

REFORMING THE INTERNATIONAL MONETARY SYSTEM

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Introduction

There is by now a general consensus that the financial liabilities the US have been amassing on account of its large trade deficits poses a general threat for the US as well as the world economy. However, how and why differs markedly as to whether global imbalances are read from the current or the capital account side. In the former case, the problem begins with overspending in the US and persists because of the policy exchange rates pursued by at least some of the countries running trade surpluses. The former causes trade imbalances to emerge in the first place while the latter prevents market forces from correcting those imbalances. This way of looking at the problem presupposes an *international* economy consisting of national economies with their own distinct systems of financial intermediation. For remedy, it points to measures that can on the one hand enhance exchange rate flexibility and on the other curtail spending in deficit countries like the US while raising it in the surplus countries like China. While overspending used to usually be blamed on government budget deficits, this time after the crisis the failure of US macroprudential regulation to detect and prevent excessive credit growth seems to have become the preferred explanation.

A very different picture emerges however when the issue is looked at from the capital account side, which in our view is more consistent with an emergent *transnational* global economy that is characterized by an increasingly unified system of global financial intermediation. In this setting, the FED is not only an essential player but in fact the operator of this vast system of indebtedness that is denominated mainly in dollars. US policies thus impact not only what happens in the US but the whole structure of international commitments and the viability of payment flows in international financial markets.

In this *capital-account* view, for instance, the US credit boom was perversely functional because it kept alive a dysfunctional system of global financial intermediation - albeit in an unsustainable way, because currency crises of the 1990s made it increasingly more difficult to channel investment to the rest of the world. Now, with the financial crisis, this system of global financial intermediation has begun to unravel. In our view, global disintermediation is the paramount problem that needs to be addressed in connection with the global economy today in the aftermath of the crisis.

In Part I, below, we argue that the main challenge we currently face is the threat of financial disintermediation on a global scale. We then go on to discuss the political and economic impasse the world economy is in today as a prelude to Part II, where the different proposals that have so far been advanced to reform the international monetary system are critically discussed in terms of both their real world relevance and their effectiveness in reviving global intermediation on sound footing. This section ends with our own proposals that we believe can be viable in the current environment. We end with a few concluding remarks.

Part I: The Current Impasse

I.1. Rise of Global Financial Intermediation

Looked at from the point of view of the capital account, the global predicament can be said to be based on three things. One is the “exorbitant privilege” the US enjoys on account of the dollar being the international reserve currency. This gives rise to the need for large US trade deficits, which in turn poses a potential threat for the confidence in the dollar as Triffin had recognized as early as in the early post WWII period. Second, a global system of financial intermediation where the US acts as the world’s banker, issuing short term liabilities to the rest of the world while making long term investments in other countries. This makes currency mismatch a pervasive problem, creating the potential for exchange rate volatility to destabilize credit expansion throughout the world. Finally, the US remains the safe haven and thus the destination of the ‘flight to quality’ in the world economy as has been evident since the crisis. The second feature however is the key to understanding how global intermediation began to take shape by the 1990s.

Two distinct forms of intermediation at the global level can be distinguished in the early post WWII era. One, as in long term US investment abroad, involves foreign borrowers who owe debts directly or indirectly to US banks whose liabilities are held by US based creditors, the holders of bank deposits who would normally want to stay in dollars. Since banks’ receipts are in dollars and deposits are held in dollars, currency mismatch is not here an issue of concern. The US short term borrowing throughout the same period is the second form of intermediation where the roles are reversed between foreigners and US entities. Debts are still denominated in dollars and banks receive dollar payments, but now creditors are foreigners who need to be induced to hold their deposits in dollars since they have no specific reason to stay in dollars. While the former intermediation is bigger and more important than the latter during the early part of the post WWII era, the latter acquires an importance comparable to the former by the 1980s, turning currency mismatch in the banking system into a potential problem.

Beginning with the 1990s, the two forms of intermediation begin to get intertwined as short term borrowing becomes increasingly the source of funds that finance a rising proportion of US long term investment in other countries. In other words, the US progressively turns into the world’s banker. It issues short term liabilities to foreigners and makes long term investments in the rest of the world. During this time the overall US current income account deteriorates as US entities begin to get an ever smaller part of interest income from total dollar denominated debts worldwide. Even though the US net asset position eventually turns negative in the new century its net income flow in the current account remains positive and actually begins to rise more recently – a fact consistent with its role as being the world’s banker making long term investments at a yield higher than on the short term liabilities it issues.¹ Other countries’ need for dollars

¹ US have experienced substantial capital gains in recent years in its FDI and equity in the rest of the world due to appreciation of foreign currencies against the dollars. See, Lane & Milesi-Feretti (2008) for a detailed discussion of these valuation effects on the US external position. The improvement of US net

did not diminish because of these changes. On the contrary, the rest of the world needed dollars as a result not only to trade and service debt, but also to make investments in.

This emergent system of global financial intermediation had the following hallmarks. First and foremost, bank deposits that financed the dollar denominated long term debt held by borrowers in developing economies were now held increasingly by foreign entities that had no special preference for dollars. Thus, currency mismatch, only a potential problem in the 1980s, turned into a pervasive one by the 1990s. Second, financial liberalization around the world turned variable price assets into the main conduit of capital flows. Compared to the fixed price bank loans of the 1980s, such variable price assets blurred the distinction between borrowing and sale of equity, making long term investment much easier to reverse and speculation less costly. Finally, central banks lost a good part of their ability to control credit expansion in their respective countries. This was true not only in the periphery but the US as well – though, countries that resisted capital account liberalization fared considerably better.

I.2. Global Financial Intermediation under Distress

Because banks and financial institutions around of the world hold vast quantities of dollar denominated assets against liabilities that need not be in dollars, periods of ebbing confidence and flight from the dollar squeezes net worth of international banks and financial institutions. The viability of the system requires that banks and other financial units can issue new liabilities with ease to retire maturing debt. But, increased expectations of dollar depreciation can constrain financial units' ability to market new liabilities in dollars. If they are forced to shift increasingly to liabilities in other currencies that are becoming more expensive in terms of their assets ebbing confidence in and depreciation of the dollar is liable to cause credit contraction in international banks. That makes the overall viability of the system dependent on official purchases of new (and now old as well) dollar liabilities to counter the negative effect of ebbing confidence on credit, but yet the demand injection past a threshold runs the risk of increasing the flight from the dollar and thus requiring an even larger dose of demand injection down the line that is not sustainable.

This seems to be the gist of the constraint policy makers are facing in the US today. It is often thought that the exceptional ability to issue liabilities in its own currency makes the US immune to the potential conflict between domestic policy objectives and international payment obligations that so often bedevils policy makers in other countries. Even if applicable in good times, this proposition however can hardly be said to apply today. Since the financial crisis US economic policy autonomy has evidently been shrinking rapidly and it will not be surprising if this trend continues unabated in the period ahead.

income position in its current account just as its net asset position turned negative has also given rise to the mistaken notion that its overall external deficit is illusory (Hausmann & Sturzenegger 2006).

That the US might be facing an external constraint might however not yet been fully registered, perhaps because until recently the destabilizing effects of currency mismatch and exchange rate instability were only felt in emerging economies, bolstering the misleading notion that this was mainly so because of the relative strength of *Anglo-Saxon* capitalism. Throughout the 1990s it was mainly (though not exclusively) the emerging economies that were plagued by volatile capital flows, sudden stops and abrupt capital flow reversals. After the Asian crisis, however, US long term investment also became increasingly volatile, setting the stage for the global financial disintermediation we face today.

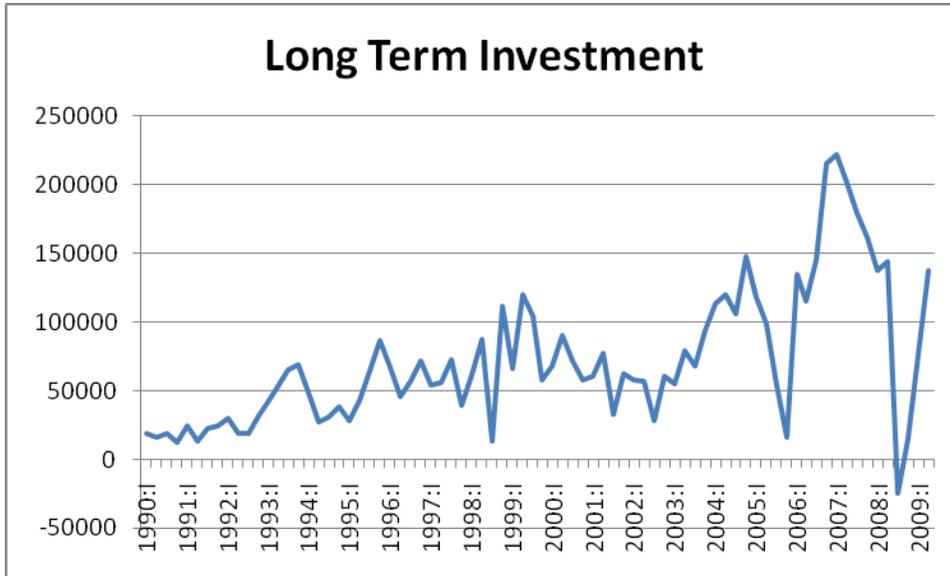
The period since the early 1990s can be broken down to three sub-periods to track problems in global financial intermediation. The trend of three variables – current account balance, long term investment, and US short term borrowing – summarize how global financial intermediation began to run into problems.

- i. 1990s prior to the Asian Crisis
- ii. From Asian Crisis till the Financial Crisis
- iii. After the Financial Crisis

During (i), the outflow of US long term investment (Graph 1) rises steadily along with US short term borrowing from the rest of the world (Graph 2), while the trade deficit (Graph 3) remains relatively modest. To acquire dollars countries as always have had either to run trade surpluses, borrow or sell assets– ignoring of course foreign exchange reserves which were not as significant until much more recently. Dollars accumulated unevenly in the hands of a few successful exporters - first Japan and Germany, then, China, the oil exporters and a few others. Quite often, the prevention of currency appreciation was the *sine qua non* of their success,² which also became the means to build up a war chest of reserves to deter speculative attacks on their currency. Less successful exporters by contrast had to attract foreign capital to avoid running into balance of payments difficulties. They had to compete against each other in making themselves more hospitable for foreign investment which, incidentally, helps explain how and why financial liberalization could spread so quickly around the world during this period. While some countries hardly received any capital, others were drenched, making it hard to tell who was better off as the capital inflow was both volatile and strongly procyclical. In fact, the system worked like the pre-1914 “gold standard” – highly stable in the center and riddled with boom and bust cycles in the periphery, where capital-account driven boom and bust cycles culminated in one currency crisis after another in the emerging economies throughout the 1990s. But, the system went well beyond transferring trade surpluses to deficit countries as trade imbalances were dwarfed by the total flow of funds intermediated by the US financial system.

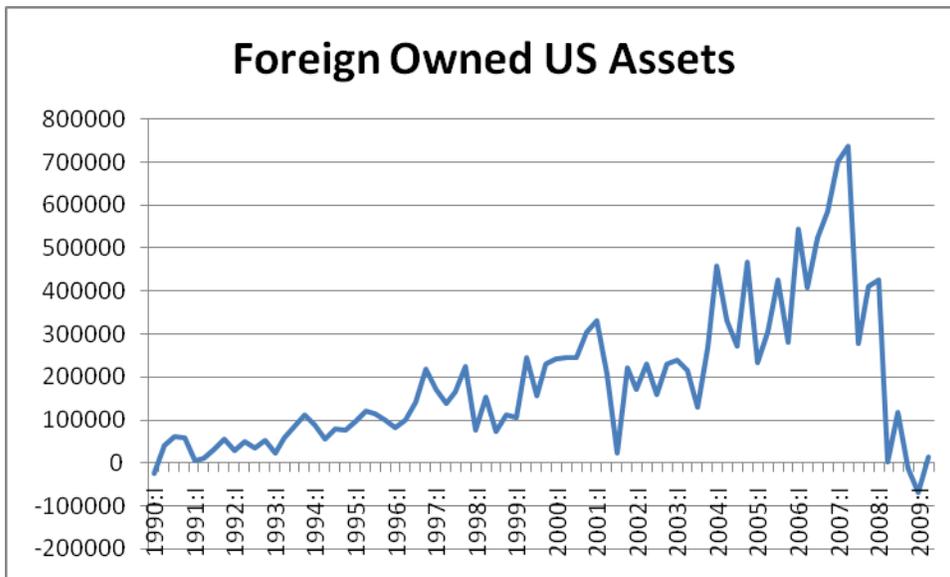
² The link between an undervalued real exchange rate and growth shows up clearly in cross-country regressions (Rodrik 2008). Also, Japan is an exception that proves the rule, showing that currency appreciation against the dollar was in fact self-limiting as it led to falling exports and curtailing demand for the currency in question.

Graph 1



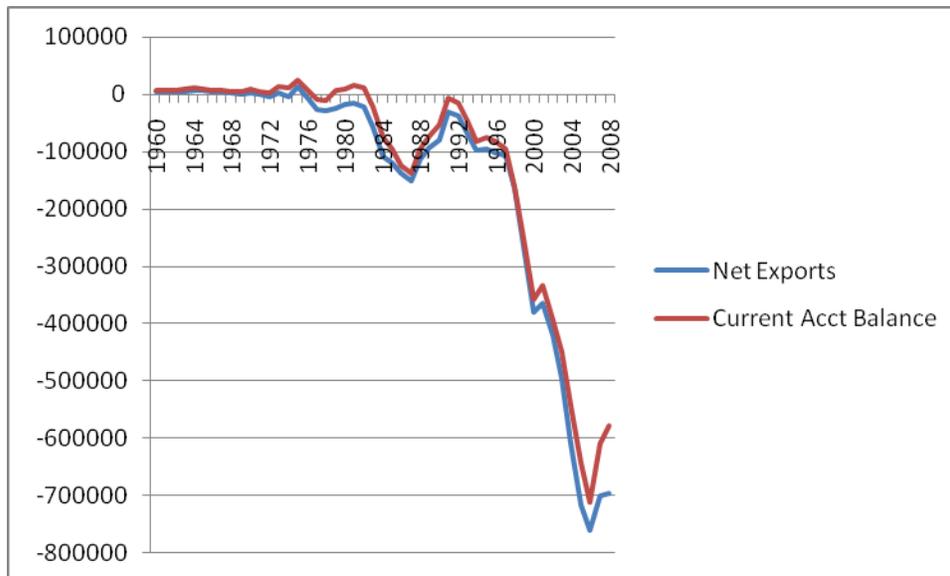
Source: Bureau of Economic Analysis – International Economic Accounts

Graph 2



Source: Bureau of Economic Analysis – International Economic Accounts

Graph 3

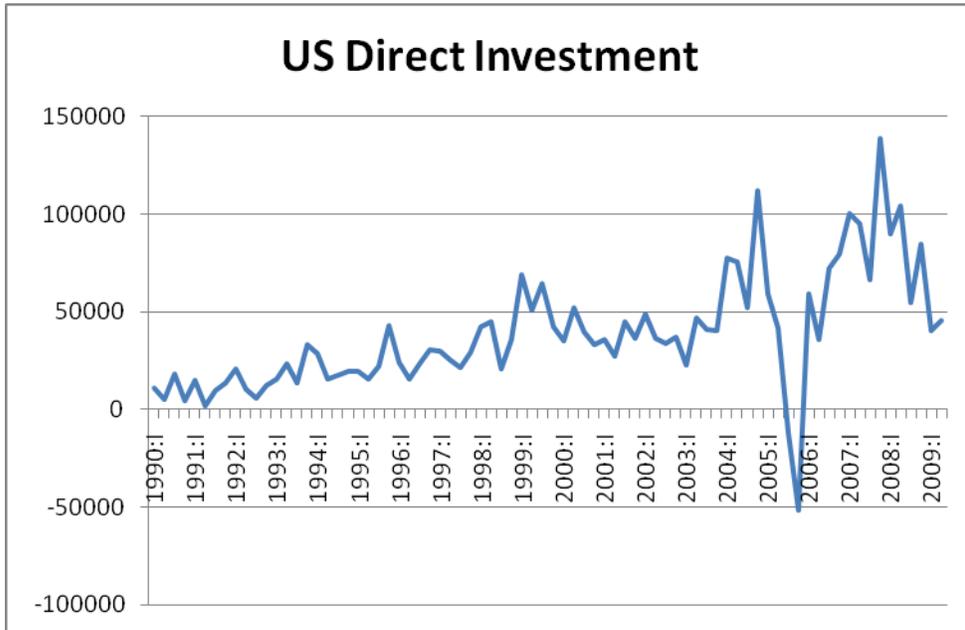


Source: Bureau of Economic Analysis – International Economic Accounts

In sub-period (ii), the two main components of US long term investment – direct investment (Graph 4) and purchase of long term securities (Graph 5) – begin to exhibit wide fluctuations. They fall after the Asian crisis through the end of 2002 at a time when lending to the US also rises, when a widening trade deficit ends up being the balancing item.

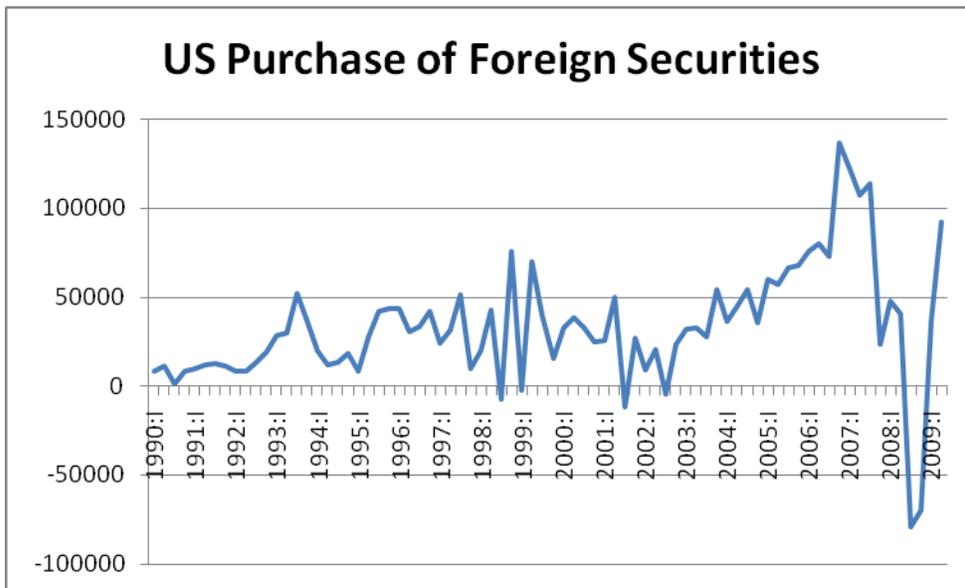
A *capital account* side interpretation suggests that the rising trade deficit was here the effect, an outcome of the falling US saving rate associated with the credit boom which was in turn triggered by the decreased outflow of long term US investment along with the increased lending to the US. Thus, whatever “savings glut” there was it was caused as much by falling US long term investment as by increased lending to the US. It appears that long term investment shifted onto more developed economies with greater reservoirs of creditworthiness, the US first and foremost among them, once it became harder to invest overseas – both because of the increased currency risk due to contagion and currency crises and falling returns on real investment due to overcapacity.

Graph 4



Source: Bureau of Economic Analysis – International Economic Accounts

Graph 5



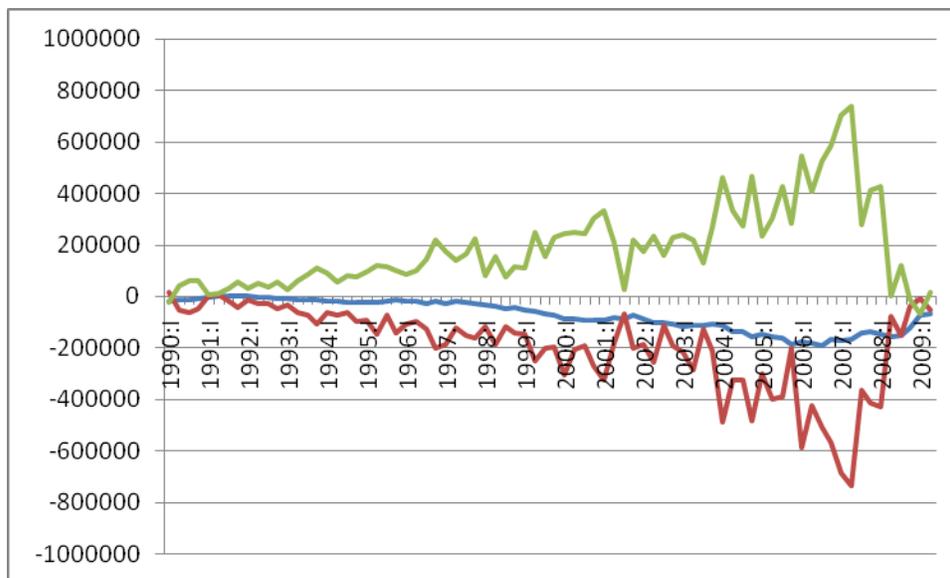
Source: Bureau of Economic Analysis – International Economic Accounts

I.3. Threat of Global Financial Disintermediation

Following the downward trend after the Asian crisis long term investment has become hypersensitive to US interest rates (and later exchange rates) and increasingly more volatile. Around the end of 2002, low interest rates stimulated a sharp outflow, which abruptly ended by the end of 2004 when the interest rate rose steeply. The overall effect of the interest rate hike was strongly expansionary domestically in the US due to its impact on reversing the capital outflow – reminiscent of the decreased capital outflow from the US to Europe after the interest rate hike in 1928. An even more explosive outflow in the US long term investment started in the first quarter of 2006 only to end with a sharp reversal after the onset of the crisis in 2007. Unlike the end of 2003, interest rates did not fall but the value of the dollar did.

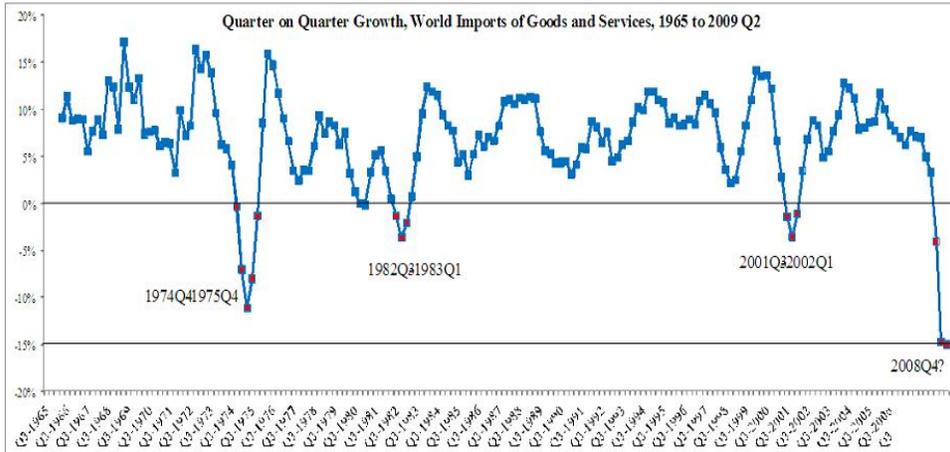
(iii) Graph (6) gives a picture of the global financial disintermediation that appears to have set in after the financial crisis - where the US trade deficit (blue) is dwarfed both by US long term investment (red) and its export of securities (green) to the rest of the world before the crisis – and help put in perspective the dramatic collapse in global trade (Graph 7) since the latter part of 2008, which has been steeper than the contraction experienced during Great Depression. Since the recent revival in world industrial production since the early part of this year the contraction in global trade appears to have abated. But, despite a modest uptick in the most recent available data, world trade flows remain depressed even in comparison to the comparable stage of the Great Depression (Graph 8). Another aspect of global disintermediation has been the growing importance of local currency bond markets in emerging economies, which have doubled in size since 2000 (Dalla & Hesse 2009).

Graph 6



Source: Bureau of Economic Analysis – International Economic Accounts

Graph 7



credit might be negligible as well. Foreign entities overseas, just like the US banks, might be using the increased policy induced capital outflow from the US to shore up their reserves rather than expanding credit. In fact, record low spreads on emerging market sovereign bond yields over US Treasuries, more than halved in 2009, seems to be stimulating many reserve rich countries (e.g., Qatar, Russia, Kazakhstan (*Financial Times*: November 18, 2009) to issue record high debts to shore up their war chests against future emergencies. These countries are basically shorting dollar as they seem to expect that they will be paying their debt in the future with cheaper dollars. Thus, a low dollar is more likely to have a contractionary effect on worldwide credit expansion because it squeezes banks' net worth overseas.

In fact, when dollar depreciation is hastened past a certain threshold the contractionary effect on credit seems to take the upper hand, with any adverse news causing the commodity prices to fall, risk aversion to rise, and creditors flocking back to the "safe haven" of dollar assets, checking or even partially reversing the falling value of the dollar. In turn, when improved outlook on the dollar bolsters bank net worth causing credit to rebound, risk aversion falls, growth starts to pick up and the cycle repeats itself. This describes in a nutshell the structural impasse we seem to be currently in. (The simple dynamic model in the Appendix highlights its essential features.)

1.5. The Way Out of the Impasse?

International currency/payment reform can potentially break this impasse. In our view, it might become politically viable in two different ways. One is through the enlightened leadership of the US and international cooperation perhaps at the level of G20. This route appears unlikely today given the lack of interest on the part of policy makers in the US. The other route might be more indirect, involving the roundabout impact rising cost of inaction could have on decision makers and the policy debate, especially in the US where arguably the full implications of the current impasse - 10% plus unemployment and stagnation for years to come - has not yet been fully factored in the political equation.

However, it is also entirely possible that US policy makers might respond in a shortsighted way to their growing inability of to reflate the economy because of the foreign constraint, seeking solace in weak dollar. In fact, barring international reform, a collapse of the dollar and a slide into a multicurrency system can be said to be in the US interest – analogous perhaps to going off the gold in 1933 – as it will free its hand to reflate its economy. The dynamic that can bring this about can be quite similar to what is described in the second generation currency crisis models. In the European crisis of 1992-3, the conflict speculators perceived between the fixed parity and the change of direction in macroeconomic policy that appeared likely in the light of unexpected economic developments was perceived to be the main problem. Speculators attacked the currencies of those countries they thought could gain more from abandoning the fixed parity than defending them. Governments ended up *ratifying* these speculative attacks by changing course, even though their original policies would have been viable had it not been for the attack on the currency.

On the other hand, a collapse of the dollar and slide into a multicurrency system is hardly in the best interest of developing countries. From their point of view, the challenge is to put to use their large reserves of dollars to revive financial intermediation that can assist development. If this cannot be achieved globally because of the intransigence of the US, the current regional efforts in establishing monetary unions in Latin America and South East Asia can perhaps provide a second best solution.

Part II: Paths to Reform

There is considerable variation in views on the kinds of reform proposals that should be adopted and about the urgency with which they should be undertaken. The United Nations Report of the Commission of Experts sees a new global reserve currency as “an idea whose time has come” and takes the view that it is imperative that the international community begin working on such a proposal (UN 2009). The Commission and other analysts find the continuation of the current system – the use of assets denominated in national currencies as international reserves – objectionable because it has contributed to global imbalances and inequities by channeling capital flows to countries that issue reserve currencies.

On the other hand, some believe that the current system may simply evolve over time as preferences for longer-term investments reduce the need to hold short-term liquid assets (Feldstein 2009). Staff economists at the International Monetary Fund think the timeframe and tradeoffs for implementing reforms suggest “that the current system, suitably strengthened, may endure for some time longer” even though recurring bouts of instability indicate “a need to look for durable remedies”(Mateos y Lago et. al., 2009). While these economists do not argue that the current system should continue, the statement reflects the skepticism of some about the ability of those who favor moving to a new system to implement far-reaching reforms.

Meanwhile, many also assume that shifting from a key currency system by increasing the number of currencies used to acquire international reserve assets would add diversity and stability. But even those that accept such a solution as inevitable caution that it will require deep and liquid financial markets for added currencies, their wide use in private sector transactions and the willingness of the issuing countries to allow investments in national financial assets on a scale necessary to accommodate the demand for reserves (ibid.).³

³ This could be an especially difficult problem if there were a larger demand for euro reserves since the assets preferred by reserve holders are government securities. While all such securities in the euro area are denominated in the same currency, perceptions of credit-worthiness vary and could concentrate investment in a few countries. Greenwald and Stiglitz (2008) argue as well that the EU’s growth and stability pact tends to restrict expansionary policies and that the failure of governments in whose securities reserves are invested to respond effectively would result in strong deflationary pressures.

Others oppose shifting to a multicurrency system, arguing that, in addition to increasing exchange rate volatility, international reserves denominated in any national currency couples reserve accumulation to the deficit position of a reserve currency country and is therefore inherently unsustainable (Greenwald and Stiglitz 2008; Ocampo 2009). Nevertheless, the shift from a key currency system to a multicurrency system is likely to take place if coherent and coordinated action to reform the system is not taken.

The following sections describe and analyze the three main paths toward reform that are currently under discussion. The first section looks at previous experience with multicurrency systems and describes the problems such systems have caused in the past. The second section outlines the various proposals for a non-national reserve system based on increased issuance of special drawing rights (SDRs) and the third explores proposals for the creation of new non-national reserve assets not based on the SDR and issued by international agencies other than the IMF.

II.1. Reviving the Multicurrency System

Advocates of a multicurrency reserve system are reinventing an old wheel. Such a system came into being after the collapse of the Bretton Woods agreement in the early 1970s, involved most of the currencies of Western Europe and persisted until the dollar strengthened and reemerged as the key currency in the 1980s. During this period, one of the major problems with such a system was glaringly evident as shifts from one currency to another increased exchange rate volatility and disrupted trade. Central banks in the industrial countries responded by intervening in foreign exchange markets to support the dollar and prevent the appreciation of their own currencies. The result was a 65 percent increase in global reserves in 1971 with an additional buildup throughout the decade that contributed to global inflation and severely weakened, rather than strengthened, the dollar (Dam 1982).

The effects of central bank intervention in currency markets seem not to have been well understood in this period since the outcome was not what was intended. A key element in a currency-based international monetary system is that foreign exchange reserves are holdings of interest-bearing credit instruments that expand credit in the country that issues the currency in which they are invested. Thus when a central bank bought another country's currency to push up that currency's value, it invested its holdings in credit market assets such as bank deposits or government securities issued by that country and thus added to the recipient country's credit supply.⁴ Assuming the acquired currency had fallen in value as a result of expansive monetary or fiscal policies, intervention would have the pro-cyclical effect of augmenting that expansion. Thus the 1970s, a decade of intervention, was also a decade of global inflation.⁵

⁴ Before the Smithsonian Agreement in 1971, some countries held foreign exchange reserves as deposits in international banks in the external ("euro") markets. Recognizing the explosive growth in credit denominated in currencies held outside the issuing country and the damaging impact on national monetary policies, the industrial countries agreed to invest foreign exchange reserves in the government securities of the issuing country.

⁵ Conversely, when intervention was undertaken to dampen the value of a currency, the intervening central bank sold its holdings of that currency, withdrawing funds from that country's credit markets, causing

A far more serious example of the problems inherent in a multicurrency system relates to the damaging, deflationary consequences of the extinction of reserves that occurred in the 1930s. While some foreign exchange reserves had been held by central banks before World War I, the movement of gold to the U.S. during the war and the decline in gold production made it impossible for European countries to acquire sufficient gold reserves to regain convertibility for their currencies. At a monetary conference in Geneva in 1922, many accepted the recommendation to use foreign exchange reserves to economize on gold.⁶ The Bank of England resumed gold convertibility in 1926 (at the pre-war rate) and persuaded some other European countries to do the same. Nevertheless, most industrial countries continued to rely on acquiring holdings of foreign exchange assets to build up their reserves and, by the end of the 1920s, foreign exchange reserves constituted about 42 percent of total reserves of 25 countries (Grubel 1977).

As Germany went into recession in 1929, the Bank of France sold its holdings of Deutsch mark assets and forced Germany to suspend convertibility. Then, with economic conditions deteriorating world-wide in 1931, the French central bank began to convert its existing stock of foreign exchange reserves into gold. Other countries sold their holdings of sterling on fears that France's sales would force the U.K. to suspend convertibility and, after they had precipitated a run on the Bank of England, it did suspend convertibility on September 21. Unable to dispose of sterling, many of these countries converted their holdings into dollars and, since the dollar remained convertible, exchanged dollars for gold. From mid-September to the end of October 1931, the Federal Reserve lost \$755 million of gold - \$350 million taken by France and the rest by Belgium, Switzerland and the Netherlands. In a futile attempt to reverse these losses, the Fed raised the discount rate from 1 ½ to 3 ½ percent – a move that is generally viewed as deepening the U.S. depression and that of the much of the rest of the world (Kindleberger 1984).

The multicurrency system of reserve holdings became a critical channel for the transmission of economic collapse in the 1930s. Between 1929 and 1931, foreign exchange reserves fell from 42 to 27 percent of total reserves and fell further to 8 percent by 1932. The contraction in international monetary reserves put severe downward pressure on money stocks and credit in national economies and contributed to a sharp contraction in cross-border trade and investment (Grubel 1977).⁷

interest rates to rise and, contrary to the original intention, raising the value of the currency. The sell-off of dollar assets by European central banks in response to the stronger dollar in the early 1980s helped push US interest rates and the dollar higher than would have been the case absent intervention.

⁶ There was no formal international agreement but some countries acted legislatively on this recommendation at the national level and many others simply resumed the practice of buying foreign exchange from their own financial institutions (Grubel 1977).

⁷ Eichengreen (2009b) agrees that the erratic shifts that occurred in this period destabilized and ultimately destroyed the interwar reserve system. However, he sees the lesson as a positive one. In his view, having more alternative currencies in a system puts pressure on policymakers to maintain investor confidence and, he says, "that's not a bad thing." Such an optimistic view of the ability (or willingness) of policymakers to respond to such pressures – especially when speculation is the driving force they face – is not supported by the evidence of responses in the 1930s or in more recent times.

More recently, the growth in carry trade transactions as channels for capital flows has introduced some elements of a multicurrency system with significant effects for reserve accumulation. Borrowing in a low interest rate currency for investment in higher yielding assets denominated in another currency increases exchange rate volatility by depressing the funding currency and causing the currency in which the funds are invested to appreciate. Since the mid-1990s, the yen, euro and dollar have all been used at various times as funding and investment currencies in carry trades with higher-yielding emerging market assets periodically attracting large shares of investment as well.

As has been frequently noted, rising inflows of investment into emerging markets have augmented reserve accumulation. Moreover, the build-up in reserves has, in turn, fueled the rise in private capital flows by feeding liquidity back into national and external markets. For example, the Bank of Japan's decision in March 2005 to offset its mounting stock of dollar reserves by relaxing restrictions on bank lending in yen precipitated an even more massive build up in yen/dollar carry trade positions than occurred before the collapse of the Long Term Capital Management hedge fund in 1998. As the buildup in these positions depressed dollar interest rates, the search for higher yields resulted in historically high capital flows to emerging economies in 2006 and 2007 that further expanded their holdings of dollar reserves. The bloated balance sheets of global financial institutions mirrored this expansion and were a significant contributing factor in precipitating the crisis as banks lost access to the immense volume of credit needed to support their carry trade positions. The collapse in the availability of funding for carry trade positions precipitated a contraction in lending that spread throughout the global financial system.

If left to market forces, changes in the current system are likely to involve a diversification of currencies in reserve holdings as well as in private international investment. But, given previous experiences with multicurrency systems, it is doubtful that such a development will bring stability or avoid further and larger crises. Thus, consideration of alternative monetary systems would seem both reasonable and urgent.

II.2 The Role of the SDR: Old and New Proposals

There have been sporadic calls to revive issuance of SDRs since the IMF staff study in 1987 and they have grown more frequent since the onset of the financial crisis.⁸ The proposal for a substitution account – first offered in the late 1970s when the weakening dollar raised alarms – has also been revived (Kenen 2009). But the most recent discussions move beyond earlier ones to explore ways to create a new SDR-type global currency. All these proposals put forward useful ideas about how to move a non-national reserve asset that is already in existence into the center of the international monetary system. To those who see the current system as inherently unstable and inequitable, expanding use of the SDR seems the most feasible next step in the process of reform.

The substitution account, for example, looks to a way to cushion a potential sharp fall in the value of the dollar that would erode the value of global reserves and precipitate a

⁸ For a discussion of the origin and history of SDRs, see IMF 1987 and D'Arista 2009.

further sharp contraction in the global economy. As proposed in the late 1970s and currently, it would create a means to convert dollars into SDRs. As a result, the IMF would exchange holdings of U.S. Treasury bills for SDRs and pay interest on the SDRs from interest received on the T-bills. This transfer would not incur a cost to the U.S. since the Treasury would be paying interest on its securities in any event and without regard to the identity of the holder of its debt. But the U.S. could potentially incur a large cost if the objective of creating the account – to maintain the value of dollar reserves – were met in that it would lose its ability to lower the real value of its debt if need be through the depreciation of its currency. The substitution account was not adopted when first proposed in the late 1970s because the U.S. was unwilling to accept the burden of guaranteeing the value of the dollars held in the substitution account on a par with an SDR backed by 16 currencies at that time. Later, when the dollar strengthened sharply after the crisis, interest in SDRs soon abated (Helleiner 2009).

Current discussions of the substitution account propose sharing the exchange rate risk (Kenen 2009; IMF 2009). But that could lead to inequities if all IMF member countries shared the risk in proportion to their quotas in the Fund since the largest holders of dollar reserves would benefit the most and would be subsidized by other countries. If, however, the risk were shared in proportion to the size of countries' reserve holdings, the larger holders would bear most of the risk and therefore gain no benefit. Sharing the risk would have been more feasible at the end of the 1970s when a larger group of industrial countries held the majority of dollar reserves. The more concentrated pattern of holdings today makes agreement on a substitution account less likely.

New SDR allocations. Following the lead of the G-20, the IMF initiated a new allocation of SDRs in mid-2009 that raised their share in non-gold reserves from 0.5% to 5.0%. A call for a new issuance had been made by the governor of the Chinese central bank, Zhou Xiaochuan, who also proposed that the SDR basket be expanded to include the currencies of all the major economies weighted in terms of GDP, and that it be backed by real assets such as a reserve pool that would allow subscription and redemption by investors as desired (Helleiner 2009). While the new allocation has gone forward, some see it as a marginal accomplishment in terms of the goal of instating the SDR as the primary reserve asset unless some of the limitations inherent in SDR issuance can be overcome.

Among the major limitations is that the SDR is not liquid; it cannot be openly traded for national currencies and buying or selling SDRs for national currencies requires the consent of the countries issuing those currencies. Thus SDR reserves cannot be used to counter a run on a country's currency or buy needed imports in the event of an economic downturn or natural disaster. Proposals to increase liquidity include establishing a settlement system between the SDR and other currencies and encouraging countries to peg to and invoice in SDRs. But some note that increasing its role and usefulness will also require encouraging, promoting and/or subsidizing private sector use of the SDR (IMF 2009).⁹

⁹ The idea is to encourage denomination of international trade and investment transactions in SDRs with settlement in one of the component currencies – a strategy used in Europe when the ecu was the unit of account before the introduction of the euro.

Barry Eichengreen argues that because liquidity requires a critical mass, SDRs should be issued and redeemed not only by the IMF but by governments and private banks and be used in transactions by non-financial business. He suggests that the IMF take on the role of market-maker, buying and selling SDRs at spreads comparable to spreads on the dollar. What he calls the “commercialization” of the SDR is, in effect, a proposal to give it the central role in the international payments system as well as the reserve system. But, as he concedes, ensuring the mass trading required for a viable reserve currency would require that the IMF become a global central bank and lender of last resort (Eichengreen 2009a IMF). Such an evolution would obviously require time. Thus, in Eichengreen’s view, the dollar will remain “first among equals” into the future – in part because the market for U.S. Treasury securities is the “single most liquid government bond market in the world” (Eichengreen 2009b).

Jose Antonio Ocampo (2009) accepts that view in the sense that he advocates concentrating on reforming the global reserve system rather than the broader international monetary system while continuing use of the dollar for international payments.¹⁰ His major concern is to align SDR issues with support for development, giving larger allocations to those with the highest demand for reserves and allowing the IMF to use unutilized SDRs to buy bonds from developing countries.¹¹ He also proposes that allocations be countercyclical – loaned during crises and automatically extinguished when loans are repaid – and that unused allocations be treated as deposits that can be loaned to countries in need. Included in his outline of new provisions is the suggestion that generous overdraft or “drawing” facilities be created that can be used on an unconditional basis by all member countries and that the IMF be authorized to suspend the right of countries with large surpluses or excessive reserves to receive SDR allocations.

A similar proposal for penalizing surplus countries was made by Bruce Greenwald and Joseph Stiglitz (2009). Advocating substantial and regular issuance of SDRs,¹² they propose that allocations made in proportion to current IMF positions be taxed at a rate of 50 percent per unit of current account surplus up to the total of a country’s allocation and that the tax be used for global financial aid. Their proposal deals with the liquidity problem by requiring each member country to guarantee that it would convert SDRs into its own currency. Alternatively, they suggest that a group of countries could form a new system to which they make annual contributions in their own currencies and receive

¹⁰ Allowing the dollar to remain the means of payment would, however, perpetuate many of the existing problems surrounding the buildup of dollar liabilities. If used in transactions (and held as reserves) by the foreign *private* sector, foreign holdings of dollars would continue to create distortions in capital flows as U.S. credit markets would continue to be the center for the temporary investment of funds used in payments.

¹¹ Similarly, George Soros has proposed that rich countries give their unutilized SDRs to poor countries (paying the current rate (0.5%) on SDRs that are released into circulation) to relieve debt and finance low carbon investments. His proposal would use the IMF’s \$100 billion gold reserve to guarantee repayment (Harraban 2009).

¹² Greenwald and Stiglitz suggested that, given global reserves of about \$3 trillion in 2008 and an average rate of growth in trade of 7%, annual issues should amount to \$200 billion.

“global greenbacks” in return.¹³ Such a system would ensure convertibility, provide an asset to use in a crisis and ensure the availability of resources for all members of the group. It could be initiated at a regional level and, as Ocampo (2009) and the Report of the UN Commission of Experts (2009) also note, would serve as a means to build a new monetary system from the bottom up.

Under the Greenwald and Stiglitz plan, global greenbacks would be held by central banks but the authors note that “a more ambitious version” would allow them to be held by individuals. Thus they, too, acknowledge the need to forge a link between reserve assets not based on national currencies and the currencies used in private international transactions. But here and in earlier work by Stiglitz (2006), the institutional arrangements that would be required are not spelled out.

Modifying SDR proposals Chapter 5 of the Report of the UN Commission of Experts (2009) contains many elements of the above proposals but is structured to provide a new global reserve currency that could be managed by the IMF or by a new institution, a “Global Reserve Bank”. In one version of this proposal, the contributions of all members in their own currencies would serve as backing for the global currency and thus would constitute a world-wide system of swaps among central banks. In an alternative version, the international agency would issue the global currency to member countries like the IMF issues SDRs with no backing other than the commitment of member countries to accept it in exchange for their own currencies. A third version would designate these issues of the global currency as deposits in the Global Reserve Bank and authorize the Bank to use them to buy government securities or lend them, providing backing for the global currency in the same way national currencies are backed by the assets of national central banks.

Under this last institutional arrangement, interest on the deposits created and allocated by the Global Reserve Bank would be paid out of the interest on loans or government bonds to encourage member countries to hold reserves with the Bank. New issues would be allocated according to the size of member countries’ GDP or their needs but allocations would be penalized to discourage countries from running large surpluses that are not used to increase global demand.¹⁴

The UN Report suggests some of the elements needed to make a non-national currency reserve asset effective. One is that, like a system based on national currencies, the institution that issues the asset must have the authority to create credit and must use some form of backing that can channel credit to the recipients. In short, unlike the IMF whose

¹³ The authors do not discuss how the currencies contributed to the agency would be invested or how they might affect credit in national economies.

¹⁴ Several fall-back proposals offered in the UN Commission Report include the basic one of increasing SDR issuance on a regular or countercyclical basis, providing all financing for crises in SDRs and extinguishing them as loans are paid back, and investing some of the SDRs in bonds issued by regional development banks. The UN Report also advocates using these proposals in regional arrangements.

function is more like that of a Treasury operation dependent on taxpayer funds, the institution must be a monetary agency. As such, it would have the potential to evolve in time into a global central bank issuing liabilities in sufficient amounts and with sufficient credibility to be used by both public and private sectors of the global economy for transactions as well as a unit of account and store of value. But, as Eichengreen points out, it will take time for that to come about.

Meanwhile, what other arrangements might work in the interval to accomplish the goals put forward in the recent proposals described above? The following draws on those proposals to offer the outline of a modified SDR-type plan that might be effective as a transition vehicle toward a new system:

- The international agency would issue a reserve asset to member countries' central banks in exchange for their countries' government securities. Those securities would serve as backing for the reserve asset.
- The value of the reserve asset would reflect the aggregate market value of all members' currencies. The amount of reserves issued to a given country, however, would be determined by its shares of global population, trade and output. The governance of the international agency should reflect those same weights.
- The international agency could provide liquidity to member countries by exchanging government securities with central banks for currencies or selling them to private or public investors.
 - For example, the agency could sell the government securities of country A to investors in exchange for the currency of country A or that of any other country at its discretion. It could then exchange the currency acquired with the government or central bank of country B in exchange for that country's reserve assets.
 - In such transactions, country A's reserve balance would be unaffected and the agency's holdings of country B's securities would remain unaffected. However, the agency would now have a loan to country B on the asset side of its balance sheet and a liability to country A for the securities sold. When the loan by country B is repaid (in country A's currency), the proceeds would be used to reconstitute the agency's holdings of country A's securities. Thus there would be no change in the value of the agency's balance sheet and no expansion of global liquidity.
- New issues of reserve assets would, however, expand credit in member countries and expand global liquidity. Redemptions of countries' holdings of reserve assets by the international agency in exchange for their government securities would contract credit. Thus the international agency would have countercyclical powers to issue and redeem reserve assets.

One advantage of this modified system is that it fosters development by absorbing Treasury debt in exchange for reserve assets that can back credit expansion in the domestic economy. Thus it enables countries that have not been able to engage in fiscal stimulus in this or any other downturn to do so. In addition, it can supply the means of payment for international transactions to countries that do not issue widely tradable

currencies and can respond as a lender-of-last-resort in currency crises. Finally, it moderates the intrusion on national sovereignty of a new regional or global currency based on the concept of the euro. Countries would still use their own national currencies at home but would be able to acquire international reserves without borrowing from foreign private financial institutions or earning reserves by curtailing domestic demand to promote export-led growth.

II.3. Building Alternative Global Reserve and Currency Systems

Eichengreen's evolutionary path toward the commercialization of the SDR would, as he notes, move the system toward the creation of a global central bank and lender-of-last-resort. It could also lead to a single currency for the global economy that many would find unacceptable. There is, however, the potential to create other paths that move beyond the particular SDR-type institutional and instrumental structure and they, too, should be explored. To further that exploration, the following reform proposals are offered in the hope of expanding the menu of options and enlarging the debate.

Creating a public international investment fund for emerging economies. The spillover effects of the investment of emerging economies' current account surpluses in the U.S. and other major national and international financial markets assured not only that these poorer countries would be financing the rich but that some portion of those funds would be recycled back to those same creditor economies in the form of foreign acquisition and ownership of their financial assets and productive facilities.¹⁵ Moreover, the channel used to return savings back into these countries has itself further undercut the potential for those savings to support development.

With the phenomenal growth in the assets of institutional investors in developed countries in the 1990s, portfolio investment replaced bank lending as the dominant channel for inflows to developing countries. Many developing countries that need long term financing for infrastructure and other basic components of development strategies do not have markets that can absorb foreign portfolio investment flows or the credit standing to attract them. Others may be overwhelmed by investment flows up to the point when the currency appreciation that it promotes prompts outflows and triggers a currency crisis. Portfolio investment is mostly short term; it tends to change prices and exacerbate volatility in secondary markets rather than provide the long-term financing needed for economic expansion. Moreover, both portfolio and direct investment by foreigners necessarily entails the need for returns to reward the individuals and institutions that have acquired ownership of these assets. Thus the investment of these flows is directed in ways that encourage and facilitate export strategies that increase the accumulation of external currencies.

In view of this aspect of the reserve accumulation process, one of the more pressing issues in dealing with global imbalances is to find ways to recycle the current account surpluses of developing countries back into their own economies in support of

¹⁵ See the discussion of the round-robin character of capital flows in D'Arista and Griffith-Jones (2006).

development strategies that increase demand and income more equitably and reduce dependence on export-led growth. What is needed is a new channel for portfolio investment to provide flows that are stable, in amounts appropriate to the size of a country's economy and directed more toward the goals of development than short-term profits for investors.

Such a channel could be constructed by creating one or more closed-end funds for emerging market investment as a separate institution under the Bretton Woods umbrella.¹⁶ These funds would issue their own liabilities in a variety of national currencies and use the proceeds to pay for stocks and bonds of private enterprises and public agencies denominated in local currencies in a wide spectrum of developing countries. The funds' liabilities would be marketed both to private institutional investors in advanced economies and official investors from emerging economies and they would also qualify as international reserves, guaranteed by a multinational agency and its member countries. Investing the reserves of developing countries in these funds would redirect external savings back into the economies of the countries that own them rather than into the financial markets of strong currency countries. Moreover, their closed-end structure would ensure that long term funds would be provided and that sales of the funds' liabilities by investors would not force redemptions that would disrupt development projects.

Like proposals for additional issues of SDRs, a major objective of these investment funds is to inaugurate a meaningful shift into a non-national reserve asset and phase out a system in which the choice of financial assets as reserve holdings centers on a few countries whose wealth supports the strength of their currencies. One incentive for developing countries to hold these securities as reserves is that they would provide a multilateral (rather than a unilateral) guarantee from industrial countries and, in time, from wealthier emerging economies.

Reforming the international payments system. The above proposal – to use credit liabilities of a public multilateral institution as reserve assets – is incremental in nature. While it addresses a critical flaw in the current international monetary system, an equally critical one – the means of payment – would still need to be addressed. Permitting the continuation of a key or multicurrency regime for cross-border transactions would perpetuate the export-led growth global paradigm by requiring the majority of countries to shape their economies to ensure that they can earn – or borrow – reserve currencies to engage in external trade and investment. It also requires reserve currency countries to import more than they export to meet the demand for its currency and accept the resulting current account deficits and build-up in debt. The global economy can only regain balance if every country is able to use its own currency, backed by the wealth created within its own borders, to participate in the global economy.

One way to achieve this objective would be to mine Keynes' Bretton Woods proposal to create a new institutional framework. While Keynes' overall proposal was designed for a very different world, the basic structure in his concept – an international clearing agency

¹⁶ For a discussion of the benefits of a closed-end fund and other details of its structure, see D'Arista 2000.

(ICA) – could be revised to serve as the institutional platform for a new global payments system that would foster egalitarian interactions and more balanced outcomes.

The new ICA would clear transactions denominated in members' own currencies by crediting and debiting their clearing accounts. The clearing accounts would, in fact, constitute the international reserves of the system, held for the member countries by the ICA and valued using a trade-weighted basket of all members' currencies. Thus, the clearing process would change the ownership of reserves and reinstate the original intent of the Bretton Woods Agreement to maintain public control of international payments. It would also permit exchange rate adjustments over a set period of time in response to changes in reserve levels, preserving the valid role of market forces in shaping currency values through trade and investment flows while ensuring that speculators would no longer dominate the process.

A revised ICA could reintroduce Harry D. White's Bretton Woods proposal to authorize open market operations by an international agency (Boughton 2006).¹⁷ It would do so by permitting the new clearing agency to acquire government securities from its member countries to back their reserve holdings. This would give the ICA means to buy or sell these securities to help national authorities correct imbalances and promote stability. In addition, when approved by a super-majority of its member countries, the ICA's money-creating powers would allow it to operate as a true lender-of-last resort – a role the IMF cannot play given its dependence on taxpayer contributions. In this capacity, the ICA could assist a national central bank in supplying liquidity by buying government securities from residents in the national market and augmenting the country's supply of international reserves.

Membership in the ICA would be open to national central banks of all participating countries and branches of the clearing agency would operate in every major financial center across the globe. The Agency would be governed by a rotating executive committee that would at all times represent half the world's population and half its total output. Its role in clearing members' payments in their own currencies would ensure that the ICA would not infringe on their sovereignty - as an international bank that issued a single currency would do. The conduct of national monetary policy and decisions about exchange rate regimes would remain the prerogative of national authorities.

But the ICA's ability to create and extinguish international reserves would give it the power to change the availability of liquidity at the global level. The absence of that power has been increasingly evident throughout the post-Bretton Woods era as crisis after crisis has damaged the global economy and underscored the inadequacy of the current monetary framework. The establishment of an international monetary authority to conduct countercyclical operations was never more needed than it is now.¹⁸

¹⁷ This proposal is also incorporated in the modified SDR plan described above.

¹⁸ For an expanded discussion of the ICA proposal, see D'Arista 2000.

II.4. The Outlook for Reform

Whatever their limitations, the fact that the institutional and instrumental framework for SDRs already exists suggests that this framework would present fewer barriers in terms of moving toward an international reserve asset not based on national currencies. In fact, as noted, there has already a substantial new issue of SDRs in 2009 although its effectiveness is as yet not apparent.

An alternative proposal to increase the share of non-currency reserves in the system and directly support development that could be easily implemented under the existing institutional framework would be the creation of the closed-end international investment fund discussed above. The World Bank already has authority to issue its own liabilities and borrowing to invest in the assets of developing countries is consistent with its mandate to facilitate private development in these countries. Moreover, the World Bank was already moving in that direction in the 1990s when it encouraged and sponsored private investment funds in emerging market economies. The failure of that initiative was at least partly due to the fact that the focus was more on fostering privatization than supporting development needs and objectives. In addition, having bowed to the wishes of private investors, the World Bank agreed to open-ended as opposed to closed-end funds which exacerbated the procyclical effects of portfolio investment flows.

But the more ambitious SDR proposals and the proposal for an international clearing agency discussed above would require changes in the characteristics of the instruments and the institutional structure of the existing international monetary agency. As a result, they would necessitate approval of a new international agreement by national legislative bodies. Because such proposals move toward reform of both the international reserve and payments systems, the policy coherence and international cooperation needed to reach agreements on such changes would be a considerable undertaking. Like the decision for new SDR issuances, the most likely forum for initiating discussions of such far-reaching steps would be the G-20. Nevertheless, failure to take those steps – to focus only on the international reserve system – will, in our view, result in a shift to a multicurrency payments system that, given the size of private international capital flows, will intensify the problems that now exist under the key currency system.

Conclusion

The world economy is in an impasse, and policy makers are at a crossroad as to how they respond to the challenge it poses. A win-win solution would require deepening international cooperation and new institutions that would make many of the reform proposals discussed above politically viable. However, inertia and shortsighted policy decisions on the part of the rich and powerful nations, especially the US, might instead push us towards an outcome inferior to what is within reach for all. However, even then, the increased economic power of emerging economies and their financial clout means

that they might be able to have much greater influence over their own destiny today than ever possible hitherto, provided that they manage to act in tandem through global or regional fora.

In a nutshell, the policy challenge policy emerging market and developing countries face involves the need to address two related but separate problems. One is the challenge of reviving financial intermediation that channels investment throughout the world in a way that promotes development and stability. The other is to be able to participate in global trade and investment without having to amass someone else's currency – a requirement that, in the past, forced them to either over-borrow or promote exports at the expense of all else. The large dollar reserves in the hands of emerging economies give them some breathing room from the constraint posed by the latter challenge while providing them with the means to address the former. In fact, any success in financial intermediation that channels investment towards development globally – or at least regionally - can make it easier to reform the payments system.

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Appendix

Consider a simple dynamic system with:

$$\begin{aligned}\dot{V} &= f(V,C) && \text{with } f_v < 0 \text{ and } f_c < 0 \\ \dot{C} &= g(V,C) && \text{with } g_v > 0 \text{ and } g_c > 0\end{aligned}$$

where V is the index value of the dollar in terms of some undefined set of international currencies and C is a composite variable that captures the volume of credit supply in financial markets. It is assumed that prices of commodities move with credit.

The first equation describes the effect value of the dollar and volume of credit has on how the value of the dollar changes over time. A higher volume of credit (price of commodities) contributes to dollar depreciation ($f_c < 0$); while the negative sign of f_v stands for expectations of mean reversion. A higher value implies that the more the dollar falls the less it is expected that it will fall further. Thus, when confidence in the dollar ebbs the absolute value of this partial derivative becomes smaller.

The second equation expresses the change in credit (commodity prices) as a function of the level of the dollar and credit itself.

A positive g_v implies that the value of the dollar has a positive impact on credit, through its effect on banks' networth. On the other hand, a positive g_c implies a high supply of credit feeds back positively on its rate of change, suggesting that speculative sentiment is strong.

The signs of the elements of the Jacobian matrix of this system are:

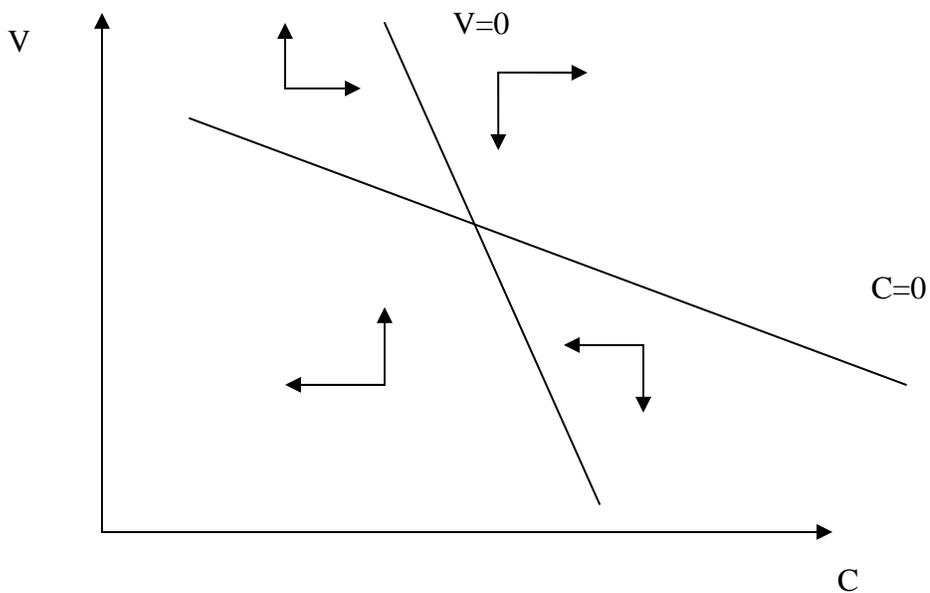
$$J = \begin{bmatrix} - & - \\ + & + \end{bmatrix}$$

with $|J| > 0$ and $\text{tr} J > 0$ or < 0 as to whether $f_v < g_c$ or $f_v > g_c$

which implies that the slope of the demarcation curve $\dot{V} = 0$ curve, $\left. \frac{dV}{dC} \right|_{\dot{V}=0} < 0$;

and the slope of the demarcation curve $\dot{C} = 0$ curve, $\left. \frac{dV}{dC} \right|_{\dot{C}=0} < 0$.

In the event the latter slope is larger than the former, the dynamic behavior in the phase space is cyclical as shown below.



The stability of the cyclical behavior depends on the sign of $\frac{\partial f_C}{\partial V}$ which in turn depends on the relative sizes of f_V both g_C in absolute value. The former is stabilizing while the latter a destabilizing force. Thus, ebbing confidence in the dollar (a lower f_V) implies a weakening of the stabilizing force; while, a rise in speculative expectations on commodity prices (a higher g_C) implies a strengthening of the destabilizing force.