

SPECIAL REPORT

The new global balance

- As a finale to our series of notes on the reshaping of the new global balance, we present a unified framework in order to help understand our main predictions.
- We believe that as risk appetite slowly returns, the negative risk premium that benefited US Treasuries and the dollar will rapidly reverse.
- As the Fed is likely to err on the side of growth for a long time, the dollar could test its 2008 lows within the next 12 months.
- Despite an expected fall in global imbalances, we believe a more stringent financial landscape and scarcer global savings justify a weak dollar in the medium term.

In recent years, economic doomsayers have predicted an apocalyptic scenario in which investors turn their back on US assets, leading to a downward spiral of dollar weakening and US rate steepening. While this apocalyptic scenario did eventuate to a degree, it occurred in a very different way to that which was envisaged. A few months into the crisis, it is clear that the global flight to safety has benefited Treasuries, and that the financial deleveraging has benefited the USD, along with other so-called “funding” currencies.

This behavior begs the question: will we see a full reversal of these trends once economic and market conditions normalize? We argue that a reversal is warranted for three reasons:

- The slow return of risk appetite – already underway – will cease to benefit low-risk US assets.
- The collapse of financial cross-border flows – ie, “financial de-globalization” – will require that global investors allocate a larger share of their cross-border portfolio to assets of current account deficit countries such as the US. The new financial landscape – with greater financial regulation and lower leverage – is likely to make this shortage of international capital more persistent.
- The retrenchment of private savers – especially in oil-exporting countries and Japan – and massive expansionary fiscal policies are likely to lead us towards a “savings drain” by global lenders and away from the “savings glut” prevalent in pre-crisis years.

Note: On the previously distributed version of this report we erroneously stated in the third summary bullet on the front page that “the dollar could test its 2008 highs within the next 12 months”. This version corrects that with “the dollar could test its 2008 lows within the next 12 months”.

PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES STARTING AFTER PAGE 13

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Borrowing will become more expensive once risk appetite returns

We envision a new financial landscape in which leverage is limited by worldwide regulation, and where the gradual digestion of toxic assets will weigh on bank's balance sheets for some time, thereby limiting the availability of credit in coming years. This scenario suggests that, when risk appetite slowly returns over the coming quarters, the US will face tougher terms in financing its external imbalance. In our view, these tougher terms are consistent with a closing of the current account imbalances.

We forecast the Fed will opt for a weaker dollar over higher rates

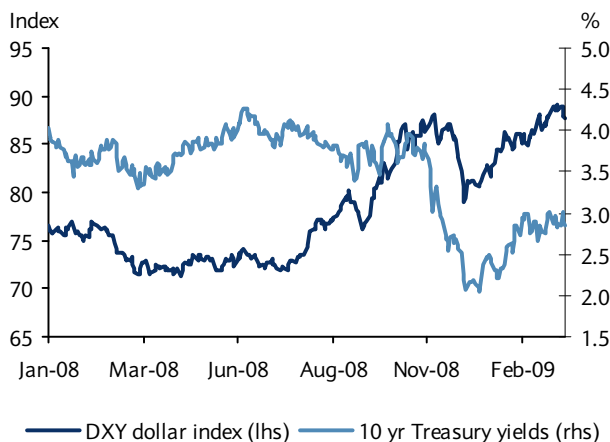
However, we believe the Fed will play an important role in deciding whether most of the tougher terms international investors will demand from the US will be reflected in higher rates or a weaker dollar. Our baseline scenario is for the bulk of the effect to show up in a lower value of the USD, as the Fed will likely err on the side of growth during 2009 and 2010 and keep rates at low levels, including through the purchase of Treasuries.

But if risk aversion persists, the negative US risk premium will not unwind

The biggest risk to our predictions remains a failure for the global economy to revert to normalcy. If global risk aversion does not retrench – because the recession is much longer or deeper than expected by market participants, exacerbating negative feedback loops – then the unwinding of the current negative risk premium for US assets is likely to be delayed. Figure 2 summarizes our main conclusions.

In what follows, we make our case in three steps. First, we describe the main facts that have so far characterized the response to the financial crisis (section I). Second, we present a unified framework to explain the performance of currencies in the past few years and the response to the recent financial crisis (section II). Finally, we use this framework to argue that despite our expectation that the US CA deficit will fall, the US is likely to face tougher terms in financing it in the coming years.

Figure 1: Response of USD and Treasury rates to the crisis



Source: Bloomberg

Figure 2: Main fundamental drivers of our views

Main drivers:

		US Rates	US Dollar
Financial	Lower Gross Capital Flows	Increase	Weaker
	Return of risk appetite	Increase	Weaker
Real	Reduction in Lenders' savings	Increase	Weaker
	US fiscal policy	Increase	Stronger
	Non-US fiscal policy	Decrease	Weaker

Timing: The pace of dollar weakening is likely to be highly influenced by the pace of return of risk appetite

Real and financial factors reaffirm the expected short-term patterns

The Fed plays a key role on whether to expect higher rates or weaker dollar

Source: Barclays Capital

1. What's new? Financial de-globalization and savings drain

We start our analysis by describing the recent response of investors, consumers and governments to the financial crisis. We present four facts that are important in understanding our main predictions:

- A. Gross capital flows have collapsed.
- B. Net external savings from global lenders have fallen and are likely to contract further.
- C. US private savings are increasing.
- D. Global fiscal deficits are rising fast.

A. Fall in gross capital flows

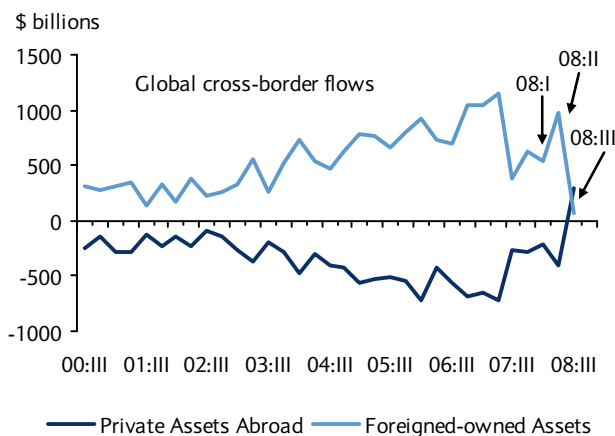
Cross-border capital flows have collapsed since peaking in 2007

Whereas the “flight-to-safety” dimension of this crisis (which has favored US Treasuries as a safe haven from investors all over the world) has been widely publicized, it has masked a potentially more important aspect: cross-border capital flows have collapsed. Figure 3 shows the undoing of financial globalization. After reaching a peak in mid 2007, gross flows have started to fall dramatically. The retrenchment since mid-2008 is particularly notable. This reflects an increase in the so-called “home bias”, ie, investors’ desire to return to domestic assets.

International investors are returning home

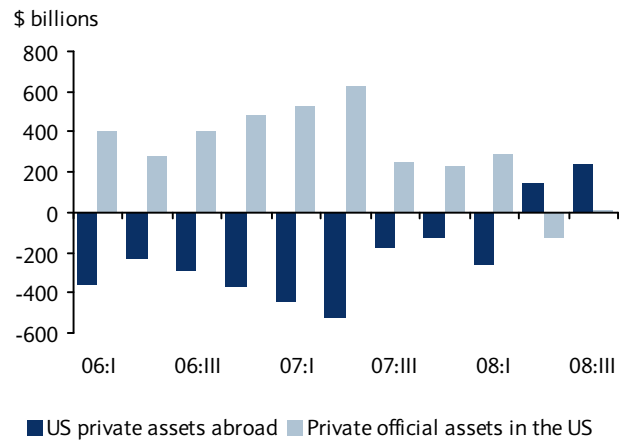
This pattern has been particularly dramatic among private investors. Figure 3 shows that private inflows to the US have reversed (light bars). That is, foreign investors have reduced their holdings of American assets in the past two quarters by \$115bn (whereas in a typical quarter between 2003 and 2007 private capital inflows were close to \$300bn). A similar pattern is evident in the behavior of American investors, who have repatriated their foreign capital aggressively in recent quarters: in a typical quarter Americans tend to buy around \$250bn of foreign assets, in 3Q08, Americans sold \$240bn of foreign assets.

Figure 3: The undoing of financial globalization



Note: Chart shows the sum of assets abroad and foreign-owned assets of the largest 30 countries globally by portfolio volume. Source: IMF, Barclays Capital

Figure 4: Private foreign assets are leaving the US and Americans are returning home



Source: Bureau of Economic Analysis

Despite the retrenchment, foreigners still prefer to hold US Treasuries

Concurrent with the decline in overall cross-border flows, the shift in the composition of foreign investors' portfolios toward US Treasuries has also been notable. Despite total inflows by foreign investors declining sharply in recent quarters, the demand for Treasuries has increased at the expense of both agencies and corporate bonds. The flight to safety in recent quarters is an unmistakable pattern in the data.

B. The drain of net external savings by global lenders

Savings of global lenders, ie funds available to global borrowers, are set to fall

The bursting of the oil bubble and China's shift toward domestic sources of growth, coupled with Japan's falling savings and a generalized collapse in international trade, are bound to lower external savings in CA surplus countries (global lenders). This reduced availability of funds is expected to worsen the terms under which countries with CA deficits (global borrowers) are likely to be able to fund themselves.

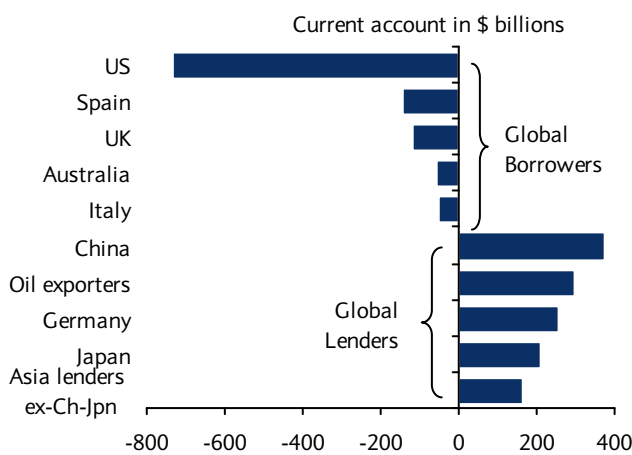
The change in China's "development" strategy will reduce its once large CA surplus

The Chinese side of the global imbalance has been the subject of lively debate in recent years, fuelled by concerns about a growth path increasingly dependent on exports and investment. This has resulted in the ratio of private consumption to GDP falling to 40% from 60% over the past 25 years. We believe the crisis has prompted a more proactive set of policies that place the near-term burden of the recovery on public investment for the sake of expediency, but gear the long-term strategy to boosting domestic consumption on a more permanent basis. We expect this combination of policies to become increasingly apparent in external accounts. We expect China's CA surplus to be 7.3% of GDP in 2010, down from 11.3% in 2007.

The decrease in savings is common to other world lenders, such as Japan and the oil exporters

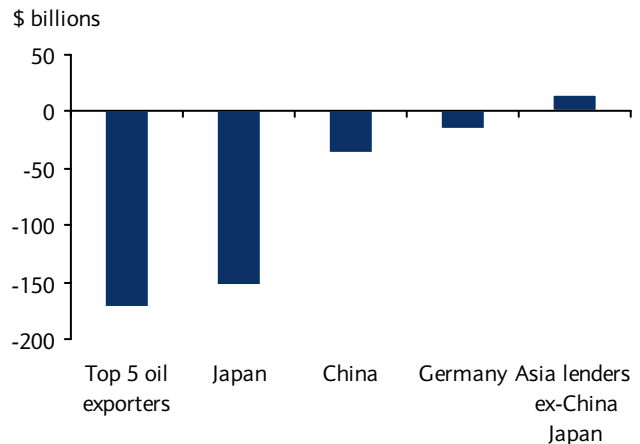
As Figure 6 highlights, the fixation with China should not mask the general nature of the decline of CA surplus countries. Indeed, the expected fall in China's external surplus is not even the largest among global lenders in 2009. The collapse in oil prices immediately implies lower savings for oil-exporting countries – its effect on global savings amplified by oil exporters' higher propensity to save (See Box 1: "Oil prices and the wealth reshuffling effect"). Likewise, Japan has been running trade deficits since August 2008. Part of it may be directly related to the crisis (the 35% y/y decline in Japanese exports is a reflection of the global downturn and JPY appreciation), but there is an underlying structural decrease in the Japanese savings rate that suggests more deficits to come¹.

Figure 5: Global lenders and borrowers in 2007



Note: CA = Savings – Investment. Asia lenders ex China Japan include Singapore, Taiwan, Malaysia, Hong Kong, Thailand, Indonesia, Philippines, Laos, Nepal, Myanmar. Source: IMF, Haver, Barclays Capital.

Figure 6: Expected fall in global lenders' external savings (2008 vs 2009)



Note: Asia lenders ex-China Japan include Singapore, Taiwan, Malaysia, Hong Kong, Thailand, Indonesia, Philippines, Laos, Nepal, Myanmar. Source: IMF, Haver, Barclays Capital

¹ See *Japan Economic Commentary: December trade data – Net exports to weigh heavily on real GDP*, 22 January 2008, for a more thorough explanation of the structural factors behind this change

Box 1: Oil prices and the wealth reshuffling effect

A distinct but related mechanism can also lead to a reduced pool of international capital. As oil prices fall, income is transferred from oil exporters to importers: as a net importer, US income increases as oil prices decline. By contrast, Saudi Arabia's incomes decrease as a result. But what happens to total external savings as a result of the change in the oil price? Figure 7 suggests that oil exporters save a larger fraction of their income than importers (China being an exception). Thus, the reshuffling of income from oil exporters to importers reduces savings in oil-exporting countries more than the increase in savings in oil-importing countries.

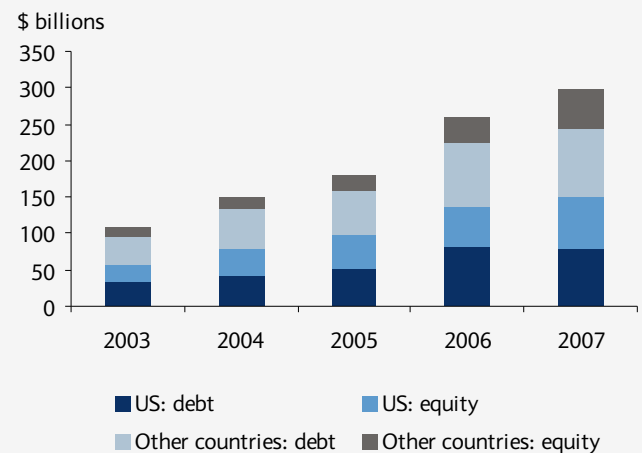
This means that, assuming all else is held constant, this reshuffling of income should signify tougher terms for deficit countries to finance their net borrowing in environments of low oil prices. Specifically, it indicates that oil-driven external savings accumulated in sovereign wealth funds and international reserves (allocated in no small degree to Treasuries, see Figure 8) will build up more slowly (or decline), while the higher income from lower gas prices in commodity importers (the other side of the equation) would be mostly spent.

Figure 7: Propensities to consume

Oil Importers		
Propensity to consume	(c+g)/y	m/(c+g)
United Kingdom	0.83	0.33
United States	0.83	0.15
Japan	0.71	0.14
China	0.61	0.31
Group Average	0.74	0.23
Oil Exporters		
Propensity to consume	(c+g)/y	m/(c+g)
Saudi Arabia	0.63	0.51
United Arab Emirates	0.56	0.87
Qatar	0.53	0.65
Oman	0.67	0.54
Iran	0.71	0.28
Group Average	0.62	0.57

Source: Barclays Capital

Figure 8: Oil exporters: Composition of cross-border investment



Note: Oil exporter countries: Kazakhstan, Kuwait, Mexico, Russia, Venezuela. Non oil exporters: US, China, Japan, Germany, Korea, France. Source: IMF

C. Increased US private savings

The collapse of oil prices and net worth represent a positive savings shock for the US

The fall in oil prices and the collapse of household's net worth are strong forces that will likely boost US private savings for some time. The financial crisis has significantly accelerated the decline in US households' net wealth, which started in mid-2006. It is likely that consumption will fall as wealth declines. Consumption responds positively to lifetime wealth and as wealth falls credit constraints get tightened. So a decline in wealth induces both a rise in the saving rate and an improvement in the CA (= Savings - Investment). Figure 9 shows the relationship between net worth and savings rate since the 1960s, which suggests some role for these factors in understanding US trends in savings.

Movements in net worth and external imbalances are closely linked

An indication that the increase in net worth is linked to the external imbalances is provided in Figure 10. It shows that the real house price increases for countries running CA deficits differ systematically from those in surplus countries. Although the source of causality in the figure is unclear (it could also be that an omitted factor – such as low world interest rates – could explain the empirical pattern), we believe it is likely that the burst of the world housing bubble will partially reverse the downtrend in US savings and the global imbalance. In particular, if governments were to stay on the sidelines, the decline in wealth in deficit countries, coupled with the decrease in surpluses of oil-exporting countries, could lead to a new world balance in which CA surplus and deficits narrow without large price corrections. However, such a smooth re-balancing is highly improbable, as it would require a deeper US recession than the government is willing to tolerate without an offsetting reduction in public savings.

D. Global fiscal loosening

Fiscal stimulus in major economies will be nearly 2% of GDP in 2009

The level of discretionary fiscal stimulus in the major global economies this year is likely to build up to nearly 2% of GDP. This is a record stimulus, and underlines the determination of governments, particularly the US and China, to use fiscal policy actively to support the economy. For a closer look at the efficacy of fiscal policy, see Box 2: “The crux of the crowding out argument”.

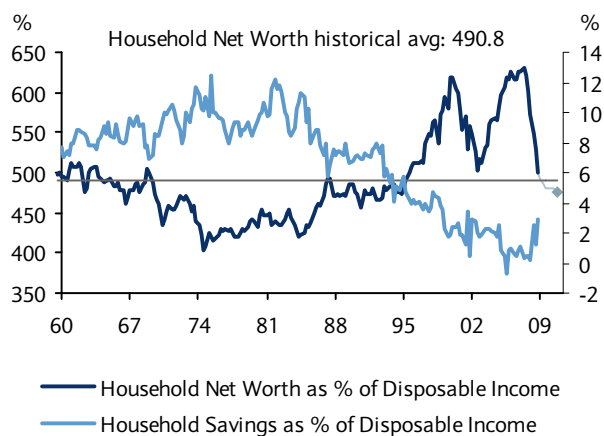
Public debt issuance is also rising rapidly...

The scale and synchronization of the projected government debt issuance is remarkable. Our calculations suggest that this year the total rise in government debt in a group of five large economies will be c.\$3.2trn, around 8% of GDP (the “G-5” group comprises: the US, euro area, UK, Japan, and China), while in 2010 debt is likely to expand by a further \$2.5trn (Figure 12). More than half of this issuance will be driven by the US, but Europe is also set to make a major contribution.

...and will reach a post-war record this year

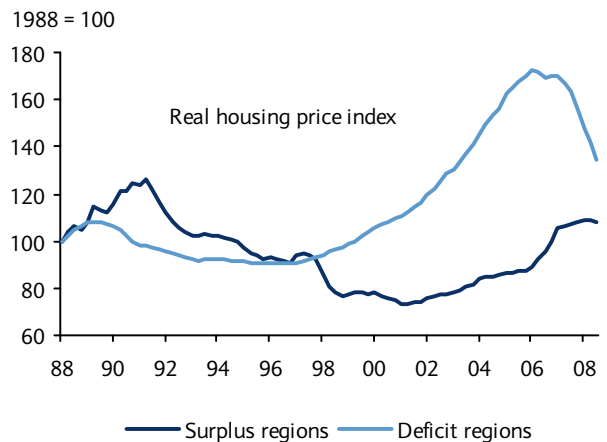
This fast accumulation of debt implies a record-high, post-war level of debt to GDP in the major economies. According to our calculations, the ratio for the G-5 economies will rise from 82% last year to 91% this year and 96% in 2010. The speed of acceleration is also notable, with the sharpest rise in the ratio of debt to GDP in 40 years expected in 2009. Ultimately, we believe that this large public debt issuance will add to the financing pressures of large debtor countries throughout 2009, and will put limits to discretionary spending in 2010.

Figure 9: Households’ net worth and savings rate



Source: Haver, Barclays Capital

Figure 10: Housing prices of surplus and deficit countries



Note: Regional housing price indices are weighted by GDP. Surplus region index include Germany, China, Korea, HK, Indonesia, Taiwan, Russia and Norway. Deficit region index include US, UK, Australia, Spain.
 Source: Haver, Barclays Capital

Box 2: The crux of the crowding out argument

Few topics are presently more controversial than the efficacy of fiscal policies. Because this issue is key to understanding the asymmetric reduction in global imbalances, we summarize the main arguments behind this debate. Three factors are essential in determining the degree of fiscal effectiveness:

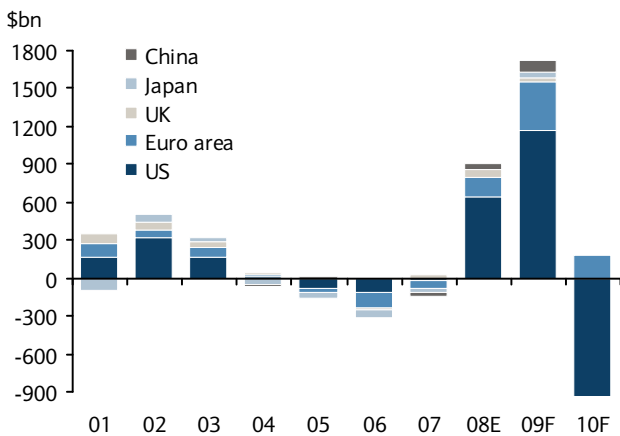
- 1) **Permanent income:** Classical economists argue that as consumers respond only to changes in their permanent income, any change in public policy would be immediately reversed by private behavior. For instance, as the government reduces taxes today, households expect future taxes to rise to pay for the higher fiscal deficits, thus, their permanent income is unchanged. As a result, private savings increase 1:1 with the fall in taxes, leaving aggregate demand unchanged.
- 2) **Higher interest rates:** A partial crowding out of private consumption by public expenditure can also occur through the effect that increased public borrowing has on rising interest rates – especially in countries with high levels of debt. The higher rates lead consumers to postpone part of their planned consumption.
- 3) **Liquidity constraints and openness:** Even for “permanent income” consumers, when liquidity constraints are binding, they are likely to increase their spending when taxes fall. Moreover, for a given level of stimulus, the larger is the propensity to consume abroad, the lower is the boost to domestic aggregate demand.

Unlike theory, the empirical evidence *unequivocally* indicates that fiscal policy can stimulate domestic demand. First, consumers act like grasshoppers (myopic and Keynesian spenders) rather than ants (forward-looking “permanent income” consumers).¹ Second, there is strong evidence that liquidity-constrained (low-income and low-asset) consumers spend a higher share of their tax savings (Broda and Parker, 2008). Third, because of the countercyclical, “leaning-against-the-wind” nature of fiscal policy, it is *wrong* to interpret a negative correlation between private and public savings (which is -0.5 for quarterly US data) as an indication of causality (from public to private consumption) and “crowding out.” Blanchard and Perotti’s (2002) careful empirical work tries to avoid this problem by focusing on “exogenous” changes in public policy (ie, excluding those that can be predicted from the past or as an automatic policy response to economic activity), and finds that “exogenous” stimulative policy *does* boost GDP (albeit by less than 1:1, see *Profligacy is the new prudence*).² Blog wars may spice up the debate, but careful empirical work can provide us with much needed guidance.

¹ For a careful test of these theories, we refer the reader to *Grasshoppers, Ants and Pre-Retirement Wealth: A Test of Permanent Income Consumers* by Erik Hurst, mimeo University of Chicago.

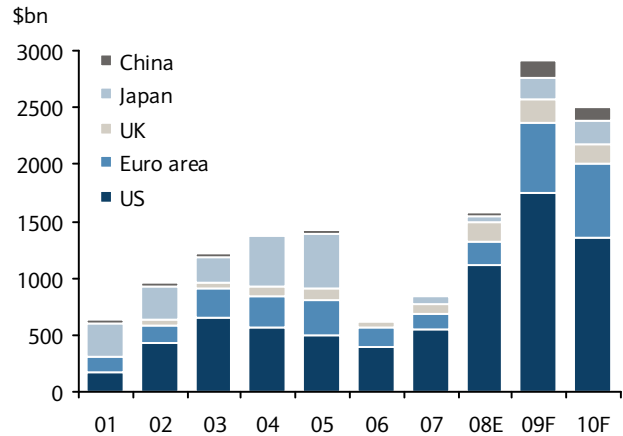
² Blanchard and Perotti (2002) “An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output” QJE, November; Broda and Parker (2008), “The Impact of the 2008 Tax Rebate on Consumer Spending: Preliminary Evidence”, mimeo University of Chicago, GSB, July.

Figure 11: Annual change in “G-5” government deficit



Note: Barclays Capital government balance and FX forecasts used to estimate 2008, 2009, and 2010 figures. Source: Haver, Barclays Capital

Figure 12: Annual change in “G-5” government debt



Note: Shows aggregated data for: US, euro area, UK, Japan, and China. This series is based historically on those estimated by the OECD, though we update these for 2008-10 based upon our own assessment of what has been happening to issuance during 4Q08 and what we expect to arise during the next two years. Source: OECD, Barclays Capital

Standard international trade and finance models guide our main predictions

Trade-based model help explain why imbalances widened in a world with fewer barriers

2. A simple framework

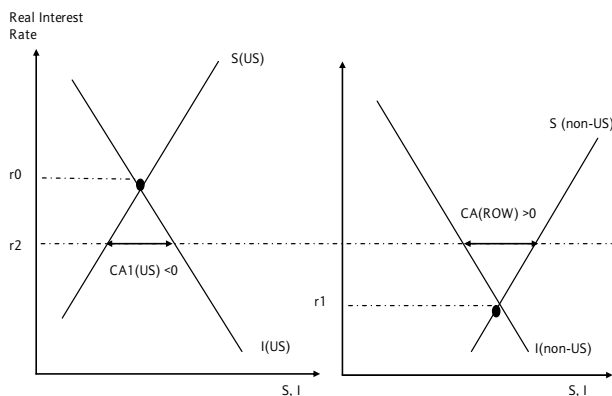
It is standard practice to think about the determination of real interest rates and exchange rates by focusing on trade (real) and financial flows. In this spirit, we illustrate in a parsimonious way the workings of standard international models that guide our main predictions.

A. Real model of interest rates

While of course interest rates and exchange rates are determined simultaneously, for expositional purposes, it is useful to focus first on rates. Figure 13 shows the US and “Chinese” savings and investment profile as a function of real interest rates. Naturally, higher interest rates imply higher savings and lower investment (where the interest rate is the opportunity cost of investing). The figure is depicted in a way that is helpful to understand the global developments in recent years. In particular, it can explain the impact of the Chinese insertion in world trade markets:

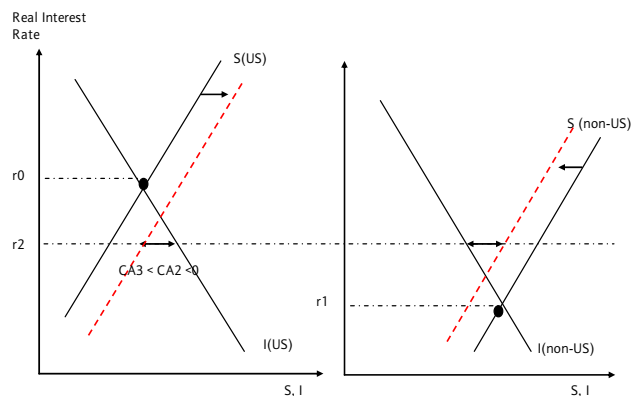
- Pre-WTO accession: The US and Chinese economies (shown as one of the ROW countries) were essentially closed, where $CA=0$ (ie, $s_i=$ in each country, denoted by dark circles in Figure 13), and two different interest rates could be sustained worldwide as there was no opportunity to arbitrage between these closed markets. In the US, the prevailing interest rate in this stage was r_0 . Because of the existence of high ROW savings, the ROW interest rate is lower at r_1 .
- The incorporation of China into world markets changed the picture substantially. For illustrative purposes, we assume the integration is complete, with no barriers to investment between the US and China (although we are clearly not there yet, barriers have been falling dramatically recently). This integration means that the equilibrium interest rate is one that makes *world* savings equal to *world* investment (no longer $s_i=$ on a country-by-country basis). US interest rates fell to r_1 from r_0 during this stage. This drop in rates happened concomitantly with growing global imbalances, both key characteristics of 2001-07.

Figure 13: A framework to understand global imbalances



Source: Barclays Capital

Figure 14: Fall in imbalances with no price action?



Source: Barclays Capital

Portfolio model: Interest and exchange rates

Portfolio models take into account factors overlooked by trade dependent models

Real models typically refer to trade flows as key determinants of interest rates and exchange rates, but are silent about the critical role played by financial flows, changes in asset preferences and the stock of debt. For this reason, we need to complement the analysis above with the insights of the portfolio theory of exchange rates pioneered by Kouri (1976), a set-up which has become increasingly useful with financial globalization and the frequent deviations from uncovered interest rate parity (UIP) epitomized by the carry-trade. For more details, see Box 3: “The portfolio model in a nutshell”. A key building block of this set-up is the risk premium for foreign assets. As investors typically care about the returns in their local currencies, any exchange rate volatility reduces their desire to hold foreign assets, and they require an excess return to be compensated for this additional risk – a “home currency bias” that, in the industrial world where assets are largely denominated in the local currency, can motivate the home bias.

Box 3: The portfolio model in a nutshell

The portfolio model can be succinctly summarized by the three equations below. The first expresses the excess return RP of foreign assets over US assets. The second is the result of the portfolio optimization problem: the share of home assets held by US investors depends negatively on RP, and positively on the degree of risk aversion, and on the exchange rate risk Var (\$/USD) that favors home assets from the standpoint of US investors (and, symmetrically, foreign assets from the perspective of foreign investors). Equation (3) solves the model by equating the supply of US assets (LHS) to the optimal demand for US assets (RHS, where the first term is the share of US wealth devoted to US assets, and the second is the share of foreign wealth dedicated to US assets).

Two characteristics of equation (3) are important to understand the framework’s main predictions. First, the larger the asset supply, the greater the return demanded by investors. In particular, an increase in the supply T of US assets would require a reduction in RP to attract new demand for US assets – a reduction that can occur via a weakening of the dollar (i.e. a lower Δ^e (\$/USD)) as in Figure 13 or, alternatively, through a rise in the US interest rate R. Second, assuming home bias (ie, α* > 0.5), the demand of any country’s asset falls with its wealth W, again leading to an increase of US interest rates or a weaker dollar.

Note also that a proportional increase in risk aversion (in turn, in home bias) will benefit the wealthier country, as dT/dα = W - W*, whereas a proportional decline in investable wealth will hurt the country with the stronger home bias, since dT/dW = -α*. Thus, a rise in risk aversion worldwide benefits countries with large net stocks of cross-border assets to repatriate. On the other hand, the share of foreign assets differs markedly across countries: a decrease in investable wealth (either due to destruction of value or to reduced leverage) should hurt more the country with the stronger home bias. The US, with its net foreign asset position and its low home bias, should fare poorly on the first count and well on the second.

Portfolio model: building blocks

$$(1) RP = R^* + \Delta (\$/USD) - R$$

Δ^e(\$/USD) is the expected appreciation of the foreign currency \$

* denotes the foreign country’s variables

$$(2) \alpha = 1 - RP / [p \text{Var}(\Delta (\$/USD) W)],$$

$$\alpha^* = 1 + RP / [p^* \text{Var}(\Delta (USD/\$) W^*)]$$

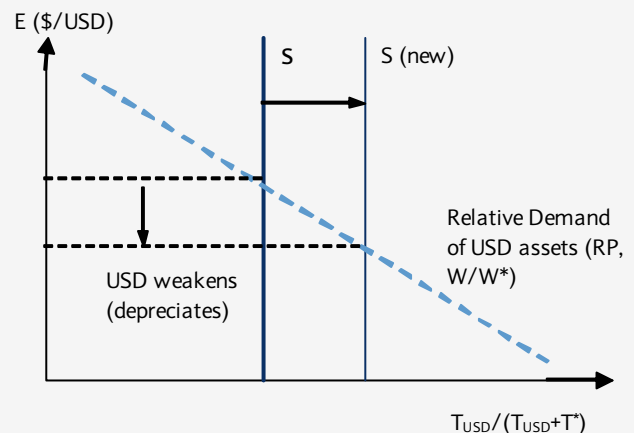
p is the degree of risk aversion; W is the level of US wealth.

$$(3) T = (\alpha RP, z) W + (1 - \alpha^* (RP, z^*)) W^*$$

T is the total supply of US assets, and z-shocks affect the preference of investors to hold domestic or foreign

Source: Barclays Capital

Figure 15: The portfolio model of exchange rates



Source: Barclays Capital

Jumps in risk aversion and exchange rate uncertainty elevate the home bias

Intuitively, in the simplest zero-inflation, two-country setup with credit risk-free sovereign assets, the demand of foreign assets by US investors depends positively on their interest rate differential (the expected dollar return over the home asset) and negatively on the degree of risk aversion and exchange rate risk.² As risk aversion and exchange rate risk jump, investors increase the portfolio share invested at home – in line with the elevated home bias that characterized the post-Lehman period.

3. Building the argument: Main insights and predictions

Three consequences of the current crisis stand out

With this framework in mind, where a single interest rate clears world savings and investment and asset preferences play an important role, we can understand the potential effects of the global factors mentioned in the previous section. In particular, it can be useful to assess the impact of three different consequences of the financial crisis: 1) the gradual recovery of risk appetite; 2) financial de-globalization; and 3) the impact of fiscal policy in the context of a savings drain.

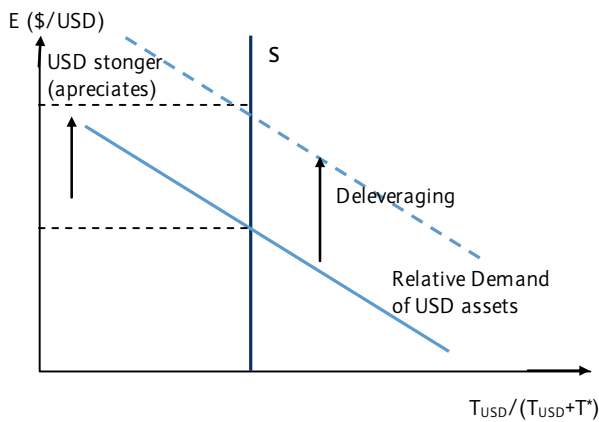
Global deleveraging has benefited funding currencies such as the USD and JPY

1. The recovery of risk appetite. Crucially, differences in perceived riskiness and flight to quality favored US sovereign assets. The data suggest that while American investors have returned home, foreign investors have been less enthusiastic, as Spanish, Korean or Brazilian local currency government bonds look less attractive today relative to US Treasuries than a few months ago. Moreover, financial deleveraging has been benign for the so-called funding currencies such as the USD or the JPY. As leverage is reduced, leveraged US investors sell risky foreign (as well as local) assets to unwind their positions, adding to pro-dollar pressures, while leveraged foreign investors do the same with a marginal effect on the demand for the USD (as the sale of risky USD assets is offset by the payment of a USD debt). Thus, the deleveraging process is likely to have shifted the relative demand for US assets outwards, given the particular “funding” characteristics of the USD.

But demand for funding currencies will wane once risk aversion retrenches

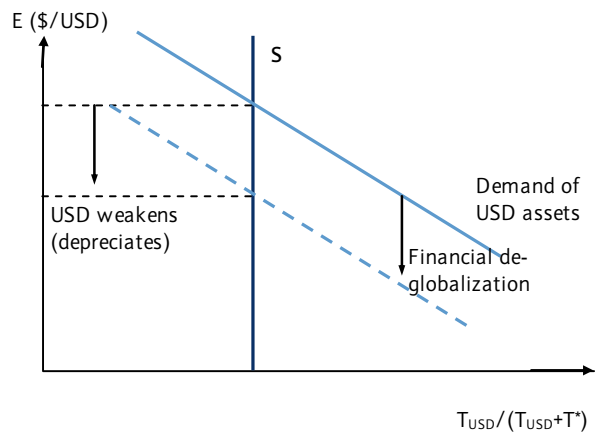
From now on, we expect a gradual recovery of risk appetite that could hurt the very US assets that previously benefited from the flight to quality, with negative implications for the USD and US Treasury rates (see Figure 2). As risk appetite returns and the risk of foreign assets are re-assessed, the flight to Treasuries (and the concomitant demand for dollars) is

Figure 16: Deleveraging



Source: Barclays Capital

Figure 17: The impact of financial de-globalization



Source: Barclays Capital

² The model can be readily expanded to include other sources of risks, as we discuss below, but not much is gained except some algebraic complexity.

likely to wane. Moreover, while the scars from the crisis and new financial regulation will likely limit the amount of leveraging in the coming years relative to the levels achieved in 2007, the financial deleveraging process is likely to be close to an end, and may even revert somewhat if Fed rates at zero make the USD the currency of choice to fund cross-border risk taking. Given all the factors involved, we expect the partial undoing of the retrenchment of the past few quarters to bring things roughly halfway back to where they were six months ago, before the last leg of the crisis began.

De-globalization places additional pressure on interest and exchange rates

2. Financial de-globalization will likely compound the previous effect. A notable feature of the period of financial globalization that started in 2002 is that, despite the heavy borrowing in recent years, the US has financed its large current account deficits without experiencing an unusual build-up in foreign investors' holdings of US assets. A simple exercise helps clarify this point (Figure 18). Consider a two-country world with one surplus country (country A) and one deficit country (country B). To focus on the effect of gross – as opposed to net – flows, assume that current account balances remain unchanged before and after the crisis, but the level of A's investable income halves from a pre-crisis level of 1,000 (20% of which goes to finance country 1's current account) down to 500. It follows that, to finance the same current account deficit in the post-crisis, country B needs to induce country A's investors to double their foreign portfolio share by raising expected returns, which could be achieved either through higher rates or appreciation expectations.

This is bad news for the US

The example illustrates the effect of today's sharp decline in capital flows. It has long been highlighted that the US current account deficit has absorbed a large amount of the *net* external savings from the rest of the world. In the past five years, the cumulative US borrowing has been \$3.4trn, which amounted to almost 60% of *net* external surpluses. However, courtesy of the surge in financial globalization, US borrowing was only 23% of the assets that foreign investors were investing abroad, less than its estimated share in the global asset portfolio (Figure 5). Even debt securities, blessed by the flight to quality, captured 41% of 2007 cross-border debt flows, roughly in line with their 37% share at the beginning of the year. In other words, international flows to the US were barely keeping track with the foreign portfolio shares of international investors. Not anymore. We believe this pattern of drier international capital markets is likely to persist for many quarters, in which case, the same US funding needs would need to stretch the share captured by US assets – at a cost in terms of higher rates and/or a weaker dollar.

Figure 18: What happens when capital flows dry up?

World pre-crisis				
	Country 1	Country 2	Country 3	Total
Assets owned abroad	80	210	210	500
Foreign owned assets	100	200	200	500
Share of world assets	0.2	0.4	0.4	
Current account	20	-10	-10	0
World post-crisis				
	Country 1	Country 2	Country 3	Total
Assets owned abroad	0	10	10	20
Foreign owned assets	20	0	0	20
Share of world assets	1	0	0	
Current Account	20	-10	-10	0

Note: Current account = Foreign owned assets – assets owned abroad.

Figure 19: Is the US borrowing more than its share?

	2007	Yearly avg. 2002-06	Yearly avg. 1997-2001
All Investments (\$ trn)	2.06	1.30	0.74
US share of global flows	19%	24%	24%
Us share of global stock	23%	38%	32%
Portfolio Equity (\$ trn)	0.20	0.08	0.11
US share of global flows	23%	15%	21%
Us share of global stock	44%	45%	39%
Bonds and notes (\$ trn)	0.95	0.68	0.23
US share of global flows	41%	36%	26%
Us share of global stock	37%	45%	39%

Note: FDI and banking shares proxied by the US share in the world dollar GDP. Source: BEA, IMF, Bloomberg, Barclays Capital

The drain in external savings will lead to higher US rates...

3. Fiscal policy and the savings drain. Supply factors also contribute to our predictions and argue for a longer-lasting correction rather than just a reversal of recent changes. A **savings drain** has an intuitive impact on world interest rates. In general, the lower are savings, the higher are rates, as funding sources for investment are scarce, driving the return to these funds higher. Examined in isolation, the current fall in external surpluses from Japan and oil exporting countries has the effect of reducing world savings as the non-US savings schedule shifts inward. A fall in external savings thus means higher interest rates that would lead to a higher (lower) desire to save (invest) that would reduce the US CA deficit. That is, higher rates induce Americans to reduce their foreign borrowing.

...unless domestic savings make up for the loss in foreign surpluses

Thus, if the shocks are as depicted in Figure 14, the unwinding of the global imbalances could be achieved by the seamless substitution of higher savings in a more frugal US for reduced Japanese and Chinese external savings. If so, interest rates would not be required to change in the transition to the new world balance. However, the change in the composition of world consumption has clear implications for the value of the USD, as we highlight in the next section.

4. Bernanke's choice: A weaker dollar

Bernanke must choose between higher rates or a weaker dollar

Steeper rates or a weaker dollar? As risk slowly returns, the Fed is already facing a dilemma between leaving rates to follow their upward course, which would be detrimental for growth, or keeping rates depressed by purchasing Treasuries, thereby monetizing the deficit and risking a dollar overhang and, possibly, inflation. And this tussle is likely to continue over a long period. Once the fiscal and monetary packages start to have an effect in the economy, or simply because the downward cycle comes to an end, the Fed will have to choose between capping any incipient recovery by letting rates up, or fuelling further dollar weakness.

Given the current economic weakness and political climate, we expect the Fed to keep rates low

The Fed, not surprisingly, has chosen, and in our view will continue to choose, rates over dollar. We expect this choice to change only when there are robust signs of positive growth in the real economy, something we do not envision for at least several quarters. Even though Bernanke is well aware of his predecessor's mistake of being too loose for too long, we believe he will continue to be determined to avoid weak growth and will stick to his initial choice. Especially important for this view is the politically sensitive issue of US homeowners. With unemployment expected to reach almost 9.5%, Congress will be sympathetic to a Fed that helps households. Moreover – though less appealing to Congress – higher rates would inhibit the healing of a financial sector mined with toxic assets, and a banking sector likely to undergo a long and painful convalescence for years to come.

The Fed's balance sheet expansion is not inevitably inflationary

While the dilemma is likely to be painful for the US, it is important to understand that part of the recent expansion of the Fed's balance sheet simply made up for tighter liquidity due to disintermediation and thus should be relatively easy to revert. In economic jargon, the increase in base is compensating for the collapse of the multiplier. As such, this expansion could be undone – as in the case of Japan – without much ado, as financial intermediation and growth returns. By contrast, the fiscal stimulus (coupled with an already sizeable fiscal deficit) requires new financing that would bring the US public debt ratio from 41% of GDP at the end of 2008 to 59% by the end of 2009. These larger fiscal needs could be either eliminated through a stream of fiscal surpluses or, less painfully, diluted through monetization, inflation, and depreciation. This latter path would possibly elicit a second-round effect from inflation to higher medium- and long-term rates that may prolong a period of weak growth.

*But we could see the dollar fall
15% over the next year*

Ultimately, the dollar may have to bear all the burden of the adjustment, and could easily depreciate 15% in real effective terms, ie, all the way to its pre-Lehman level, within the next 12 months. This correction could start right now, as many of the drivers of dollar strength (unwinding of leverage positions, risk aversion, funding costs) are gradually dissipating. Importantly, it is difficult to envisage the euro taking most of the hit as before: battered European economies do not look ready to withstand a competitive devaluation of the dollar. More realistically, part of the real exchange rate adjustment would need to come from the strengthening of other core and EM currencies (many of which have already adjusted considerably to the new scenario and should hold well in the absence of more negative surprises).

*The main risk to our prediction is
that risk aversion remains high
throughout 2009 as global risks
do not abate*

From the previous discussion, it follows that the main risk to our call is the chance that the factors driving down the dollar (particularly, risk aversion and tail risk) revert to year-end levels. One can think of potential – albeit improbable – triggers: a full-blown banking crisis or the abandonment of the euro in a Western European economy; a stream of bankruptcies in the US; political infighting around the corporate rescue packages. Alternatively, a faster-than-expected recovery in the US, if coupled with a delayed recovery elsewhere, may open the door for interest rate hikes by the Fed. But even under these scenarios, we still see a weakening for the USD before any sign of recovery.

*US policy plays an important role
in shaping the new global
balance.*

Ultimately, the global imbalance debate will reappear in new clothes. The rise in US household savings, coupled with an increase in Chinese consumption, could have undone the mismatch, but at the cost of a deep recession that US policymakers are not willing to tolerate. The current alternative, by exploiting a temporary strong demand for US assets, can transfer part of the cost to US dollar asset holders around the world in the form of a weaker dollar. Will the US be able to share the burden for the lack of alternative savings instruments, or will Bernanke's choice secure cheap financing only at the expense of irreversibly undermining the dollar as reserve currency? Many have called the end of the dollar reign before, a question that depends crucially on how much and for how long the Fed wants to pursue the current strategy. We do not go that far. What we can say is that the US seems intent on a solution that relies critically on seignorage on foreign holders of US assets. The weakening of the US dollar will be a measure of the degree of loss-sharing behind the recovery.

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