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Global Crises and Reform of the International Monetary System

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# Global Crises and Reform of the International Monetary System

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## I. Summary

# **Background**

History seems to have a tendency to repeat itself. The global economy goes through systemic crises. A few of these crises are catastrophic enough to seriously threaten global peace and stability. Yet it is precisely at historical junctures such as these that the inertia over reforming the international monetary system-the rules and institutions that govern international payments-is somehow overcome. World War I and the general return to the gold standard in the 1920s led to a shortage of gold from its undervaluation. This was corrected by an appreciation in its price engineered through the great deflation of the 1930s. The shock of World War II brought about the Bretton Woods Articles of Agreement. Pressure from a weak dollar in the 1970s helped create the European Monetary System. The first global crisis of the 21st century has turned out to be as severe as the Great Depression, and in some aspects, worse, though thankfully, not as long-lived. More importantly, its occurrence offers a rare opportunity to consider reforming the international monetary system yet again.

#### The Triffin Dilemma

The principal reserve currency in the world today is the currency of a single country. That currency is the US dollar. The use of a national currency as the global reserve currency raises the Triffin dilemma according to which, a country that issues the global reserve currency cannot maintain its value while providing adequate global liquidity at the same time. This is because increasing the amount of global liquidity makes it imperative for the global reserve-issuing country to run deficits. Hence, the value of the reserve currency declines. The ability of a currency to serve as a global reserve asset tends to be compromised if confidence in it as a global store of value is undermined. In light of the dollar's depreciation in the run up to the current crisis, concerns about the ability of the US to preserve the value of the dollar have become a source of great uncertainty, particularly as regards the continuing role of the dollar as the anchor of the global monetary system.

#### Changes in the Global Economic Landscape

The global economic landscape has been evolving in a way that makes the global economy prone to crises under the predominantly US dollar reserve currency system. Economic globalization has tied the fortunes of countries ever so intimately that we now know that "decoupling" is rarely going to be the outcome. The engines of growth in the global economy and the share of global output are increasingly shifting away from the US, EU and other industrialized countries, toward rapidly-growing countries like China and other emerging economies. Global external imbalances have grown tremendously in recent years largely because the share of the principal reserveissuing country in the global economy is unusually small relative to the increasingly

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large incremental demand for reserves in the rest of the world. Growth in these countries as well as their attempt to self-insure against a variety of risks, including financial deleveraging, "sudden stops" in capital flows¹, damage to the domestic banking sector and domestic credit markets, and changes in the terms of trade, are the reasons behind the increasingly large incremental global demand for reserves. Financial globalization as a result of financial openness and financial development since the early 1990s has complicated the usual channels of policy effects and altered the way in which traditional trade channels work. These have had a profound impact on the evolution of the demand for reserves, especially in the case of emerging economies.

# **Global Aggregate Demand and Liquidity Provision**

As the US dollar is the principal reserve currency in the world, however, the US faces very few incentives to correct its large external deficit. The same is true of surplus countries, especially countries like China, who have substantial (dollar-denominated) external surpluses. In contrast, non-reserve deficit countries face tremendous pressure to adjust and correct their external imbalances. Asymmetric adjustment between deficit and surplus countries and constraints on the policy space for such adjustment give rise to the problem of insufficient global aggregate demand. There is also a related yet distinct problem of adequate provision of global liquidity by the US. Being the principal issuer of world money, the US needs to meet the incremental demand for reserves from the rest of the world in order to provide adequate liquidity. <sup>2</sup> The US BOP deficit is the pipeline that feeds reserves to the rest of the world. Problems of inadequate global aggregate demand and inadequate liquidity provision have been recurring themes in global crises.

If the rest of the world attempts to run current account surpluses (or if deficit countries attempt to improve their external balance), both global aggregate demand and income will decline, unless the US provides the desired global liquidity by spending and running current account deficits. We have a situation in which the global economic system is stable only to the extent that the US is willing to be the "deficit country of last resort" and carry the burden of sustaining global aggregate demand. The US will have to run external deficits to keep the global economy going. Ideally, as the principal global reserve-issuing country, the US would need to invest abroad an amount equal to the incremental demand for reserves in the rest of the world for it to be able maintain a balanced external account.

# Reasons for the Large Incremental Demand for International Reserves

One basic insight from Keynesian economics is that growth induces an increased desire for liquidity and thus, an increase in spending less than the increase in real output (hoarding). This means that growing countries will tend to be net savers and run current account surpluses in order to build-up reserves to satisfy their increased desire for liquidity or money demand. These hoards are a leakage from the global economy and therefore, impart deflationary pressure on it in the absence of countervailing upward adjustment in demand elsewhere.

In addition to growth, the incremental global demand for reserves has grown because of the need for self-insurance by countries in the face of increased vulnerability arising from financial globalization, especially in the case of emerging economies.

<sup>&</sup>lt;sup>1</sup> Calvo and Reinhart, 2000.

<sup>&</sup>lt;sup>2</sup> Conversely, if too much global liquidity is provided, there is going to be an accumulation of an unsustainable debt overhang.

Despite substantial opportunity costs associated with holding relatively-low yielding dollar-denominated reserve assets, the volatility of output, exchange rates, capital flows, and commodity prices, particularly those viewed as temporary, has fueled the increased desire of countries to hoard reserves. Hoarding reserves is seen as a form of self-insurance against risks such as capital account crises, illiquidity, the failure of export-led growth strategy, the inability to ensure inter-generational equity³, and destabilizing internal and external "drains" ⁴ (capital flight) on the domestic banking and credit sectors. Hoarding reserves is also in large part a reaction to the absence of a credible global lender of last resort, as seen in the shortcomings of the IMF during the Asian and Russian Crises of 1997-1998 and more recently, in its withdrawal of support to back the Argentine peso in 2001. It buys time for more gradual BOP adjustment, especially for countries whose exchange rate regimes are less than perfectly flexible. Central banks worldwide have also accumulated large stocks of reserves as a result of their attempts to prevent currency appreciation through sterilization.

# **US Adjustment to Imbalances-The Problem of Moral Hazard**

One can imagine that the US would ordinarily be faced with a dilemma between achieving its domestic monetary policy goals, such as inflation control on the one hand, and achieving external balance on the other, given the need to provide adequate global liquidity by running external deficits. 5 It has also been observed that while world trade in goods and bonds has grown much faster than world GDP, liquidity support and financial regulation have essentially remained local. Indeed, the US role in sustaining aggregate demand domestically (and globally, as argued previously) through expansionary policies and deficits has also spawned asset bubbles, such as those in housing in the US and elsewhere, and in commodity prices as well. The use of the dollar as the principal global reserve currency internationalized the US financial crisis. While the bursting of the housing bubble in the US and the inadequacies of financial regulation are the usual starting points in discussions of the origins of the current global crisis, these are only part of a bigger story. The underlying roots are deeper and more fundamental--the lack of incentives faced by the US under a predominantly US dollar global reserve currency system to adjust its expenditures downward and bring it back in line with income and in general, to implement macroeconomic policies that benefit the US economy but one that also internalizes the externalities of such on the rest of the world.

In theory, a country running a BOP deficit must reduce domestic spending to get it in line with income in order to restore external balance. However, as the monopoly issuer of the dominant world money, the US faces very few incentives to undertake the necessary contractionary policies to increase its net saving and eliminate its BOP deficit. This is because the US enjoys seignorage revenue (pure seignorage as well as inflation tax revenue) from the privilege of issuing the principal global reserve currency, not only from its citizens but also from those in the rest of the world that use the US dollar. At the same time, the desire of other countries to accumulate dollar reserves also reduces the incentive faced by the US to reduce spending in order to correct its external deficit. This is because the demand for additional

<sup>&</sup>lt;sup>3</sup> Mateos y Lago, 2009, p. 8. Inter-generational equity concerns may explain why oil-exporting countries, for example, attempt to hoard reserves.

<sup>&</sup>lt;sup>4</sup> Obstfeld, Shambaugh, and Taylor, 2009, p. 3.

<sup>&</sup>lt;sup>5</sup> Note that the ECB cannot be a very flexible provider of global (euro) liquidity as there are strict limits with respect to the inflation rate and deficit-to-GDP ratios in the Euro area.

<sup>&</sup>lt;sup>6</sup> Calvo, 2009.

reserves by the rest of the world finances the US current account deficit. There is a problem of moral hazard.<sup>7</sup>

For the US, the potential conflict between the external balance objective of eliminating the BOP deficit, and the internal objective of maintaining the US economy at full employment can be set aside. The US is in a unique position of being able to generate an inflationary bias to stimulate its own economy despite having an external deficit. Aside from being able to attend to its own domestic concerns, the US can deflect adjustment to the rest of the world. The US' willingness to meet the demand for increased global liquidity bears not only on the relative sizes of surpluses and deficits of countries worldwide, but also which and to what extent countries will want and need to adjust to correct such imbalances. These adjustments obviously have a profound effect on both the level and distribution of incomes and the inflation burden across countries.

# Seignorage, Inflation Tax Revenue, and Capital Gains

There is a natural proclivity for any issuer of money to issue money because of the resource transfer gained (seignorage revenue) by the issuer of money. Much of the seignorage revenue earned by the US comes from abroad as more than half of US currency circulates outside of its borders. When currency is issued at a rate that produces inflation, there is additional inflation tax revenue extracted by the currency issuer. As the dominant currency of the world, therefore, the US earns pure seignorage as well as inflation tax revenue from both internal and external sources. In a real sense, the US has an incentive to spend as it does not have an effective budget constraint under a dollar-based global reserve currency system. It can finance expenditures and deficits by printing money. Better still for the US, it can borrow cheaply from the rest of the world as it has, since the US has the sole ability to borrow abroad in its own currency because this currency is also the principal global currency. Thus, the US is also able to reduce inflationary pressure from the issuance of money on its own economy by exporting it to the rest of the world that wants dollars in exchange for imports of goods and financial capital from them.

Insufficient net saving in the US for some time has been reflected in large and persistent external deficits. The US dollar will therefore tend to depreciate, as it has. However, despite the depreciation of the US dollar, including in the run up to the current crisis, ironically, the US has enjoyed a capital gain and does so whenever the dollar depreciates. This is because US liabilities are almost entirely dollar-denominated whereas US assets are mostly foreign-currency denominated. Thus, there is a capital gain to the US whenever the dollar depreciates. This tendency of the dollar to depreciate is countered by pressure on the US dollar to appreciate. The latter comes from the deflationary effect of current account surpluses in the rest of the world, as growing countries run surpluses in order to build up dollar hoards. Hence, in addition to the increased demand for dollar reserves in the rest of the world which would tend to appreciate the dollar, global deflation, or a falling general price level worldwide, raises the real value or purchasing power of the dollar.

<sup>&</sup>lt;sup>7</sup> Eichengreen, 2009, p. 31.

<sup>&</sup>lt;sup>8</sup> Schmitt-Grohe and Uribe, 2009. This study shows that with foreign demand for dollars, it is no longer optimal for the US to follow the Friedman rule of setting the real rate of interest equal to the rate of deflation. Instead the US gains revenue from the issuance of money by running a Ramsey-optimal inflation rate of between 2-10 percent per annum.

<sup>&</sup>lt;sup>9</sup> This follows from GDP accounting.

<sup>&</sup>lt;sup>10</sup> Mateos y Lago et al., 2009, p. 7.

## The Adoption of Flexible Exchange Rates

The large-scale adoption of flexible exchange rates in 1973 and the prevalence of pro-cyclical capital inflows experienced by many countries, especially emerging economies, combined with unopposed currency appreciation, are seen as almost surely leading to mounting BOP deficits and crisis in these countries. Ironically, the adoption of flexible exchange rates was intended to automatically eliminate the external imbalances of countries, and reduce risk in the financial system and one-way bets on the domestic currency, thereby discouraging pro-cyclical capital flows. Emerging economies, in particular, have found themselves at risk of being exposed to "sudden stops" of capital and severe illiquidity that historically precipitate crises given large pro-cyclical capital inflows. Furthermore, countries are not indifferent to the level of the exchange rate, which under a liberalized financial and capital account regime may foster greater BOP instability. Thus, there are cogent reasons for these countries' increased precautionary demand for reserves and their attempts to build up BOP surpluses.<sup>11</sup>

# **International Monetary Policy**

The goal of international monetary policy is to stabilize world prices and facilitate growth and development so that there can be global peace and prosperity. Resolving recurring problems of insufficient global aggregate demand and deflationary pressure from the asymmetric adjustment to external imbalances, and inadequate provision of global liquidity require a fundamental reform of the international monetary system, especially its governance. Today's international monetary system has been referred to as something of a "non-system," with the world divided into a part made up of countries with currencies that float and permit the free flow of capital, and another part with varying degrees of control over exchange rates and international capital flows.<sup>12</sup>

The ability to provide adequate liquidity, timely and adequate adjustment of imbalances, and reduced risk has proven to be elusive under the current system centered on the US dollar. This is despite the development of private financial markets in Eurodollars and European currencies and the adoption of a flexible exchange rate system that have helped relieve liquidity problems. Under conditions of severe global crises such as the current one, however, the problems become acute. The size of surpluses that need to be run by growing countries in order to satisfy their increase in desired liquidity and precautionary reserves rises in the face of reduced value of their hoards as the US runs BOP deficits and the dollar depreciates. But larger external surpluses impart even greater deflationary pressure on the world economy and further reduce global demand and income. The US, as the main reserve-issuing country, needs to invest abroad an amount which would satisfy the incremental demand for reserves in the rest of the world in order to maintain a balanced current account. But under the global dollar standard, as discussed, it has little incentive to do so.

Of course, when the global economy is in as deep a crisis as it is in today, contractionary policy in the US and adjustment to correct its external deficit would only worsen economic conditions in the US and globally. Now is clearly not the time for the US to do these and the US is correctly trying its best to stimulate aggregate

<sup>&</sup>lt;sup>11</sup> Ironically, countries that stockpile US dollars as a form of 'precautionary' demand for reserves typically find that they cannot use them anyway when they feel that a crisis is imminent for fear of actually precipitating a run on the domestic currency.

<sup>&</sup>lt;sup>12</sup> Mateos y Lago et al., 2009, p. 5.

demand. But by understanding the lack of incentives facing the reserve-issuing currency to run a tight ship to begin with as well as the incentives faced by the rest of the world to run current account surpluses and hoard dollars, the world might come to reflect more deeply on the roots of recurrent global crises and agree on reforming the international monetary system.

# **Manifestations of the Triffin Dilemma Today**

In today's world, the Triffin dilemma is reflected in the large swings in US current account imbalances and the associated volatility of the dollar exchange rate, with the risk of large losses in the value of foreign exchange reserves held in US dollars and the decline in the use of the US dollar as a global store of value over time as US deficits increase. Countries that are large holders of dollar reserves, notably China (over \$2T) and Japan (\$1.5T) as of May 2009, face the risk of diminished purchasing power from the dollar reserves they hold. These countries find it difficult to diversify their portfolio of reserves and reduce the concentration of reserves held in dollars in order to reduce risk even if they wanted to. This is because the sheer size of the amounts needed to be sold to meaningfully diversify would drastically reduce the value of such reserves. This would then result in a loss of value of these reserves and therefore, of purchasing power to the holder of these reserves. The latter is an outcome that countries attempting to diversify their reserves are trying to avoid to begin with. Furthermore, if these reserves are sold off quickly, it would also induce greater exchange rate and BOP instability and may also adversely affect financial stability.

The US is acutely aware of this dilemma faced by large holders of dollar reserves in trying to diversify their reserve holdings. On the one hand, this gives the US even fewer incentives to change its ways, reduce its deficit, or be willing to give up the privilege that comes from being the issuer of the principal global reserve currency. On the other hand, if the day comes when most or all of the rest of the world is no longer as willing to hold dollar assets as in the past, and no alternative to the dollar as a global reserve currency is found, global income will likewise adjust downwards.

#### Some Proposals for Reforming the International Monetary System

Proposals to reform the international monetary system are not new. They goes way back to Keynes' 1930 Treatise on Money and his proposal for an International Clearing Union, which formed part of the preparations for the Bretton Woods Conference. Keynes realized that the incentives faced by deficit and surplus countries to adjust, and the incentive for adequate global liquidity provision are shaped by the nature of the global reserve system. His proposal was for a global supranational reserve currency that he called a "bancor" based on the value of thirty representative commodities and issued by a supranational bank.

Reform of the current international monetary system requires an alternative to the system in which a single country is the issuer of the dominant world currency. The new system needs to be a more realistic representation of the way economic and political power is distributed and evolving in the world. It needs to reduce the incentives for countries to run current account surpluses and hoard dollars. In this way, insufficient aggregate demand and liquidity, and deflationary pressure on the global economy could be avoided. An alternative to the US dollar and, in general, to having a single national currency as the reserve currency of the world, will tend to reduce spending in the reserve-issuing country and limit its proclivity to run huge deficits as the it will lose its seignorage and inflation tax revenue privileges.

Proposals for reforming the international monetary system vary and include the creation of a supranational currency, reform of the IMF, creation of a new global financial institution, increasing the array and amount of global reserve assets, finding ways to lower the incremental demand for international reserves by countries particularly for precautionary purposes, and greater regional cooperation and the creation of multiple currency areas in the world through regional economic integration.

### II. Stylized Facts

#### **Two Depressions**

The current crisis may have started in financial markets in the US, but its devastating effects on the global economy have raised comparisons with the Great Depression. Indeed, Eichengreen and O'Rourke (2009) find that the effects of the global crisis today are as serious as those of the Great Depression of 1929, and in some ways, worse. They track the paths of world industrial output, world stock markets, and the volume of trade following the peak in world production which occurred in June 1929 during the Great Depression, and April 2008 during the current crisis.

In contrast with the experience during the Great Depression in which global industrial production declined continuously for 3 years from its peak, global industrial production in the current crisis has shown clear signs of recovery since about June 2009. Prior to this recovery, however, the decline in industrial production in the previous nine months was similar to the decline in industrial production in the nine months following the 1929 peak.

There is a much faster and larger decline in stock market wealth from this crisis relative to that at the comparable stage of the Great Depression. Stock markets worldwide have recovered sharply since the March 2008.

The collapse of global trade during this current crisis is clearly more severe even by standards of the Great Depression. Global trade has recovered somewhat as the rapid decline in global trade volumes has abated and indeed, data for June 2009 show a slight increase.

Among the big European countries, France and Italy, in particular, have suffered much more during the current global crisis than they did in the aftermath of the Great Depression, as seen in the much larger declines in their industrial output. Industrial output in Germany and the UK closely follow their rate of fall in the 1930s.

This is the case as well for the US and Canada. Japan's industrial output recovered sharply in March 2009. Prior to this, however, Japan's industrial output in February was recorded at 25 percentage points lower than at the equivalent stage of the Great Depression.

Compared with the situation during the Great Depression, the expansionary monetary policy response of monetary authorities worldwide has been quicker and of a much larger magnitude as seen in the 7-country average of Central Bank discount rates. This is a coordinated response to the crisis by the world's most important central banks. Money supply in 19 countries has risen very steeply in a short span of time whereas conditions during the Great Depression were worsened by the sharp contraction in the money supply. Today there has been a massive increase in the size of the balance sheet of the Fed as the Fed tries all kinds of creative ways to inject

liquidity into its financial system. It has also lent massive amounts to some key central banks.

Countries have substantially loosened fiscal policy and are more willing to run budgetary deficits compared with the situation during the Great Depression. The US fiscal deficit as a percentage of GDP is also expected to expand dramatically to 90.4 percent in 2009 and 98.1 percent in 2010. There has been a dramatic increase in US government expenditures and decline in US government revenues, particularly in 2009, and is projected to last for the next few years.

#### The US Financial Crisis

The financial crisis in the US that eventually swept the global economy became evident when some major financial institutions in the US collapsed or needed massive infusions of federal funds to survive. Taylor (2009) makes the case that excessively loose US monetary policy beginning in 2001 was responsible for the financial crisis of 2008. This loose monetary policy, in turn, was perhaps triggered by the bursting of the dotcom bubble and 9/11. From a broader perspective, one can argue that it was the insufficiency of global aggregate demand that accompanied these catastrophic events as well as the attempts by the US to prevent external deflationary pressure from affecting the US that necessitated what turned out to be overly expansionary US monetary policy. Under the current international monetary system, the US has to run even larger deficits to help its economy from falling too far below full employment when there are deflationary shocks in the global economy as occurs when the rest of the world is accumulating current account surpluses. US interest rates were cut from 6% to 1 3/4% in 2001 and further to 1% and remained low for 3 years, fuelling a housing bubble in the US. 13 The situation was exacerbated by loose financial regulation in the US, which spawned the creation of new financial products whose risk characteristics were largely unknown and obscured by the asset boom in the housing sector. Taylor makes a rather convincing argument that had the Fed followed the Taylor rule in setting interest rates, it would not have unnecessarily lowered interest rates to the extent that it did and fuelled a housing bubble that eventually burst.

One question that may be asked is why a crisis that initially affected only a small sector of the US housing market, namely, the subprime market, turned into a major financial crisis. The marketing of subprime, alt-A, and home equity loans relied on independent mortgage originators, which unlike the securitization of conventional mortgages by government securities agencies, operated with fewer constraints. As a substitute for government service enterprises (GSE) guarantees, mortgage-backed securities (MBS) were rolled over into collateralized debt obligations (CDOs). The latter were sold in a series of tranches, with the junior tranches assuming the initial defaults. The senior tranches were regarded as very secure and had triple A ratings. The problem with the securitization of these mortgages is something that has been called the "Queen of Spades" problem as investors did not know which securities had the bad loans in them. In the absence of regulators, the major source of information regarding the risks of MBS was credit rating agencies. Non-prime mortgages grew from 15 percent of new originations in 2001 to 50 percent in 2006. By 2007, 90

<sup>&</sup>lt;sup>13</sup> Taylor, 2009.

<sup>&</sup>lt;sup>14</sup> Bosworth and Flaaen, 2009.

<sup>&</sup>lt;sup>15</sup> Taylor, 2009, p. 12. In the card game "Hearts," the one who has the Queen of Spades loses the game.

percent of these mortgages were securitized.<sup>16</sup> The credit default swap (CDS) market grew in a very short time span, from 0 in 2000 to roughly \$62T in 2007, with reinsurance companies claiming that they were backing subprimes etc., except that there was no real insurance.<sup>17</sup>

#### **Global Imbalances**

Imbalances in Asia were affected by the decline in the investment-to-GDP ratio during the Asian Financial Crisis from levels prevailing before the crisis, especially in several particularly hard-hit ones like Indonesia, Thailand, and Korea. This non-recovery of investment demand to pre-Asian Crisis levels, and not higher saving rates as a percentage of GDP *per se*, has led to a positive saving-investment gap in Asia. This gap is reflected in CA surpluses, especially in countries where sterilized intervention allowed currency undervaluation and fostered export-led growth.

China, for example, has run particularly large current account surpluses, especially starting in 2005, when its current account surplus more than doubled to USD 161B from USD 69 B from a year earlier. Japan has had current account surpluses in excess of USD 100B for a while and this has been the case also for Germany since 2004. At the same time, the US current account deficit worsened from USD -631B to USD -749B in the same years before hitting its lowest point so far of USD -804 in 2006. By 2006, China's current account surpluses had surpassed Japan's and Germany's individual surpluses.

The share of the US in global output is very small compared with its share of global current account deficits of some 75 percent, while the incremental global demand for dollar reserves by growing countries has been growing phenomenally.<sup>18</sup>

## **Large Accumulations of Reserves**

The risks that open economies, particularly financially-open ones, face given greater volatility in output, exchange rates and pro-cyclical capital flows have led to a desire for a massive accumulation of reserves for precautionary reasons. Central banks in these countries see the need to protect the domestic banking sector and domestic credit markets from potential currency mismatches and the "twin" drain problems. These are internal drains, or a run from bank deposits to currency, and external drains, or a flight to foreign currency or foreign banks. In emerging economies, particularly, reserve accumulation has been driven more by the size of the domestic financial sector rather than real trade flows. <sup>20</sup>

From the end of the Bretton Woods era, global international reserve holdings as a fraction of world GDP grew by a factor of 3.5, from less than 2 percent in 1960 to 6 percent in 1999, despite the shift toward more flexible exchange rates in 1973. Since 1990, the average advanced country ratio of reserves to GDP has held steady at about 4 percent, but the emerging markets' average reserve ratio has more than quintupled, from 4 percent to over 20 percent of GDP. <sup>21</sup> Reserve accumulations

<sup>&</sup>lt;sup>16</sup> Bosworth and Flaaen, 2009, p. 2.

<sup>&</sup>lt;sup>17</sup> Remarks by J. Sachs, 16 September 2009.

<sup>&</sup>lt;sup>18</sup> Eichengreen, 2009, p. 28.

<sup>&</sup>lt;sup>19</sup> Obstfeld, Shambaugh, and Taylor, 2009, p. 2.

<sup>&</sup>lt;sup>20</sup> Rodrik, 2006.

<sup>&</sup>lt;sup>21</sup> Obstfeld, Shambaugh, and Taylor, 2009, pp. 1-2.

accelerated sharply since 1999. The primary drivers of this trend are Asian and some Latin American emerging markets, Japan, and oil exporters, notably Russia.

Reserve accumulations rose to 11.7% of world GDP in 2007 compared with 5.6% a decade ago when the Asian Crisis struck. Reserve accumulations in 2003-2007, prior to the current crisis, amounted to an annual average of USD 777B or 1.6% of global GDP.<sup>22</sup> According to some estimates, insurance motives account for \$4T to \$4.5T, about two-thirds of current reserve holdings, with over half of the increase occurring over the past decade.<sup>23</sup>

There has been a very slow decline in the dominance of the dollar in international reserve holdings. From 71 percent in 1999, IMF data for the second quarter of 2009 show that the 62.8 percent of all allocated reserves were held in US dollars, a decline of only about 8 percent from a decade ago. However, there has been a larger decline in the holding of dollar reserves by emerging and developing countries in the same period as compared with the decline in dollar holdings by advanced countries.

The average global holdings of dollar reserves for 2006-2008 shows that China holds 23.1 percent of total world reserves while Japan holds 13.7 percent of total. <sup>24</sup> In other words, 36.8 percent of total world reserves is held by two countries.

The US enjoyed a net capital gain from the gradual depreciation of the dollar for several years in the run up to the current crisis of over US\$ 1T.<sup>25</sup> This is because while US' liabilities are dollar-denominated, its assets are denominated mostly in foreign currencies.

# **Capital Flows**

In at least the last two decades, countries and regions in the world, especially emerging market economies, have experienced massive capital inflows and outflows, whether measured in absolute historical levels or as a proportion of GDP.<sup>26</sup> Economic liberalization efforts in trade and financial markets and in the capital account in these countries, higher rates of return on capital and investment opportunities in these countries, low interest rates in developed countries such as the US in the recent period, and deregulation of financial markets in these countries which allowed greater risk diversification globally, have greatly facilitated such inflows of capital to emerging market economies. Emerging economies, particularly those in Asia and Latin America in the 1990s, and more recently, Central and Eastern Europe, have been the main recipients of large inflows of capital.<sup>27</sup>

Episodes of massive capital inflows, oftentimes in excess of 10 percent of GDP, have been a usual feature of the run-up to crises. Thereafter, a "sudden stop" of capital inflows is typical of currency crises in emerging market economies.<sup>28</sup> In past crises such as those in the 1908s, many developing countries suffered from the legacy of

<sup>&</sup>lt;sup>22</sup> Stiglitz, 2009, p. 72.

<sup>&</sup>lt;sup>23</sup> Mateos y Lago et al., 2009, p. 8 drawing on Obstfeld, Shambaugh, and Taylor, 2009.

<sup>&</sup>lt;sup>24</sup> Mateos y Lago et al., 2009, p. 9.

<sup>&</sup>lt;sup>25</sup> Mateos y Lago et al., 2009, p. 7.

<sup>&</sup>lt;sup>26</sup> Gochoco-Bautista, 2009.

<sup>&</sup>lt;sup>27</sup> Schadler, 2008.

<sup>&</sup>lt;sup>28</sup> Calvo and Reinhart, 2000.

an external debt burden when capital inflows ended. Capital flows have been quite volatile, especially for non-FDI flows, and for gross rather than net private flows.<sup>29</sup>

In the current global crisis, emerging markets have experienced large capital outflows once again as deleveraging proceeds in the US. Some worrisome features indicating financial fragility are also present today. Whereas maturities had temporarily lengthened after the crises in the 1980s and 1990s, the share of short-term foreign borrowing has increased since the early 2000s, especially for lower-middle- income countries, raising the dangers associated with a potential capital flow reversal. There has also been a secular rise in equity-like foreign funds, whose share in net external financing has fluctuated between 56 and 94 percent since 1993, compared with only about 10 percent in the early 1980s.<sup>30</sup> But the rising share of portfolio flows in these makes the domestic economy vulnerable to sudden shifts in foreign investor sentiment.

An important difference is that the context in which capital flows are occurring today is somewhat different from that in the 1990s and earlier periods. Emerging market economies today, with a few notable exceptions such as India, are running current account surpluses rather than deficits. Both current account surpluses and capital inflows have led to a huge increase in the average rate of annual reserve accumulation in the last six years compared with that in the 1990s.<sup>31</sup> This provides a liquidity cushion during crisis periods and also reduces the need to borrow external funds.

Another notable difference is that the rate of net external financing by richer countries in the recent period has increased by three times what it was in the 1990s as these countries borrow from emerging market economies to finance their huge current account deficits.<sup>32</sup> Developing countries are, in effect lending to developed countries in a seemingly perverse direction of capital flows. Large reserve holdings distort global capital flows towards the center, reducing the benefits of capital liberalization, and breed market uncertainty which are particularly destabilizing when there is a high concentration of reserves. Furthermore, developing countries are lending to developed countries at very low interest rates, amounting to USD 3.7T in 2007.<sup>33</sup>

## III. Proposals for Reforming the International Monetary System

The world needs an international monetary system that promotes global price stability, facilitates world economic growth and ensures global financial stability. A global monetary arrangement that has at its center the currency of a single country as the dominant reserve currency of the world tends to produce external imbalances and encourage boom and bust cycles as well as a risky financial system.<sup>34</sup>

## **Creating a Supranational Reserve Currency**

<sup>&</sup>lt;sup>29</sup> Schadler, 2008.

<sup>&</sup>lt;sup>30</sup> Obstfeld, 2008, p. 6. Net external financing is the amount of net resources provided by foreign investors in order to finance a country's current account deficit, its net reserve accumulation, and its residents' own net purchases of assets located abroad.

<sup>&</sup>lt;sup>31</sup> Obstfeld, 2008, p. 5.

<sup>32</sup> Obstfeld, 2008, p. 5.

<sup>&</sup>lt;sup>33</sup> Stiglitz, 2009, p. 73.

<sup>&</sup>lt;sup>34</sup> Joshi and Vines, 2009.

From Keynes to Mundell and to Stiglitz, there have been efforts to find an instrument of instilling confidence so that global aggregate demand is sufficient and liquidity adequate and supportive of growth. There are different ways in which a new global reserve currency may be created. One possible approach has its roots in Keynes' 1930 proposal to create a supranational currency, the "bancor," to be issued by a supranational by a supranational bank. Keynes, Triffin and Mundell all proposed centralizing reserve assets in order to create what Mundell refers to as "paper gold". "paper gold" idea was to put all reserves into an international monetary pool and use certificates members got in exchange (intors) as world money. If countries decided to increase the supply of intors, they would not need to acquire more gold, foreign exchange or SDRs in exchange. They would simply agree to change the value they place on the millions of ounces of gold. <sup>36</sup>

There are certain desirable characteristics that the international reserve currency should possess.<sup>37</sup> It should be anchored to a stable benchmark and issued according to a clear set of rules to ensure adequate and orderly supply. Its supply should be flexible enough to allow timely adjustment according to changing demand. Changes in the supply of the international reserve currency should not depend on the economic conditions and sovereign interests of any single country.

#### Advantages of a Supranational Reserve Currency

There are several advantages to having a supranational reserve currency. One advantage is that the reserve currency would have a more stable value because of the pooling of several important currencies. This would therefore confer an instantaneous method of reserve diversification to holders of the supranational reserve currency. The only existing example of such a supranational reserve currency is the Special Drawing Rights or SDR.<sup>38</sup> More precisely, the SDR is not a currency itself, but rather, is a claim on a basket of currencies. The SDR is a supranational reserve currency that follows from Mundell's proposal for creating "paper gold." An important advantage of a supranational currency is that it provides a way of replicating the "hard currency" properties of the different currencies on which it is a claim against. Thus, the incentive for countries to self-insure against various risks by exporting capital to the reserve-issuing asset country (or countries) and holding "safe" assets such as dollar-denominated Treasuries is reduced.<sup>39</sup>

Both greater stability in the value of the global reserve currency and its ability to replicate the "hard currency" properties of a variety of reserve currencies reduce the demand for reserves. The incentives faced by countries under the current system to run current account surpluses and then recycle these into US dollar-denominated financial assets should likewise decline. When there are imbalances, countries will tend to face an incentive to adjust compared with a situation in which a single country's currency is used as a benchmark for other currencies and a yardstick for trade. By reducing the constraints to making the necessary adjustments so that imbalances do not get too way out of line, the risk of future crises is reduced and the ability to manage them is enhanced.

<sup>&</sup>lt;sup>35</sup> Mundell, 1971, p. 135.

<sup>&</sup>lt;sup>36</sup> Mundell, 1971, p. 136. Unfortunately, the widely gyrating price of gold in the last few decades has rendered it inutile as the main underlying asset of a stable global reserve money.

<sup>&</sup>lt;sup>37</sup> Zhou. 2008.

<sup>38</sup> Stiglitz, 2009, p. 74.

<sup>&</sup>lt;sup>39</sup> Mateos y Lago et al., 2009, p. 18.

A supranational reserve currency eliminates the exhorbitant seignorage privilege that is enjoyed by the reserve-issuing country when a single national currency is the principal global reserve currency. The loss of the near monopoly power in the issue of the main global reserve currency will reduce the incentives faced by the reserve-issuing country to run large and persistent external imbalances. This will also reduce global risk as the international monetary system will be less dependent on the vagaries and politics of any single country.

### **SDR-an example**

The SDR is an instrument that gives a country the right to draw on the IMF an amount based on a country's contributions to a quota system. The latter specifies the amounts countries are allowed to contribute convertible currencies and SDRs to the IMF. The weights on the different currencies that comprise the SDR basket are defined in "hard" terms, e.g., 44 US dollar cents per SDR. 40 The SDR works in such a way that the relative weights of currencies of the different reserve-issuing countries in the SDR basket adjust automatically when exchange rates change. This imposes discipline on each reserve-issuing country as its weight in the SDR basket would automatically fall if it issues too much currency and its currency depreciates. Of course, a major issue has been the initial set of weights given to the different reserve currencies in the SDR basket, and it will be as well in the case of any other supranational global reserve currency basket that might be created.

When the SDR was created in 1960 as an "outside" money issued by the IMF, the hope was that it would become a major component of world reserves, and be used to establish a system in which global liquidity provision would be adequate and likewise depend on deliberate international decisions. Unfortunately, the creation of the SDR failed to fully resolve the problem of adequate liquidity provision and a more automatic adjustment to external imbalances. SDRs today constitute only about 4 percent of total global reserves. <sup>41</sup> Only a total of only 21.4B SDRs (about \$33B) were issued in two different periods (1970-72 and 1979-81). <sup>42</sup> The approval by the IMF of a new emission of SDRs equivalent to \$250B at the recent G20 London meeting is seen as a major step in increasing global liquidity and enhancing the role of the SDR as an instrument of international cooperation.

#### Creating a Supranational Reserve Currency-A Modern Version

A modern version of the original proposals to create a supranational currency is one by Stiglitz et al. as part of a report by a UN Commission of Experts. <sup>43</sup> One scheme would require countries to agree to exchange their own currencies for the new currency-say International Currency Certificates (ICCs), which could be SDRs- and vice versa, in much the same way quotas are made up today. The difference from the way quotas are set would be that developing countries would make their quota contributions only in their national currencies and not in SDRs or convertible currencies as is the rule today. This proposal could potentially reduce the existing inequality in the existing system of weights of currencies in the current SDR basket by providing one way for countries to considerably expand their quotas. The system envisioned would be equivalent to a system of worldwide swaps among central

<sup>40</sup> Mateos y Lago, 2009, p. 18.

<sup>&</sup>lt;sup>41</sup> Mateos y Lago et al., 2009, p. 18.

<sup>42</sup> Stiglitz, 2009, p. 78.

<sup>&</sup>lt;sup>43</sup> United Nations, 2009.

banks. The global currency would be fully backed by a basket of the currencies of all members and hence, would be a truly supranational reserve currency.

An alternative scheme would have an international agency in charge of creating global reserves simply issuing global currency, allocating ICCs to member countries without any "backing" for the global currency, except the commitment of central banks to accept it in exchange for their own currencies. ICCs or SDRs would have the characteristic of an international reserve currency in much the same way that acceptance by citizens of payments in a national currency gives it the character of domestic money. There is, however, a way for ICCs to have backing. If the issues of global currency received by countries could be considered as deposits in the IMF or a Global Reserve Bank, and the institution in-charge of managing the system acting as the global central bank is allowed to buy the government bonds of member countries or to lend to them, then these investments would be the "backing" of the global currency. This would be similar to domestic moneys being "backed" today by the assets of national central banks (government bonds in their hands and their lending to private sector financial institutions).

Countries could agree to hold a certain fraction of their reserves in the global currency under either of these schemes. The global reserve currency could also pay interest, at a rate attractive enough to induce its use as an investment for central banks' reserves. These investment earnings, in turn, could finance the interest paid to countries that hold the deposits of the global currency. By diversifying away from holding individual country currencies as reserves and holding a supranational global currency instead, the value of reserve holdings would be more stable. As with SDRs, the exchange rate of the global currency would be the weighted average of a basket of convertible currencies, the composition of which would have to be agreed on.

### Rationalizing the Allocation of Global Currency

The allocation of the global currency needs to reflect the distribution of economic power in the world as growing countries, who increasingly account for larger shares of world output, are the ones with a demand for greater liquidity. A formula could be crafted for the allocation of the global currency ("quota") based on the weight of countries in the world economy (GDP) and to their needs (some estimation of the demand for reserves). In 2007, developing countries held reserves which were, in proportion to their GDP, several times those of industrial countries (26.4% of GDP vs. 4.8% for high income OECD countries), as a form of insurance against risk arising from trade and capital account volatility. A formula that would allocate the currency according to some definition of the global demand for reserves would result in larger proportional allocations to these developing countries.44 The size of the annual emissions of global reserves could be targeted to offset the increase in non-borrowed reserves, which would be equivalent to offsetting the deflationary effect of reserve accumulation. A simpler proposal would fix annual emissions at a given rate per year, say \$150 to \$300B per year, although based the experience regarding the demand for reserves in 2007, even \$300B would not have been sufficient. 45

The proposal to make the SDR the dominant world reserve currency in place of the dollar was made by Zhou Xiaochuan, Governor of the People's Bank of China, during the G20 meeting in London in 2008. Undoubtedly, this proposal was made in recognition of China's desire to diversify its holdings of reserves away from dollars and into a supranational currency to reduce risk and to do so quickly without facing

<sup>&</sup>lt;sup>44</sup> Stiglitz, 2009, p. 76.

<sup>&</sup>lt;sup>45</sup> Stiglitz, 2009, p. 76.

capital losses. There is also a desire to shift away from dollar reserves in order to reduce the influence of US policy on global economic outcomes and on political pressures it brings to bear on certain countries. He stated that the SDR could be given a greater role in the global reserve system, and its issuance made automatic and regular. He called for the inclusion of all the currencies of the major countries to form the basis for the valuation of SDR, and the possibility of GDP being included as a weight in the basket of currencies of the SDR. The allocation of SDRs could shift toward a system backed by real assets, such as a reserve pool (rather than the current system of separate management of reserves by countries) to increase confidence in the ability of the reserve currency to maintain its value, instead of the present system of allocating SDRs based on calculations of quotas. The creation and control of global liquidity under a centralized system of management of reserves could be assigned to a global institution, such as the IMF, but obviously, a very much reformed IMF.

However, Governor Zhou stated that there needs to first be a substantial increase in SDR allocation that would reduce the resource problems faced by the IMF and the perceived inequity and difficulties in representation and influence by countries, especially emerging ones like China. He called on countries to cooperate politically in order to accomplish these goals of increasing SDR allocation and broadening its uses, eventually including replacing existing reserve currencies with the SDR.

#### **International Cooperation Needed**

A shift to an SDR-based global monetary system, or any alternative to the current one for that matter, requires international cooperation and agreement to speed up the transition to such a system. However, such an agreement to shift to an SDR-based system may be difficult to obtain because it will tend to socialize the costs of adjusting a few large balance sheet positions (i.e., China, Japan) concentrated in the dominant global reserve currency at present, the US dollar.<sup>46</sup>

Interest in a global off-market mechanism for dollar reserve holders to be able to convert their excess reserves into SDR-denominated assets has been rekindled in light of the global crisis and the dilemma faced by large dollar reserve holders. A suggestion has been made for a global substitution account that the IMF could be set up for this purpose, in which transparent allocation rules could be put in place stipulating a gradual rebalancing of the portfolios of individual countries.<sup>47</sup> This account would allow central banks to swap dollar assets, such as US Treasury bills, for SDRs. The IMF would then convert these short-term dollar-denominated assets for longer claims on the US Treasury, with the spread between the rates paid to SDR holders to help cover exchange rate risk. Governor Zhou's proposal likewise includes a suggestion for the IMF set up an open-ended SDR-denominated fund based on market practice to promote the development of SDR-denominated assets.

## Creating a Private Market for a Supranational Global Reserve Currency

There is a need to create a deep and liquid private market for SDRs so that a settlement system between the SDR and other currencies could be established. The SDR could become a widely-accepted means of payment in international trade and financial transactions. Creating a deep and liquid market for SDRs entails the usual processes involved in creating deeper and liquid markets for any financial asset-

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 $<sup>^{46}</sup>$  The BSP, for example, has stated that it wants to keep its reserves in US dollars rather than SDRs.

<sup>&</sup>lt;sup>47</sup> Mateos y Lago, 2009, p. 19.

bonds issued in SDRs and held by the private sector as well, e.g., pension funds etc. and a market to trade these in. It could also be used as the unit of account in international trade, commodities pricing, investment and corporate book-keeping. Under the current system, the SDR is used only in transactions between governments and international institutions.

# Countercyclical Issuance of the Supranational Reserve Currency

Expanding the role of the SDR also include proposals for the use of a large countercyclical issue of SDRs to finance world liquidity and official support to developing countries during crises, including the current one. One advantage of using SDRs in such a countercyclical way is that it would provide a mechanism for the IMF to play a more active role during crises. If all financing during crises come from SDR loans, the emissions generated by this would be automatically extinguished once loans area paid back and create the global equivalent of the central banks swaps on a massive scale by major industrial countries in response to the current crisis. However, the benefits from the countercyclical issue of SDRs under the current system are constrained by the fact that if SDR issuance is tied to existing quotas of the IMF, less that \$100B of the \$250B emission proposed would go to developing countries, and only \$20B would go to low-income countries. 48 This inequity problem could be reduced not only through a revamp of the existing system of allocation of quotas, but also by allowing unutilized SDRS, especially from industrialized countries, to be used for lending to poorer countries. The IMF could also invest some of the funds made available through the issuance of SDRs in bonds issued by multilateral development banks.

# **Institutions for Global Monetary and Financial Governance**

How institutions for global monetary and financial governance are built or re-built have elicited many diverse and sometimes contentious views. Some have said that there are no institutions focused on global macroeconomic and financial stability issues at the present time. Therefore, "New Bretton Woods" institutions need to be built in order to generate conditions for sustainable development and peace. Furthermore, these new institutions should be more tolerant of controls on capital mobility, especially those focused on putting limits on activities of the banking sector.<sup>49</sup>

Some proposals work within the existing international monetary system and emphasize the need for reforms in existing institutions. These reforms could be radical enough so that even existing institutions would actually become "New Bretton Woods" institutions. A reformed IMF could, in principle, be given the responsibility of managing the global reserve system as it already issues the only supranational reserve currency, the SDR.

These new or reformed institutions would oversee the adoption of mutually-agreed upon goals and rules in the conduct of global monetary policy. Included in this is the requirement for countries to come to an agreement on a world inflation target. The aim of such a proposal is to prevent policy decisions in important or specific countries from perversely affecting policy decisions in other countries, such as by keeping policy rates across countries on track to meet the global inflation target. Once such a

<sup>&</sup>lt;sup>48</sup> Stiglitz, 2009, p. 77.

<sup>&</sup>lt;sup>49</sup> Calvo, 2009, p. 54.

<sup>&</sup>lt;sup>50</sup> Taylor, 2009, p.28.

global inflation target has been agreed upon, a framework could be developed at the country level for central banks and finance ministries to collaborate, set controls on leveraging in financial institutions, etc. all of which may be done even in the absence of a global institution but would obviously be more easily implemented if there were one. Most proposals call for more effective policy coordination across countries, as policy adjustments by both surplus and deficit countries in tandem could be mutually beneficial even if these adjustments may be welfare-reducing when done in isolation.<sup>51</sup>

Of course, all this is easier said than done. Countries do not always find themselves needing the same types of economic remedies as the nature and effects of shocks on countries may differ. Issues of institutional governance need to be resolved through international cooperation to obtain consensus. Whose interests will be reflected in the global inflation target to be agreed on? What if the politically powerful but not necessarily economically powerful countries do not agree with the target? Who will enforce the rules of the game? The IMF's warning of the risks posed by chronic and large US deficits and disorderly adjustment were largely ignored by the US and did not result in policy changes.<sup>52</sup> Neither has the Multilateral Consultative Initiative conducted by the IMF since 2006 to discuss the cross-border implications of global imbalances led to any adjustments in the policies of the countries concerned.<sup>53</sup>

There is always a very real problem in obtaining international consensus. In part, this is because despite the shift in economic power in the world, there appears to be little recognition of this fact in terms of representation of these countries in global institutions. Under the existing system of quotas of the IMF, the allocations for countries like China and other emerging economies are very small and not very reflective of the importance of these countries in terms of economic power in the world today. Unfortunately, it seems that political power lags economic power. Thus, major decisions and the rules of the game on matters that affect the global economy largely reflect the wishes of the US and western industrialized countries.

## A More Independent IMF

One suggestion for reforming the IMF is to give greater independence to those responsible for the surveillance function, such as making them function independently of IMF management and the Board.<sup>54</sup> It should have its own budget and be headed by someone appointed to a single long term in office. It could issue reports without seeking approval from management. Aside from making a department within the IMF more independent, the IMF as an entire institution could be made more independent. It would insulate the surveillance function from politics. Members of the management team would serve long terms in office, not have to seek the approval of an Executive Board, and would come from a greater group of countries. But management would also have to more transparent and accountable for their actions through the publication of the minutes of their deliberations and being accountable to an International Monetary and Financial Committee, not the Board.

### Incentives for Countries to Run More Balanced External Accounts

<sup>&</sup>lt;sup>51</sup> Eichengreen, 2009, p. 24.

<sup>&</sup>lt;sup>52</sup> Eichengreen, 2009, p. 24.

<sup>&</sup>lt;sup>53</sup> Eichengreen, 2009, p. 25.

<sup>&</sup>lt;sup>54</sup> Eichengreen, 2009, pp. 26-27.

In addition, the problem of global imbalances and countries maintaining large BOP or current account surpluses as well as failure or reluctance to make the necessary adjustment to correct these could be discouraged by building-in incentives and/or penalties to discourage these practices. An example of such a penalty would be that countries would lose all or part of their quota allocations if they maintain large surpluses and do not increase global demand in a timely manner. A country that runs a current account surplus or deficit in excess of 3 percent of its GDP, for example, might be required to transfer additional resources to the IMF at the end of each year in which it runs such excess persisted. These tax revenues need not be paid to the IMF-they could go to the World Bank for development assistance or to the UN for peacekeeping operations etc.

# **Evolutionary Processes in Building Institutions of the International Monetary System**

It is obvious that building new institutions or reforming existing ones is not going to be either a quick nor easy process. It is not in the US' interest to simply give up it exorbitant privilege of issuing the principal global reserve currency. More evolutionary ways to build institutions that rely on regional initiatives could be implemented in the transition to a new system or become the new international monetary system itself.

# **New and Extended Common Currency Areas**

Proposals along this latter category call for the creation of new and extended common currency areas. Mundell's (2002) original proposal was to have a three-currency monetary union among the G3-US, the EU, and Japan and then fix exchange rates among the three parties. As in the case of the EMU, the three-currency monetary union would require common agreement on the targeted inflation rate, a common way of measuring the inflation rate (such as Eurostat's Harmonized Index of Consumer Prices (HICP)), redistribution of the seignorage in proportion to equity in the global reserve bank, a way to fix exchange rates, and a centralized monetary policy. Mundell asserts that once inflation rates and inflation targets are close enough, it would not be difficult to lock exchange rates, organize a common monetary policy and agree on seignorage, as in the case of the EU in which even political issues between France and Germany in the formation of a monetary union were overcome.

Mundell's G3 proposal recognizes the political reality that the US is going to be unwilling to give up its role as issuer of the most important currency in the world. The EU is presumably also unwilling to part with the euro. Perhaps the more realistic version of this proposal would have a three-currency monetary union among the US, EU, and finally, a group which includes China, Japan, and the rest of Asia. But this means that China, Japan, and the rest of Asia have a lot of work left to do.

Countries in a region could, for example, agree to create a common reserve currency by pooling their reserves and being ready to exchange their own currencies for this common currency. In turn, the common regional currency would be convertible into any hard currency and could serve as a reserve currency. Over time, countries in the region could rely on this new currency and reduce their holdings of other reserve currencies.

<sup>&</sup>lt;sup>55</sup> Eichengreen, 2009, p. 28.

<sup>&</sup>lt;sup>56</sup> Mundell, 2002, p. 12.

ASEAN + 3 is at the stage of multilateralizing reserve pooling under Chiang Mai Initiative Multilateralized (CMIM)-essentially coming up with a common management system for reserves in the region. It is unclear if the goal of this is to eventually come up with a common regional currency. But it is apparent that were Asia to come up with a common currency of its own, it could, in principle, contribute to a new international monetary architecture.

Indeed, some suggestions for reforming the IMF include one in which it would become a decentralized network of regional reserve funds.<sup>57</sup> The suggestion is akin to Mundell's original G3 idea. In the future, it is possible that regions of roughly comparable size would emerge, each with a convertible currency traded on liquid markets to satisfy the incremental demand for reserves. No one of them would be able to reduce saving relative to investment and run current account surpluses by a very large amount simply because the global demand for reserves is increasing if the regions are more or less equal in size.

# Linkages between Regional and Global Monetary Arrangements

Regional and global arrangements could be linked, for example, through determining SDR allocations based on contributions to regional arrangements.<sup>58</sup> Regional arrangements, such as CMIM, could become part and parcel of the global reserve system. Such a decentralized system of regional reserve funds would have many advantages, including the possibility of better solving problems associated with crises in smaller countries at the regional level.

#### The Role of China

The role of China in the evolution of a new international monetary system is very important. China may soon become the second largest economy in the world and appears open to seeing a new international monetary order. It has increasingly been treated as a co-equal by the US, not only in matters of economics but also in matters relating to security and politics. Lately, Chinese officials have been encouraging domestic and foreign firms to settle transactions in renminbi, signing agreements with governments to do likewise, extending renminbi swaps to foreign central banks such as to Korea during the current crisis, relaxing restrictions on the ability of foreign financial institutions to issue renminbi debt in HK. It is apparent that the Chinese realize that eventually, the renminbi will have to become convertible, and that deep and liquid markets in renminbi have to be developed in order for China to be able to more readily assert its political and economic clout to attain its domestic objectives and to help shape the international monetary system. Whether proposals to make the SDR or another supranational reserve currency the dominant global reserve currency, or those that encourage greater regional integration including in Asia is the optimal path to take is a strategic question that needs to be addressed not only by China but by the rest of the world as well.

#### Conclusion

In spite of the difficulties involved in reforming the international monetary system, the clear and ever-present danger of the global economy's or global financial system's collapse should be incentive enough to pursue this goal. That the current post-Bretton Woods system has worked as long as it has prior to the Great Depression-like global crisis today does not mean that the systems works well or

<sup>&</sup>lt;sup>57</sup> Calvo, 2009, p. 63.

<sup>&</sup>lt;sup>58</sup> Stiglitz, 2009, p. 79.

cannot be improved. Unfortunately, it may take a long time for the world to come up with an alternative to the dollar-centric system that it has-perhaps on the order of two decades or so-unless the global political center of gravity changes as dramatically as the economic landscape has. Perhaps it already is, and we must be ready to be engaged in the process of reforming the international monetary system.

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