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The International Monetary (Non-)Order and the "Global Capital Flows Paradox"

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ABSTRACT

This paper sets out to investigate the forces behind the so-called "global capital flows paradox" and related "dollar glut" observed in the era of advancing financial globalization. The supposed paradox is that the developing world has increasingly come to pursue policies that resulted in current account surpluses and thus net capital exports—destined primarily for the capital-rich United States. The hypothesis put forward here is that systemic deficiencies in the international monetary and financial order have been the root cause behind today's situation. Furthermore, it is argued that the United States' position as issuer of the world's premiere reserve currency and supremacy in global finance explain the related conundrum of a positive investment income balance despite a negative international investment position. The assessment is carried out in light of John Maynard Keynes's views on a sound international monetary and financial order.

Keywords: International Monetary Order; Global Imbalances; Capital Account Convertibility; Capital Flows; Reserve Currency; Financial Instability; Subprime Crisis

JEL Classifications: B25, B31, F02, F32, F33, F55, G18

1. INTRODUCTION

The world economy has experienced an impressive global boom since 2003. While the boom was broad based, spanning more and more countries and even reaching the euro area by 2006, it also carried a number of features that gave rise to puzzlement and concern. Unprecedented "global imbalances," epitomized by a U.S. current account deficit that exceeded 6 percent of GDP by 2005, represented one major theme. Related to it, a "global capital flows paradox" was identified as countries in the developing world turned into net capital exporters, with surging reserve holdings in the form of U.S. Treasury securities. The global boom reached a critical point in 2007, when U.S. domestic demand growth finally slowed down. Hopes for a "decoupling" of the rest of the world persist in early 2008, since important emerging market economies are judged to be in such good shape as to be able to withstand the U.S. slowdown and sustain the global expansion.

This paper sets out to investigate the forces behind the so-called "global capital flows paradox" and related "dollar glut" observed in the era of advancing financial globalization. The hypothesis put forward here is that systemic deficiencies in the international monetary and financial order are the root cause of today's situation. Furthermore, it is argued that the U.S. position as issuer of the world's premiere reserve currency and supremacy in global finance explain the related conundrum of a positive investment income balance despite a negative international investment position, which in turn has deteriorated by much less than could have been expected given the magnitude of the United States' trade imbalance.

The analysis in this paper is carried out in the light of Keynes's views on a sound international monetary and financial order, which in Section 2 are contrasted with the actually agreed upon Bretton Woods order. Section 3 then describes some salient features and experiences under the post–Bretton Woods international monetary non-order and era of financial globalization. A brief summary of the U.S. current account deficit follows in Section 4, while Section 5 focuses on the developing world's change in behavior over the 1990s and the related "global capital flows paradox." The internal workings of the U.S.-led global boom are the subject of Section 6, which offers critiques of both the "Bretton Woods II" and "global saving glut" hypotheses. Section 7 then addresses the issue of the opportunity costs of the developing world's paradoxical conduct under the U.S. dollar standard, questioning whether capital account

convertibility and financial globalization are living up to the promises that were made for them. Section 8 concludes.

2. KEYNES'S VIEWS ON A SOUND INTERNATIONAL MONETARY ORDER, AND WHAT BECAME OF THEM AT BRETTON WOODS

Keynes's monetary works of the 1920s, featuring *A Tract on Monetary Reform* (1923) and "The Economic Consequences of Mr. Churchill" (1925) in particular, make it clear that he did not consider the gold standard a suitable global order that would foster global economic stability while at the same time allowing countries sufficient scope for addressing their respective domestic situations (or: national policy space). Composing the design of an ideal order for the postwar world in the early 1940s, Keynes observed that the gold standard only worked reasonably well for a brief period and for very special conditions that no longer prevailed. His aim was to reestablish an international monetary order for free trade and finance without the gold standard's key defect of imposing deflationary adjustments on parts, or even the whole, of the system. His script for the envisioned new, better order "completely dethroned gold in polite language" and effectively "substituted bank money for gold" (Keynes 1942, p. 140).

Inspired by the insights that his *General Theory* (1936) had brought to light, Keynes was optimistic that the postwar era could be an era of wealth creation and rising incomes, provided that obstacles to free trade constraining countries' export markets were relieved and an expansionist bias to global demand implanted into the global monetary order. In essence, Keynes wanted to disable countries to pursue mercantilist strategies but enable them to systematically pursue domestic demand-led growth through deliberate management of their economies instead. In chapter 23 of *The General Theory*, Keynes observed that countries faced an incentive to draw on measures to increase the favorable balance of trade to boost their investment and employment growth given their lack of non-mercantilistic policy instruments that would allow sufficient control over domestic policy objectives under gold standard conditions. The problem is of course that this strategy cannot work for the—closed!—world economy as a whole, risking that the response of countries with an unfavorable trade balance might impart an overall deflationary bias into the system.

Contemplating what a new postwar order should look like, Keynes noted that the interwar period had provided all the unfortunate experiments of collective failure that could result when countries, desperately lacking better alternatives, judged that mercantilism was in their best national interest, featuring competitive deflation and competitive exchange depreciations, and the collapse of international trade and finance. Keynes feared that global current account imbalances that built up during the war and the corresponding concentration of gold holdings in the United States would impart a contractionist and deflationary bias on deficit countries and the system as a whole, risking a repeat of previous disasters featuring protectionism and beggar-thy-neighbor policies.

His proposal¹ was: to create a new international monetary standard and system liquidity that was largely detached from gold; to implant a chiefly rule-based adjustment mechanism toward balance-of-payments equilibrium into the new global order featuring symmetric pressures for adjustment on both current account surplus and deficit countries; and to create sufficient national policy space that would enable countries to achieve domestic stability while abiding by the new international rules of the game, abstention from beggar-thy-neighbor strategies in particular.

At the core of Keynes's envisioned "International Clearing Union" was the "bancor" unit of account and international liquidity in the form of (overdraft) bank money. The bancor was to be defined in terms of, but—importantly—not convertible into, gold. In contrast to the random growth in the world's gold stock, bancor supply was ultimately elastic and under deliberate international control. By way of design in line with national banking principles, a credit mechanism was to overcome the "hoarding" problem afflicting the gold standard.

National currencies were to have fixed parities in terms of the bancor, and member countries, quotas for bancor overdraft loans. Symmetry in adjustment pressures was secured, as both surplus and deficit countries were to pay interest on their credit or debit balances, respectively, and face quasi-automatic exchange rate realignments if their bancor clearing balances exceeded certain thresholds in terms of their defined quotas. National policy space was to be created through capital controls looking after the "hot money" problem while allowing countries to set interest rates in line with their respective domestic requirements.

¹ See CW, Vol. 25. Arguably, Keynes's early "clearing union" drafts most truly reflect his own vision. For a more detailed analysis of the evolution of Keynes's thinking on this issue, see Bibow (2008a).

Temporary international payments imbalances were thus to be smoothed by official and "supernational" bancor overdraft liquidity. Bancor liquidity would grow endogenously with trade and temporary payments imbalances, and without facing competition from either national reserve currencies or private short-term lending. Exchange rates were to be pegged but adjustable according to rules that forbid beggar-thy-neighbor-style destabilization and prescribed quasi-automatic parity changes designed to keep trade balanced.

In summary, Keynes's bancor scheme was designed to rob countries of any mercantilist option, but grant them national policy space to pursue deliberate national policy management targeting domestic stability instead, and within a symmetric and cooperative international order. In addition, Keynes envisioned complementary international institutions designed to secure a tendency toward international balance through stabilization of the international investment and credit cycle, fostering commodity price stabilization, and supplemental international support for reconstruction and development.

The regime actually established at Bretton Woods differed from Keynes's vision in important ways.² Rather than being based on an internationally controlled bancor standard, the Bretton Woods regime established a U.S. dollar standard, granting a special status to one country. On the other hand, gold was only incompletely dethroned under Bretton Woods, as gold convertibility of the U.S. dollar remained in place, supposedly representing a check on U.S. control over the international dollar standard.³ Capital controls were progressively eased over time, unleashing a reemerging international financial system, largely detached from proper international regulation and oversight.

As it turned out, fears of any contractionary bias stemming from the United States' commercial surplus position were largely alleviated even from the outset and increasingly so over time, as the United States proved sufficiently flexible and creative in making dollar reserves available to the rest of the world.⁴ At first, this occurred largely through generous official aid (the Marshall Plan in particular)⁵, then through U.S. foreign direct investment, and, finally, through U.S. trade deficits. In the end, the Bretton Woods regime failed for reasons of dollar abundance

² See Isard (2005) for a summary and brief historical overview.

³ Sales of gold were limited to foreign central banks and governments and licensed private users.

⁴ Note that Keynes's infamous "final words" on "the long run," which appeared in his last published article, referred to the longer-term U.S. prospects. As it turned out, he was quite right in venturing that the United States would not be "paralysed by the Midas touch" (Keynes 1946, p. 185).

⁵ In addition, the region most in need of reconstruction established a European Payments Union to economize on its need for external reserves and foster intraregional trade.

rather than scarcity, namely, when Europe's refusal to either accept currency revaluation or accumulate more dollars (in envy of the United States' "exorbitant privilege") put mounting pressure on the gold check and President Nixon responded on August 15, 1971, by cutting the U.S. dollar officially free from gold.

Europe resisted currency revaluation for fear that this would jeopardize the old continent's export-oriented reconstruction and catching-up strategy. Especially, defeated Germany (and, similarly, Japan) relied on export-led growth throughout this period, and with great success. Capital flows among developed countries, apart from U.S. outflows toward "reconstructing" Europe, were limited, although rising over time with the emergence and growth of Eurocurrency markets in London. Until the 1970s, developing countries had little access to global finance and received capital inflows largely in the form of official aid.

Overall, the Bretton Woods regime of pegged exchange rates and controlled global finance proved very successful in promoting international trade and economic growth precisely because the United States showed itself at ease in supplying sufficient U.S. dollar liquidity by pursuing domestic demand-led growth and absorbing the exports of export-led growth countries. In short, the United States played its role as nth country.

Another of the regime's key defects—namely, putting all the pressure on deficit countries and relieving surplus countries of any responsibility for adjustment toward global equilibrium thus applied only at the regional level, not at the global level. At the global level, the key-deficitcountry United States could (or, rather, had to) ignore adjustment pressures owing to its special status as reserve currency issuer. By contrast, at the regional level, Germany, for instance, could establish its (by now) long-standing tradition of running permanent trade surpluses vis-à-vis its European neighbors. For exchange rate realignments were not quasi-automatic, as envisioned by Keynes. Fearing possible disruptive impacts on free trade, the United States had favored extreme rigidity of parities, only to be adjusted in (undefined) cases of "fundamental disequilibrium." In practice, realignments were generally delayed as long as possible.

3. THE POST-BRETTON WOODS INTERNATIONAL MONETARY NON-ORDER

The Bretton Woods international monetary order gave way to what may be best described as a "non-order."⁶ Essentially, today, "anything goes" rules countries' exchange rate policy choices. Moreover, since the 1970s, national financial systems had been deregulated and capital accounts liberalized both in older industrialized countries and a rising number of "emerging market economies," a title conferred on developing countries that have actively participated in the process of financial globalization. Financial globalization—the integration of national financial systems through rising cross-border financial flows and asset holdings—was promised to deliver enhanced efficiency and stability through market discipline, as were floating exchange rates within the new "anything goes" global monetary non-order.

In particular, floating exchange rates were promised to increase national policy space. Freed from the Bretton Woods straitjacket of pegged exchange rates, countries could manage monetary policy in line with their respective domestic requirements. Of course, market discipline would help governments in making wise policy choices. And since "speculative" private capital flows exert a stabilizing influence over exchange rates, there was apparently no need for holding any official reserves, either. Should current account imbalances arise in the process, as would actually have to be expected in a world of vast disparities in resource endowments and income levels, et cetera, these could hardly be seen as imbalances in the sense of disequilibria, given that the wisdom of market forces naturally tends toward equilibrium at all times.

For, by allowing capital to flow toward its most productive use internationally, free capital mobility was promised to improve allocation efficiency and hence raise economic growth and levels of income. Capital account convertibility would facilitate portfolio diversification and risk sharing and enable countries to smooth consumption over time, the new market faith held out. All along, apparently no safeguards were needed against always stabilizing international capital flows, including "hot money." The IMF itself became so excited about infallible market

⁶ As noted above, convertibility of the U.S. dollar into gold was suspended in August 1971. At first, there were attempts to retain the system of pegged exchange rates, which ultimately failed in March 1973 when the German Bundesbank and other European central banks stopped buying dollars. The Rambouillet Agreement of November 1975 then led to the amendment of the International Monetary Fund's (IMF) Articles of Agreement, formalized in the Jamaica Accords in 1976.

wisdom (aka "the Washington Consensus") that it pushed for universal capital account convertibility to be added to its Articles of Agreement right before the time of the Asian crises.⁷

While some countries might come to specialize in financial services in line with their comparative advantage in the process, this would be just another benefit of financial globalization. In principle, no nation seemed to enjoy any special status regarding its currency, national policy space, and global finance. If anything, the benefits of financial globalization would seem to disproportionately favor emerging markets. The countries of the developing world have the most to gain, it seems, both by becoming more equal in terms of policy autonomy and also as the natural recipients of capital inflows propelling their development and catching-up process.

Researchers have labored hard, but until now they have failed to provide any compelling evidence in support of these promises. If anything, evidence shows that "developing countries that have relied less on foreign finance have grown faster in the long run" (Prasad, Rajan, and Subramanian 2007). Furthermore, a recent IMF study concludes that "financial globalization has not delivered on the promised benefit of improved international risk sharing and reduced volatility of consumption in developing countries" (Kose et al. 2007). Rather than delivering any promised stability, the widespread perception in the developing world is that financial globalization yielded economic instability and insecurity instead.

From a Keynesian perspective, of course, there is little surprise about the experience that liberalized financial markets in emerging markets should also exhibit "asset market play" (so ably described by Keynes in chapter 12 of his *General Theory*). The benefit of organized securities markets lies in making investments that are *fixed* for the community as a whole and *liquid* for the individual investor. Keynes argued that, by providing liquidity to the individual investor, who is thereby only committed to any particular investment his or her money has financed as long as he or she has not subsequently sold it to someone else, organizing financial markets with a view to their liquidity might well ease the financing of investment and foster capital accumulation. On the other hand, given the veil of Keynesian uncertainty surrounding real investments and their financing decisions, market liquidity may well distract investors from

⁷ In April 1997, the IMF's Interim Committee "agreed that the Fund's Articles should be amended to make the promotion of capital account liberalization a specific purpose of the Fund and to give the Fund appropriate jurisdiction over capital movements." See Polak (1998) and Fischer (1997).

trying to "defeat the forces of time and our ignorance of the future" (Keynes 1936) and instead focus on anticipating what average opinion might expect the average opinion to be next.

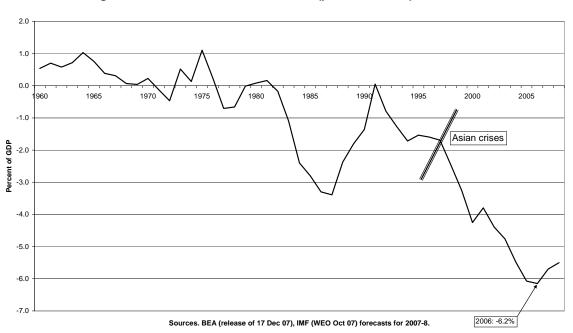
Of course, asset-market play of the "beauty contest" type also characterizes foreign exchange markets—given Keynesian uncertainty about the supposed "fundamentals" determining exchange rates. Even ignoring the potential of market-driven fundamental misalignments of exchange rates, a need for foreign exchange reserve holdings reemerges here as soon as countries decide to smooth what seems excessive exchange rate volatility. But foreign exchange market volatility is inherently related to volatility in financial markets more generally, and the fickleness of private capital flows in particular.

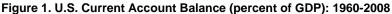
Emerging markets came to learn their lessons about financial instability by experiencing financial crises that caused severe economic dislocations and hardship. They learned that reserves could be quickly depleted when private capital flows suddenly rush for the exit. Rather than being the main beneficiaries of financial globalization, emerging markets seem to be both more prone to "speculative attacks" and contagion from their asset class, and also more defenseless, given the disparity in size involved when large global players take (and dissolve) positions in relatively small open economies with narrow markets. Suffice it to mention that the role of the IMF became widely seen in emerging markets as designed to bail out rich lenders rather than helping crisis countries, which faced austerity prescriptions through loan conditionality.

I will return to these emerging market experiences and the lessons that crisis countries took from them in Section 5. Before that, however, it is useful to take a look at the evolution of the U.S. current account position since the 1980s. The point is that in conflict with the idea that floating exchange rates would make countries more equal, the U.S. dollar has retained its special status as key reserve currency until today. In fact, U.S. dollar reserve holdings have exploded over the last 10 years or so. Furthermore, while orthodoxy trumpeted the supposed benefits to emerging market economies, it has remained conspicuously silent on the benefits of financial globalization favoring reserve currency issuers and international financial centers.

4. A BRIEF HISTORY OF THE U.S. CURRENT ACCOUNT DEFICIT

Figure 1 shows the evolution of the U.S. current account balance since 1960. The turning of the U.S. current account surplus into a deficit between 1965 and 1971, in conjunction with rising short-term capital outflows, heralded the collapse of the Bretton Woods (I) order. Leaving the instabilities of the 1970s to one side, Figure 1 makes it clear that while the sharp rise in the U.S. deficit position in the 1990s had a precursor in the 1980s, its sheer magnitude reached in recent years is unprecedented. The figure also indicates the event that marked the beginning of the global capital flows paradox: the Asian crises. By motivating an important turning point in the behavior of emerging market economies, the Asian crises have also contributed significantly to the rise in global imbalances.⁸





While the course change in the behavior of emerging market economies in the late 1990s and related global capital flows paradox is the primary focus of this paper, note that today's

⁸ Henning (2000) estimates that almost \$100 billion of the rise in the U.S. current account deficit from 1996 to 1998 was a consequence of allowing Asian and other crisis economies see their current account positions turn into surplus.

imbalances also feature some important recurring elements. These may be seen in Figure 2, which decomposes the U.S. current account deficit into its key sources or counterparts. While elevated oil prices left their negative impact on the U.S. current account after 1973, the emergence of a huge U.S. current account deficit in the first half of the 1980s was primarily driven by one factor: the United States' role as a "locomotive" in pulling the world economy out of the recession of the early 1980s.

In particular, as the Reagan administration added expansionary fiscal policy to the Fed's tight money stance under Chairman Paul A. Volcker, whereas Europe and Japan got stuck with deflationary macro policies until much later in the decade, a GDP growth differential in the United States' favor and a surging dollar resulted in a marked deterioration in its trade with its industrialized trade partners in Europe and Japan. In other words, the U.S. "twin deficits" of the first half of the 1980s mainly mirrored the lagging of Japan and Europe behind the U.S. locomotive.

The situation changed in the second half of the 1980s, as the U.S. dollar depreciated (following the Plaza Accord), oil prices slumped, and both Japan and Europe experienced a belated economic boom—lasting until 1990 in Japan's case and 1991 in Germany's—whereas the United States experienced a mild recession in 1991. Accordingly, the U.S. current account deficit shrunk after 1986 and had even briefly disappeared by 1991 (which, however, also reflected foreign transfer payments in recognition of U.S. military action following the Iraqi invasion of Kuwait).

Since 1992, the U.S. current account position with Japan and Europe has steadily deteriorated once again. As Japan entered a period of deflation and domestic demand stagnation the country's former strategy of export-*led* GDP growth became one of sole reliance on exports to offset persistently deficient domestic demand at home. Developments in Germany have turned out remarkably similar, ever since the Bundesbank's monetary overkill in response to German unification, joined by mindless fiscal austerity, plunged Germany into deep crisis by 1993 (Bibow 2003).

Since Germany exported its peculiar ("supply-side-only") policy wisdom to its European neighbors through the Maastricht Treaty of 1991, creating the euro and Euroland by 1999, the "German disease" has spread. Subdued growth plagued much of Europe until 1997, when a brief boom started that owed to external growth stimuli (chiefly, the U.S. "New Economy" boom and

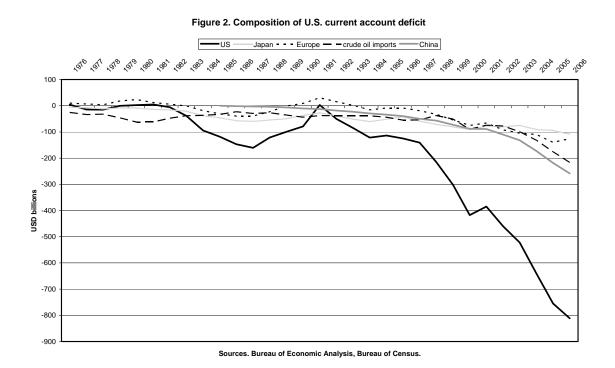
strong U.S. dollar). In September 2002, the IMF acutely observed that "external imbalances across the main industrial country regions widened steadily during the 1990s" (IMF 2002, pp. 65–66), with these imbalances being "dominated by the euro area and Japan, respectively" (p. 67).

Meanwhile, Japan's current account surplus climbed to \$207 billion in 2007 (4.7 percent of GDP), increasingly driven by soaring capital income. Germany's current account surplus reached some \$198 billion in 2007 (or 6 percent of GDP), largely driven by a trade surplus of some \$240 billion, reflecting the country's title as world export champion. Diversity in current account positions characterizes the rest of Europe. Generally speaking, those countries that experienced large interest rate declines through convergence toward German levels, either during the 1990s or the 2000s, run sizable current account deficits today.

The impact of the oil price boom since 2002 represents another recurrent element in the U.S. current account imbalance of today. In the U.S. case, the quadrupling of the oil price added another \$100 billion or so to the already huge and soaring deficit. On the current account surplus side, this factor redistributed surpluses away from Japan, Germany, and China, and toward Russia and other oil and commodity exporters. In Japan's case, this factor has dampened the rise in its trade surplus. In the euro area's case, the oil price boom has turned a significant current account surplus. (\$113 billion in 2004) into an overall balanced position in recent years. The five-year global boom (analyzed in Section 6 below) and, more specifically, the "China factor" can be identified as the driving force behind the oil (and more general commodity) price boom of recent years.

Figure 2 also shows the U.S. current account imbalance with China, which is the primary focus of debate in the United States. No doubt, since 2002 this particular imbalance has increased most sharply, causing rising U.S. pressure for renminbi appreciation. Most recently, euro area and Japanese authorities, too, have become more vocal in this regard, which seems somewhat hypocritical given that Japan's and Germany's combined current account surplus of some \$400 billion in 2007 well exceeds China's. Given the renminbi's U.S. dollar peg (until July 21, 2005) or quasi-crawling peg (since), the renminbi has seen (dampened) depreciation with the U.S. dollar vis-à-vis the euro, for instance. This may well constitute one factor behind the rising trade imbalance between Europe and China. Yet, in view of the rising U.S.-Chinese imbalance, it

is clear that other, and probably more important, forces must be at work too, driving China's breathtaking export and GDP growth rates.



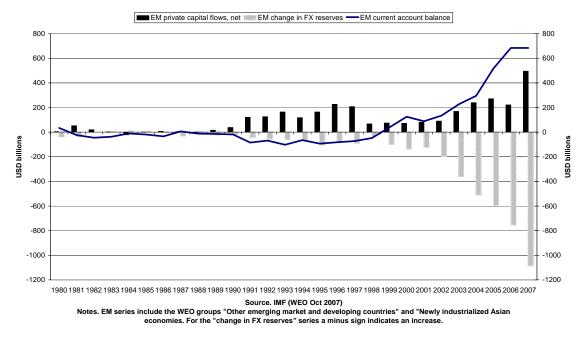
The next section presents the Asian crises as the turning point in the behavior of emerging market economies, which in addition to the recurrent elements and the "China factor" discussed in this section introduced some interesting new twists to developments in global imbalances—featuring the "global capital flows paradox."

5. EMERGING MARKETS' COURSE CHANGE AND THE "GLOBAL CAPITAL FLOWS PARADOX"

Figure 3 shows that 1998–99 marked the turning point in the aggregate current account balance of the developing world.⁹ Accordingly, in the aftermath of the Asian crises, capital flows changed direction, ever since flowing from poor to rich countries, primarily the United States. The developing world's current account surplus position has taken the form of a surging reserve

⁹ I consolidated the IMF *World Economic Outlook* "emerging market and developing countries" and "newly industrialized Asian economies" groups.

accumulation, primarily in the form of low-yielding U.S. Treasury securities. Former Secretary of the U.S. Treasury Larry Summers (2004) dubbed this constellation the "global capital flows paradox."





While official flows are headed north on a grand scale, net *private* capital flows have gone the opposite way since the early 1990s. More precisely, Figure 3 shows that private flows have reached the developing world in two strong waves since capital account liberalization began spreading in the late 1980s and early 1990s. The first wave started in the late 1980s and abruptly ended in 1998; the second took off in earnest in 2002 (following years of more tepid flows around the time of the dot-com bubble and bust, which saw very active capital flows within the developed world).¹⁰ A common element is that both waves arose in an environment of low interest rate policies by the Federal Reserve (Fed) in reaction to cyclical weakness in the U.S. economy. An important difference in the developing world's response to the two waves was observed, however, in line with the shift in their aggregate current account position.

Generally speaking, as the first wave hit the developing world in the early 1990s, countries allowed real appreciation of their currencies to take place and tolerated the emergence

¹⁰ The net flows hide much sharper changes in gross flows. The second wave differs from the first in that gross private outflows from the developing world have also grown strongly since 2003.

of rising current account deficits, presumably because complementing domestic saving by foreign saving was promised to spur economic growth and development. In fact, GDP growth may have accelerated in the short run as capital inflows gave rise to asset price bubbles and consumption booms. But these gains typically proved short-lived, followed by "sudden stops" (or: reversals) in private capital flows, prompting financial crises and severe economic disruptions. Currency depreciation imposed by market forces then turned current account positions around. And, out of pure necessity at the start, this generally marked the return to export-led growth. The conspicuous fact is that countries have proved determined to *maintain* competitive exchange rates and prevent reoccurrence of external vulnerability ever since.

In particular, when the monetary easing by the Fed in 2001–02 kicked off the second wave of private capital flows headed toward emerging markets, countries generally resisted currency appreciation by adopting an easing monetary stance in line with that of the Fed as well as through foreign exchange market interventions. Maintaining competitive exchange rates became the cornerstone of their export-led development strategies. Also, running current account surpluses allowed the refilling and greatly enlarging of depleted reserves—as policy space insurance, it would seem (and as suggested by Martin Feldstein [1999]). Apparently, experiences with financial instability and crises have taught the developing world the lesson that a competitive exchange rate may be key to *sustainable* growth under the existing unsafe international monetary (non-)order.

However, being sourced from both current account surpluses as well as net private capital inflows foreign exchange reserves have meanwhile swelled to levels judged excessive by many observers. Moreover, there is the issue that insurance through reserve accumulation is not a free lunch. So the broader issue is that current policies may not be sustainable either. In fact, at the start of 2008, widespread hopes for a "decoupling" of the rest of the world from the sputtering U.S. locomotive seemed to presume a renewed change of course on the part of the developing countries, supposedly in their own best interest. Before questioning the "decoupling" hypothesis, it is worthwhile to scrutinize more closely the internal workings of the global boom since 2003.

6. THE INTERNAL WORKINGS OF THE GLOBAL BOOM

Since 2003, the world economy has enjoyed a span of record growth. This outcome may seem rather surprising for a number of reasons. First, as noted in Section 4, Japan and Germany (and the euro area at large), the second- and third-largest economies in the world, have become solely reliant on exports and have contributed correspondingly little to global demand. Second, as noted in the previous section, since the Asian crises, the developing world has behaved contrary to orthodox wisdom by running current account surpluses and exporting, rather than importing, capital. Third, concerns about the global economy being "out of balance" and the U.S. current account deficit posing a threat to global stability have been running high for many years.

Not all observers have shared those concerns about global imbalances, however. In particular, proponents of the Bretton Woods II (BWII) hypothesis argued that the "imbalances" were an indication of a symbiosis of interests, suggesting sustainability of the boom (see Dooley, Folkerts-Landau, and Garber 2003). In our view, the global boom was less of a surprise than it may have seemed at first, while scrutinizing its internal workings raises doubts about its sustainability.

To begin with, there can be little doubt that the global boom was sponsored by highly expansionary U.S. fiscal and monetary policies (see Godley et al. 2007). In the context of the "2001 global slowdown," the United States' fiscal stance was eased by an unprecedented 6 percent of GDP between 2000 and 2003, while the U.S. Fed cut 550 basis points off its federal funds target rate between January 2001 and the end of 2002, as fears of deflation were running high at the time. The U.S. expansion was transmitted throughout the "dollar zone" precisely through the developing world's policy of maintaining a competitive exchange rate vis-à-vis the U.S. dollar. Similarly, the euro area was the only major region not participating in the global boom precisely because the European Central Bank (ECB) refrained from following the U.S. Fed (easing much more "cautiously" and benignly watching the euro's rise from the ashes of 2001), while the fiscal authorities were single-mindedly trying to balance their budgets (following the "wisdom" of the so-called Stability and Growth Pact). Neither the global boom that got off the ground in 2003 nor the fact that it only reached the euro area in 2006 seems much of a puzzle to us.

Yet, the fact that long-term interest rates remained at low levels throughout the five-year global boom and even fell in response to Fed tightening starting in June 2004 was famously referred to as a "conundrum" by former Fed Chairman Alan Greenspan. The explanation favored by both Greenspan (2007) and his successor, Ben S. Bernanke (2005, 2007), is that a "global saving glut" depressed global interest rates, including U.S. mortgage rates. It is true that "low" interest rates (as compared to the high interest rate era of the 1980s and early 1990s) were a global phenomenon. And it is also true that property prices increased strongly in many countries outside the United States. But the idea of a "global saving glut" is not a sound one.

Underlying the saving glut hypothesis is the loanable funds theory of interest. On this view, a rise in saving in much of the developing world flooded the global capital market, and the resulting excess of saving over investment in the capital market depressed interest rates. I have argued elsewhere that loanable funds theory is fatally flawed (Bibow 2001) and the saving glut hypothesis thus based on flawed theory (Bibow 2008a). How could "excess saving" in Asia have *financed* the U.S. boom? It was surely not any "ex ante saving" in the developing world that allowed the U.S. expansion to get off the ground. Nor do ex post accounting identities prove anything of the like.

Rather, liquidity preference theory starts from the observation that expansion in the United States was made possible in the first place by *dollar liquidity*. Dollar liquidity spilled over to much of the rest of the world through the linkages referred to above in a process featuring U.S. spending growth in excess of U.S. income growth and soaring global imbalances. This was made possible to go ahead at low interest rates since both key ingredients were in place: low policy rates, and benign interest rate expectations held by financial market players. Both policy rates and interest rate expectations remained low despite rapid demand growth because of vast new global supply-side opportunities and generally weak pressures in labor markets.

In other words, a liquidity preference theoretical explanation for the "bond market conundrum" attributes the phenomenon to a *global dollar glut* arising in an environment of deficient demand in product markets. If "excess saving" is meant to be a synonym for deficient demand, do not miss that developments in product and labor markets triggered the policy and market responses that delivered low interest rates ruling in financial markets, and whatever may be the case in the imaginary classical "capital market" allegedly balancing saving and investment. And we may add here that even as inflationary pressures finally emerged in 2007,

reflecting global commodity resource constraints, bond yields stayed low as markets apparently judged that the global boom and the monetary policy tightening cycle were already at or past their peak, so that inflationary pressures would soon abate again.

Having offered an alternative explanation for Greenspan's "bond market conundrum," we may also point out here that a rather important oversight afflicts the BWII hypothesis, which claims that "global imbalances" may be sustainable due to an ongoing symbiosis of interests among deficit (U.S.) and surplus (developing world) countries. In this view, the developing world's interest is to sell its products into the large U.S. market as a way of stimulating employment growth and development. The U.S. economy, on the other hand, is flexible enough to tolerate the resulting quasi-permanent drag on income growth given its comparative advantage in creating safe financial assets, which provide the collateral for the foreign direct investment (FDI) stock needed in the developing world to complement its vast cheap labor resources in export production.

It is helpful to recall here an imaginary experiment, courtesy of Milton Friedman, that nicely highlights the conditions under which the world's ongoing imbalances could indeed be sustainable. Imagine that the U.S. Federal Reserve sends out a helicopter for a cash rainfall upon U.S. consumers. It is easy to picture U.S. consumers showing no reluctance in picking up the banknotes and spending them, and to an important extent, on imported goods, too. The Fed's helicopter payloads thus find their way into otherwise half-empty containers returning to Asia, finally ending up as official reserves in the coffers of Asian central banks, which are forever content with holding barren pieces of paper in exchange for the products shipped to the United States.

A first qualification to this parable is that few U.S. dollar banknotes are actually shipped to Asia, either in containers or otherwise. So imagine instead that those banknotes are largely converted into electronic entries of U.S. Treasury securities. In 2003, when Treasury bills yielded around 1 percent (and Treasury bonds around 4 percent), reserves held in the form of Treasuries rather than banknotes implied only a minor qualification to our parable. It is becoming more of a qualification today, as Sovereign Wealth Funds (SWFs) increasingly take over the job of investing excess (?) reserves for higher yields.

I will return to this issue in a moment. But first, I shall point out a more immediately relevant domestic factor in the internal workings of the U.S. boom that has left some rather

unpleasant legacies in the United States, which are showing up today most clearly in the ongoing subprime mortgage crisis. I argued above that expansionary fiscal policy played an important role in the U.S. recovery. Furthermore, in line with rising reserve holdings in the developing world, the share of U.S. Treasury securities held by foreigners (primarily foreign central banks) has increased significantly since the 1990s. However, apart from cyclical as well as policy-induced variation, the U.S. public debt ratio has been stable or on a mild decline since the early 1990s—which is much in contrast to the trend rise in the household sector debt ratio over the same period, particularly mortgage debt (see Figure 4).



Figure 4. Behind the spending binge: stable public debt, surging mortgage debt

In fact, the rise in household sector debt—corresponding to the fall in the personal saving rate since the early 1990s from 7 percent of disposable income to zero in 2006—stands witness to the fact that the long U.S. expansion was essentially a consumer boom. This observation is especially true for the years after 2001, when U.S.-led global growth resumed after a brief slowdown. In other words, the U.S. boom was *not* primarily financed by public debt, sponsoring a global boom along the way, as in the parable above, but by private consumer debt—mortgage debt in particular. Whether Asian central banks (and SWFs) have ended up holding banknotes or Treasuries or higher-yielding assets affects the United States' external financing cost. But the

essential point is that the ultimate driving force behind the boom was consumer debt. Developments in U.S. mortgage and property markets were key to U.S. (and global) growth, and to the emergence of global imbalances and their U.S. internal counterpart.

Following recovery of the U.S. economy from the 1990–91 recession, property prices began to grow faster than incomes, driven by a self-validating process of rising credit availability that, in turn, reflected the compound impact of monetary policy, financial innovation, regulation, and competition in the financial service industry. Both innovative processes and products played a role as banking business turned more and more toward the "originate to distribute" model, structured finance principles of "slicing and dicing" allowed for the re-repackaging of large mortgage pools into collateralized debt obligations (subsequently sold to institutional investors, including unregulated hedge funds, or removed from bank balance sheets via "conduits" or Structured Investment Vehicles [SIVs]), while the development of credit derivatives like credit default swaps enabled an ever less transparent, but allegedly ever more efficient, allocation of credit risk in the financial system.

In the process, mortgage origination moved increasingly outside the realm of regulation and mortgage credit risks apparently migrated off bank balance sheets (in avoidance of bank capital charges). Consumers—also those with "subprime" credit ratings—enjoyed easy access to mortgage finance, including "piggyback" second mortgages for home equity withdrawals, while banks and rating agencies enjoyed high fee incomes on off-balance-sheet business and modelbased credit risk assessments of ever more sophisticated financial instruments, respectively. All went well as long as property prices kept on rising, as they did until 2006, validating the low risk of mortgage debt and relaxation of lending standards that was the basis for easy access to mortgage credit in the first place. Alas, in 2006 the property price boom that had fueled the virtuous cumulative process finally stalled.

The Fed's "easy money" policy after 2001 surely played a role in this Minskyan boombust cycle, through raising the attractiveness of adjustable rate mortgages and "teaser rate" features in a low-interest-rate environment, for instance. Yet, the Fed only followed its mandate of fostering maximum employment and price stability. Back in 2001–03, the Fed eased aggressively in reaction to pronounced labor market weakness and deflation threats. Also, do not overlook here that, in order to offset the drag on U.S. GDP growth stemming from the rest of the

world's reliance on U.S. spending growth, the Fed had to ease correspondingly more than would have been necessary in a more balanced global demand environment. It duly did.

And when the Fed then took its foot off the accelerator in 2004–06, property markets duly responded, with prices stalling in 2006 and falling nationwide by 2007. Problems started with the weakest link in the chain: subprime mortgages. During the boom, even borrowers who were unable to service their mortgages out of income could buy properties, namely, by taking out no-interest mortgages and relying on later refinancing at higher property values. As soon as property price rises failed to materialize, such mortgages became delinquent—a clear case of "Ponzi finance" turning sour. Accordingly, the credit risk of securities backed by mortgage collateral (in whatever sophisticated ways-sliced and diced, re-re-repackaged, et cetera) were reassessed. When it turned out that rating agencies calibrated their models on the basis of historical data showing a marked upward trend and excluding the possibility of nationwide falling property prices, the prospect of widespread bankruptcies suddenly loomed large, both among mortgage borrowers and their lenders. As investors realized that it was not even clear on whose books risks might materialize in the end, securities prices plunged across the board (in so far as there were any prices, as markets seize up in such events) and systemic risks surgedcalling in the lenders of last resort. Since August 2007, major central banks have engaged in emergency liquidity provision, as well as policy rate cuts.

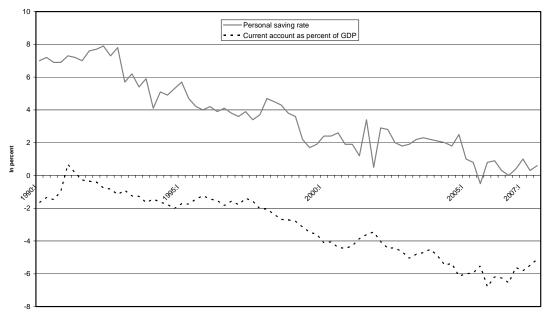


Figure 5. "The big engine that could"; but probably no more for now

Source. Bureau of Economic Analysis

In the concluding section I will briefly return to the question of the extent to which these measures are likely to bring resolution to the ongoing financial crisis and prevent a global slowdown. Whether the stabilization or even trend reversal in the U.S. personal saving rate (see Figure 5) will come along with a benign unwinding of global imbalances also depends on the successful "decoupling" of the rest of the world. In contrast to the BWII hypothesis, the upshot of the analysis in this section is that the key driving force behind the global boom has stalled.

7. THE OTHER SIDE OF THE "EXORBITANTLY PRIVILEGED" COIN

The previous section pinpointed an important aspect in the internal working of the U.S. expansion that makes the idea of a sustainable symbiotic relationship between the United States and its creditors appear in a questionable light. In this section we offer some preliminary thoughts on the question whether the developing world may have an interest in a quasi-permanent arrangement along BWII lines.¹¹

Insurance is not a free lunch. If the developing world holds "excessive" reserves as a form of insurance, it is also paying a premium for its chosen coverage. It is one thing to argue that the developing world seems to prefer paying this insurance premium over the alternative of allowing exchange rate appreciation. It is another to acknowledge that they seem to prefer taking out insurance to secure national policy space *under the existing international monetary non-order*, while alternative international arrangements that are more equitable, and perhaps more efficient, are also conceivable.

Usually the size of the "insurance premium" at issue here is measured in terms of the yield spread between U.S. Treasuries and yields on domestic assets sold or issued by central banks to sterilize their reserve accumulation. Results along these lines imply only a low "fiscal cost" or even suggest that in developing countries with low interest rates central banks earn positive carry (Ginsberg et al. 2005). Measuring opportunity costs in such a way may be somewhat misleading, though (see also, Rodrik 2006). The exercise is begging the question what good there is in running a current account surplus and allowing net private capital inflows to then accumulate liquid foreign assets, and only to make sure the situation can continue—if it can.

¹¹ Bibow (2008b) further elaborates on this issue.

The irony is that, contrary to orthodox promises, for the developing world free capital mobility seems to require huge safety buffers in the form of *low-yielding* foreign assets, sourced from both current account surpluses and private capital inflows. Net capital exports are a far cry from the idea that foreign saving would augment domestic saving, thereby allowing developing countries to grow and develop faster. Apparently, then, foreign saving is *not* needed for growth and development. Rather, net capital exports imply that the developing world foregoe potentially higher domestic investment and/or consumption today, and on market terms that do not even offer any attractive reward in terms of future consumption. If that is the case, what is the developing world paying insurance for in the first place? What is the benefit in allowing foreign investors to participate in the catching-up process through *high-yielding* FDI and portfolio investments?

Arguably, access to export markets and technology transfer are the two key external contributors to development. And these two factors may well require FDI to work best. But granting FDI an important role in development is not the same thing as general capital account convertibility, particularly if capital account convertibility turns developing countries into net capital exporters while foreign portfolio investors share the rewards of their catching-up, which is based on (diminished) domestic saving only. Seen from this perspective, capital account convertibility appears a nifty mechanism for rent extraction working through the defensive behavior of developing countries under the existing international monetary non-order.

A look at the other side of the coin is revealing. Although the United States has run huge current account deficits for many years, its external debt ratio has stayed stable at around 20 percent of GDP since 2001. And despite its sizable net debtor position, it continues to enjoy a positive investment income balance. A number of factors are behind *this* conundrum proper, including differences in the riskiness of assets and liabilities as well as a general return advantage in the United States' favor. With gross assets and liabilities being a multiple of the negative net position, and featuring an "original virtue" effect of dollar depreciation owing to a leveraged "short dollar" position, valuation effects have come to play a crucial role in the United States' external position. In a way, the United States seems to have found a solution to the challenge posed by Evsey Domar (1950) that the interest rate payable on the external debt must not exceed the rate of economic growth needed to keep the external debt ratio stable, and even for the case where the U.S. trade deficit itself would point toward a steep rise in the U.S. external

(net) debt ratio. This solution would seem to be unobtainable for any other country (see Kregel 2004).

To be sure, part of the "exorbitant privilege" payoff may have arisen vis-à-vis other industrialized countries, and valuation effects may still partly reverse in future too. In any case, it appears that free capital mobility magnifies the benefits of reserve currency issuance and financial supremacy. Yet, if development does not seem to require foreign saving to supplement domestic saving, why should developing countries accept the short end of the stick in this zero-sum game?

Compare the three possible constellations, then. Orthodox theory suggests a current account deficit position for developing countries, with foreign saving allegedly boosting their economic growth and development. Reality is of the opposite kind, featuring the "global capital flows paradox"—but together with "surprisingly" good growth performance based on (diminished) domestic saving only. While developing countries seem to find this outcome preferable under the current international monetary non-order, under an alternative order as envisioned by Keynes *all* countries would be under continuous pressure to run balanced external positions over time while having access to official international liquidity to bridge *temporary* imbalances. Arguably, Keynes's vision provides a better benchmark by which to assess the developing world's opportunity costs of insuring against risks that do not seem to come along with any rewards that would justify the risk taking in the first place.

What are the chances for a regime change along Keynes's lines? A more immediate concern is whether the developing world can actually draw on its insurance in times of need and decouple from the United States.

8. CONCLUDING OBSERVATIONS ON DECOUPLING AND THE PROSPECTS FOR REGIME CHANGE

We contrasted Keynes's original vision of a sound postwar international monetary order with what became agreed at Bretton Woods. We then noted that nothing essential has changed for the nth country since the collapse of the Bretton Woods order in the early 1970s, as the world has continued to run on a U.S. dollar standard. A significant change occurred with the liberalization and globalization of financial markets, spreading throughout the developing world, too. The

paradoxical fact is that the developing world at large has turned into a net capital exporter and accumulator of vast low-yielding reserves, apparently as insurance against the vagaries of financial globalization. Rather than augmenting their domestic saving through capital imports, a process that was promised to accelerate economic growth and development, general capital account convertibility and financial globalization seem to augment the "exorbitant privilege" of reserve currency issuance and global financial supremacy.

Yet, contrary to the BWII hypothesis that "global imbalances" might be sustainable, our analysis suggests that the driving force underlying the symbiosis dried up in 2006–07 as the U.S. property boom stalled and then went into reverse. Driven by private rather than public debt, the debt legacies of that boom are now seen in deteriorating U.S. consumer balance sheets, with falling property prices inflicting their leveraged impact on net worth and creditworthiness. Similarly, lenders and portfolio investors exposed to the U.S. mortgage market experience the corresponding impact on their capital base. Apart from creating pressures for asset sales and deleveraging, these developments are bound to constrain new lending: a credit crunch is unfolding.

Since August 2007, key central banks have labored hard to counter market illiquidity, and with some success. But large-scale emergency lending is no substitute for proper balance-sheet repair and recapitalization of private borrowers and bank lenders. The U.S. banking system is under stress, as "off balance sheet" risks parked in conduits and SIVs have made an unplanned return onto banks' balance sheets and write-downs are impairing the capital available to cover existing risks or take on new ones. Interestingly, U.S. banks (as well as the Swiss bank UBS, et cetera) have received recapitalization not from national public sources, but from foreign ones. Does the (partial) takeover of some key players of global finance turn into the latest twist in the developing world's response to the threats of financial globalization? Ironically, the markets have so far cheered the unexpected helping hand. Not so the governments in the developed world, however, which have called for rules and restrictions on the investments of SWFs. Whatever the merit of such calls may be, I doubt that bank recapitalization through this channel will prove sufficient to address the scale of bank capital damage, which may come to exceed by far the impact of the subprime crisis that has so far been at the center of attention.¹²

¹² The IMF (*WEO*, October 2007) identified the drying up of foreign financing of the U.S. current account deficit and rising trade protectionism as the two key threats to the global economy. The above developments feature

While the banking system is in need of capital base repair to avoid a full-scale credit crunch, it is not the only weak spot in the old BWII machinery. The U.S. consumer, too, needs a bailout. In early 2008, a fiscal stimulus package of some \$150 billion (or roughly 1 percent of U.S. GDP), mainly targeting low- and middle-income U.S. households, does not seem unlikely to come into effect in the course of the year. While representing a move in the right direction to counter the ongoing slowdown in private spending, the magnitude involved will not be sufficient to restart the engine. Tax cuts will help to support incomes as the labor market deteriorates. But the underlying balance sheet problems that encourage credit tightening and thus constrain consumers' cash flow remain. Note that a proper bailout (or recapitalization) of U.S. consumers would effectively move us to the "helicopter parable" employed in Section 5 above: replacing private debts with public debts. Such a consumer bailout would also establish the implicit BWII requirement for sustainability. However, this, too, seems unlikely to happen.

Therefore, with the U.S. engine having stalled for the time being, decoupling will be a necessary condition for sustaining global growth. Decoupling involves a reversal in global current account trends seen since the Asian crises. And to some extent decoupling did indeed happen over 2006–07. At least in the initial stage of the U.S. slowdown and current account improvement (as a share of U.S. GDP), global growth held up well. In early 2008, with the U.S. Fed in fast-easing mode, the developing world once again faces the choice to either "follow the leader" and ease too, or to allow their currencies to appreciate. By stimulating domestic demand, the former strategy would be more conducive to sustaining global growth, but in either case, current account positions in the developing world would tend to worsen, implying an unwinding of global imbalances and disappearance of the alleged "global saving glut" along the way.

By contrast, while this trend reversal in itself would also imply a corresponding slowdown in reserve accumulation from the current account source, a continued dollar glut nevertheless represents one possible scenario. Private capital flows toward the emerging world could even accelerate, particularly if the leader were *not* followed (turning the U.S. dollar into a carry trade funding currency). But then, there is also the opposite scenario. Given the buildup of leverage during the boom, further declines in property prices and capital impairments at the core of the international financial system could force widespread distress selling. By prompting

protectionism concerning *financial* inflows from the developing world into *non*-Treasury securities, indicating a drying up of *cheap* finance for the United States' international investment position.

"sudden reversals" in international private capital flows, this would then provide a real test for the view that the developing world's reserve holdings have become "excessive."

Last but not least, we should note that there are also structural factors in the way of a smooth decoupling and benign unwinding of imbalances. The developing world's export bias, motivated and conditioned by the existing international monetary non-order and financial arrangements along BWII lines, have also left their real imprint on the structure of the global economy. The U.S. consumer is not all that easily replaceable. The industrial production structures in export-oriented emerging market economies like China have developed with a view of, and are geared toward, the fancies of the first world. Chinese farmers simply do not have the means to buy what China's industry produces for sale in high-income economies. So the European consumer is the only real alternative, and in 2007 Europe actually overtook the United States as China's most important export market. Yet, the European consumer is unlikely to get a chance to step up to the bar before being crushed by the ECB.

These considerations are a reminder of the role that protracted domestic demand stagnation in Japan and Germany (and the euro area) has played in the buildup of global imbalances. Decoupling would seem to include a course change on their part, too. More generally, these considerations alert us once again to the fact that current global arrangements are very different from what Keynes had envisioned for the postwar world. Under his scheme, countries are denied the option to freeload on external growth stimuli, and are instead given the policy space to systematically pursue domestic stability. Ongoing changes in the global economy may herald the end of U.S. dollar dominance. One possibility is that a more balanced oligopoly of floating key currencies will come to replace the current dollar standard, with only limited cooperation among them. With Euroland lacking both the institutional structure and the political-economic mindset to become a global player, China, and perhaps India, too, may come to play the more decisive part, equipped with instincts to stay free from foreign monetary-financial hegemony. In an environment of more equal global players, perhaps the time will become ripe for an international order along Keynes's *symmetric* and *cooperative* lines.

REFERENCES

- Bernanke, B. S. 2005. "The Global Saving Glut and the U.S. Current Account Deficit." Sandridge Lecture, Virginia Association of Economists, Richmond, March 10.
 - ——. 2007. "Global Imbalances: Recent Developments and Prospects." Bundesbank Lecture, Berlin, September 11.
- Bibow, J. 2001. "The Loanable Funds Fallacy: Exercises in the Analysis of Disequilibrium." *Cambridge Journal of Economics* 25:5: 591–616.
 - ——. 2003. "On the 'Burden' of German Unification." *Banca Nazionale del Lavoro Quarterly Review* 61:225: 137–169.
 - ——. 2007. "Global Imbalances, Bretton Woods II, and Euroland's Role in All This." In J. Bibow and A. Terzi, eds., *Euroland and the World Economy: Global Player or Global Drag?* New York: Palgrave Macmillan.
 - ——. 2008a. "Time for a Revamp of the International Monetary Order, or: What Would Keynes Have to Say on Today's 'Global Imbalances'?" Mimeo.
 - ——. 2008b. "Insuring against Private Capital Flows: Is It Worth the Premium? What Are the Alternatives?" Mimeo.
- Domar, E. D. 1950. "The Effect of Foreign Investment on the Balance of Payments." *American Economic Review* 40:5: 805–26.
- Dooley, M. P., D. Folkerts-Landau, and P. Garber. 2003. "An Essay on the Revived Bretton Woods System." Working Paper No. 9971. Washington, D.C.: National Bureau of Economic Research. September
- Feldstein, M. 1999. "A Self-Help Guide for Emerging Markets." Foreign Affairs 78:2.
- Fischer, S. 1997. "Capital Account Liberalization and the Role of the IMF." Speech given at the IMF seminar "Asia and the IMF," Hong Kong, September 19.
- Ginsberg, H., R. McCauley, Y. C. Park, and A. Persaud. 2005. *Official Reserves and Currency Management in Asia: Myth, Reality, and the Future.* London: Centre for Economic Policy Research.
- Godley, W., D. B. Papadimitriou, G. Hannsgen, and G. Zezza. 2007. *The U.S. Economy: Is There a Way Out of the Woods?* Strategic Analysis. Annandale-on-Hudson, N.Y.: The Levy Economics Institute. November.

Greenspan, A. 2007. The Age of Turbulence: Adventures in a New World. New York: Penguin.

Henning, C. R. 2000. "External Relations of the Euro Area." In R. Mundell and A. Clesse, eds., *The Euro as a Stabilizer in the International Economic System*. Boston and London: Kluwer Academic Publishers.

International Monetary Fund (IMF). Various years. World Economic Outlook. Washington, D.C.

- Isard, P. (2005): *Globalization and the International Financial System—What's Wrong and What Can Be Done*. Cambridge: Cambridge University Press.
- Keynes, J. M. 1923. A Tract on Monetary Reform. In The Collected Writings of John Maynard Keynes (CW), Vol. 4. London: Macmillan and New York: St. Martin's Press, for the Royal Economic Society, 1971–89.
- . 1925. The Economic Consequences of Mr. Churchill. CW. Vol. 9.
- . 1936. The General Theory of Employment, Interest and Money. CW. Vol. 7.
 - ———. 1942. "Minutes of a Meeting of the War Cabinet Committee on Reconstruction Problems, 31 March 1942." CW. Vol. 25.
- Kregel, J. 2004. "External Financing for Development and International Financial Stability." G-24 Discussion Paper Series, No. 32. New York and Geneva: United Nations Conference on Trade and Development. October.
- Kose, M. A., E. Prasad, K. Rogoff, and S.-J. Wei. 2007. "Financial Globalization: Beyond the Blame Game. *Finance and Development* (Washington, D.C.: IMF) 44:1.
- Polak, J. J. 1998. "The Articles of Agreement of the IMF and the Liberalization of Capital Movements." In S. Fischer et al., eds., *Should the IMF Pursue Capital-account Convertibility*? Princeton Essays in International Finance, No. 207. Princeton, N.J.: International Finance Section, Department of Economics, Princeton University.
- Prasad, E., R. Rajan, and A. Subramanian. 2007. "The Paradox of Capital." *Finance and Development* (Washington, D.C.: IMF) 44:1.
- Rodrik, D. 2006. "The Social Cost of Foreign Exchange Reserves." *International Economic Journal* 20:3: 253–66.
- Summers, L. H. 2006. "Reflections on Global Account Imbalances and Emerging Markets Reserve Accumulation." L. K. Jha Memorial Lecture, Reserve Bank of India, Mumbai, March 24.

United Nations Conference on Trade and Development (UNCTAD). 2007. "Trade and Development Report, 2006: Global Partnership and National Polices for Development." New York and Geneva. October.