IS A DECLINING DOLLAR GOOD FOR THE ECONOMY OR THE GLOBAL ECONOMY?

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A headline on the front page of the New York Times (January 13, 2005) stated "U.S. Trade Deficit Rises to A New High; More Risk To The Dollar". The Times reported that in November 2004, the monthly U.S. trade deficit reached nearly $60 billion. In other words, Americans spent $60 billion more on imports than they earned by selling exports to foreigners. The New York Times article noted that this record trade deficit "figure confounded predictions that the deficit would diminish with the weakening of the dollar".

Why are these economic predictions so confounded? The conventional wisdom propagated by economic pundits is that the U.S. trade deficit will disappear if there is a deliberate policy for permitting (and promoting) a market decline in the value of the dollar in terms of foreign currencies. This dollar devaluation, it is claimed, is a necessary and sufficient condition for (1) eliminating the persistent, enormous American annual trade deficit and (2) regaining balance and stability for the global community. For example, a1999 Institution for International Economics publication suggested that the US trade deficit was not sustainable and indicated that: " 25 per cent is a good ball park figure for how much the dollar would have to depreciate to reach its fundamental equilibrium exchange rate" (Mann 1999, p. 168-9) .

This assertion is based on the argument that with a decline in the value of the dollar, US exports will become cheaper to foreigners and hence they will buy more US goods. Simultaneously a decline in the dollar means imports will become more expensive to Americans

and they will buy less from foreigners. Now, it is true that as the value of the dollar declines, there will be an increase in exports and decline in imports in terms of the physical volumes of exports and imports bought and sold, but this does not mean that the trade deficit will be reduced.

A decline in the dollar means that, except for commodities such as oil which are priced in dollars, all imports are more expensive in terms of dollars. Consequently, Americans will buy a smaller physical volume of imports. This does not guarantee that Americans will spend a smaller total of their hard earned dollars on imported goods and services. For example, suppose that at a price of $450 Americans are importing 1100 TV sets per week, thereby spending $495,000. When the dollar depreciates, suppose the price of imported TVs rises to $550. At this higher dollar prices the number of imported TV sets bought by Americans is reduced, say, to1000. In this hypothetical example, American dollar spending on imported TV sets increases from $495,000 to $550,000 despite the fewer number of TV sets being imported.

Similarly, a decline in the dollar will mean that the price of US exports to foreigners will decline in terms of their domestic currency so that foreigners should buy a larger physical volume of imports form the US. This does not guarantee that Americans exporters will earn more foreign currency for this greater volume of exports. A declining dollar may be a sufficient condition to eliminate, or even significantly reduce, the huge annual US trade deficit. [In technical terms, the Marshall-Lerner condition necessary for a dollar depreciation to improve the trade balance may not be applicable to the US trade pattern[1].]

The New York Times headline is suggestive that the Marshall-Lerner condition is not applicable to the US trade deficit. The dollar has been declining for three years. Nevertheless , the US trade deficit has almost doubled from $30 billion a month in January 2002 to $59 billion a

month in January 2005. Faced with these unpleasant facts, proponents of the conventional wisdom reply that it takes time for the adjustments in exports and imports to occur, but in the long run a decline in the dollar will ultimately eliminate the US trade deficit. But as the famous English economist John Maynard Keynes once noted "In the long run we will all be dead."

Calls for a continuing dollar decline assures that the dollar and foreign currencies are on a collision course that will encourage speculators to look for significant profits by selling dollars and thereby driving down the market value of the dollar. The question then is not whether there will be an abrupt further dollar decline leading to a financial market crisis, the question is when will such a crisis occur. If Treasury Secretary John Snow continues to speak out for a weaker dollar against Asian currencies and at the same time Fed Chairman Greenspan continues to suggest that the dollar needs to fall further, then US policy makers are only encouraging speculators to bet against the dollar. Future historians will refer to the resulting decline of the dollar as the bursting of the dollar bubble.

Since World War II the world has been on a dollar standard. Until 1973, the dollar was fixed in terms of an ounce of gold. Under this Bretton Woods dollar-based payments system the non-Communist world experienced the highest global rate of real economic growth ever recorded. .The average annual per capita rate of real economic growth for the OECD nations from 1950 to 1973 was almost precisely double the previous peak growth rate of the industrial revolution period. Productivity growth for the OECD nations was more than triple that of the industrial revolution era. The average per capita growth rate for LDC's was 3.3 per cent almost triple the growth rate experience by the industrializing nations during the industrial revolution (see Davidson, 2002, pp 1-3). Moreover, as McKinnon (1990,p. 10) has noted, during this period

there was a “much better overall record of price stability” As I indicate in my book Financial Market, Money and the Real World (Davidson, 2002, pp. 226-27)), it was not the fixity of exchange rates alone that contributed to this “golden age”. An additional essential condition (which we discuss further infra) was that the creditor nation accepted responsibility for curing current account imbalances.

After 1973, there was an exchange rate mix with some countries pursuing a managed float against the dollar and others some form of fixity. Nevertheless the US dollar remained as the anchor (standard) for the international payments system. Today, however, a continual and significant falling dollar threatens the very existence of this dollar standard. Can something take this dollar standard’s place?

Short of convening another Bretton Woods conference to hammer out a new international payment system, today’s global economy has two choices. Either to defend the existing dollar standard, or abandon any international standard for the global payments system and accept that all currencies are free to float against each other. The latter may be thought desirable by classical economic theory ideologues, but if history is any guide the adoption of “beggar thy neighbor” exchange rate policies in the 1930s does not augur well for such a system.

To protect the existing dollar standard, however, foreign central banks would have to intervene in markets by buying dollars even more than they currently do to maintain some stability in international financial relations. Today’s conventional wisdom among central bankers , however, is that the monetary authorities should not intervene in any significant manner in foreign exchange markets. When some central bankers do intervene –as the Bank of China and the Bank of Japan have done-- they are told by other nations’s central bankers and government

officials that it is wrong for them to interfere with the efficient financial markets of the international community.

I believe that the globalized economic community faces a dilemma in the currency markets that may have even more serious repercussions than the terrorist strike on 9/11. A decline in the value of the dollar sufficient to make a significant reduction (even if it does not eliminate) the US trade deficit can be a weapon of mass destruction. Can we muddle through on the hope that speculators in our liberalized international financial markets "know" what is good for the global economy as the Bush-Snow -Greenspan pronouncements suggest? Or should we wake up our policy makers and insist that they develop contingency plans to avoid this potentially devastating bursting of the dollar standard?

PATHS TO ECONOMIC GROWTH

Orthodox economists are almost unanimous in preaching the virtues of floating – and its logical inevitability. Yet many, perhaps most, countries remain attached to some form of fixing. Is this a case of economists being out of touch with reality? Or is it that reality is out of touch with economists?

The post-Bretton Woods world has never been one of pure, generalized floating. There is a kaleidoscope of currency arrangements ranging from 'hard' fixers to 'pure' floaters, and almost anything in between. Conventional wisdom claims floaters are gaining over the currency fixers and currency rate managers and that soft pegs are unsustainable. Are we moving towards a bipolar world where most currencies float freely and a minority, such as the Euroland nations, adopt hard pegs[2]?

Conventional wisdom assumes that the motives of the 'fixers' always has been

predominantly economic. For decades after World War II, however, fixers were motivated in large part by geopolitical, rather than purely economic, reasons. The Western European countries accepted the dollar standard in return for military protection against communism. Today, willingness of the Euro countries to float against the dollar can be viewed as an assertion of political independence[3].

Nevertheless, the growing financial maturity and the reduction of trade barriers in Euroland did not lead the European countries to float against each other. Rather it led them towards the most extreme version of hard fixing. The Euro-nations have recognized that fixed, but not necessarily undervalued, rates should be preferred both for macroeconomic stability and to facilitate inter-regional trade expansion. If, this is true for Euroland, is it not true for the globalized economy of the 21 century?

It should be clear that the most vocal advocates of floating are predominantly Americans – operating under the ideological spell originally cast by Milton Friedman's classical theory Monetarist approach and ultimately incredulously based on a Walras-Arrow-Debreu classical theory that is founded on the axiom[4] that money is neutral – i.e., money relations have no effects on real output. Only relative prices are important in determining the composition of output of a fully employed economy. But as Frank Hahn (1973, p. 14) noted "practical men and ill-trained theorists everywhere in the world do not understand what they are claiming...when they claim a beneficent and coherent role for the invisible hand" of a market with freely flexible prices.

The desire of nations such as China, India, Japan, and other Asian rim countries to maintain a competitive fixity of exchange rates against the dollar reflects the desire of these nations to pursue export-led growth – with the US economy the ultimate primary marketing target

for these Asian nations's export industries. Of course this Asian decision to pursue export-led growth permits the consumers in the US to live well beyond their means. At the same time it means that these export oriented nations are pursuing policies to encourage significant savings on their rapidly growing international accounts.

Taking advantage of the world's appetite for dollars, the US has accepted the view that other nations should bear the onus for American's exuberant consumption spending patterns. These other nations have a choice on how they accept this responsibility. They can either (1) revalue their currencies but to do so would mean they would have to accept lower rates of real growth or (2) they can accept dollars almost without limit to maintain their real economic growth and movement to prosperity. Given these options, it is not difficult to understand why the imbalance between the Asian creditors and the world's largest international debtor tends to persist despite a declining dollar. Asiatic nations recognize that their rapid export-led economic growth policies success relies on encouraging the United States to overspend. The Euro nations, on the other hand, perhaps in their desire to demonstrate their geopolitical independence from the US, apparently prefer to impose overall lower real economic growth on their residents.

What generalization regarding economic growth policies can we draw from this current world situation? To slightly oversimplify, I believe that there exists today two roads to real economic growth. Most of the world relies on export-led growth for achieving significant rates of real economic growth[5]. On the other hand, the road that the US travels (and Euroland apparently desires to trod on) requires significant labor productivity growth to generate real output growth. Under the Bush Administration, despite a slight recession, there has been a respectable rate of economic growth, while total employment is still less than the employment levels in January 2001

when President Bush took office. Higher real GDP with less workers signifies a strong rate of productivity growth associated with the real economic growth experienced by the US in the 21st century.

At the beginning of the 21 century when the US fiscal budget turned to a deficit, many economic pundits predicted that withing two to three years the US current account deficit would be unsustainable. But even earlier, on February 17, 1999, Treasury Secretary Robert Rubin warned that "The international system cannot sustain indefinitely the large current account imbalance" (Mann, 1999, p. 166). Moe than five years have past and the evidence is that foreigners continue to finance an ever increasing US trade deficit, despite pressure from Washington to end these US capital inflows.

Nevertheless, the conventional wisdom remains that foreigners will not accept dollars without limit in the long run – and hence the US current account deficit is not sustainable. Foreigners, especially foreign central banks, will not continue to finance the "extravagant" consumption patterns of Americans. Ultimately, the US will have to reduce its exuberant consumption spending on foreign produced goods. Is this likely as long as the Asiatic nations pursue the export-led growth route for economic growth and prosperity?

IS THE US PROBLEM ITS TWIN DEFICITS?

Many of the talking heads of the media complain that the US problem is one of twin deficits - the US government spends more than it raises in taxes, while the dollar value of US imports significantly exceeds the value of exports. In 1981, US exports minus imports was +$8 billion. Every year since the has been a trade deficit, but in 1991 the current account showed a small surplus when the first President Bush launched the "Desert Storm" war against Iraq and

insisted that nations such as Japan, Germany, etc pay for that war which protected them from Saddam Hussein. In 1991 foreign governmental unilateral transfer payments to the US were sufficient to turn the US trade deficit into a small current account surplus.

In the latter half of the Clinton Administration the federal government ran significant fiscal surpluses. Nevertheless the US trade deficit continued to grow from $52 billion in 1993 to $379 billion in 2000.. This fact alone suggests it is not the fiscal budget deficit per se that is the cause of the persistent US current account deficits.

In the years since 1981 the US has acted as the primary engine of economic growth for the rest of the world. Given the current international payments system, if either the US voluntarily ended its trade deficits or if the rest of the world refused to continue to finance the US international overspending, then the major growth industries of the rest of the world would stagnate as their export market in the US dried up.

Those who advocate that China, Japan, India, etc should stop sterilizing their export earning surplus dollar inflows and let their currency float (upwards) against the dollar are using the old classical argument that when there is an international payments imbalance, it is the duty and obligation of the debtor to curtail spending and that the creditors should accept (encourage) their debtor trading partners to tighten their belts and accept a lower real income for its residents. But a rapid and significant belt-tightening exercise by large customers of nations that rely on export led growth has deflationary repercussions for the creditor nation(s) such as rising unemployment, falling aggregate incomes, and potential bankruptcies of their previously expanding export industries that can result in these industries defaulting on their outstanding bank loans in these creditor nations who already have shaky banking systems.

Given the history of the global economy in the last quarter of a century, creditor nations would be foolish to suddenly stop sterilizing their large and growing surplus dollar export earnings and adopt a free floating exchange rate.

In his Bretton Woods papers, Keynes argued that when large international debtors have persistent current account deficit problems, it is enlightened creditors who expand their spending on the products of the debtors so that the latter can earn sufficient foreign exchange. Can we design an international payments system where the creditor nation(s) take on the responsibility to help debtor nations work their way out of debt? The answer is yes, but before we get to such a proposal let us look at a proposal to deal with these international financial problems that has been put on the table by a Nobel Prize winner.

CURRENCY CRISES AND GLOBAL GREEN BACKS

In the Spring 2003 issue of Harvard Relations Council International Review, Nobel Prize winner Joseph Stiglitz indicated that the international financial system is suffering from a virulent malady that, at one time or another, has left developing nations, e.g., Korea, Indonesia, Thailand, Mexico, Argentina, Brazil, economically devastated.

Stiglitz notes that international capital flows are a primary cause of this disease as every prudent nation (except the United States) strives to maintain a surplus of exports over imports to be added to the nation's foreign reserves. Since the global economy is in essence on a "dollar standard", foreign reserves are held primarily in the form of US Treasuries.

Stiglitz correctly notes that one country's surplus must be some other nation(s)'s deficit as the saved foreign reserves are not used to buy the products of the nation's trading partners. In essence, when any nation pursues policies that successfully run persistent trade surpluses, it is as

if this nation is playing a game of Old Maid and passing the Black Queen of unemployment and indebtedness to other nations. In a dollar standard world, nations (other than the United States) stuck with the Old Maid must use a combination of previously saved foreign reserves plus new international loans to pay for their excess of imports and to service their existing international debts. Ultimately, as its foreign reserves dwindle and its international indebtedness increases, the deficit nation is unable to service its outstanding international debt obligations.

To prevent default, the IMF can make new loans to the indebted nation. The IMF loans require deficit nations to adopt "Washington Consensus" reforms where (1) all domestic financial, labor and product markets must be "liberalized", i.e., freed of government control, and (2) the nation must 'tighten its belt", i.e., run fiscal surpluses and tight monetary (high interest) policies. These belt tightening policies depress the nation's economy, in the hope that the resulting impoverished population will drastically reduce their purchases of all goods and services including imports.

Even as the deficit nation tightens its belt, however, its increased international indebtedness (as the IMF loans are added to the existing loans) enlarges the annual international debt service payments. Adding to this burden is any decline in the nation's exchange rate as domestic residents and foreign investors, taking advantage of the liberalized international financial market, attempt to move their funds to a safe haven in another country. Almost inevitably, the indebted nation can not free itself from the increasing weight of its hard currency international debts — except by default. The result is a moribund economy e.g., Argentina in 2002.

Stiglitz suggests creating "global greenbacks" (known as special drawing rights [SDR]) to

be issued as grants (handouts) to developing countries and other countries in times of international financial difficulties. Under Stiglitz's plan, these global greenbacks can be converted into hard currencies to service debts, buy imports, or supplement foreign reserves. Unfortunately, such handouts are merely palliatives and not the solution to the problem. Moreover, some countries will become SDR addicts, and when the handouts end, the economic withdrawal symptoms can be even more deadly.

The cure lies in creating new international financial architecture as President Clinton called for after the 1998 Russian debt default. Unfortunately Clinton's clarion call went against the "Washington Consensus" and therefore was never seriously studied by major political decision makers. Stiglitz fails to provide a new architecture because he ignores some guidelines that Keynes indicated were essential to avoid international financial problems and recessionary forces in the post World War II era. Keynes suggestions included:"We need a quantum of international currency... [which] is governed by the actual current [liquidity] requirements of world commerce, and is capable of deliberate expansion.... We need a method by which the surplus credit balances arising from international trade, which the recipient does not wish to employ can be set to work... without detriment to the liquidity of these balances" [Keynes , 1980, p.168]..

In my book, Financial Markets, Money and the Real World [Davidson, 2002, ch. 14] I have embedded Keynes's suggestions in a proposal for a new international financial architecture that is designed [1] to prevent a lack of global effective demand due to any nation(s) either holding excessive idle reserves or draining reserves from the system, [2] to provide an automatic mechanism for placing a major burden of payments adjustments on the surplus nations, [3] to

prevent financial crises while providing each nation with the ability to monitor and, if desired, to control movements of flight capital[6], [4] to expand the liquidity of the international financial system as global capacity warrants, and [5] encourages the debtor nations to work their way out of debt rather than either await handouts or default on international obligations to encourage short "haircuts" for their international creditors.

The health of the global economic system will not permit us to muddle through with the present international financial arrangements much longer. Before an international financial calamity occurs, it is time to look at blue prints for a New Financial Architecture that will prevent recurrent financial crises and the possibility of another international Great Depression.

Noting that there has been almost 100 currency crises in the previous 30 years, Stiglitz states "the question is not whether there will be another crisis, but where it will be". According to Stiglitz: "This much is clear: the International Monetary Fund (IMF), whose responsibility it is to ensure the stability of the global financial system, has failed miserably in its mission to stabilize international financial flows, arguably making matters worse".

Thirty years before 2003, however, marked the breakdown of the most successful international financial system[7] in the history of mankind, the Bretton Woods system. Unfortunately, this fact did not stimulate Stiglitz to raise the following questions :

(1) Despite the existence of the same IMF during the quarter century after World War II, why did the Bretton Woods financial system tend, in general, to avoid international financial crises?

(2) What was it about the international financial system during the Bretton Woods period that encouraged (or at least did not hinder) year-after-year of unparalleled rates of increase in the real GDP per capita for every nation this side of the Iron Curtain[8]?

(3)Why was there such unparalleled growth rates even though every major nation, including the United States, instituted some form of international capital flow restrictions during the Bretton Woods period?

WHERE DO WE GO FROM HERE?

In Davidson, (1992, 2002) I have developed in great detail a proposal for a new financial architecture for the international payments system. Building on Keynes's proposal for an international clearing union, I have developed an eight point system that produces the necessary and sufficient conditions to permit the establishment of a global golden age of economic growth in the 21st century. The main proviso of my proposal are:

1. The unit of account and ultimate reserve asset for international liquidity is the International Money Clearing Unit (IMCU). All IMCU's are held only by central banks, not by the public.

2. Each nation's central bank is committed to guarantee one way convertibility from IMCU deposits at the clearing union to its domestic money. Each central bank will set its own rules regarding making available foreign monies (through IMCU clearing transactions) to its own bankers and private sector residents[9]. Ultimately, all major private international transactions clear between central banks' accounts in the books of the international clearing institution.

3. The exchange rate between the domestic currency and the IMCU is set initially by each nation -- just as it would be if one instituted an international gold standard.

4. Contracts between private individuals will continue to be denominated into what ever domestic currency permitted by local laws and agreed upon by the contracting parties.

5. An overdraft system to make available short-term unused creditor balances at the Clearing

House to finance the productive international transactions of others who need short-term credit. The terms will be determined by the pro bono clearing managers.

6. A trigger mechanism to encourage a creditor nation to spend what is deemed (in advance) by agreement of the international community to be "excessive" credit balances accumulated by running current account surpluses. These excessive credits can be spent in three ways: (1) on the products of any other member of the clearing union, (2) on new direct foreign investment projects, and/or (3) to provide unilateral transfers (foreign aid) to deficit members.

7. A system to stabilize the long-term purchasing power of the IMCU (in terms of each member nation's domestically produced market basket of goods) can be developed. This requires a system of fixed exchange rates between the local currency and the IMCU that changes only to reflect permanent increases in efficiency wages.[10] This assures each central bank that its holdings of IMCUs as the nation's foreign reserves will never lose purchasing power in terms of foreign produced goods, even if a foreign government permits wage-price inflation to occur within its borders.

8. If a country is at full employment and still has a tendency towards persistent international deficits on its current account, then this is prima facie evidence that it does not possess the productive capacity to maintain its current standard of living. If the deficit nation is a poor one, then surely there is a case for the richer nations who are in surplus to transfer some of their excess credit balances to support the poor nation.[11] If it is a relatively rich country, then the deficit nation must alter its standard of living by reducing the relative terms of trade with major trading partners. If the payment deficit persists despite a continuous positive balance of trade in goods and services, then there is evidence that the deficit nation might be carrying too heavy an international debt service obligation. The pro bono officials of the clearing union should bring the debtor and creditors into

negotiations to reduce annual debt service payments by [1] lengthening the payments period, [2] reducing the interest charges, and/or [3] debt forgiveness.[12]

It should be noted that proviso #2 permits capital controls[13]. Proviso #6 embodies Keynes's innovative idea that whenever there is a persistent (and/or large) imbalance in current account flows -- whether due to capital flight or a persistent trade imbalance --, there must be a built-in mechanism that induces the surplus nation(s) to bear a major responsibility for eliminating the imbalance. The surplus nation must accept this burden for it has the wherewithal to resolve the problem.

In the absence of #6, under any conventional system, whether it has fixed or flexible exchange rates and/or capital controls, there will ultimately be an international liquidity crisis (as any persistent current account deficit can deplete a nation's foreign reserves) that unleashes global depressionary forces. Thus, proviso #6 is necessary to assure that the international payments system will not have a built-in depressionary bias. Ultimately then it is in the self-interest of the surplus nation to accept this responsibility, for its actions will create conditions for global economic expansion some of which must redound to its own residents. Failure to act, on the other hand, will promote global depressionary forces which will have some negative impact on its own residents.

Some think that my specific clearing union plan, like Keynes's bancor plan, a half century earlier, is Utopian. But if we start with the defeatist attitude that it is too difficult to change the awkward system in which we are trapped, then no progress will be made. Global depression does not have to happen again if our policy makers have sufficient vision to develop this Post Keynesian approach. The health of the world's economic system will simply not permit us to muddle through.

APPENDIX A: THE NEED FOR MARKET ORDERLINESS IN FINANCIAL MARKETS

Financial markets furnish liquidity by providing an orderly, well organized environment where

financial assets can be readily resold for cash -- while the essential properties of the underlying real capital assets prevent them from producing the attribute of liquidity[14]. Market orderliness requires a private or a public institution that regulates the net flows into and out of the market. Orderly liquid financial markets, however, encourage each investor to believe they can have a fast "exit strategy for the moments when they are dissatisfied with the way matters are developing. Without liquidity, the risk of making an investment as a minority owner would be intolerable."(Bernstein, 1998a p.18). This fast exit strategy potential is inherent in any well-organized financial market, and therefore, it promotes the separation of ownership and management (Keynes, pp. 150-1) (Davidson, 1972) (Bernstein, 1998). With a liquid capital market, owners have no legal or moral commitment to stick around long enough to make sure their capital is used efficiently.

In the absence of a liquid financial market "[t]here is no object in frequently attempting to revalue an investment to which we are committed" (Keynes, 1936, p. 151) for there can be no fast exit strategy. If capital markets were completely illiquid then there would be no separation of ownership and control. Once some volume of capital was committed, the owners would have an incentive to use the existing facilities in the best possible way no matter what unforeseen circumstances might arise. Perhaps then capital markets might behave more like the efficient markets of mainstream theory. Bernstein's (1998a, p. 23) homily that "an efficient market is a market without liquidity" is a lesson that policy makers must be taught. Judicious use of capital controls in international financial relations can promote efficiency by constraining any sudden change in the demand for liquidity that would adversely affect the real economy of trading partners.

If financial markets are primarily organized to provide liquidity, then when bullish sentiment about the uncertain future dominates financial markets, rising capital market prices will encourage savers to readily provide the funding that induces entrepreneurial-investors to spend sums

on new investment projects that (i) far exceed their current incomes and (ii) induce exuberant expectations of future returns. The result is an investment boom. If some time in the future, doubts suddenly arise concerning the reliability of these euphoric expectations, then bearish sentiment will come to the fore and the investment boom will turn into a bust.

When the bearish view of the future becomes overriding, an excessive demand for liquidity can develop that will impede the production of new investment capital even when real resources are idle and therefore readily available to produce new real capital goods. The basic message of the Keynes's General Theory is that too great a demand for liquidity can prevent "saved" (i.e., unutilized) real resources from being employed in the production of investment goods. These resources will be involuntarily unemployed.

Unlike Old and New Keynesians, Keynes explicitly recognized that the introduction of sand in the wheels of liquidity-providing financial markets via a transactions tax is a double-edged sword. Keynes [1936, p. 160] noted that a financial transactions tax "brings us up against a dilemma, and shows us how the liquidity of investment markets often facilitates, though it sometimes impedes, the course of new investment".

What market conditions would create non-volatile movements of prices in real world financial markets?

"It is interesting that the stability of the [financial] system and its sensitiveness... should be so dependent on the existence of a variety of opinion about what is uncertain . Best of all that we should know the future . But if not , then, if we are to control the activity of the economic system ... it is important that opinions differ" [Keynes, 1936, p. 172]

In other words, an ergodic system, i.e., a system where the future can be "known" via statistically reliably predictions, would provide the "best of all" possible worlds for financial market stability. Then the future can be reduced to actuarial certainty, i.e., "we should know the future". Market

efficiency would be assured as long as agents operated in their actuarially known self-interest. There would be no need for a fast exit strategy. Financial analysts who argue that "fundamentals" determine the long term trends in financial markets believe that, at least in the long run, the financial system is ergodic.

If, however, the system is nonergodic (i.e., uncertain and therefore statistically reliable predictions can not be made), then actuarial certainty and the possibility of rational probabilistic risk spreading -- which orthodox economists claim is an essential function of efficient financial markets -- is impossible. Consequently, a second best solution to maintaining market stability is to encourage substantial numbers of market participants to hold continuously differing expectations about the future so that any small upward change in the market price brings about a significant bear reaction, while any slight downturn induces a bullish reaction. The result will be to maintain spot financial market (resale) price orderliness over time and therefore a high degree of liquidity[15]. Normally ,in such markets there is an institutional "market-maker" who assures market participants that the market maker will intervene to maintain orderliness in price movements if, at any moment of time, there is a discontinuity in either bull or bear expectations.

If, there is a rapid, large and sudden discontinuity that leads to a major shift in the private-sector's bull-bear disposition, what I call a band-wagon effect or other call a herding[16] effect, then the market maker may not have the resources to intervene to maintain orderliness. In this situation price stability requires capital regulations to prevent the bears from liquidating their position too quickly (or the bulls from rushing in) and overcoming any single agent (private or public) who has taken on the responsible task of market maker to promote "orderliness"[17]. Capital controls serve the same function as laws that make it a crime to yell fire in a crowded theater. In the absence of such social constraints on free speech, the resulting rush to the exit may inflict more damage than any potential fire.

APPENDIX B: DO WE NEED SAND IN THE WHEELS OF INTERNATIONAL FINANCE (OR

OTHER MAINSTREAM SUGGESTED PRESCRIPTIONS?)

Despite willingness to accept the “compelling logic” of efficient market theory (EMT), the common sense of Tobin and his New Keynesian followers regarding real world financial markets can not help but break into their logical models-- with injury to their logical consistency. Thus to solve today’s international monetary problems, some “Keynesians” advocate a Tobin tax. Tobin (1974) has been warning that free international financial markets with flexible exchange rates create volatile international financial markets that can have a "devastating impact on specific industries and whole economies". Tobin advocates that governments limit market volatility by increasing the transactions costs on all international payments via a small "Tobin tax". Unfortunately though Tobin's assessment of the problem is correct, the empirical evidence is that any increase in the transactions costs significantly increases rather than decreases measured market volatility (Davidson, 1997, Davidson 2002). Moreover, a Tobin tax does not create a greater disincentive for short-term speculators as Tobin has claimed (Davidson, 1997, Davidson, 2002) . Hence, the "Tobin tax"solution is the wrong tool to solve the growing international financial speculative market problem.

Since the Mexican peso crisis of 1994, pragmatic policy makers have advocated a lender-of-last-resort (LOLR) to stop international financial market liquidity hemorrhaging and to "bail-out" the international investors. In 1994, US Treasury Secretary Rubin encouraged President Clinton to play this LOLR role. With Clinton's liquidity facilities exhausted, the IMF stepped into this lender role when the Asian crisis of 1997 and the Russian bear emerged in 1998. When the IMF recently reached the end of its liquidity rope, IMF Director at the time, Stanley Fisher, suggested that the G-7 nations take over the "lender of last resort" (LOLR) function. Fisher's cry for a G7 LOLR collaboration is equivalent to recruiting a volunteer fire department to douse the flames after someone has cried fire in a crowded theater. Even if the fire is ultimately extinguished there will be

a lot of innocent casualties. Moreover, every new currency fire requires the LOLR to pour more liquidity into the market to put out the flames. The goal should be to produce a permanent fire prevention solution, not to rely on organizing larger and larger volunteer fire fighting companies after each new currency fire breaks out.

Finally, the man who "broke the Bank of England", George Soros, as well as some economists, e.g., Rudi Dornbusch, have, in the past, recommended a currency board solution. A currency board fixes the exchange rate so that the domestic money supply does not exceed the amount of foreign reserves a nation possesses[18]. Thus, if and when investors panic and rush to exit from a nation, the currency board maintains the exchange rate by selling foreign reserves and reducing the domestic money supply by an equivalent sum. A currency board solution, therefore, is equivalent to the blood letting prescribed by 17th century doctors to cure a fever. Enough blood loss can, of course, always reduce the fever but often at a terrible cost to the body of the patient. Similarly, a currency board may douse the flames of a currency crisis but the result will be a moribund economy as the experience of Argentina in 2002 demonstrated.

Jeffrey Sachs, Milton Friedman and others have suggested a return to completely flexible exchange rates. Unfortunately whenever there is a persistent international payments imbalance, free market exchange rates flexibility can make the situation worse. For example, if a nation is suffering a tendency towards international current account deficits, then free market advocates argue that a decline in the market price will end the deficit. If, however, the Marshall-Lerner condition does not apply, as illustrated at the beginning of this paper, then a declining market exchange rate worsens the situation by increasing the magnitude of the payments deficit[19].

If, the payments imbalance is due to capital flows, there is a similar perverse effect. If, for example, country A is attracting a rapid net inflow of capital because investors in the rest of the world think the profit rate is higher in A, then the exchange rate will rise. This rising exchange rate

creates even higher profits in terms of their domestic currency for foreign investors and will encourage foreign investors to rush in with additional capital flows pushing the exchange rate even higher. If then suddenly there is a change in sentiment (often touched off by some ephemeral event), then a fast exit bandwagon will ensue pushing the exchange rate perversely down.

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ENDNOTES

1. Even if the Marshall Lerner condition is met, if the sum of the price elasticity of demand for imports plus the price elasticity for exports only slightly exceeds unity it may take a tremendous plunge in the dollar to even significantly reduce the balance of trade deficit.

2. Stanley Fischer (2001), "Exchange Rate Regimes: Is the Bipolar View Correct?", Journal of Economic Perspectives 15, 3-24.

3. If the Euro was pegged to the dollar, would European support for President Bush's intervention in Iraq be different?

4. An axiom is a doctrine that is accepted as a "universal truth" for which no proof is required.

5.I have explained why export led growth is such an attractive option in P. Davidson "The General Theory n An Open Economy Context", in A Second Edition of the General Theory, vol. 2, edited by G. C. Harcourt and P. Riach, London, Routledge, 1996; reprinted in Uncertainty, International Money, Employment and Theory, [vol. 3 of the Collected Writings of Paul Davidson] edited by Louise Davidson, London, Macmillan, and New York St. Martins Press, 1999.

6. It would make visible international movement of funds earned in illegal activities, tax dodges, and funds to finance international terrorist activities.

7. Successful in the sense that during this period the average annual real growth per capita was almost double the peak growth rate of developed nations during the period of the industrial revolution, while the average real growth rate of developing nationsequ7alled or exceeded the industrial revolution growth rate [see Davidson, 2002, p. 2].

8. For the figures see Davidson (2002) p. 1-2. For an explanation see Davidson (2002) pp.225-8.

9Correspondent banking will have to operate through the International Clearing Agency, with each central bank regulating the international relations and operations of its domestic banking firms. Small scale smuggling of currency across borders, etc., can never be completely eliminated. But such movement's are merely a flea on a dog's back -- a minor, but not debilitating, irritation.
If, however, most of the residents of a nation hold and use (in violation of legal tender laws) a foreign currency for domestic transactions and as a store of value (e.g., it is estimated that Argentineans hold more than $5 billion U.S. dollars), this is evidence of a lack of confidence in the government and its monetary authority. Unless confidence is restored, all attempts to restore economic prosperity will fail.

10 The efficiency wage is related to the money wage divided by the average product of labor, it is the unit labor cost modified by the profit mark-up in domestic money terms of domestically produced GNP. At this preliminary stage of this proposal, it would serve no useful purpose to decide whether the domestic market basket should include both tradeable and non-tradeable goods and services. (With the growth of tourism more and more nontradeable goods become potentially tradeable.) I personally prefer the wider concept of the domestic market basket, but it is not obvious that any essential principle is lost if a tradeable only concept is used, or if some nations use the wider concept while others the narrower one.

11 This is equivalent to a negative income tax for poor fully employed families within a nation.

12 The actual program adopted for debt service reduction will depend on many parameters including: the relative income and wealth of the debtor vis-a-vis the creditor, the ability of the debtor to increase its per capita real income, etc.

13. The function of capital controls is to prevent sharp changes in the bull-bear sentiment from overwhelming market makers and inducing rapid changes in price trends for such volatility can have devastating real consequences. For a further explanation see Appendix A of this paper.

There is a spectrum of different capital controls available. At one end of the spectrum are controls that primarily impose administrative constraints either on a case-by-case basis or expenditure category basis. These controls include administrative oversight and control of individual transactions for payments to foreign residents (or banks) often via oversight of international transactions by banks or their customers. Mayer (1998, pp. 29-30) has argued that the Asian problem was due to the interbank market that created the whirlpool of speculation and that what is needed is "a system for identifying...and policing interbank lending" and banks' contingent liabilities resulting from dealing in derivatives. Echoing our nonergodic theme, Mayer (1998, p. 31) declares "The mathematical models of price movements and covariance underlying the construction of these [contingent] liabilities simply collapsed as actual prices departed so far from `normal' probabilities".

Other capital controls include (a) policies that make foreign exchange available but at different exchange rates for different types of transactions and (b) the imposition of taxes (or other opportunity costs) on specific international payments, e.g., the Tobin Tax or the 1960s United States Interest Equalization Tax. Finally there can be many forms of monetary policy decisions undertaken to affect international payment flows, e.g., raising the interest rate to slow capital outflows, raising bank reserve ratios, limiting the ability of banks to finance purchases of foreign securities, and regulating interbank activity as suggested by Mayer.

The recent experience of the IMF, as lender of last resort imposing the same conditions on all nations requiring international liquidity loans, should have taught us that in policy prescriptions one size does not fit all situations. Accordingly, the type of capital regulations a nation should chose from the spectrum of tools available at any time will differ depending on the specific circumstances involved. In this brief paper it would be presumptuous of me to catalog what capital regulations should be imposed for any nation under any given circumstances. Nevertheless, it should be stressed that regulating capital movements is a necessary but not sufficient condition for promoting global prosperity.

14.Keynes (1936, p. 241n) argues that the "attribute of 'liquidity" of an asset is by no means independent of the presence of two essential properties, namely that the asset is not reproducible via the employment of labor and it is not substitutable for the producible output of industry.

15.Only in the nonergodic world that is our entrepreneurial economic system, is it sensible to organize complex and lengthy production and exchange processes via the use of nominal contracts (Davidson, 1994) in order to give entrepreneurs some control of cash flows over an otherwise uncertain future. In such a world, the primary function of organized financial markets is to provide liquidity by permitting the resale of assets in an orderly market. Only secondarily do modern super-efficient financial markets affect the allocation of new capital amongst industries and to the extent it apportions capital, this distribution is not predetermined by some long-run immutable real economic fundamentals

16. Since most of the time, a herd will normally be peacefully grazing in a serence pasture, I believe that the name "herding effect" is a misnomer for the action it is describing. A stsampede effect would be a better description.

17. Many financial markets have "circuit breakers" which is a crude instrument to constrain capital inflows or outflows in the market — especially with the ubiquitous utilization of the Internet which allows transactions to occur outside organized financial markets.

18 A currency board is the modern equivalent of the gold standard where U.S. Dollars are the "gold". The gold standard worked only when there was no bandwagon effects. It always failed when there was a bandwagon effect for a fast exit.

19 The Marshall-Lerner condition requires that the sum of the price elasticities for exports and imports exceed unity for a depreciating exchange rate to reduce the payments deficit. The textbook J-curve for a depreciating exchange rate recognizes that in the short run the payments deficit worsens (the downward part of the J-curve). The J-curve ultimately turns upward because it is assumed that in the long run, price elasticities are approximately infinite.