

Financial turmoil and global imbalances: the end of Bretton Woods II?

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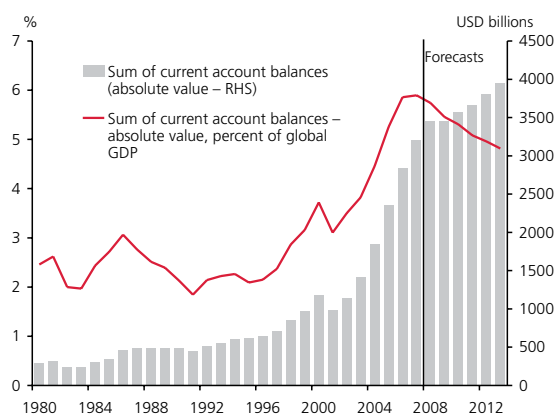
Since August 2007, the global economy has been subject to a sharp and adverse financial shock, with re-pricing of risk and higher cost of funds. This article argues that this shock is a consequence of an unsustainable period of global economic growth involving very large external imbalances. These imbalances – large current account surpluses in many emerging markets matched by current account deficits (CADs) in a number of advanced economies – contributed to an unsustainable cheapening of credit and increased risk-seeking behaviour by financial markets. The development of the imbalances can be explained by financial underdevelopment in many emerging markets, together with particular savings and investment dynamics across the surplus and deficit countries. These factors established ‘Bretton Woods II’, a global macro-financial dynamic that tied the deficit and surplus economies together in a co-dependent relationship. The current credit crisis appears to mark the limits of this relationship. However, the precise nature of any subsequent adjustment in global imbalances is not immediately clear.

1 Introduction

This article examines the relationship between the ongoing turmoil in financial markets, and the pattern of capital flows that has underwritten global growth in recent years. The global credit crisis that originated in the US sub-prime mortgage market can be understood as a consequence of the unsustainable nature of very large external imbalances that have evolved since the late 1990s (figure 1). The current deleveraging associated with the credit crisis therefore marks the beginning of the end of the broader economic and monetary configuration that has underpinned these imbalances. In short, the credit crisis signals the end to what, following Dooley *et al.* (2003), we will refer to as Bretton Woods II (BWII).

The term BWII is used to signify the mutually beneficial and co-dependent relationship between the world’s largest economy (the US) and an emerging periphery.¹ This arrangement has allowed China and other emerging economies to pursue an export-led development strategy and run persistent current account surpluses, while enabling deficit economies such as the US to consume far more than their domestic income would otherwise allow. The sustainability of this global arrangement has been subject to debate within such global fora as the G7 and the IMF. The general consensus has been that while global imbalances could persist in the short run, BWII did not constitute an enduring architecture for long-term economic growth.²

Figure 1
Current account imbalances



Source: IMF, RBNZ calculations.

¹ The original Bretton Woods institutions established after World War II facilitated the economic development and re-emergence onto the world stage of Germany and Japan in the context of the geo-political leadership of the US. The term is used here more as a metaphor signifying the current symbiotic relationship between the US and a set of emerging market economies, rather than as a way of describing a set of specific institutions as in the post-War period. See Dooley, Folkerts-Landau and Garber (2003, 2004) for the original exposition of the BWII framework.

² This consensus position has been expressed in the IMF’s multilateral consultation process around global imbalances, which has focused on the need for policy interventions on the part of both surplus and deficit countries in order to prevent a disorderly unwinding of the imbalances. For their part, Dooley, Folkerts-Landau and Garber have always seen BWII as a stable and durable regime. The present credit crisis has done little to deter them from this perspective - see Dooley *et al.* (2008).

Until recently, the resilience of the global economic expansion and associated optimism had meant that it was possible to overlook the more sober warnings about the non-sustainability of BWII. However, the financial shock that erupted last August in the sub-prime sector of the US housing market, and that has since spread throughout a heavily leveraged global financial sector, has given rise to concerns about the health of the global economy more generally. The “global economy is now facing a widespread deleveraging as mechanisms for credit creation have been damaged in both the banking system and the securities market – that is, both of the financial system’s twin engines are faltering at the same time” (IMF, 2008, pp. 6-7). Financial institutions in many OECD countries have become much more highly leveraged in recent years, reflecting the excess liquidity generated by global imbalances, financial innovation produced by an under-pricing of financial risk, and unsustainable growth in prices across a range of financial assets. In short, “the unsustainable has run its course” (BIS, 2008, p. 3).

In the next section, we situate the BWII system and underlying imbalances in historical context. Current account imbalances and the corresponding flows of financial capital have traditionally been a key mechanism by which countries have lent resources to other countries. At times, these cross-border flows of savings have ended badly for the borrowing countries, who have found themselves unable to service the debt – as in the 1990s, with a number of emerging market debt crises. Indeed, the Asian crisis of 1997-98 set the scene for the current export-led growth strategy of China and other emerging markets. This strategy is premised on the accumulation of reserve assets and an undervalued exchange rate.

Section 3 elaborates more fully on the current configuration of global imbalances and the contours of BWII. This section explains BWII as a result of the interplay between financial market underdevelopment in many emerging markets, financial globalisation and specific savings and investment dynamics. The elevated level of oil prices is highlighted as another key contributing factor to global imbalances.

The last section discusses how the ongoing turmoil in financial markets might signify a sea change in current global

economic and monetary arrangements and the concomitant demise of BWII. That said, it is by no means clear precisely how the adjustment in global imbalances will unfold at this point.

2 Global imbalances in historical context

‘Imbalances’ has a pejorative connotation, implying in some sense that ‘balance’ should be restored. However, there are a number of periods in economic history where global savings have flowed from one region to another, resulting in sizable current account imbalances.³ These include the era of the Gold Standard until 1914, the petro-dollar flows in the 1970s, the emergence of the US as a debtor nation in the 1980s, and the debt flows to emerging markets in the 1990s.⁴

Economic theory suggests that such transfers lead to the more efficient allocation of global capital, with the returns to capital assumed to be higher in the less-developed borrowing country.⁵ This ‘conventional’ view conforms to the direction of flows in the pre-WWI Gold Standard period where the core industrial economies of Britain, France and Germany financed the development of a resource-intensive periphery – Australia, Argentina, Canada and New Zealand, for example. The 1990s is another example, where capital flowed from advanced economies to the developing world.

³ For useful historical summaries, see Bracke *et al.* (2008), Brenner and Pisani (2007) and the IMF (2005).

⁴ Note, the global economic and monetary arrangements authored by the US after WWII – the so-called Bretton Woods system – did not allow a large-scale transfer of net savings between countries via the current account (Brenner and Pisani, 2007). The system’s *raison d’être* was to rehabilitate global trade within a system of stable exchange rates (based on the dollar standard) and capital controls. Countries that were having balance of payment difficulties were subject to revaluation of their currencies in order to prevent large current account imbalances. The large-scale transfer of saving that did take place was through the Marshall Plan, which saw around \$12 billion of US aid to reconstruct the war-ravaged economies of Europe and Japan.

⁵ The discrepancy in wages suggests that the returns to capital should be much higher in countries at an earlier stage in development, even allowing for factors likely to reduce the efficiency of productive capital.

At other times, however, capital has flowed mainly between advanced economies, as in the 1980s when Germany and Japan financed the US CAD – which peaked at 3.3 percent of GDP in 1987. In the 1970s, the dominant flows were between less-developed economies. The oil revenues generated by the oil price shocks were recycled through the financial intermediaries in the advanced economies, and on-lent to other developing countries.

The unwinding of these large transfers of global savings between countries has at times been associated with a painful period of adjustment for borrowing countries, although this has not always been the case. The Gold Standard era ended not because of difficulties that Australia and others had in servicing the financial obligations associated with their CADs, but because of an exogenous shock in the form of World War I. The imbalances of the 1980s were resolved via coordination between the US and the surplus countries without a slowdown in US growth.

By contrast, the imbalances of the 1970s corrected sharply in the 1980s following an increase in interest rates and the collapse of oil prices. The former prompted a series of debt defaults from borrowing nations, while the decline in oil prices caused a dramatic turnaround in the trade balances of oil exporters. In the 1990s, speculative attacks on a number of emerging market currencies proved the catalyst for capital flight and a debt crisis across emerging Asia. This followed a period of financial liberalisation and the dismantling of capital controls in the early 1990s, which saw a significant increase in inter-bank lending to the region. For the Asian banks, their borrowing was in foreign currency and their lending was in their national currencies, which meant they were exposed to the risk of sharp changes in the value of their exchange rate (although the pegging of their exchange rates dulled the perception of this risk at the time).⁶

The lessons learnt by the Asian economies during the financial crisis also set the scene for the emergence of today's external imbalances and the consolidation of the

BWII system. The region emerged as a net exporter of capital via an export-led development model that generated surpluses on the trade balance. Many Asian governments also viewed it as necessary to have a sufficiently large war chest of foreign reserves to prevent future speculative attacks on their currencies and capital flight.

3 Bretton Woods II

The emergence of the current pattern of external imbalances is quite different from past experiences of major global imbalances. Firstly, the direction of capital flows or net savings transfers is unusual. Capital is flowing 'uphill' from emerging markets to the advanced economies. Secondly, this global flow of net savings is taking place in a period of financial globalisation where the level of gross financial flows is unprecedented. Thirdly, current global imbalances have grown up in, and contributed to, a broader macroeconomic environment of remarkably high and stable growth, low inflation and reduced financial market volatility. However, this stability has proved temporary, as the vulnerabilities associated with the imbalances have contributed to the turmoil we are currently witnessing.

The imbalances on the deficit side have been concentrated primarily in one country – the US. The US is absorbing a significant fraction of the world's savings to finance its external deficit. By contrast, the world's current account surpluses are more dispersed.⁷

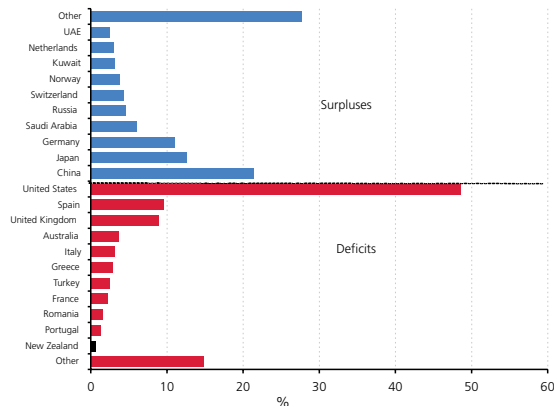
The counterpart to this pattern of current account balances is the net capital flow from the surplus to deficit economies and, more specifically, from the emerging markets to the advanced economies.

One way of initially rationalising this is by distinguishing between gross and net capital flows. The flow of cross-border

⁶ In addition, Asian financial institutions were exposed to the liquidity and credit risks associated with their domestic lending. These risks were compounded by poor risk management practices and deficiencies in broader governance arrangements.

⁷ In the mid-1980s, the US CAD was matched primarily by the surpluses of Japan and Germany, and the resolution of the external imbalances at the time was facilitated by the select number of countries involved. This time around, such coordination is more problematic given the greater number of countries involved on the surplus side, as well as the incentives underpinning BWII.

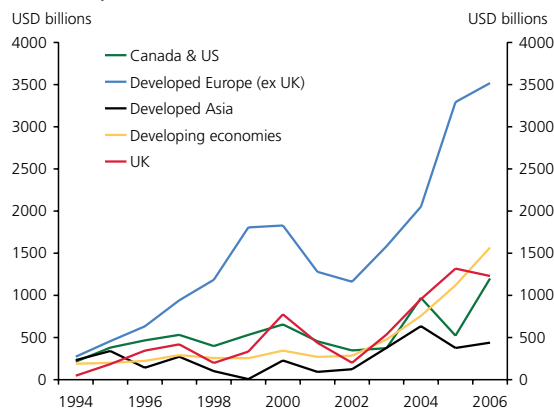
Figure 2
The distribution of current account balances (2007)



Source: IMF, RBNZ calculations.

capital topped USD8 trillion in 2006, or 17 percent of global GDP, up from 5 percent in 1995. This dramatic increase in cross-border flows – in the form of debt, equity and direct investment – is the embodiment of financial globalisation, where on-going technological change, financial innovation and domestic and international financial liberalisation of capital controls since the 1970s have combined to increase the gross level of assets held cross-border. The dominant ‘producers’ of international assets have been the advanced countries of Europe, which have provided large amounts of finance to Eastern Europe in particular (figure 3).

Figure 3
Gross capital flows

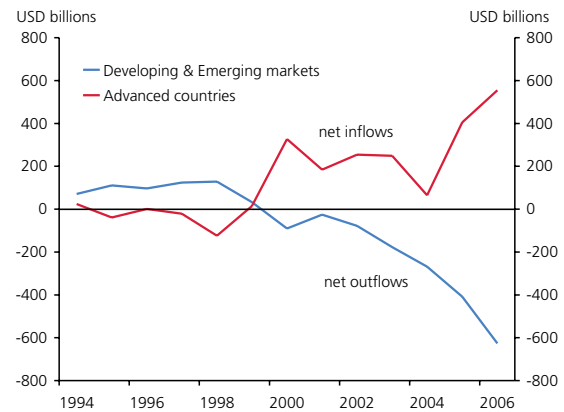


Source: IMF.

The share of gross capital flows from developing countries is small, but growing, driven by the current account surpluses of emerging Asia and the oil exporters. In addition, emerging market economies are still to a large degree recipients of these gross flows, in the form of foreign direct investment (FDI) to China for example, or in the case of emerging Europe,

bank lending.⁸ Indeed, FDI is still flowing the ‘right way’, where 40 percent of private flows to emerging markets are FDI (Prasad, Rajan and Subramanian, 2007). However, when all forms of financial flows are taken into account, there has not been a net transfer of capital from rich to poor countries (figure 4).

Figure 4
Net capital flows



Source: IMF.

In short, financial globalisation cannot, by itself, explain the increase in net flows from emerging markets to the developed world. Emerging Asia and the oil-exporters are the dominant suppliers of capital in net terms. Explaining this pattern of net capital flows that underpin current account imbalances is the essence of BWII, which will be elaborated below.⁹

There are a number of interrelated factors that, taken together, explain the emergence of global imbalances and

⁸ Eastern Europe has been the recipient of large financial flows in the context of the transition of its economies from a socialist to a market-based model of development, which has required a large overhaul of their capital stock. Moreover, optimism surrounding the growth prospects of these countries has been buoyed by membership in the EU and associated convergence with Western Europe (Rahman, 2008).

⁹ Note, global imbalances can also be mapped by examining the stock of international assets and liabilities, where capital account flows corresponding to the current account balances change the stock of existing international assets and liabilities. The net international investment position data broadly follows the pattern of capital flows, although there are important valuation effects associated with capital gains on assets as well as with exchange rate changes. These valuation effects have meant that the US’ net international position has not deteriorated to the extent implied by the CAD flows. For example, the US’ share of total international financial liabilities is 21 percent, which is much smaller than its share of the global CAD (just under 50 percent - figure 2).

the broader BWII configuration. These include: financial sector imperfections and the role of the US as a key financial intermediary; saving and investment dynamics in the particular borrowing and lending countries; and the increase in oil prices.

The first explanation relates to the nature of financial market imperfections in the context of the pattern of capital flows described above. On the one hand, financial globalisation has created an environment where borrowing and lending has become less restricted. This has led to the decline in the home bias of investment and the diversification of portfolios across countries and asset classes. On the other hand, financial market underdevelopment in emerging markets implies that the domestic savings generated by productivity increases in these economies is not adequately intermediated via the local financial system into increases in consumption. In addition, a heightened degree of uncertainty can lead to over-saving, since the pooling and distribution of risk that well-developed financial markets provide is absent (Valderama, 2008). The under-provision of public goods such as social security and public health and education systems in many emerging markets can lead to very high household savings rates, and relative under-consumption.¹⁰ This precautionary savings motive is magnified at the economy-wide level by the desire on the part of emerging market governments to avoid a repeat of the currency crises of the 1990s, leading them to hold sufficient foreign exchange reserves to avoid a balance of payments crisis.

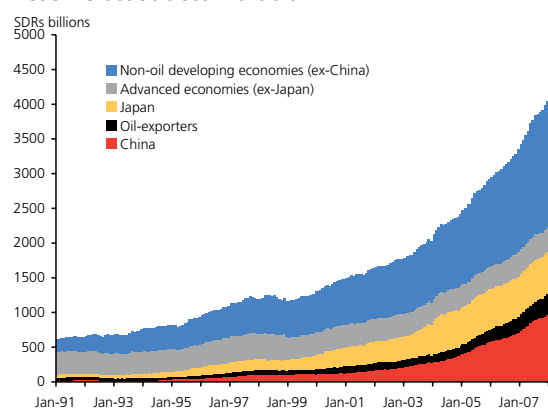
The excess savings generated by this precautionary motive, and mediated by financial underdevelopment, must end up somewhere. This somewhere has been the US. The US is an important producer of financial assets, including 'safe assets', given the depth of its financial markets, low inflation and the protection afforded to property rights. As foreign savings have increased, the need for safe assets to store value from political and economic turbulence has also increased. In this context, the US has been the key destination for this

¹⁰ By contrast, productivity increases in economies with well-developed financial markets can more easily be translated into consumption, as households are able to borrow in anticipation of future income increases, and hence smooth their consumption behaviour. This access is further enhanced by financial innovation and the development of new financial products.

'excess savings' generated by emerging markets. According to Zhang and Miller (2007), the US is exporting the security of ownership in exchange for manufactured goods.

The specific mechanism for this savings transfer has been central bank reserve accumulation and the recycling of petro-dollars via the Sovereign Wealth Funds of the oil exporters. The growth in reserve accumulation has been dramatic over the past few years. Foreign exchange reserves as measured by the IMF are SDR4.3 trillion, or USD6.8 trillion (figure 5).¹¹ China's official central bank holdings alone are USD1.8 trillion.¹² Indeed, one key marker of the stability of BWII would be the continued preference of foreign central banks to hold low-yielding US government debt, which is the primary reserve asset of choice.

Figure 5
Reserve asset accumulation



Source: IMF.

In recent years, official capital inflows to the US have financed an increasingly large portion of the US CAD compared to net private capital inflows.¹³ The concern has always been how these official flows would hold up in the context of

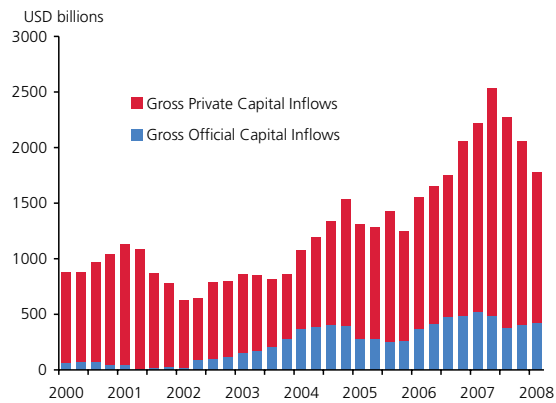
¹¹ Data is for April 2008. An SDR, or special drawing right, is a composite currency used by the IMF based on a weighted average of major currencies. As at 8 August, 1USD = 0.63SDR.

¹² The total Chinese government holdings of reserves are likely to be even higher, given the recent creation of the China Investment Corporation (CIC) – a sovereign wealth fund. In addition, state banks are required to hold a level of foreign reserves as part of their reserve requirements. Brad Setser estimates that the Chinese government probably manages between USD2.4-2.5 trillion in foreign assets [see his blog, 'Follow the Money', <http://blogs.cfr.org/setser/>].

¹³ As many have pointed out, the level of official inflows to the US is probably understated, since a proportion of asset accumulation by central banks and Sovereign Wealth Funds shows up as private capital flows after intermediation directly by capital markets in third countries.

capital flight on the part of private investors as the USD falls. To date, these official flows have held up, preventing any disorderly depreciation of the dollar and holding down US interest rates at a lower level than otherwise would be the case (figure 6).

Figure 6
US capital inflows



Source: Datastream.

That said, a number of emerging markets have realised that the ongoing depreciation of the USD inevitably implies capital losses on their holdings of USD assets. Since 2000, ten new sovereign wealth funds (SWFs) around the world have been created to invest in higher-earning assets, including equities (Gieve, 2008).¹⁴ SWFs have around USD2–3 trillion under management. Any portfolio diversification away from US assets would prompt further dollar depreciation and higher US interest rates.

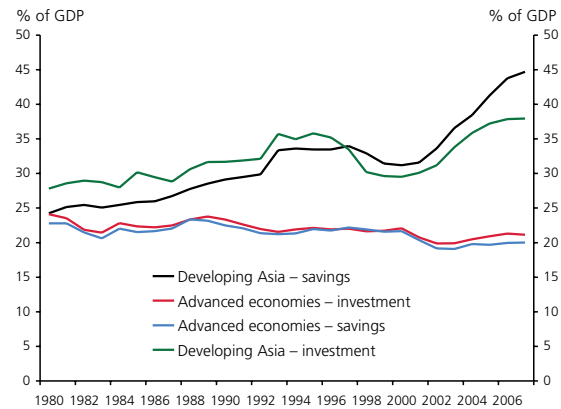
A second explanation for global imbalances relates to specific savings and investment dynamics in both the deficit and surplus countries. The difference between national savings and domestic investment is the analytical counterpart to current account balances. If domestic savings is insufficient to meet desired investment, the shortfall must be met by the importation of global savings.

From figure 7 one can see an increase in savings in emerging Asia that has outpaced investment since the late 1990s. We noted above the precautionary motives for an increase in public savings as protection against capital flight, together with the increase in household savings due to financial sector

¹⁴ There are of course, political economy issues related to this ‘reverse FDI’, just as there were in the 1980s with Japanese FDI into the US. The Unocol and Dubai World Ports cases are illustrative in this regard.

underdevelopment and more general uncertainty associated with the economic reforms.¹⁵

Figure 7
Global savings and investment



Source: IMF.

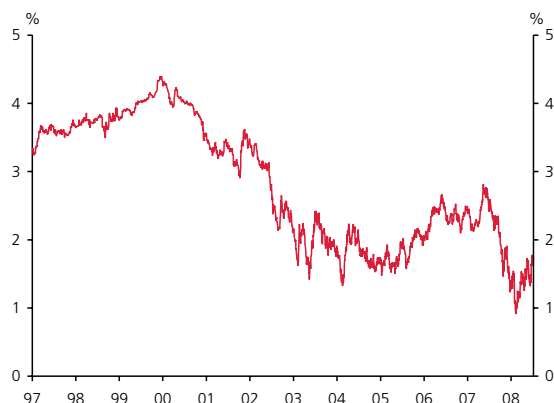
In the advanced economies, there has been a secular decline in both savings and investment, with the savings falling more than investment – resulting in the reliance on foreign saving to finance the desired level of domestic investment. The long-term decline in savings in advanced countries can be explained by the following factors (IMF, 2005): increased access to credit facilitated by financial market innovation; the decline in public savings in some advanced economies such as the US; and an increase in the elderly dependency ratio, where an aging population tends to dissave during retirement. On the investment side, long periods of subdued growth in Europe and Japan, together with demographic trends, have reduced desired investment for industrial economies as a whole.

All else equal, the gap between desired investment and domestic savings in the advanced economies should lead to an increase in long-term interest rates (Bernanke, 2007). However, the dramatic increase in savings from the rest of the world, and the intermediation of this saving through US financial markets, has had the effect of depressing US and global interest rates.¹⁶

¹⁵ In addition, investment levels in Asia (ex China) have not recovered from the Asian crisis. In this regard, there are elements of both a savings ‘glut’ and investment ‘slump’, both of which explain the pattern of current account surpluses in the region.

¹⁶ The large increase in desired savings has not been the only factor behind the decline in real long-term interest rates. Other factors include the decline in the term premium due to the decline in uncertainty that is associated with a low-inflation environment.

Figure 8
US real long term interest rates



Source: Bloomberg.

This decline in long-term interest rates, coupled with relatively loose monetary policy settings in the US immediately following the dotcom crash in 2001, has accentuated the imbalance in the US between savings and investment. US households have been able to sustain high levels of consumption relative to their incomes because of this low interest rate environment. Moreover, household wealth over this period increased as the prices of assets such as property were buoyed by the benign financial conditions. The decline in household savings in the US has been compounded by government dissaving.

More specifically, the global savings glut emanating from the increase in the net supply of capital from the rest of the world has been instrumental in an unbundling and re-pricing of risk within financial markets. Excess global liquidity contributed to the development of new markets and financial products designed to generate a return on this liquidity. The massive growth of securitised debt products – such as residential mortgage-backed securities – is indicative in this regard. In turn, the propagation of such new financial instruments has further increased liquidity growth.

Oil prices are another important element underlying current global imbalances. Oil prices have increased dramatically over the past few years on the back of robust demand from emerging Asia to fuel its rapid industrialisation. Higher oil prices cause a deterioration in the trade balances of oil importers, and a windfall for oil exporters. For example, at USD120 a barrel, the six-country Gulf Cooperation Council (GCC) is earning around USD2-2.5 billion a day

(Jen, 2008).¹⁷ While some of this windfall is being spent on domestic infrastructure and other projects, the majority of this oil revenue has been recycled back to oil importers via the investment of accumulated reserve assets, as described above.

In sum, BWII has allowed many emerging markets to foster a specific economic development model based on export-led growth, while permitting the US to import capital and spend more than the economy produces. This co-dependency helped create a benign global financial environment that contributed to rapid financial innovation – a development that itself reinforced the imbalances.

4 Financial market turbulence and Bretton Woods II

As discussed above, the excess liquidity related to global savings and investment imbalances served to underpin a very strong period of global growth. Low global interest rates and subdued financial market volatility reinforced investor confidence and facilitated the development of financial products to reward risk-seeking behaviour in new ways.

However, this period of financial innovation and risk appetite has come to an abrupt end. The US economy is currently experiencing a sharp slowdown as the housing market corrects, while credit concerns have extended well beyond the market for structured products based on residential mortgages. The crisis in the US sub-prime mortgage market has become a full-blown global credit crisis, where both the cost of credit and risk aversion has increased. Financial institutions are experiencing severe balance sheet pressures as a result of their exposure to risky financial instruments, and liquidity pressures more generally. The prices for financial assets have fallen sharply, and spreads on both risky and non-risky assets have blown out. The cost of purchasing insurance against financial market volatility has increased sharply as a result.

To date, most analyses of this financial market turmoil have focused on the market segments where it all began (BIS,

¹⁷ Jen estimates that at \$120 per barrel, the GCC has about \$58 trillion in proven oil reserves, non-GCC OPEC \$53 trillion and others \$14 trillion.

2008). Here, the problems associated with the 'originate-to-distribute' model of financial intermediation have been emphasised. This model allowed banks to expand their lending without violating capital requirements imposed by regulators. Banks were able to on-sell loans to investors, or offload the loans to separate entities that the banks created for that purpose – the so-called 'structured investment vehicles'. Directing these loans off balance sheet enabled banks to issue even more loans – loans that were increasingly risky since these attracted higher fees for the originating banks. Therefore, much analysis associated with the credit crisis has been focused specifically on the highly innovative structured credit products, their encouragement by rating agencies, and the way banks shifted these products 'off balance sheet' in order to reduce their use of regulatory capital (BIS, 2008).

However, a broader perspective suggests the current financial market turmoil is an outcome of an unsustainable period of credit growth intimately tied to the BWII system. The credit crisis therefore represents a 'Minsky moment' – a moment of recognition and recoil that is prompting reflection on the broader economic and monetary arrangements associated with BWII (BIS, 2008; UBS, 2007).¹⁸

A growing number of commentators have begun to explore the connection between current developments in financial markets and the imbalances that have underwritten the global boom.¹⁹ For Münchau (2008), the crises unfolding in credit and property markets, as well as developments in food and other commodity prices, are all part of the same narrative of a liquidity-driven global boom. BWII, in the words of Münchau, has been a "gravity-defying design", which has allowed the US to run a CAD and the emerging markets to recycle their trade surpluses back into the US, increasing various asset prices and encouraging financial institutions to take excessive risks.

For Roubini (2008), BWII has always been a disequilibrium for emerging Asia, where the entire Asian development

model has been based on sustaining US consumption. The limits of this system have now become more apparent, and reflected in accelerating inflation and pressures for currency appreciation in a number of emerging markets.²⁰

China's export-led development model has been premised on pegging its currency to the USD at an undervalued rate in order to generate trade surpluses and accompanying foreign reserves. Fixing an exchange rate to prevent appreciation requires intervention on the part of monetary authorities. The central bank must be prepared to purchase all the dollars coming into the country, as a result of either export receipts or from capital flows. To prevent an increase in the domestic monetary supply stemming from this intervention, the authorities can attempt to sterilise the effects on the domestic money supply by issuing government bonds, or increasing the reserve requirements of financial institutions.

However, this sterilisation can rarely be complete. The capital flows coming into China have fuelled growth in bank lending to the private sector. These flows are increasingly taking the form of 'hot money' flows in anticipation of the eventual appreciation of the Chinese currency.²¹ Most of this hot money is going into Chinese bank deposits, as opposed to property or into equities, as the nominal return on bank deposits is higher than in the US. Thus, international investors seem to be increasingly of the view that the arrangements of BWII are unsustainable. At some point, the capital losses on Chinese reserve holdings of US assets, and the growing inflation problem will prompt a substantial revaluation in the exchange rate. Inflation is also a problem for oil exporters, with most of the Middle Eastern countries pegged to the USD. Fixing a currency has the added problem of abrogating control of domestic monetary conditions. By pegging to

¹⁸ This is named after US economist Hyman Minsky, whose work in the 1960s and 1970s attempted to understand the relationship between speculative bubbles and financial crises.

¹⁹ See, for example, Münchau (2008), Roubini (2008), and Wolf (2008).

²⁰ This view contrasts with that of Dooley *et al.* (2008). For these authors, it is the short-term desire on the part of the Chinese authorities to avoid social unrest and generate the level of economic growth sufficient to absorb the excess supply of rural labour that will hold BWII together for the foreseeable future. Asian central banks will continue to accumulate low yielding US Treasuries, and any appreciation of the renminbi will not be enough to fundamentally alter the pattern of global current account balances. The credit crisis is interpreted here as specific to the nature of financial innovation that has occurred over the last few years, as opposed to embodying a consequence of BWII regime per se.

²¹ *The Economist*, "Hot and Bothered", June 26.

the USD, however loosely, many emerging markets are effectively importing the loose monetary conditions of the US economy as the Federal Reserve cuts rates in response to a slowing economy and credit market turmoil.

Thus, the limits to BWII are not being expressed as a debt crisis for emerging markets as in 1997-98, but as an overheating problem reflected in the appreciation in the real exchange rate via higher inflation.²² The short-term objectives of the US and the key emerging markets are becoming misaligned, removing the incentives that have underpinned the co-dependent nature of BWII. Over the longer term, this misalignment will be more obvious. Arguably, the desire for sufficient reserves to satisfy precautionary demand has been met, while policies focusing on enhancing domestic demand would create a more balanced economy, and one less reliant on net export growth. These other policies include financial sector reforms associated with the development of mortgage and credit markets, together with an expanded social security system to reduce precautionary savings.

If the credit crisis in the advanced economies and overheating in emerging markets do indeed reflect the limits of BWII – the argument presented here – then what will the subsequent adjustment of global imbalances entail? The answer to this question, unfortunately, is more open-ended.

On the one hand, global imbalances could persist for some time without significant correction despite the on-going repricing of risk in financial markets. Admittedly, the housing-induced slowing of the US economy, coupled with the depreciation in the USD exchange rate to date, has reduced the large US CAD from its peak of 6.2 percent of GDP, to 5 percent presently.²³ However, high oil prices have prevented further correction in the US trade balance, while sustaining the surpluses of the oil exporting countries. Furthermore, the US continues to be able to attract the requisite capital flows necessary to fund its current account, despite significant depreciation of the US exchange rate to date. This reflects

both the US' role as a safe haven in times of risk aversion, and the apparent desire of many emerging markets to maintain export competitiveness.

Indeed, current financial market concerns may lead to a recomposition of global imbalances, rather than their attenuation (Lipsky, 2008). Global risk aversion could lead to the unwinding of the external positions of heavily indebted peripheral countries, including New Zealand. Moreover, with limited exchange rate appreciation from key surplus countries, the adjustment of the US current account to date has been against other floating currencies such as the euro.

On the other hand, the sub-prime crisis may suggest to financial market participants that the superior intermediation capacity of the US has been overstated (Aizenman and Sun, 2008). The willingness of emerging markets to place their domestic savings in the US financial system in the form of US government debt could then be in question, particularly if the export-led model of economic development is no longer viewed as optimal. Much will depend on the outcome of policy debate within emerging markets as they are confronted with both domestic inflation pressures, and a sharply slowing global economy, which will reduce export growth.

Empirical evidence on current account adjustment suggests that instances of large and sustained deficits and surpluses are rare.²⁴ Countries do not seem able to run either deficits or surpluses for a sustained length of time. There are exceptions, and both New Zealand and Australia are relevant in this respect. Both economies have been able to run CADs in the range of 4-5 percent or more for a least a decade.

Past episodes of CAD reversals have been associated with both exchange rate adjustment and a slowdown in GDP growth. The IMF notes that movement in the exchange rate can help to smooth the adjustment – the greater the adjustment in the exchange rate, the lower the loss in output growth. This indicative evidence from past episodes has been central to the IMF's multilateral consultations on global imbalances, which have stressed the need for a combination of exchange rate adjustment, together with other policies designed to

²² Although emerging markets taken as a whole are running current account surpluses, a number of emerging markets do have CADs, with a high percentage of short-term debt. Emerging markets with dependence on cross-border bank finance, such as the Baltic and South Eastern Europe economies, might find themselves under increasing liquidity pressure.

²³ As at Q1 2008.

²⁴ See, for example, Edwards (2005, 2006 and 2007) and the IMF (2007).

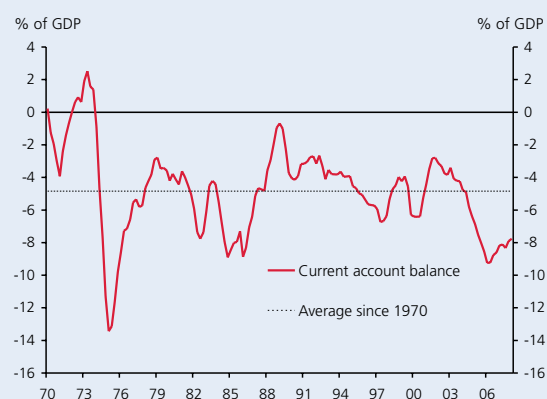
Box 1

New Zealand's external imbalances

In absolute terms, New Zealand's external imbalances are insignificant in the overall schema of global imbalances. New Zealand's share of the global CAD is just 0.7 percent, compared to the US' share of just under 50 percent (see figure 2). New Zealand has not, therefore, played any active role in the emergence of BWII *per se*, nor will it play any role in the fundamental resolution of global imbalances. Nevertheless, relative to GDP, New Zealand's external imbalances are large, and the deterioration in our external position since 2001 has, in part, been enabled by the dynamics of BWII. In addition, the unwinding of imbalances at the global level could well affect the rebalancing of the New Zealand economy.

Figure 9

New Zealand current account balance



Source: Statistics New Zealand.

From 2001 to 2006, New Zealand's CAD deteriorated 6.4 percentage points to -9.3 percent of GDP.²⁵ The deterioration in the deficit since 2001 can be partly attributed to an increase in business investment, and the high demand for imported capital (Bollard, 2005). However, the more important driver of this deterioration has been an increase in household spending and a corresponding run-down in household savings.

Rising house prices in the context of a low interest rate environment have enabled households to unlock housing

²⁵ The recent slowdown in economic growth, coupled with a depreciation in the exchange rate, has since seen the deficit correct modestly to -7.3 percent of GDP (as at Q1 2008).

equity built up via capital gains to fund consumption. New Zealand's domestic savings have been insufficient to fund the desired level of investment in housing, and New Zealand has had to borrow from abroad to fund the shortfall. The primary conduit for accessing global savings has been bank borrowing from overseas capital markets.

The excess global liquidity described in section 3 has thus been an enabling factor in New Zealand's savings and investment imbalance.²⁶ New Zealand banks have, until recently, been able to access funds at a very low cost, given the downward pressure placed on global interest rates by the global savings glut. This abundant global liquidity reduced pressure on market interest rates in New Zealand, and encouraged borrowers to take out loans at lower rates and at a longer maturity.²⁷ In addition, the global search for 'yield' prompted by the benign global financial conditions increased the foreign demand for NZD assets and placed upward pressure on the exchange rate (Bollard, 2007). Exchange rate appreciation, coupled with lower interest rates, exacerbated the imbalance between the non-traded and traded sectors in New Zealand, further widening the CAD.

These benign domestic financial conditions have not lasted. Turbulence in financial markets that began last August has increased the cost of borrowing for New Zealand financial institutions, and has been passed on to households in the form of higher retail interest rates. The current correction in the housing market is a manifestation of an unwinding of New Zealand's recent pattern of unbalanced growth. The necessary increase in domestic saving relative to investment required to correct the CAD may not be painless for households, given the declines we are witnessing in house prices and therefore household wealth.

²⁶ As recent RBNZ research shows, New Zealand's large CAD is "a rational response to a low cost of capital resulting from high savings in other countries" (Munro and Sethi 2007, p. 2).

²⁷ This shift to the longer end of the yield curve was further encouraged by the RBNZ's efforts to combat rising inflation pressures by increasing short-term interest rates. Higher short-term interest rates relative to offshore rates also encouraged capital inflow and placed upward pressure on the exchange rate.

address specific savings and investment imbalances across the deficit and surplus countries. If done successfully, these policy interventions would produce the preferred orderly adjustment of global imbalances.

Thus, the ability and willingness of both surplus and deficit countries to address their responsibilities under the IMF's framework in the context of current macro-financial turmoil will be key to how global imbalances will adjust in the near term.

5 Conclusion

The global economy is currently subject to what the IMF has described as the largest financial shock since the Great Depression (IMF, 2008). This financial shock marks the end to the benign global financial environment witnessed over the past few years – an environment where the interplay between excess global savings and financial innovation led to a general under-pricing of risk.

This article has argued that the credit crisis also represents the limits to the broader global economic and monetary arrangements we have labelled BWII. BWII embodied a fairly short-term mutually beneficial relationship between some key emerging markets and the US. The net capital flow from emerging Asia and oil exporters to the US that BWII entailed has resulted in the accumulation of very large external imbalances. And while history shows that large external imbalances are not uncommon, they seldom last indefinitely.

History also suggests the correction of large external imbalances can, but not always, lead to a painful period of economic adjustment. This disruptive scenario has always been a key risk for the global economy. This risk now seems more tangible in today's environment of macro-financial fragility.

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