of *only persons engaged in goods/services sales and purchases* to determine the exchange rate of currencies? How do we remove the disease of speculation while maintaining the benefits of market determination of currency exchange rates?

A further practical question to be considered is how a non-national currency reserve currency is to be established. The use of the currency of one country as the international medium of currency exchange provides certain exclusive benefits to that country. This is justifiably viewed as unfair. The issue of the nature of the international reserve currency, and the international monetary architecture meeting the above mentioned requirements, can only be addressed together given their complex interrelation.

I have thought of various ways in which these problem can be addressed. I will present two alternative approaches. I present these approaches below because I have not seen them presented anywhere else, though I am not sure things like the systems I will describe below have not been enunciated by others before. It will be noticed that neither of the two systems involve a characteristic which seems to be accepted as a self-evidently necessary feature of international

monetary systems, namely, the establishment of a free currency market. That is, whether it be a floating exchange rate system, or a Bretton-Woods style fixed exchange rate system, the common feature is the ability for anyone to buy and sell national currencies as they please. The only important difference between floating and fixed exchange rate systems which have this common feature is whether the governments involved have a policy to intervene into the otherwise free-market of currency trading in order to maintain the exchange rate of the currency at a particular level. In the systems described below, there are no free-markets for currencies. The only entities (other than specially authorized entities like government agencies) that will be able to purchase and sell currencies internationally (Or, as will be seen, better said “*initiate* the purchase and sale of currencies internationally”), are those entities which require those currencies for the purchase of goods and services internationally.

Of the two systems I will present, I favor the one which I will present first; a system I call the *Constrained Market Model*.

### **The Constrained Market Model**

The constrained market model is a system in which trading of international currencies only takes place in conjunction with the international purchase or sale of goods, or in conjunction with the issuance or payback of loans made for the purpose of facilitating the international purchase or sale of goods. The system achieves this by prohibiting the movement of national currencies internationally except through authorized institutions. These authorized institutions will act as the vehicles through which importers and exporters in different countries will coordinate payments for goods and services. The system ensures that no currency speculation occurs. Further, as an important feature of this system, an international reserve currency is proposed, which is not the national currency of any one nation. This ensures that no unfair advantages are attained by a country the national currency of which is also the international reserve currency, while also removing certain vulnerabilities to countries, other than the reserve currency country, which are endemic to such a system.

In order to convey the idea of this system, consider the following illustration in which a group of countries operates in accordance with that system.

Imagine the following:

Each of the nations participating in this architecture has a unique national currency. Each nation has a central bank, or equivalent institution of authority. Each nation prohibits the receipt of foreign currency by private citizens except through a special mechanism. This includes the purchase of foreign currency with the domestic currency, the receipt of foreign money for the

delivery of goods, or the receipt of gifts of foreign currency, or loans of foreign currency. What is the special mechanism which would ensure that international commerce would not come to a halt under such restrictions? A central exchange authority CEA, would exist in every country, housed, perhaps, in some official institution of government, like the central bank, or treasury. How would this CEA work?

Since all of the nations involved in the system have laws prohibiting the receipt, by any private entity, of foreign currency, no purchaser in country A would be able to either directly pay a seller in country B with the national currency of A, or use the national currency of country A to purchase (and, therefore, receive) the currency of country B with which the purchases would pay the seller in B. The CEA would act as the mediator between the purchaser in country A (PA) and the seller in country B (SB). The CEA of each country would receive its respective domestic currency from domestic purchasers desirous of foreign goods; then, the CEA would use that currency to purchase the foreign currencies of the nations from which the domestic purchasers desired goods. From whom would the CEA purchase this foreign currency? From the other CEAs, which would be the only holders of the national currencies of their respective countries (besides the entities in those countries- who would not be capable of selling currencies internationally). Once the required amount of foreign currency was obtained, that currency would then be transferred, with the help of the foreign CEA involved, into the foreign account of the seller in the foreign country from which the domestic purchaser desired import goods. In the end, the purchaser receives the desired goods, the seller receives his domestic currency, and the CEA of the seller's country receives reserve currency with which it can make future purchases of international goods.

Let us use a concrete example to make the architecture of the system clearer. Say a purchaser in country A, (PA), wishes to purchase some goods from a seller in country B (SB). Since PA would only have the currency from country A (CA), and would not be able to buy any of the currency of country B (CB) for himself with which he could pay SB, PA must go to the CEA of country A (CEA-A) and pay SB through their system. CEA-A informs PA how much CA will be required to ensure that SB receives enough CB to meet the asking price of the goods being purchased from SB. How does CEA-A know the amount of CA which will be required for this? Because, CEA-A will know 1.) The price, in CB, of the goods being sold by SB. 2.) The prevailing rate of exchange between CA and the international reserve currency (IR)- that is, the maximum amount which CEA-A is able to sell CA for IR in the international market (the international market being the CEAs of other countries acting as vehicles, of sorts, for the importers in those countries). 3.) The price, or rate, at which the CEA of country B, (CEA-B) is buying IR with CB. Thus, PA will be able to see, immediately, how much a purchase of a specific good in another country will cost him in CA. If PA finds the goods to be worth the cost, then PA pays the amount quoted by CEA-A; CEA-A then sells that CA for IR (purchases IR

with that CA) at the market rate; CEA-A then transfers that amount of IR to CEA-B; CEA-B uses that IR to purchase the corresponding amount of CB; that amount of CB is transferred to the account of SB; SB then sends the goods to PA.

The third to last step might have caught the attention of some readers “CEA-B uses that IR to purchase the corresponding amount of CB”. To whom would CEA-B sell IR in exchange for CB? It would be to the exporters in B. To clarify this, while, at the same time, further illustrating how the system works, we will identify the different conditions under which the CEA will operate.

**Trade Equilibrium:** In trade equilibrium, the rate of imports equals the rate of exports. In this condition, the rate of domestic currency being turned over to the CEA by domestic purchasers of foreign goods equals the rate of domestic currency being turned over to domestic exporters. That is, the rate of domestic currency inflow into the CEA by domestic importers will equal the rate of outflow of domestic currency to domestic exporters receiving (indirect) payment from abroad. At the same time, the rate of outflow of IR used for the purchase of foreign currencies to be used as payments for foreign goods, will equal the rate of inflow of IR from foreign CEAs acting to purchase the currency needed to purchase the goods desired by the importers in their respective countries.

**Trade Imbalance:** In a trade imbalance, the rate of imports does not equal the rate of exports. If one country, say A, has a negative trade balance, the rate of imports would be greater than the rate of exports. The effective demand for CA, by international purchasers, will be less than the effective demand, by holders of CA, for IR.

In a situation in which the rate of imports is greater than the rate of exports, the deficit country has a few different courses of action:

- 1.) The effective demand for CA, by international purchasers, will be less than the effective demand, by holders of CA, for IR. By necessity, the price, in IR, at which the CEA-A sells CA to the international market must be lowered. The devaluation of CA relative to IR will tend to increase the amount of purchases of goods produced in A, (as a result of the lower effective price of goods made in A). At the same time, the devaluation will tend to decrease the amount of purchases of foreign goods by importers in A, as they will be, effectively, more expensive. The result is that trade imbalance in the rates of imports to exports will eventually stabilize.

- 2.) The CEA of the country can utilize the reserves of IR which it has to continue to facilitate imports while keeping the price of CA (in terms of IR) the same. This is not something which can be done indefinitely, as no country would have an unlimited supply of IR. If this is done, CA

would accumulate at CEA-A, as the amount of exporting by entities in A would not be sufficient to reabsorb the CA given to CEA-A by the importers in A. This could lead to currency shortages in the economy of A, shortages which could be remedied by increasing liquidity in the economy of A in the most economically sound fashion. Should the balance of trade of A turn positive, the outflow of excess CA from the CEA-A to the exporters in A could be “sanitized” by restrictive monetary policies if such should be deemed necessary to control inflation. CA accumulated at CEA-A should be kept on hand for future trade surplus requirements.

3.) Restrictions on imports of various kinds can be adopted: Tariffs, Import limits, etc. One feature of this *constrained market model* is that limitation of imports from specific countries becomes a very simple affair, as the government can simply place a limit upon the CEA as to how much of the national currency of a certain foreign country it will be allowed to buy.

4.) A combination of 1, 2, and 3 can be adopted.

If one country, say A, has a positive trade balance, the rate of imports would be less than the rate of exports. The effective demand for CA, by international purchasers, will be greater than the effective demand, by holders of CA, for IR.

In this situation, the surplus country has a few different courses of action, which are essentially the inverse of those listed as responses to the above mentioned inverse situation:

1.) The demand for CA will be greater than the demand, by importers in A, for foreign currencies. CEA-A could allow CA to appreciate in value relative to other national currencies. The increase of the international price of CA (in IR) will lead to a reduction of exports from A, and an increase in imports to A. Eventually, the rates will balance. I would note here that the description here is idealized- really, if a country were to commit only to currency revaluation as a measure, the revaluation would not come in response to trade imbalances, but, rather, trade would keep a relatively steady balance, while the currency values changed in response to the demands of the market.

2.) CEA-A could, instead, simply allow IR to accumulate while keeping the exchange rate of CA stable. This would be accompanied by a deficiency of CA at CEA-A with which the exporters in A would need to be paid. There would not be enough importers in A providing CEA-A with the CA needed to pay the exporters in A. The CA needed to pay the exporters in A could be provided through various means, such as allocations of government budgets to the payment of exporters; which would be, essentially, the government buying IR with which it could make international purchases at some future time. Increasing the money supply of A through creation of new CA with which to pay exporters is an option, so long as inflation does not threaten. Such

money increases could be “sterilized” in various ways. Also, if CEA-A had accumulated any profits of CA through things like the charging of fees for services, that money could also be allocated, though it would probably be to miniscule to serve that purpose for any appreciable amount of time.

3.) Restrictions on exports of various kinds can be adopted.

4.) A combination of 1, 2, and 3.

### The Nature of the International Reserve Currency (IR)

In order to avoid the above discussed problems of having the international reserve currency be the national currency of a particular country, the IR to be used in the system would be one established by the agreement of the nations participating. Each nation could pay into an account, perhaps at the IMF, or some other institution, in their own currencies; the amounts determined by something like total GDP or trade volume. These national currencies then provide the basis for the issuance of a new IR which is to be used solely for trading currencies; each unit of IR representing a claim on all of the currencies backing it, in the proportion that those currencies are present in the initial subscription from the members of the system.

### Bilateral Arrangements

It should be noted that this system would not undermine the ability of nations to establish bilateral economic arrangements in which, for instance, a direct exchange of national currencies takes place between two countries for the purpose of ensuring the basis for the facilitation of the payments associated with some bilateral economic arrangement with those countries have established.

### **The Goods Price Index (GPI) Adjusted Exchange Rate Model**

In this system, all international purchases and sales of goods and services to be made by entities in a country are coordinated through a central agency- as in the constrained market model. This central agency, which, we will, again, refer to as CEA, will purchase the currencies of other countries directly from the CEAs of other countries. These purchases will be made at a certain exchange rate agreed upon by the CEAs involved in the system. The exchange rate between national currencies will be determined by a commonly agreed upon goods price index, regularly updated at a frequency agreed upon by the countries involved. All purchases of foreign goods will be made through the CEA of the two countries involved in any transaction. The domestic



currency needed for the transaction is deposited at the CEA by the importer. The CEA then uses that currency to purchase the foreign currency from the CEA of the foreign country, which is then transferred to the account of the exporter in that foreign country.

Relative deficits and surpluses in the currency holdings of the different countries involved can be cancelled out in the fashion of a clearing house on a regular basis. The currencies will be backed by the economies of the countries involved. There will be no international reserve currency, as the direct currency swaps between each nation's CEA will eliminate the need for one. There will be no standard reserve commodity to settle account imbalances. Arrangements can be made between nations on a bilateral basis in which various kinds of collateral agreements are made should it be found prudent to do so in the face of the prospect of high levels of accumulation, by one country, of the currency of another country.

As can be seen, this system would satisfy the goals which were deemed worthy of pursuit at the beginning of this report: namely, the establishment of a currency system in which exchange rates can adjust to reflect the purchasing power of each national currency, and, thereby, the proper level of demand which should be placed upon the currencies, while, at the same time, eliminating the possibility of speculation.

It may be difficult to establish consensus on the GPI however, and there may be certain problems inherent in the attempt to compare purchasing power of currencies in this way. However, it is still an elegant design, and may prove so in practice as well.