CLSA
ASIA-PACIFIC MARKETS

Solid Ground

Global outlook

Russell Napier
russell.napier@clsa.com
(44) 1316549830

Darkness on the edge of town

In the summer of 2011, a terrible burden fell upon the people of the USA. For the first time in 15 years, those who had money (savers) began to fund their government, rather than the printers of money (central banks). This shift has already hurt private-sector growth and asset prices, and as federal debt to GDP reaches 100% it will squeeze out private-sector activity. Structural moves to coerce markets into funding government have begun in Europe and will come to the USA too. But no one needs to stay for this darkness on the edge of town. Investors should move capital to jurisdictions with small government debt, large current surpluses and well-capitalised banks. Switzerland clearly no longer fits the bill, but Singapore offers a true safe haven.

20 September 2011

Global
Macro strategy

Is a dream a lie

If it don't come true

Or is it something worse

The River - Bruce Springsteen

Shift of capital to fund government produces recessions

- The commercial-paper and corporate-bond markets will shrink as funding shifts.
- The major rally in Treasuries and the collapse of bank share prices augurs deflation.
- The reduction in central banks printing to buy Treasuries means a deflation risk.
- Office of Management and Budget forecasts see zero growth in corporate profits in real terms over the next decade - and this is based on rosy assumptions.
- The federal debt burden was this high in WWII, and the private sector collapsed.

Corporate profit share of GDP will mean-revert from all-time high

- Previous peaks for the corporate profit-to-GDP ratio were 1966, 1997 and 2006, and subsequent long-term returns from equities were always poor.
- National Income Product Account data show corporate earnings peaking in 4Q10.
- Tax paid by corporations is near the average level of the past 30 years, but the federal debt-to-GDP ratio has risen from 32% to 100% over the period.

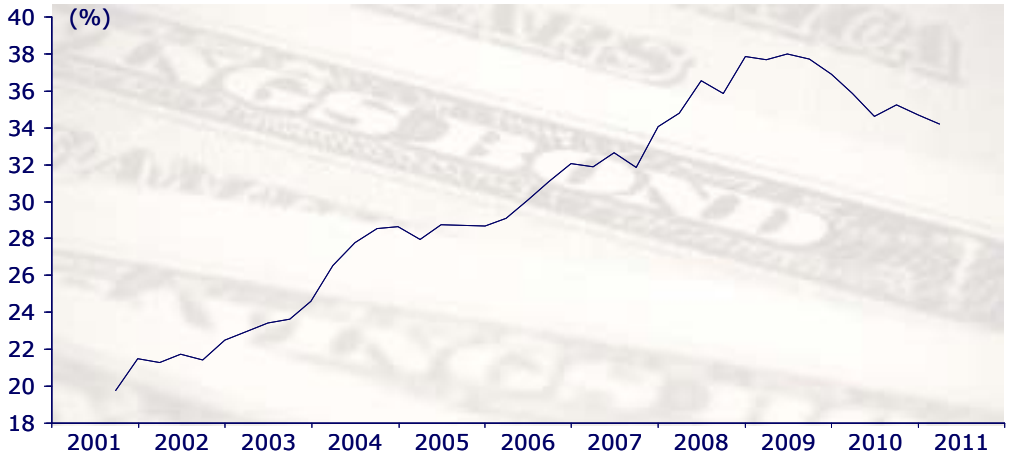
Monetary policy is reaching practical if not theoretical limits

- The ECB cannot accept the monetary consequences of solving a fiscal crisis; this is creating another banking crisis that is restricting private-sector credit.
- Internal and external politics prevent the Fed from firing the monetary bazooka.
- US foreign creditors' credulity has already been stretched by QE1 and QE2.

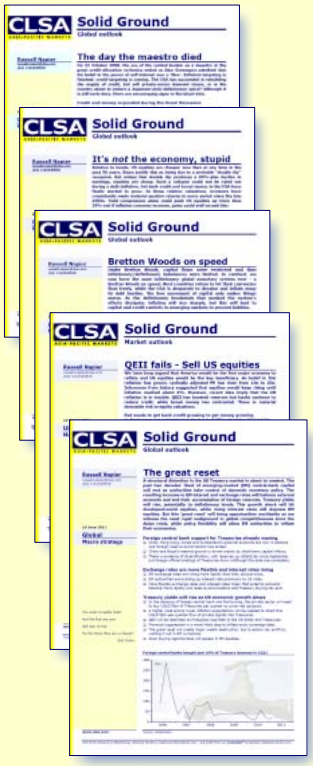
Financial suppression is now with us

- When all else fails, politicians change the rules to get the prices they want.
- The move to implement transaction taxes in Europe is a step down the road that will lead to politicians forcing capital to go where they need it to go.

Foreign central banks' share of Treasury market has peaked



Source: Datastream



Contents

About Russell Napier

Russell Napier is a consultant with CLSA, writing on issues affecting global equity markets. He worked as an investment manager at Baillie Gifford in Edinburgh, before moving to Foreign & Colonial Emerging Markets in London. In May 1995, Russell became Asian equity strategist at CLSA in Hong Kong. He was ranked No. 1 for Asian strategy in both the *Asiamoney* and Institutional Investor polls in 1997, 1998 and 1999. Since 1999 he has worked as a consultant for CLSA. Russell has developed and runs a course called A Practical History of Financial Markets. The course is aimed at fund managers and involves teachers with some 150 years of experience communicating the key lessons in financial history in just two days (www.sifeco.org). Russell's book *Anatomy of the Bear* was named investment read of the year for 2006 in the *FT*, and was republished in 2007 and 2009.

Darkness on the edge of town

A bell has rung and the dogs are salivating for easy money

Ivan Pavlov used to ring a bell before feeding his dogs. Then one day he rang the bell but delivered no food. The dogs still salivated in anticipation: they had developed a "conditioned reflex". Alan Greenspan always brought investors meat, in the form of easy money to prop up private-sector asset prices, but Ben Bernanke's Fed has none left. And despite a quarter-century of investor conditioning, his ringing of the zero-interest-rate policy bell produced only a tiny response. What will happen the next time the bell rings?

Easy money has always been the best possible response for equity prices, but now governments need to coerce private capital into bailing them out. Of course governments will try to inflate away their debt, but will investors willingly hold bonds yielding less than inflation? There are two sides to the negative real interest-rate equation and investors are salivating over the easy money and inflation side. Few want to contemplate the second part: how governments will force them to buy bonds at such low yields.

The Fed is reaching practical limitations to monetary policy

There is no theoretical limit to monetary policy, as Bernanke's famous "helicopter speech" of November 2002 made plain. But there are practical limits, which the Fed now faces. Some are obvious. It may be dangerous to leverage a central-bank balance sheet so far that a minor decline in asset prices would eradicate any equity; or to try to inflate your way out of a sovereign-debt crisis when foreigners own almost half your debt. And it may be dangerous to risk losing the incredible asset of reserve-currency status by using it to export inflation to the world. Bernanke is expected to ring the bell soon and deliver the goods. Circumstances will force him to be like Pavlov, not Greenspan, and it will become increasingly clear that monetary policy has reached a practical limit.

Will the ECB risk its own solvency to solve what is purely a fiscal problem?

The difference between theory and practice is even starker in Europe. The ECB risks its solvency every day when it loads up in assets that could one day be denominated in a foreign currency. The usual accountancy legerdemain can value sovereign debt at face value whatever the market price, but this is not possible when that debt is in drachmas or lire. Unlike America, Europe has no federal government capable of producing a fiscal solution to a sovereign-debt problem, which puts even more pressure on its monetary authority. Thus the degree of sovereign-debt monetisation is likely to be even higher than in the USA. We cannot know whether the ECB is prepared to accept such huge levels of monetisation knowing that, in the absence of European fiscal union, it is likely to end in disaster. But the fact remains that it has been intervening to support the Italian government-debt market since 8 August and it has been failing. This practical demonstration suggests it is not prepared to put its balance sheet on the line to bail out the Italian state.

Central banks are constrained by concerns over their own solvency

Central bankers can no longer be the handmaidens of capital. They may still be sworn enemies of deflation, but sometimes the cost of battle is too high. The central banks' own solvency is now the key restraint, and another headlong assault on deflation may ultimately be more expensive than the alternative.

A generation of investors has looked to the central banks to set a downside for asset prices, but it was not always so. When necessary, central bankers took actions that were highly likely to depress private-sector assets. Paul Volcker and Karl Otto Pohl were feared, not cheered. As more investors realise that central bankers are limited by the practical need to protect their balance sheets and exchange rates, asset prices will fall further.

When politicians don't like market prices, they change them

It may be time to ask, like Vladimir Illyich Lenin: 'What is to be done?' This question is best asked from Lenin's viewpoint, because a CFA or MBA does not equip one to see the most likely answer. Politicians and societies have never accepted that they must live with market prices. Whether through tariffs to protect trade or Roosevelt's morning guess of a value for gold, governments have a tendency to manufacture prices. Of course they do not need to, when markets produce prices they like. But if a price threatens its extinction, a government will most likely seek to change that price. The price is the truth, and sometimes politicians - and society - just can't handle the truth.

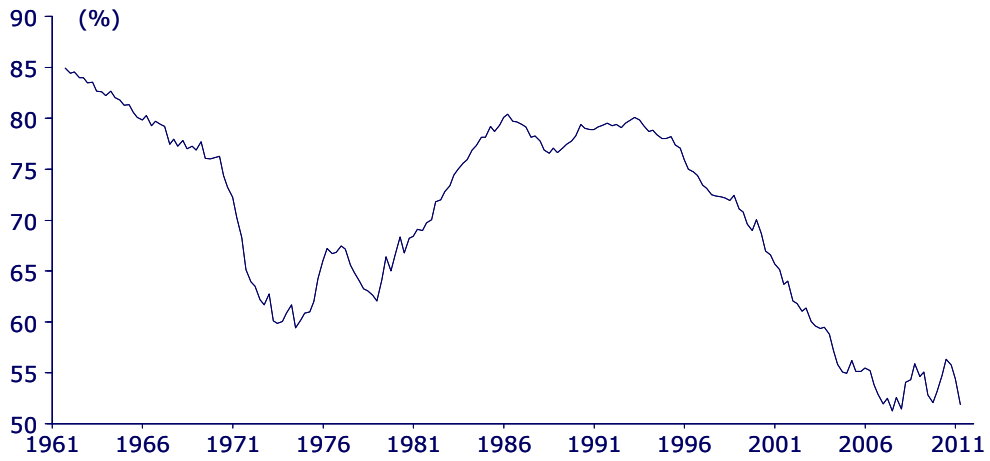
In attempting to defeat a deflationary truth, central-bank and government balance sheets have been driven to the brink of insolvency. That truth is now pushing Italy and smaller European states over the edge. This will not be permitted; governments will act to amend the laws of supply and demand. Europe is entering a period of "financial suppression", with private savings forced into funding government debt, reversing a process of pro-market structural reform that had been underway for around 30 years. No one knows how far we must go down this path before we reach another structural turning point, but history shows it will be a long road, and one inimical to good returns on capital. Soon there will be a charge for any saver wishing to exit the euro, and the stark reality of how financial suppression is being implemented will dawn very rapidly.

Capital need not hang around to be conscripted

As someone with a fiduciary duty to your clients, you might well ask 'what is to be done?' Buy more equities or more bonds? Does a government-driven structural degradation in capital allocation argue for cash over equity? Do we need high or low dividend yielding equities? The clients of investors who asked those questions at the start of the last structural degradation paid dearly: nominal and real returns from bonds and equities in 1966-82 were dreadful. The assets that preserved and created wealth - gold and Swiss government debt - were a small fraction of global market capitalisation. Today, rather than asking which developed-world asset class is best placed to weather the storm of financial suppression, you should ask: why stay? The world is full of governments that do not need to dragoon private savings into funding their debt or interfere in markets to ensure re-election. To preserve wealth and hopefully add to it, investors need to get their money into those jurisdictions as quickly as possible.

The people's long holiday from funding the state is over

Share of Treasury market not owned by central banks



Source: Datastream

Crowding out begins

This summer, savings switched from funding the private sector to funding government

Economists continue to debate whether we will have a recession in Europe and/or the USA. The brave seem prepared to say that there is a 50:50 chance and the outrageous say it is all but certain. The markets are in a mood to favour the outrageous. What investors have to understand about the events of the summer is that they reflect a reallocation of savings which is crowding out private-sector activity in the USA and Europe. This will be the dominant force for many quarters to come and will be the key driver of financial markets over many years. It is bad for growth and growth assets, and it may even produce deflation. The rally in key government debt markets indicates how private savings are flooding in to fund the public and not the private sector. This rise in government bond prices, combined with a halving of bank share prices, should leave no doubt in investors' minds that a recession - probably with deflation - is upon us.

Change in growth and inflation expectations drove the switch to Treasuries

In June, the last *Solid Ground* 'The great reset' dealt with the change in how the US government is being financed. The report described the major structural shift occurring as, for the first time in more than 15 years, the government would have to be financed by US savings. This will be a revolution, as up until now it had been largely financed by the printers of foreign currency (the People's Bank of China et al) or by those who create US bank reserves (the Federal Reserve). A government that can fund itself from invented money rather than existing savings can avoid crowding out its private sector. When private savings are relied upon to fund a government then assets must be sold to buy Treasuries and the impact of government funding on the private-sector economy changes dramatically. Most investors, focused on how this business cycle is progressing, are oblivious to this major structural shift, which not only terminates the recent expansion but will depresses private-sector growth rates for many years to come. Crucially for investors, this shift will act as a catalyst for the mean reversion in corporate profits that will undermine apparently reasonable equity valuations.

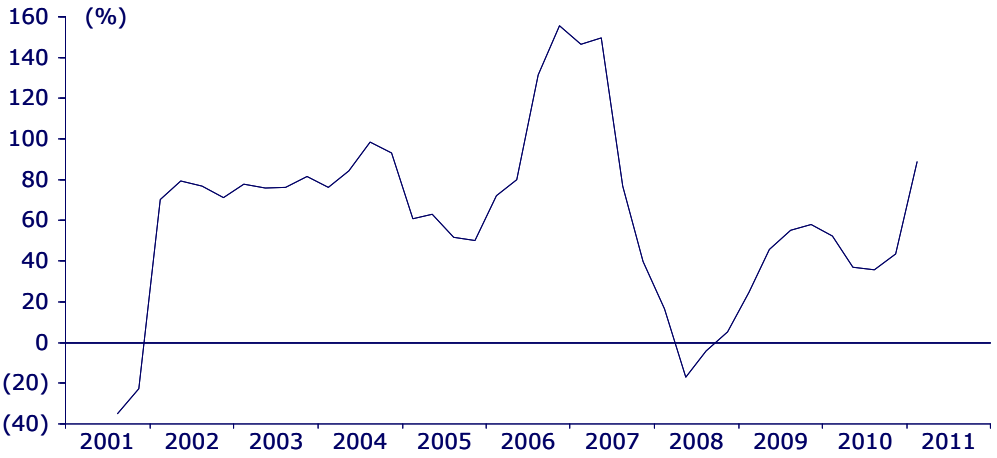

CLSA Solid Ground
Global outlook
The great reset

Figure 1 illustrates the scale of the funding burden which can fall on the private sector.

Those who print money have been financing the US government

Figure 1

Net central-bank purchases of US Treasuries as a % of issuance



Note: 12MMA of quarterly annualised data. Source: Datastream

When central-bank financing was not available, the economy and asset prices collapsed

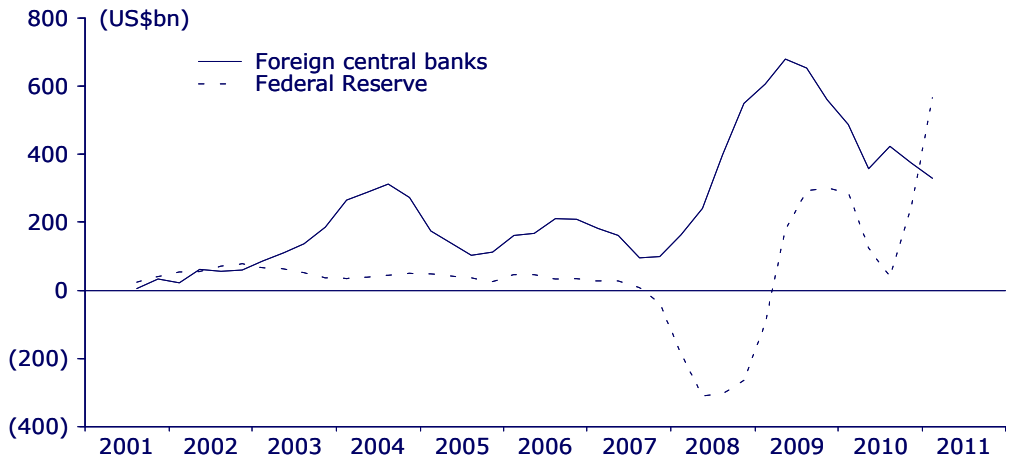
Perhaps never in the field of government finance has so much been funded by so few on behalf of so many. Figure 1 shows how the US government has become almost entirely reliant on financing itself from institutions that print money rather than on savers. It also shows how the scale of this funding collapsed post 2007. Indeed there was a brief period in 2008 when the government had to fund itself purely by selling debt to those who had saved money rather than those who printed it. The economy responded with the biggest economic contraction since the war. Who knows how bad that contraction would have gotten had the private sector continued to carry the burden of financing the government?

The reason we don't know is because the Federal Reserve launched two quantitative easing programmes and took that burden upon itself. Figure 2 shows the steady decline in foreign central bank purchases of Treasuries from their peak of early 2009 and how the Fed stepped into the breach.

Foreign buying has peaked; the Fed took up the strain until June 2011

Figure 2

Net purchasing of US Treasuries by Fed and foreign central banks

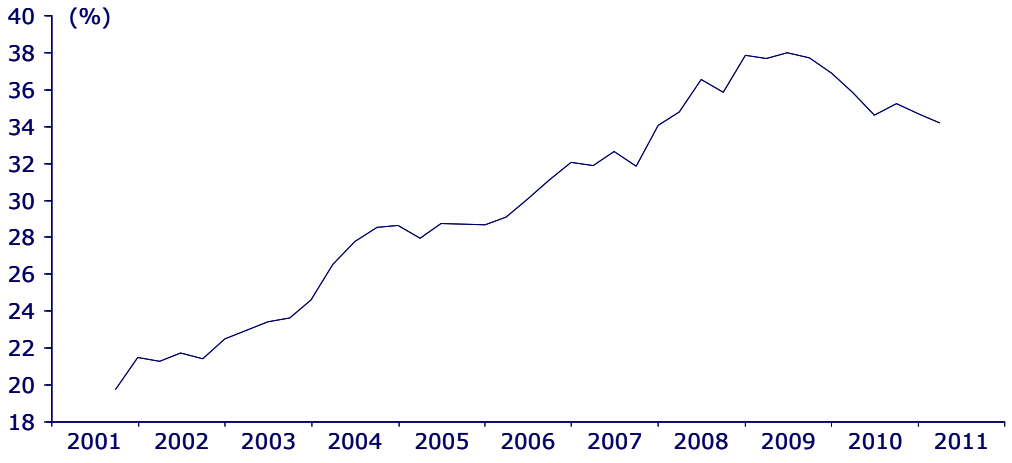


Note: 12MMA of quarterly annualised data. Source: Datastream

Foreign central banks are less important as funders of the US government

Figure 3

Share of US Treasury market owned by foreign central banks



Source: Datastream

Since June, foreign central bankers buying has not increased

With QE2 now ended and foreign central-bank purchases continuing to decline, the burden of financing the US government is shifting to private savings. Foreign central banks in aggregate are net purchasers of Treasuries, but the size of their purchases is declining while net issuance remains high. As Figure 3 shows, the result is that the proportion of the Treasury market owned by foreign central bankers is already falling.

Fed action masked retreat of foreign central banks as US government's lender of first resort

Foreign central-bank ownership of the US Treasury market peaked at 39% of the total in 2Q09 and by 1Q11 it had already declined to 34%. However when we look at all central-bank holdings including that of the Federal Reserve, the central bankers' share of the Treasury market remains at its peak of 48%. The impact of the Fed's QE policies has been to ensure that the decline in purchasing by foreign central banks did not force more of the burden of financing the government onto private savings.

QE2 ended in June. Since then we have witnessed what happens when the burden of financing the government falls upon savers. This is the beginning of the new normal of crowding out.

Higher Treasury yields were not necessary to produce a massive reallocation of savings

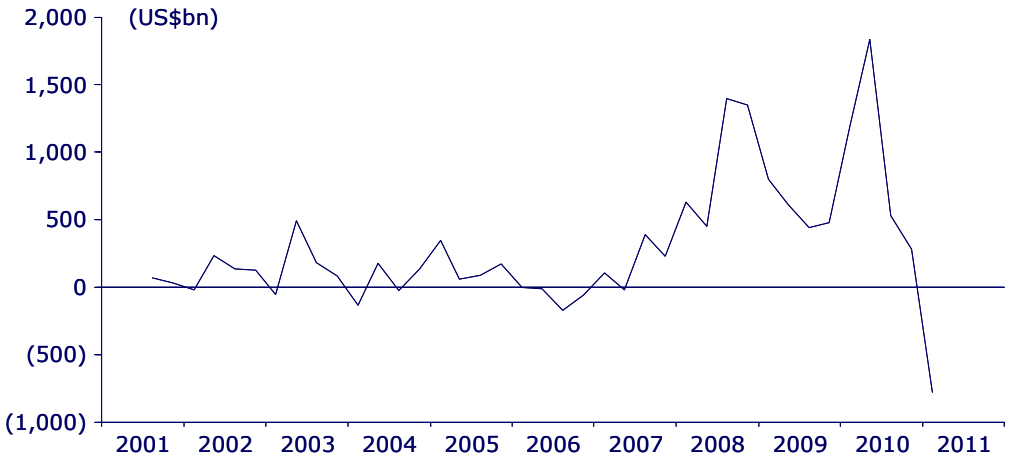
The great reset stated that this shift in private savings would most likely be instigated by a rise in government debt yields, as this seemed the most likely catalyst for such a massive realignment of savings. While a major change in growth and inflation expectations was also a possible catalyst, it did not seem the most likely scenario. But a dramatic change in growth and inflation expectations was exactly what happened in the USA and was sufficient to set private savings flowing to the Treasury market. The performance of the bond market may be different from that which seemed most likely in June, but the impact on the economy and asset prices is very similar.

A reset triggered by a rise in bond yields would probably have been even more frightening than the recent setback for equities, as it would also have cast doubt on a key safe-haven asset in the form of US Treasuries. However the impact on the private-sector economy of a shift in savings with lower bond yields is still very negative for growth and private-sector assets. In financing the government with private savings, the US private sector will be crowded out, long-term economic growth will be reduced and a deflation shock is likely. The degree of this negative impact is best illustrated by looking at recent periods when similar reallocations of private savings occurred.

Savers enjoyed a holiday from funding government, but it is ending

Figure 4

Net purchases of Treasuries by savers (quarterly data annualised)



Source: Datastream

Previous surges of private savings into Treasuries associated with hits to economic growth

Figure 4 shows how the private sector was a material purchaser of Treasuries during the global financial crisis. In that period private-sector credit contracted and the economy contracted. The more recent exodus from the market in 1Q11 occurred as the Fed appeared as a huge buyer. This probably persisted into 2Q as QE2 continued, but will have ended along with QEII in 3Q.

The surge of non-central-bank capital into the Treasury market in 2H08 was associated with a collapse in economic activity. The surge in 1H10 occurred during an economic expansion, but it produced fears of a double-dip recession which resulted in Fed intervention to buy Treasuries to try and stop private capital flowing to Treasuries. The decline in Treasury yields in the summer of 2011 is similar in magnitude to the decline seen in the double-dip fear of 2010 and somewhat less than the decline in 2H08. With QE2 over and foreign central-bank buying on the wane, it seems likely that the current collapse in yields has been spurred by a similar magnitude of movement of private savings into Treasuries. This produced an economic collapse in 2008 and a slowdown in the summer of 2010 which would very probably been much worse without Fed intervention. The shift of capital into the Treasury market this summer will produce a recession and potentially deflation..

Burden of funding the US government is switching to the private sector for the next few decades

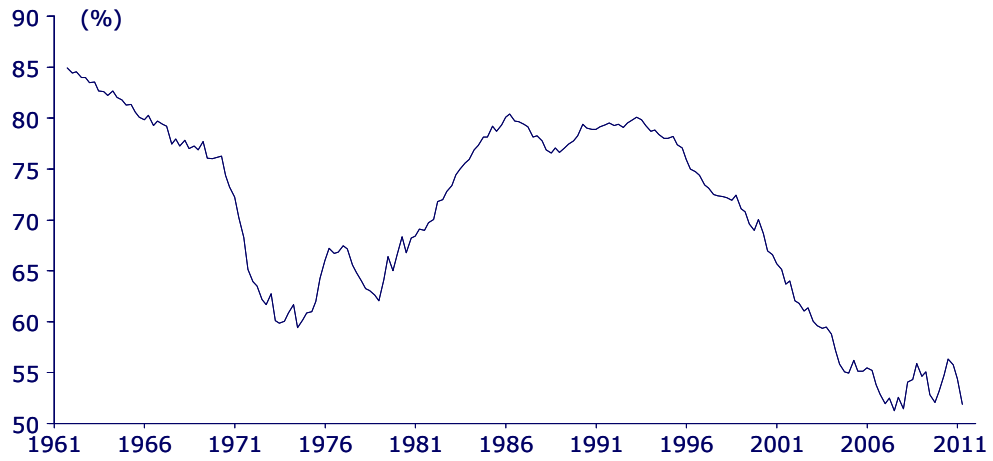
Although the private sector was a large buyer of Treasuries from 2H08 to 2H10, its role in funding the government did not increase because net issuance was also soaring. As noted earlier, total central-bank ownership of Treasuries remained constant at around 48% through this period and thus the ownership by the private sector also remained constant despite these major net purchases. With the Fed's QE programme now over and foreign central-bank purchases declining, the private sector can no longer be the large net seller of Treasuries it was in 1Q11. Indeed, it is probable that the private -sector share of the Treasury market is rising sharply in 3Q. With the Fed's balance sheet overextended and the role of foreign central bank purchasing declining this new trend is likely to continue probably for at least a decade.

Figure 5 shows just how much of the burden of government financing central banks have taken up since 1995. This chart is a warning as to just how large the adjustment process would be if we have reached a structural turning point for central-bank involvement in Treasuries.

The people's holiday from funding their government is ending

Figure 5

Share of Treasury market not owned by central banks



Source: Datastream

Need for greater private-sector saving of the government kept private-sector employment low

As Figure 5 shows, central banks have been the US government's lender of first resort the since the mid-1990s. The chart also shows how in the past three years there have been times when their role has declined. These rises have been associated with the worst recession since WWII and an unemployment rate still in excess of 9% more than two years into a recovery. A further downleg in the economy is now in progress, as suggested by the recent sharp decline in US Treasury yields.

Sharp declines in yield are associated with recessions

Figure 6

US 10-year bond yield

Source: Datastream

Scale of bond-market rally suggests a huge reallocation of private savings

Figure 6 shows how the recent decline in the 10-year bond yield compares with declines in late 2008 and the middle of 2010. On both occasions the markets tried to price in a deflation, and on both occasions the Federal Reserve responded with quantitative easing. As with the end of QE1, the end of QE2 has again been followed by bond prices acting to reflect deflation. We cannot know to what extent the rally in bonds has been driven by the switching of savings from other instruments into the Treasury market, but we know that a major buyer has replaced the Fed. The extent to which it has been a movement in private savings will only become apparent when the flow-of-funds data for 3Q is published in December this year. However unless there was a dramatic rise in foreign central-bank buying of Treasuries, which seems very unlikely, it is highly probable that private savings have driven the rally in Treasuries.

With QE2 over, crowding out is inevitable unless foreign central banks or commercial banks take up the strain. These institutions can create money and their increased participation would allow private savings to continue to finance the private sector. There is much more on commercial banks in Section 3, but the bottom line is that the value of their Treasury holdings barely changed during the major rally in Treasuries since the end of QE2. At this stage, these banks are not expanding their balance sheets to buy Treasuries, which would both create money and reduce the burden on private savings. The printers of money are not shouldering the burden of funding the government, so the savers are.

China's reserve growth is slowing markedly

In the absence of the Fed or commercial banks, foreign central banks are the only other entities that could fund the government apart from savers. Trends in foreign-exchange reserves over the summer also do not suggest any acceleration in central-bank buying of Treasuries to replace the near US$100bn of monthly purchasing that the Fed carried out during QE2.

Foreign-reserve accumulation results from balance-of-payments surpluses at the intervention exchange rate. One impact of the global shock to growth has been a flight of capital from emerging markets. Such an exodus, which results in a balance-of-payments deficit, would result in central banks selling Treasuries to defend their exchange rates. We do not yet have data for August, but the July figures show that the foreign-exchange reserves of China and others nations have declined or are stable. So while it is possible that foreign central banks in aggregate were buyers of Treasuries over the summer, their role in funding the government did not rise to replace the Fed's purchases. This probable decline in the role of foreign central banks follows on from 1Q, when their net purchases of Treasuries was just half the average level of the past 10 years. In an era when the US government's debt to GDP ratio is reaching WWII levels, the foreign central banks' role in funding the government will fall quickly if their activity remains well below the levels of the past 10 years.

Rise in foreign central bank buying of Treasuries is small compared to the decline in Fed buying

We do get weekly data from the New York Fed, which shows US Treasury securities it holds in trust for foreign central banks. These holdings increased by just US$48bn in July and August. Unfortunately, the data show only part of the picture, as many central-bank balances are not held at the New York Fed, and these other holdings could be falling or rising. During QE2, foreign central-bank holdings of US Treasuries with the New York Fed grew at US$15bn per month and post QE2 they are US$24bn per month. If the level of central bank purchases has increased by about US$9bn since the end of QE2, it hardly replaces the US$100bn per month that the Fed bought during that programme. This funding gap must be filled by private savings.

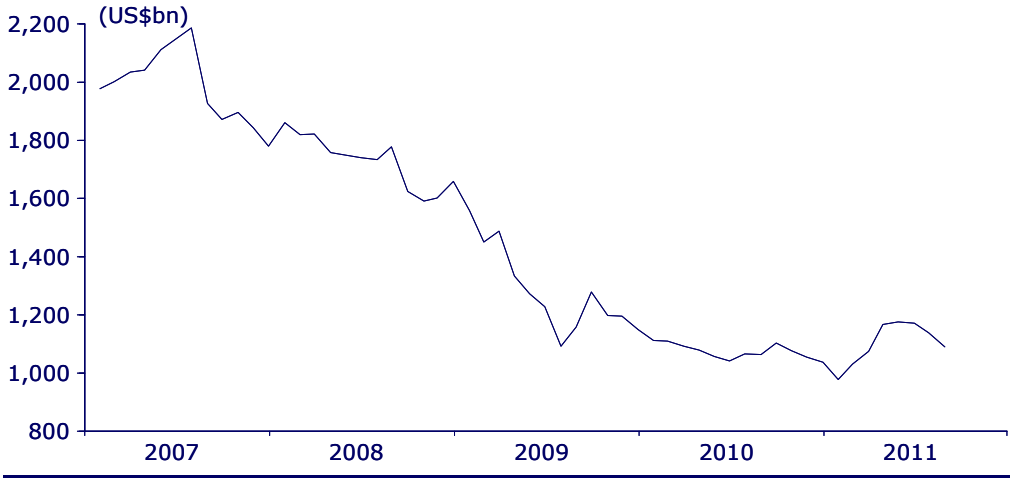
Commercial-paper market has shrunk by US$73bn since QE2 ended

The crowding out that follows this shift from central-bank to private funding is confirmed by recent trends in the commercial-paper and bond markets. The total value of commercial paper outstanding has fallen from US$1,171bn at the end of June to US$1,098bn at the end of August. Figure 7 shows how the decline in commercial paper outstanding began just as QE2 ended.

Figure 7

US commercial paper outstanding

July and August saw a contraction in the commercial-paper market



Source: Datastream

Corporate bond spreads and issuance suggest this market has also shrunk since QE2 ended

Mapping the total size of the corporate bond market is more difficult as there is limited data on bond maturity. However, assuming a fairly steady maturity profile, the data for issuance can provide an indication as to whether the corporate bond market is expanding or contracting. In July, US corporate bond

issuance was US$65bn, which is a 45% decline from the average monthly issuance in 1H11. The flow-of-funds statistics for 1Q show a marginal contraction in the total size of the corporate bond market even when monthly issuance of corporate bonds was running at US$114bn. There is of course a seasonal element to bond issuance, with the summer months always quieter, but the evidence is that issuance remains particularly subdued. The bond market is open for the very best corporate credit, but almost by definition these are corporations with strong balance sheets and thus are less likely to need to borrow. Bond-market financing has gotten considerably more difficult for all but those with the strongest balance sheets, with the spread between highly rated and more speculative paper at close to a two-year high. Given the low issuance in July and the even lower issuance in August (the worst month since May 2010), it seems likely that the US$12.5tn corporate bond market contracted over the summer. This strongly suggests that the crowding out has begun.

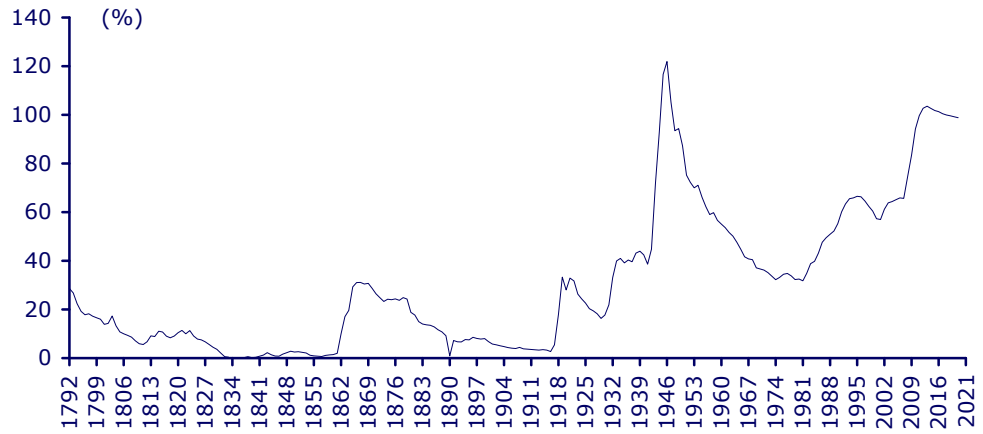
Crowding out exacerbated by continuing large issuance of Treasuries

The negative impacts of the shift to private funding of the US government would of course be mitigated if the size of its debt was shrinking relative to GDP. This is not the case, as Figure 8 and 9 attest.

Gross federal debt to GDP will stabilise at WWII levels . . .

Figure 8

Federal debt as % of GDP, 1792-2021

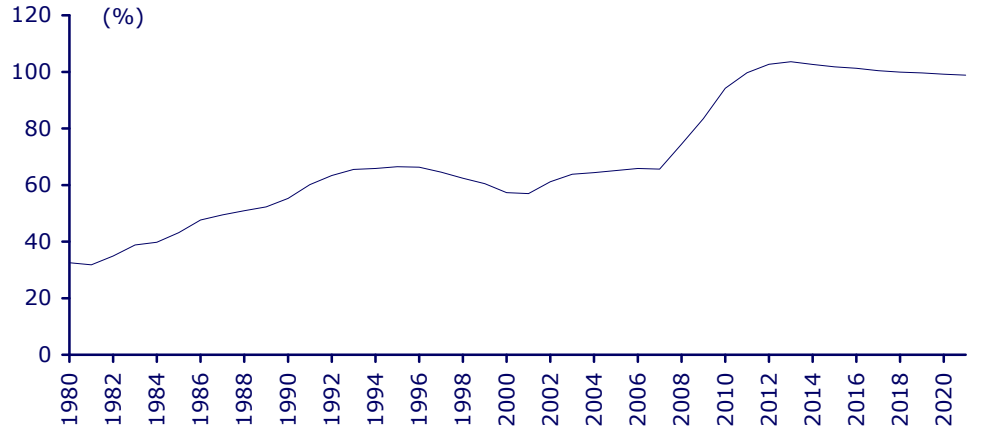


Source: OMB and Historical Statistics of the United States of America

. . . three times higher than in the early 1980s

Figure 9

Federal debt as % of GDP in recent years



Source: OMB

Such a large debt burden squeezed out the private sector in the 1940s

These charts show the Office of Management and Budget's (OMB) forecasts of gross federal debt peaking at 104% of GDP in 2013 and declining to 99% by 2021. If we assume that these forecasts are correct, the longer-term chart (Figure 8) puts them into historical perspective. It shows the OMB expects gross federal debt to GDP to stabilise at levels only surpassed in 1944-47. It is worth remembering that the debt burden at that time was financed almost solely by the US population, but this was only possible in a nation with many command-economy characteristics. The private sector was virtually squeezed out: passenger car production declined from a peak of 3,779,682 units in 1941 to 139 in 1943. While nobody expects the USA to end up with a WWII-style command economy, the point remains that it has only previously supported this level of public debt with a massive contraction in the private sector.

The OMB also expects domestic corporate profits to fall from 8.7% of GDP currently to 6.6% of GDP in 2021. That is 2% nominal growth, which equates to zero growth in domestic corporate profits in real terms from 2012-20. It is fair to say that this is a somewhat more conservative forecast than Wall Street's.

Gross federal debt to GDP will only stabilise at 100% if real economic growth averages 3.2% over the next decade

The bad news is that the OMB's forecasts are based on the following very optimistic assumptions:

- There will be no recession in 2011, nor any from 2012 to 2021
- Real GDP growth will average 3.2% from 2012 to 2021
- The lowest annual rate of real growth from 2012 to 2021 will be 2.5%
- The forecast growth rate for every year from 2012 to 2018 will exceed the Blue Chip consensus forecast.
- The peak rate of annual inflation from now until 2021 will not exceed 2.1%
- The average short-term interest rate in any year until 2021 will not exceed 4.1%
- The average yield on 10-year Treasuries will not exceed 5.3% in any year from 2011 to 2021

The OMB foresees one of the best periods ever for US growth and inflation

In other words, the OMB forecasts real economic growth over the next decade to be virtually the same as the 3.3% annual growth in real GDP during the 1990s. This will be accompanied by a peak annual inflation rate of 2.1% and an average annual inflation rate of 2.0%, which is considerably better than in the 1990s when the average annual CPI was 2.7% and inflation peaked at 6.3%. This return to 1990s growth with 1950s inflation will see 10-year bond yields remain almost 150bps below their 1990s average levels. And this fortuitous combination will occur while federal debt will average just over 100% of GDP, versus 60% in the 1990s. According to the OMB, US economic performance will now rapidly return to the levels of the past two decades, but with significantly lower inflation and materially lower bond yields.

Optimistic forecasts are not necessarily wrong, but these forecasts have ample room to be considerably wrong. It is very likely that the forecast of US federal debt to GDP plateauing at 100% is very much a best-case scenario. The government's crowding out of the private sector is not a near-term phenomenon and even the OMB's bullish forecasts see no growth in corporate profits in real terms over the next decade.

Heroic economic assumptions mean federal debt to GDP ratios only reach 104% of GDP

Figure 10

US growth and inflation since WWII

(%)	Real GDP growth	Average CPI
1950s	3.6	2.2
1960s	4.7	2.4
1970s	3.6	7.2
1980s	3.4	4.7
1990s	3.3	2.7
2000s	1.4	2.5

Source: Datastream

History will record that the huge burden of financing the US government fell on US savers for the first time in nearly 15 years in the summer of 2011; and that this changed the economic, financial and political world.

Corporate profits

Equities only look cheap because corporate profits are unduly high

US corporate profits are extremely high and are very likely to mean-revert to lower levels. This conclusion is derived from examination of more than 50 years of mean reversion in the corporate profit share of GDP.

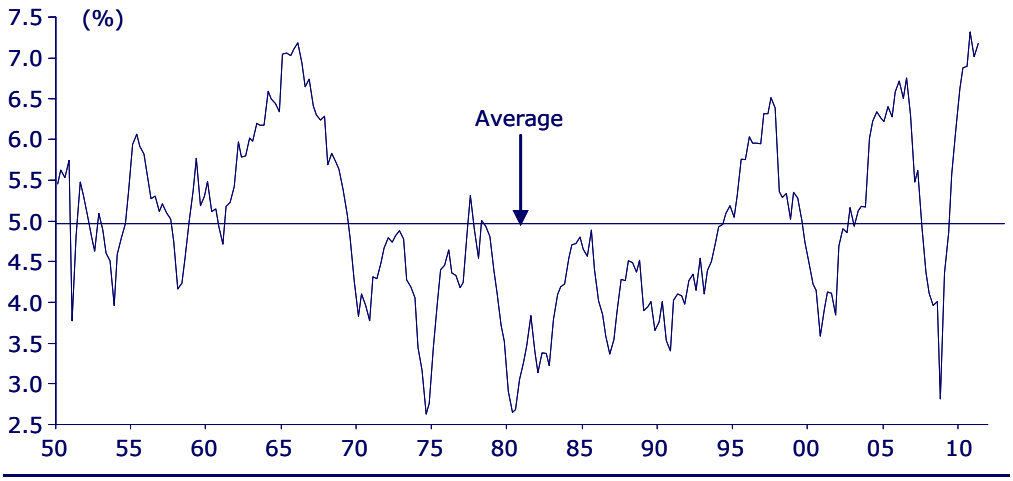
While a lot of sound and fury goes into forecasting corporate earnings, investors would be wise to concentrate on the after-tax profit data published by the US Bureau of economic Analysis as part of the National Income and Product Accounts (NIPA). Although the most recent NIPA data are subject to estimation, which uses reported earnings for guidance, they ultimately rely upon corporate profits reported for tax purposes. There is thus an interesting dichotomy, as corporations are incentivised to report the highest possible earnings to the market but the lowest possible earnings to the tax authorities. Interestingly the quantum of growth in these two very different measures has been very similar over the long term, suggesting that they ultimately are measuring the same thing. Reported profits have been much more volatile than NIPA-calculated profits.

The mean reversion in the corporate profit share of GDP, as measured by the NIPA data, is evident in Figure 11.

Corporate profit share of GDP is at a record high

Figure 11

After-tax profits of US domestic business as a % of GDP



Source: Datastream

Peak corporate-profit share of GDP in 1966, 1997, 2006 were good times to sell equities

The chart shows how after-tax domestic business profits reached 7.3% of GDP in 4Q10, exceeding the previous peak of 7.2% in 1Q66. It also shows similar peaks in 1997 and 2006. These proved to be three very good occasions to sell US equities. While the S&P did get to higher levels, it was still below the 1Q66 level as late as April 1978. Even with dividends reinvested there were zero real returns from large-cap stocks from the beginning of 1966 to the middle of 1982. Few who sold equities in early 1966 regretted the decision, even though share prices sometimes rose above the 1Q66 level.

Even the 1997 peak for corporate profits proved a good long-term sell signal

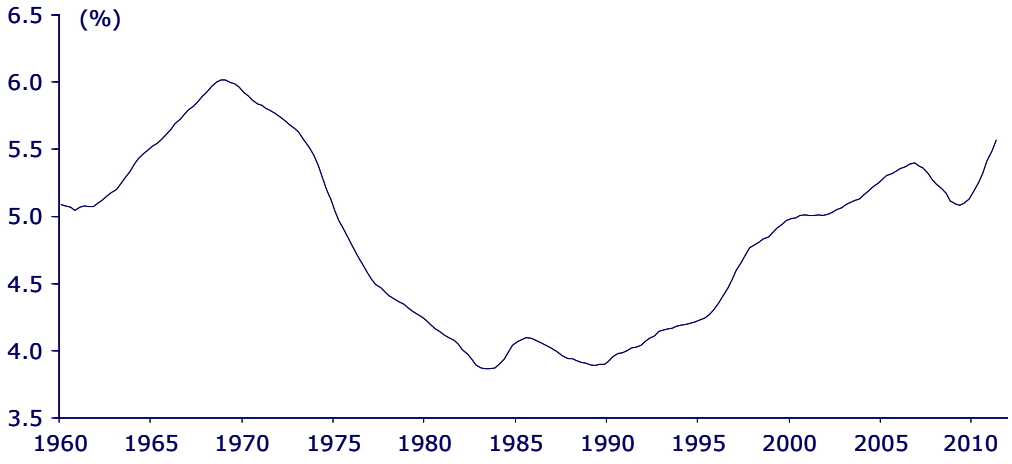
Those who sold in 1997 as corporate profitability peaked missed the surge in equity prices in the dotcom bubble, which finally burst in March 2000. However, they were then able to buy equities at cheaper levels in both 2003 and 2009. The reward for exiting equities when corporate profitability hit another high in 2006 came very quickly as the stock market peaked in October 2007. When corporate profits are this high relative to GDP, it has never been a good time for the long-term investor to commit funds to equities.

When we look at the same data using a 10-year moving average, we see how high corporate profitability has been over the past decade.

Despite volatility in past decade, corporate share of GDP has remained high

Figure 12

Corporate profits as a % of GDP (10-year moving average)



Source: Datastream

Over past decade, corporate share of GDP neared peak levels seen in 1966-73

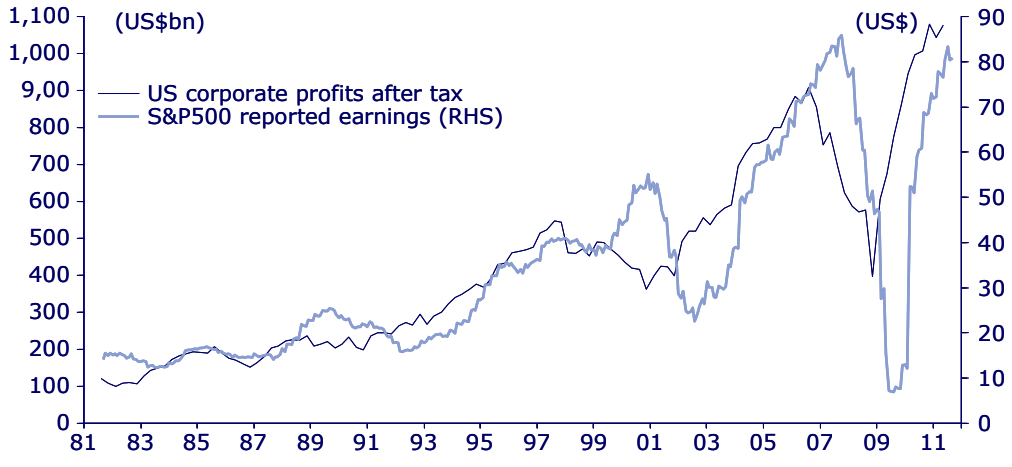
There are many investors who believe that the two major corporate-profit collapses in the past 10 years resulted in low corporate profitability through the period. Of course this may be correct in relation to reported earnings as increasingly "sophisticated" accountancy techniques swing more and more of the balance sheet through the P&L. However, underlying corporate profitability was not depressed over the past decade - quite the reverse. We indeed had two major declines during this decade but even these did nothing to reduce corporate profitability to average or low levels over the decade. Figure 12 shows that since WWII, the past decade's corporate profits as a percentage of GDP were only surpassed in the period from 3Q66 to 3Q73. History records that this was an excellent time to sell equities, as the corporate profit share of GDP mean-reverted from these very high levels.

NIPA profits tend to peak prior to reported earnings

Early data show a peak in 4Q10

Figure 13

US corporate profits after tax (NIPA data) and S&P500 reported EPS



Source: Datastream

NIPA corporate profits have peaked prior to peak in reported profits

The NIPA data on profits suggest that now is a very good time for the long-term investor to sell equities. However, as our analysis shows, the NIPA data have not proved particularly useful for those looking at shorter time horizons. At this stage there are just the first signs that NIPA corporate profits have peaked. As Figure 13 shows, the peaks and downturns in the quarterly NIPA profit data tend to come prior to those in S&P reported profits.

NIPA data peak in 1997 warned that US was in an earnings bubble, not just a valuation bubble

NIPA profits peaked in 3Q97 and continued to decline until 4Q00. This was well before the February 2001 peak in reported profits and this warning was of limited use to investors looking to maximise short-term returns because it was so early. The equity market had one of its biggest-ever bull runs from late 1997 to March 2000. So investors would have missed those extraordinary returns in what is now affectionately known as the dotcom bubble. Each investor will have to decide for themselves whether it is better to participate in a bubble, hoping to sell at an overvaluation, or to sit them out. The NIPA data very clearly warned that this was a bubble, as reported earnings increasingly diverged from the NIPA profit numbers. A significant portion of that distortion was driven by tax planning, where employee options were used to reduce tax payments. This distortion ultimately ended, while the NIPA data had been indicating throughout that reported earnings were distorted. As forewarned by Keynes, this market stayed irrational longer than many could remain solvent or gainfully employed as professional investors, but ultimately the NIPA data were correct and reported earnings were wrong.

Similarly, the NIPA data showed corporate profits peaking in 3Q06, well before the peak in reported profits in October 2007. Once again, advance warning that reported earnings were distorted was available, but in a more timely fashion. While it is still too early to say whether we are now seeing a peak in NIPA earnings, the data need to be watched closely. NIPA figures are initially estimated and subject to major reviews, but at this stage they indicate that corporate profits plateaued in 1H11. It is simply too early to say that this represents a rollover in NIPA corporate profits, but it is a warning sign.

Squeezing out of the private sector will be key driver of mean reversion in corporate profits

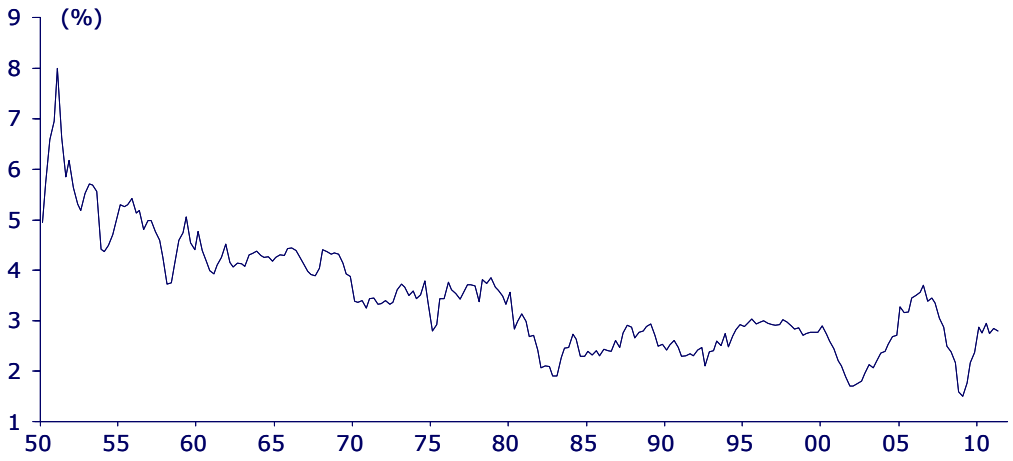
Figure 13 also shows how NIPA corporate profits have risen well above the previous cyclical peak of 3Q06. They are now 18% above that peak, whereas reported earnings are 7% below their October 2007 peak and nominal GDP is 4% above its previous peak. Given the extended nature of corporate profits relative to their previous highs, investors need to look out for catalysts for mean reversion. This report strongly suggests that the events of the summer of 2011 have started a crowding out of the private sector which will depress economic growth and thus trigger the mean reversion in corporate earnings. Such a move could very likely kickstart the mean reversion, but there are other major structural forces at work which will play a key role in reducing corporate profitability to new levels.

With government finances in such dire straits, rising corporate taxes are likely to play a major role in depressing profits for many years to come.

Corporate tax take is near 30-year average, but government debt levels are soaring

Figure 14

Corporate tax take as a % of GDP



Source: Datastream

Higher corporate taxes will be needed to fund the government as federal debt to GDP goes to WWII levels

Figure 14 shows corporate taxation as a percentage of GDP from 1Q50 to 2Q11. Many people will look at this chart and conclude that corporate taxes are around recent normal non-recessionary levels. Indeed corporate tax relative to the size of the economy is not that different from levels in the 1980s or 1990s. Of course fiscal deficits and federal debt to GDP are well above their levels in earlier decades.

What the chart does show is that the corporate tax take was a much larger portion of GDP in the 1950s and 1960s when the federal debt burden from WWII was still extant. The heavier tax burden on corporations partially reflected this: the average federal debt to GDP ratio was 68% in the 1950s and 46% in the 1960s. Over the coming decade, the corporate tax take will have to be large enough to support an average federal debt to GDP ratio of 100%. Of course corporations can enjoy their holiday from funding the state for as long as foreign and local central bankers print the money to do the job. The analysis in this report suggests that this source of funding is ending and thus the corporate sector, along with individual savers, will be forced to step up to the plate to fund the government. Thus a key catalyst driving the mean reversion of corporate profits will not just be the crowding out of private-sector economic activity but also sharp rises in tax rates.

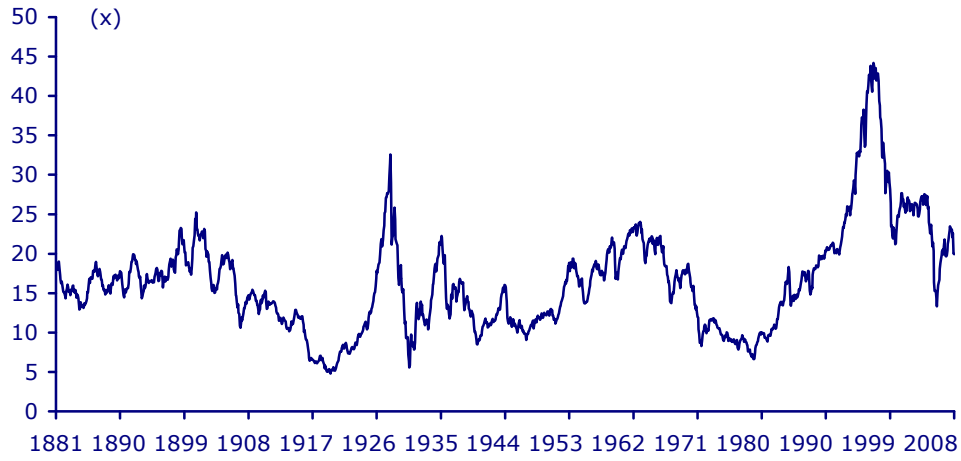
CAPE and *q* ratio both suggest that equities remain very overvalued

It is rare for an edition of *Solid Ground* to go to print without reference to the cyclically adjusted PE (CAPE). The CAPE continues to show that equities are very expensive despite very low headline PEs. This discrepancy between these two measures of value is accounted for by the fact that corporate profitability is at an all-time high. In a country where the state and many individuals teeter on the edge of insolvency, investors seem to take it for granted that corporate profitability can remain this high. Our analysis suggests that this is wishful thinking and thus the CAPE remains a very good measure of value for equities.

CAPE indicates equities are overvalued

Figure 15

CAPE for the US stock market



Source: Robert Schiller

Central banks have acted to prevent CAPE and *q* from mean-reverting

Both the current CAPE and Tobin's *q* ratio indicate similar levels of overvaluation. CAPE is a measure of share prices relative to earnings and *q* a measure relative to the replacement costs of their assets. CAPE includes earnings from financial corporations but the *q* ratio does not. The most surprising thing about these two measures, given the differences in what they measure, is that they have provided very similar signals to investors as to when equities are cheap or expensive. Both are now clearly indicating that equities are expensive. Indeed one could argue that the market has sought to reflect this fact on numerous occasions but central bankers have fought tooth and nail to extend and support the overvaluations. Does anyone doubt that without central-bank intervention, prices and values of equities would be much nearer their long term averages? Equity valuations are high and even the OMB's bullish forecasts see zero corporate profit growth in real terms over the next decade.

Current valuations augur poor long-term returns

These will develop as the corporate share of GDP mean-reverts to more normal levels

Over the course of the past 130 years, investors have never secured good long-term returns from equities by buying at current valuations. For this to be true again, the normal mean reversion of corporate profitability must prevail. This report suggests that we are entering an era when US private savings will be needed to finance the US government. Shifting that burden will produce higher corporate taxes and constrained private-sector activity, and with it a likely mean reversion in corporate profitability. Current corporate earnings may make equities look cheap, but such earnings are unsustainable.

Money and credit on the edge

Can the US commercial banking system finally turn excess reserves into credit and money?

The key failure of the US reflation is centred on the inability or perhaps unwillingness of the commercial banking system to extend credit. The central bank has boosted commercial bank reserves to levels only previously associated with banana republics, yet the banks have been happy to leave the reserves unused. In the economic recovery which began in 3Q09, there have been occasions when it did seem like the Fed was not pushing on a string. From June 2010 to November 2010, US commercial bank credit expanded by US$77bn (seasonally adjusted), representing an annual credit growth rate of around 2%. All of this expansion was accounted for by an increase in banks' Treasury holdings and bank loans continued to decline at around 3% annually over the period. This may have been anaemic growth, and the credit expansion may have been over Treasury assets, but at least this expansion could transform the Fed's creation of bank reserves into money. If this had continued and money was created, there was a real prospect that deflation would be clearly defeated - and indeed many worried that as credit growth and money growth accelerated, runaway inflation would result. However the expansion of bank balance sheets ended in November 2010.

Bank credit contracted from November 2010 to March 2011

From November 2010 to March 2011 there was a US$85bn contraction in seasonally adjusted bank credit, which represented an annual rate of contraction of almost 3%. The banks stopped increasing their Treasury holdings and the decline in bank lending continued. The policy of flooding the banks with ever-greater reserves through the QE2 programme was not working to produce more money. The good news is that things have improved since March. The key question is, can they continue to do so?

Since the launch of QE2, the Fed's balance sheet has expanded by US$557bn while over the same period commercial bank credit has declined by US$18bn. This decline in bank credit occurred from November 2010 to March 2011. Since then commercial bank credit has started to expand, and the US$146bn expansion (seasonally adjusted) from March to August represents an annual growth rate of 4%. The particularly good news about this expansion in total bank credit is that it has been led by loan growth. The US$124bn expansion in seasonally adjusted loans represents a 5% annualised growth rate. This represents the first growth in bank loans and leases since they peaked in October 2008. It may be anaemic, but it is a sign that the Fed's huge monetary stimulus is beginning to filter through. If this expansion continues there is thus hope that a more sustainable economic recovery is underway.

The recent expansion in bank credit may have ended in August

The key question now is whether the expansion is likely to continue. The US banking system was subject to further shocks over the summer. The S&P banks index shows a decline in share prices of 33% this year, credit spreads have increased and the risk profile of European counterparties has deteriorated markedly. These shocks may not prevent the expansion of loans and leases that we have seen since March, but the early evidence is somewhat worrying. In the last two weeks of August, bank credit contracted by US$24bn; US$17bn of this was a decline in loans and leases outstanding.

It is just too early to tell whether the credit expansion has been snuffed out. This analyst believes that since a crowding out of the private sector is underway, there will be further declines in bank loans and leases outstanding. However if the contraction of the past few weeks proves temporary and we return to the scale of loan expansion seen since March, there will be reason to be much more positive about the outlook.

As yet banks have not turned to funding the US government

In Section 1 of this report, the focus was on how funding of the US government would shift from those who printed money to those who saved it. This referred to a decline in the proportion of Treasuries being held by central banks. Of course there is one other institution that can create money: the fractional reserve banking system. There is thus a possibility that commercial banks will begin a major expansion in credit by buying US Treasuries. If this is large enough it could once again provide American savers with a holiday from funding their government. The dislocation in which credit assets have to be sold to buy Treasuries would be avoided and this would mitigate the crowding out of the private sector.

As Treasury prices have risen, total value of bank Treasury holdings has been static

This would be a less painful adjustment process and for that very reason is the one that is most likely over the long term. The question is whether commercial banks will willingly step up to the plate to finance the government or whether they will eventually be forced to do so. At this stage, even with the end of the QE2 programme they are showing little inclination to shoulder the burden of funding the government. The value of total Treasury holdings at the end of August was US$1,668bn, almost unchanged from the US$1,661bn recorded in April, while the price of Treasuries has been rising strongly. While we need to watch closely to see if there is a change in trend, currently commercial banks are not increasing their Treasuries holdings and thus not taking the funding pressure off US savers.

Practical limits on central-bank policy

The Fed keeps fighting deflationary market forces, but must it always win?

This analyst was a bull on equities in the deflationary contraction in early 2009. The market was fully discounting the disease but refused to recognise that any restorative medicine could be administered. This proved a good time to buy as there was scope for ample fiscal and monetary medicine to be administered. A generation of investors has become conditioned to a central bank successfully preventing the laws of supply and demand from deflating the price of equities. Today we face another deflationary episode, but the restorative medicine is limited. This time the market is expecting more medicine on a daily basis in the hope that this can at least buoy sagging equity markets. It is thus important to realise that we are reaching practical limitations as to the scale of the monetary intervention.

Equities are very cheap relative to bonds . . .

. . . as long as a deflationary recession does not develop

As asset owners have expected monetary bailouts since Greenspan the Maestro first printed us back to glory in late 1987, the realisation that practical limits to monetary policy are upon us could prove a nasty shock. When deflation is expected then equities can become very cheap relative to bonds. So it was in early 2009, when the TIPS market forecast prolonged deflation and equities adjusted sharply. Both markets were wrong and the monetary and fiscal medicine prevented all but a brief deflation. Today equities are as cheap relative to bonds as they were in 1Q09. If growth and inflation are our future, then equities are too cheap - just as they were back then. Thus it is essential for investors to make a call on whether the reflationary medicine will work on this occasion. If it does, then we could see a repeat of the excellent returns that followed after March 2009. But there are key internal and external pressures on the Fed that will limit monetary responses and make a deflationary recession more likely now than it was in 2009.

Internal pressure in the Fed not to stretch the balance sheet to where it is likely to fail

The more the Fed stretches its balance sheet, the greater the chance that one day its liabilities will exceed its assets. The assets of a central bank are normally government debt and some foreign-exchange reserves. The central bank funds these assets with liabilities it creates, called bank reserves. In the crisis of the past few years the Fed's balance sheet was put to service to purchase both Treasuries and also large amounts of private-sector debt.

Figure 16 shows the Fed's balance sheet: before the crisis in December 2007; just before the bankruptcy of Bear Stearns in March 2008; and where it is today.

Figure 16

Fed is much more heavily geared now

Fed's balance sheet through the crisis

(US$bn)	Assets				Total assets	Gearing (%)
	Capital	Gold, coin, SDRs	Treasury securities	Other assets		
Dec 07	30.7	14.0	778.9	81.0	873.9	2,847
Mar 08	39.7	14.5	703.4	181.0	898.9	2,264
Sep 11	51.9	18.4	1,658.9	1,189.7	2,867.0	5,524

Source: Federal Reserve

Fed's non-Treasury assets now 23x larger than its capital

The table shows that the Fed's balance sheet has become much more geared during the progress of the Great Recession. The bank's assets are now 55x larger than its capital, whereas at the end of 2007 they were 28x larger. The nature of the assets that the bank holds has also changed markedly. In 2007 the Fed's non-Treasury assets were just 2.6x the size of its capital. Most of these assets were foreign-currency assets and most held in the form of

sovereign debt. Today, non-Treasury assets are 23x larger than the Fed's capital. Mortgage-backed securities (MBS) alone are 17x larger. A 1.8% decline in the value of the Fed's total assets would eradicate its capital, as would a 4.4% decline in the value of just its non-Treasury assets.

Decline in the value of the Fed's non-Treasury portfolio is a real risk

Prior to the crisis, a 38% fall in the value of non-Treasury assets would have been necessary to eradicate the Fed's equity. As most of those assets were foreign-currency sovereign debt, such a fall would have been unlikely. A decline in the value of the current non-Treasury portfolio, dominated as it is by MBS, is a real risk. There are those in the Fed who think a recession may be a better alternative than destroying its capital. The fact that three members of the FOMC voted against the introduction of the zero-interest-rate policy shows that this constituency is now prepared to stand up for their beliefs. The sheer lack of new alternatives brought forward at the Jackson Hole conference suggests that the Fed's next monetary experiment will be more limited than QE1 and QE2.

USA's foreign creditors may not support even more easy money

Throughout the analysis of potential monetary responses to our new crisis there is little said about how the USA's creditors might react to further quantitative easing. It is a simple statement of fact that their percentage ownership of Treasuries has been falling steadily since the Fed started down the QE path. There may have been an extent to which this resulted from switching into other currencies at a time when Treasury issuance has been particularly strong. However a key driver of a decline in the role of central banks in funding the US government has come from their declining external surpluses. In *The great reset* we looked at how a combination of higher emerging-market exchange rates and wages was reducing the external surpluses of many of the countries accumulating Treasuries. These forces are producing an inevitable decline in the proportion of Treasuries bought by foreign central banks.

Such a decline could be exacerbated if the USA's foreign creditors tire of the Fed's attempt to print enough money to allow the government to inflate away its debts. Already China is making noises that it would prefer to own private-sector assets in the USA. The Russians, probably not entirely driven by financial reasons, have begun to reduce their Treasury holdings. The opinions of America's foreign creditors do count and have an impact on whether the almost US$2tnn increase in the Fed's balance sheet since 2008 will now be pushed even further.

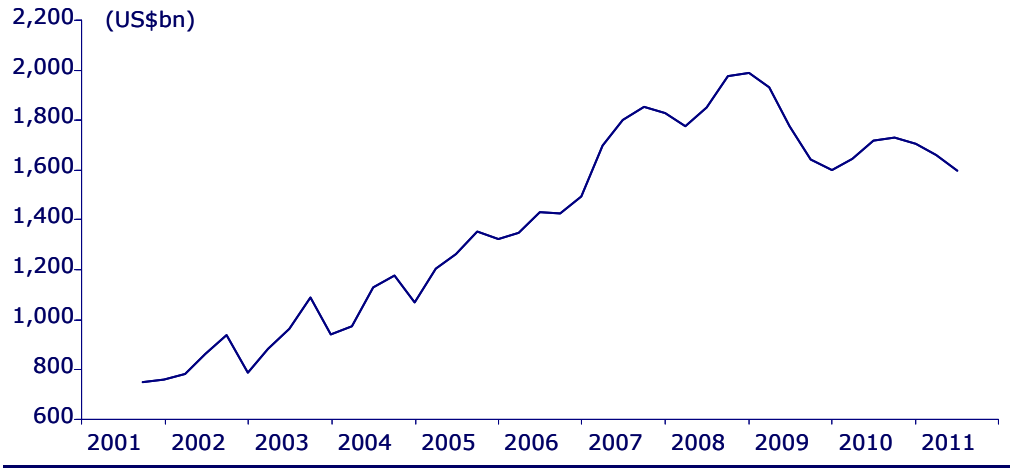
Net foreign lending to the USA amounts to 40% of GDP

As at the end of June 2011, the value of foreign private-sector and central-bank holdings of US credit-market instruments was US$8,382bn. The foreign private sector had also borrowed US$2,321bn in dollars. Thus foreigners had a net position of US$6,061bn in US credit-market instruments. Of this, US$4,112bn was held by foreign central banks, which also accounted for almost 80% of total foreign holdings of US Treasury securities. The USA has managed to find foreigners to lend it an amount equivalent to 40% of its own GDP in its own currency, and US$1,949bn of that US$6,061bn was provided by the foreign private sector. But as Figure 17 shows, net lending from the foreign private sector has been declining in absolute terms. At the peak in late 2008, the foreign private sector held 3.8% of all US credit-market instruments on a net basis. This has already declined to 3.0%.

Declining in absolute terms

Figure 17

Net foreign private-sector lending to the USA



Source: Datastream

So foreign central banks' percentage ownership of Treasuries shrank during QE1 and QE2 and the foreign private sector has reduced its net lending to the USA in absolute terms. Before proceeding to QE3, the Fed has to consider whether this is likely to further shake foreigners' willingness to lend money to the country.

Practical limits on ECB play a major role in shaping USA's economic future

While practical limits to the Fed's monetary policy have been reached, the current near-term danger is the starker limits to ECB monetary policy. The failure of this institution to prevent a debt deflation would produce another jump in credit spreads, which could not be confined to the European credit markets. Just as the failure of a US investment bank sent a deflationary shock through the global credit system, a failure by the ECB to prevent a debt deflation in Europe would have a similar impact. Given the role foreign banks play in the US commercial banking system and the US commercial banks' credit exposure to their European peers, a credit crisis in Europe would produce a credit crisis in the USA. At a time when the banking system is already struggling to finance US households and small businesses, such a crisis could easily produce another US bank credit contraction. With a fiscal solution to Europe's problems seemingly constitutionally impossible, the key question is whether the ECB will be prepared to pursue a monetary solution. The scale of the monetary solution to Europe's sovereign debt crisis seems too large for the ECB to contemplate and its recent intervention in the Italian government debt market suggests it has already reached the limits of its monetary policy.

No *de jure* single fiscal policy in Europe

While European monetary policy has been devolved to the ECB, fiscal authority remains with the sovereign states. This was not the way it was supposed to be. These states had agreed to stay within certain fiscal parameters and thus accept external limits on their fiscal freedom. They ignored the limits and most states continue to ignore them, although new external fiscal targets are being imposed in some in return for direct support from other euro members. However, these fiscal targets have been imposed on only a few - and even in these cases they remain targets and not yet achievements. There is no *de jure* single fiscal policy in Europe, and the *de facto* movement in that direction has so far been minor. Unless this changes to permit coordination of fiscal and monetary policy, some key states will be forced through destructive deflations, which will destroy social and political support for the euro.

As no member of the euro has an independent monetary policy . . .

. . . the solvency of the state can be questioned rapidly

The ECB faces a cyclical problem in reflating the European economy, but this problem is swamped by a larger structural problem. In Europe we have created countries with their own fiscal policies but no independent monetary policy. In such an environment the market will insist on bond yields, to compensate for the risk that the sovereign cannot take sufficient euros from its people to repay its debts. This is a very different question from that asked by debt investors in states with independent fiscal and monetary policies and it enforces a deflationary adjustment on states built upon the ease of inflation. In working out what happens next in Europe, the first thing to rule out is that a deflationary adjustment would work or be acceptable to people and politicians. So the one adjustment that cannot be allowed to happen is the one that the current system guarantees.

High risk premium on sovereign debt results when taxation is the only path to repayment

The deflationary adjustment process which results from the split in fiscal and monetary policy simply cannot work in Europe. The premium needed to compensate investors for the risk of a government failing to collect enough money from its citizens to repay debt is very different in nature from the risk premium on the debt of a country that runs its own monetary policy. Countries with their own monetary policy do not have to take wealth from their citizens to repay their obligations; they can simply print more money. In that case the creditor is not assessing just the ability of a country to tax but in addition its central bank's ability to create just enough money so that the purchasing power of the repayments is not undermined. Where monetary and fiscal policy are separate, the government debt market can quickly move to price in a risk that is rarely present in a jurisdiction where money can be printed as well as taken from its citizens. The major risk premium demanded in such a situation puts interest rates higher than they would be and can enforce more rapid fiscal contractions. In short it enforces a deflationary adjustment, which the modern democratic state may be unable to accept.

Bond markets are reacting rationally to enforce a deflation

But that deflation itself worsens government finances

The risk is that the government's tax revenue will not cover its payments or principal and the interest pushes government bond yields higher. These higher yields impact the cost of credit for private-sector borrowers. In extremis, yields get to such a level that a recession and deflation ensues. These forces are very similar to those triggered by deteriorating external accounts within the gold standard. Then as now, the mechanism will reduce internal prices and return the country to competitiveness and external surplus and eventually reflation and growth. Even today it is possible that the price of Greek labour and assets will be so low that capital and tourists will flood in while cheap goods flood out. The problem is that the modern state is not constructed to operate in a gold-standard mechanism. The levels of public and private-sector debt could never have been amassed under the gold standard. Thus the impact of higher interest rates, when levels of debt are excessively high, will be much greater than occurred during the gold standard.

This level of deflation can destroy thin capital bases of geared people, institutions and governments. It is an adjustment which comes whether the state responds with a fiscal austerity package or not, as it reduces the wealth of the populace ultimately supposed to repay the government debt. It is an adjustment expected and planned for in the gold-standard era but one simply not considered and thus impossible in the modern age. When debt levels are this high, it may only be able to operate through bankruptcy and the writing off liabilities rather than deflation. Even if an economy could sustain this degree of deflation without reneging on its liabilities, it is extremely unlikely that its sociopolitical structure could survive the deflationary adjustment.

Default or deflation are too painful to be rational political choices

The problem for Europe is that if this deflation brings default from one state, it could eradicate the capital base of the rest of Europe's banks. While debt defaults can be managed and contained, there is a size of default which is extremely difficult to contain. Only time will tell whether a default on Greek debt could be contained but the question is increasingly only of academic interest. The monetary/fiscal schism has now brought soaring bond yields to Italy. It seems just as unlikely that Italy can deflate its way to solvency as it was that Greece could do the same. Nobody believes that a default on the €1,890bn of Italian government debt could be contained. So we have a situation where deflation is impossible, as it would eradicate most of the country's capital and potentially destroy its socioeconomic structure. Similarly, default is also impossible, at least for the rest of the world, as it would very probably bankrupt most global financial institutions. While there are only painful and difficult solutions to Europe's sovereign debt crisis, it seems likely that politicians will strain to avoid default or deflation, given the certainty and extent of the pain.

Political solution must focus on reducing bond yields, reducing deflation and preventing default

Market forces are currently working to force deflation and default on the PIIGS. A policy response of fiscal austerity, in the absence of supportive monetary policy, also leads down the politically unacceptable road of deflation and default. The politicians of Europe will thus do everything they can to stop this. There are three options which are more politically acceptable that default or deflation:

Use euro area credit quality to back Italian bonds

1. A move to allow Italy to fund itself by issuing bonds on the credit quality of the whole of the euro area.

   If Italy was able to fund itself at lower interest rates, it may be able to see an economic adjustment which is not so deflationary as to lead to default. The constitutional problems with this arrangement are almost certainly insurmountable in anything but the very long term. The principal and interest on such a bond would in some way be the liabilities of other sovereign states in Europe, even though the proceeds of the issue would be spent by the government of Italy. No government would agree to such an arrangement without having considerable control over how the government of Italy runs its financial affairs.

Extremely difficult, politically

   Any such limitations on Italy would reduce its sovereignty - perhaps to a very large degree. So for Eurobonds to be issued and to be credible, a very rapid constitutional change in the European sovereign state would be necessary. The political elite may see such a surrender as a necessity to sustain the euro, but there are democratic processes which limit progress. While some states of Europe have already altered their institutions via treaty and without referendum, this would not be possible in all states. More importantly, the European public is now alerted to the implications for their sovereignty from a fiscal union. In many countries electoral failure awaits any political party which further signs away sovereign rights. In recent meetings it has become clear that the Germans in particular are unprepared to take such a move. While one cannot rule it out in a crisis, even an initial move would likely result in an eventual backtrack via a revolt - which hopefully would be confined to the ballot box.

ECB buys enough government debt to maintain yields

2. The ECB buys sufficient government debt to keep yields at a level which permits a non-deflationary economic adjustment.

   In short the ECB would realign its monetary policy to suit whatever fiscal policies the governments of Europe chose to adopt. If the ECB acts as if it was the national bank of each country then the deflationary adjustment can very likely be avoided. An ECB fully committed to buying Italian government debt until it produced a yield which lifted the deflationary threat would be seen as akin to a central bank of Italy. With more euros being printed and the term structure of interest rates depressed, Italy would avoid the deflation which takes highly indebted states to default.

Difficult even to support one state; extremely hard for five

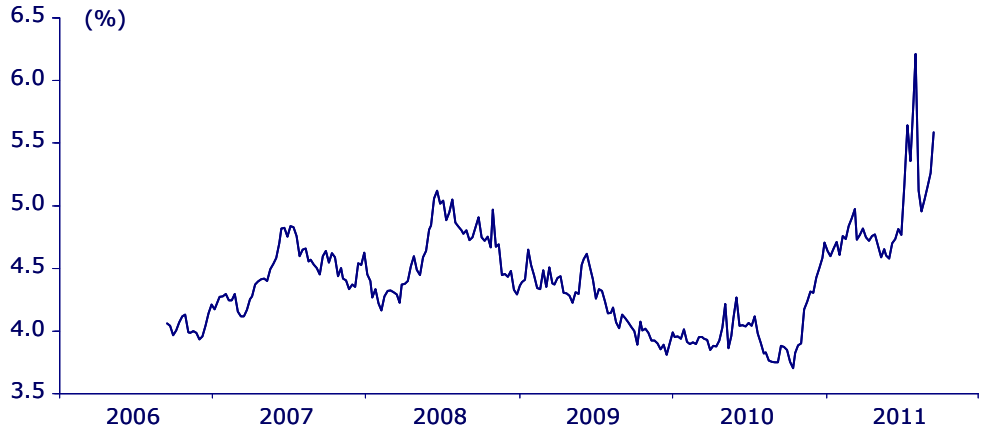
   Of course such a path would commit the ECB to monetisation of up to €1,900bn of Italian government debt. The size of this intervention would be daunting enough even if it did not need to be simultaneously necessary in the other PIIGS. Such action by the ECB would also provide cheaper finance for the Italian government, which might convince it that even higher levels of government debt are sustainable. An unconstrained state might lock the central bank into deficit funding year after year after year. One can see why the ECB is loath to provide such relief, given the scale and potential duration of their commitment. Despite this the ECB began to buy Italian government dent on 8 August 2011.

   As Figure 18 shows, this intervention did drive down the yield on 10-year Italian government debt from above 6% to below 5%. However, the yield did not return to pre-crisis levels and, more importantly, it soon began to rise again.

ECB intervention has failed

Figure 18

Yield on Italian government 10-year debt



Source: Datastream

Decline in yields would suggest the ECB is intervening more

   The ECB has been either unwilling or unable to take the yield on Italian government debt down to a level that would free it from a deflationary economic adjustment. Investors should thus keep a daily watch on the Italian government bond yield, as a decline from current yields would be a signal that the ECB is prepared to act as a national central bank.

   While possible, such a course still seems very unlikely. A monetary commitment of this scale would commit the ECB to supporting fiscal largesse for a generation and the creation of huge amounts of liquidity. Markets propped up once tend to need propping up for a very long time indeed. Locked into that process, the ECB would cease to be an

independent monetary body and be more akin to a government funding organisation. While this is exactly what central banks have often become, such a conversion has tended to be the result of warfare with attendant rationing and price controls or to have resulted in hyperinflation. The ECB's limited intervention in the Italian government debt market so far suggests it is unprepared to take that road.

Final option: force private capital into funding government

3. Force investors to buy government debt and thus reduce yields to manageable levels.

This involves no loss of sovereignty and would not transform the ECB into a national central bank. It does not involve any visible pain for the electorate - and indeed it can be pitched as an attempt to make financial institutions and not voters pay for the financial crisis. It is overwhelmingly alluring to political incumbents seeking the easiest path of adjustment. This enforced purchase of government debt will also be essential if the debt is to be inflated away. While in a free market investors are likely to demand higher yields to compensate for future inflation, the same is not true if they are compelled buyers. It was just such manipulation of bond markets that kept bond yields below inflation and permitted government debt burdens to be reduced after WWII.

Governments will find plenty of ways to achieve this

Regulatory changes can impel savings institutions to hold more government debt. Low government-mandated bank deposit rates can make funding government at negative real rates relatively easy. Tax incentives can skew potential post-tax returns in favour of government debt and ease funding. No doubt the ingenuity of the government in funding itself at negative real rates of interest, avoiding deflation and reducing its debt burdens, will know no bounds.

It is already happening in Europe . . .

The process of forcing private savings into funding public debt has already begun. The new BIS capital adequacy ratios for commercial banks will likely result in banks holding higher levels of government debt. The recent Italian austerity programme will exempt government debt from the rise in capital-gains tax proposed as part of the package. Very soon we shall also see financial transaction taxes imposed in Europe, with relatively favourable treatment likely for government debt. Europe needs to lead the way in financial repression as some government debt yields are already at levels that are enforcing the democratically unacceptable and financially ruinous deflationary adjustment.

. . . and it will spread to other jurisdictions

Other governments will follow when they are subject to a level of yields that augur a similar deflationary adjustment. This may be forced upon them by higher nominal yields or an initial deflation which produces a sharp rise in real yields and the risk of an accelerated deflation. Whatever the catalysts, the developed world's current public-debt burden will force it to inflate away that debt and a degree of enforced purchasing of government debt will be a crucial part of that process. Crucially for investors, capital controls will be necessary to pull off a successful repression. Any sovereign state can only force capital to fund the government if it first stops it from running away. It seems that most investors believe that sovereign debt can be inflated away without the conscription of private capital and the implementation of capital controls. This is likely to be the most costly error of the current generation of investors.

Those who expect market forces to prevail face a nasty shock

Market participants have a bias towards expecting market solutions, but the solutions of austerity and default are not acceptable to either politicians or voters. The largesse of central bankers has forestalled the deflationary adjustment that the market has been trying to enforce for the past decade. Market forces are finally overwhelming central bankers and market participants might conclude that finally the laws of supply and demand will prevail. However they are ignoring the simple fact that the ultimate political solution to an incorrect market price is to close or manipulate the market. So while the initial stages of fighting deflation with monetary and fiscal largesse were good for capital, the creeping suspension of market forces is inherently destructive of capital. With the practical limits to central banking almost reached, conscripted capital will now be sacrificed to prevent deflation and sustain the state.

Conclusion

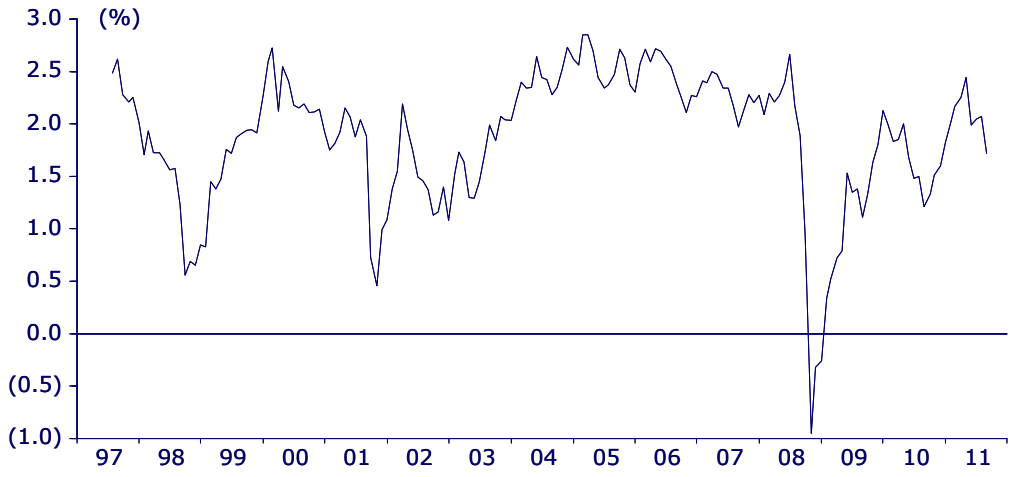
Ample room for equity valuations to decline

An adjustment occurred over the summer of 2011 that is bad for growth and bad for equities. While the equity market has reacted as expected, there is ample room for further bad news. Equities may look cheap based on current earnings, but with corporate profits at their highest-ever level relative to GDP, earnings are a very dangerous guide to true valuations.

Post-Lehman deflation shock is not priced in yet

Figure 19

Implied future inflation from five-year TIPS market



Source: Datastream

Damage to bank solvency suggests deflation will increasingly be priced in

Figure 19 shows that inflation expectations declined somewhat over the summer, falling from 2.5% over five years to 1.7% by mid-September. However expectations are well above the level post the Lehman Brothers bankruptcy, while the chances of a deflationary adjustment now are very similar to those in the post-Lehman period. Banks' balance sheets may be somewhat healthier, but they have shown a reluctance or inability to borrow, which a 50% decline in share prices over the summer can only have intensified. Even more importantly, the fiscal and monetary medicine administered with largesse after the Lehman collapse is no longer in abundance. Inflation expectations still have a long way to decline, and those who lived through the last collapse in expectations in 4Q08 will realise just how damaging such a shift can be for global equity prices.

The next government reaction will be to suspend prices

Neither fiscal nor monetary responses will now be sufficient to prevent a deflationary adjustment. All that is left is for governments to conscript capital to produce the false prices that seemingly reduce the pain. This is the new cure to prevent a market-driven deflationary adjustment. Investors are volunteering to be manipulated and frankly have very much enjoyed the easy-money stage. However now we enter a new and uglier stage, where government has to seek to suck in private capital to keep the public sector going. It is time to take whatever profits you made in the easy-money manipulation and put them in a jurisdiction where your capital will not be conscripted as part of the next manipulation.

There are many very solvent governments that will not need to resort to unwinding the market system to sustain themselves financially. It is thus worth repeating the advice from *The great reset*, which stated that the best place to invest will be countries with large current-account surpluses, low

government indebtedness and very sound commercial banks. This strategist has long considered the Singapore dollar to offer developed-world investors likely positive real returns in a period when wealth destruction is set the norm and not the exception.

This is the darkness on the edge of town

In 2002 and 2009, the markets tried to deflate the price of goods and assets. On both occasions central bankers replied with easy money that stopped the deflation. In the summer of 2011 market forces moved again to deflate assets and prices. This time the central banks' extended balance sheets mean that easy money cannot be as effective at stopping deflation. Now, direct government intervention in supply and demand is the only reply to the market-driven deflationary adjustment. Eventually this will succeed, as the democracies must inevitably inflate away their debt burdens. However, the road to that "success" is likely to have another deflation shock and a cure of market intervention, which investors will not like. Readers can decide for themselves whether it is the adjustment or the cure that represents the darkness on the edge of town.

This publication/communication is subject to and incorporates the terms and conditions of use set out on the www.clsa.com website. Neither the publication/ communication nor any portion hereof may be reprinted, sold or redistributed without the written consent of CLSA.

CLSA has produced this publication/communication for private circulation to professional, institutional and/or wholesale clients only. The information, opinions and estimates herein are not directed at, or intended for distribution to or use by, any person or entity in any jurisdiction where doing so would be contrary to law or regulation or which would subject CLSA to any additional registration or licensing requirement within such jurisdiction. The information and statistical data herein have been obtained from sources we believe to be reliable. Such information has not been independently verified and we make no representation or warranty as to its accuracy, completeness or correctness. Any opinions or estimates herein reflect the judgment of CLSA at the date of this publication/ communication and are subject to change at any time without notice. Where any part of the information, opinions or estimates contained herein reflects the views and opinions of a sales person or a non-analyst, such views and opinions may not correspond to the published view of the CLSA research group. This is not a solicitation or any offer to buy or sell. This publication/ communication is for information purposes only and does not constitute any recommendation, representation, warranty or guarantee of performance. Any price target given in the report may be projected from 1 or more valuation models and hence any price target may be subject to the inherent risk of the selected model as well as other external risk factors. This is not intended to provide professional, investment or any other type of advice or recommendation and does not take into account the particular investment objectives, financial situation or needs of individual recipients. Before acting on any information in this publication/ communication, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice, including tax advice. CLSA does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. To the extent permitted by applicable securities laws and regulations, CLSA accepts no liability whatsoever for any direct or consequential loss arising from the use of this publication/communication or its contents. Where the publication does not contain rating, the material should not be construed as research but is offered as factual commentary. It is not intended to, nor should it be used to form an investment opinion about the not rated companies.

The analyst/s who compiled this publication/communication hereby state/s and confirm/s that the contents hereof truly reflect his/her/their views and opinions on the subject matter and that the analyst/s has/have not been placed under any undue influence, intervention or pressure by any person/s in compiling such publication/ communication.

Subject to any applicable laws and regulations at any given time CLSA, its affiliates or companies or individuals connected with CLSA may have used the information contained herein before publication and may have positions in, may from time to time purchase or sell or have a material interest in any of the securities mentioned or related securities or may currently or in future have or have had a business or financial relationship with, or may provide or have provided investment banking, capital markets and/or other services to, the entities referred to herein, their advisors and/or any other connected parties. As a result, investors should be aware that CLSA and/or such individuals may have one or more conflicts of interests that could affect the objectivity of this report.

The Hong Kong Securities and Futures Commission requires disclosure of certain relationships and interests with respect to companies covered in CLSA's research reports and the securities of which are listed on The Stock Exchange of Hong Kong Limited and such details are available at http://www.clsa.com/member/research_disclosures/. Disclosures therein include the position of the CLSA Group only and do not reflect those of Credit Agricole Corporate & Investment Bank and/or its affiliates. If investors have any difficulty accessing this website, please contact webadmin@clsa.com on (852) 2600 8111. If you require disclosure information on previous dates, please contact compliance_hk@clsa.com.

This publication/communication is distributed for and on behalf of CLSA Limited (for non-US markets research) and /or Credit Agricole Securities (USA) Inc. (for US research) in Australia by CLSA Australia Pty Ltd; in Hong Kong by CLSA Research Ltd.; in India by CLSA India Ltd. (*Address: 8/F, Dalamal House, Nariman Point, Mumbai 400021. Tel No: +91-22-66505050. SEBI Registration No: BSE Capital Market Segment: INB010826432; BSE F&O Segment: INF010826432; NSE Capital Market Segment: INB230826436; NSE F&O Segment: INF230826436*); in Indonesia by PT CLSA Indonesia; in Japan by Credit Agricole Securities Asia B.V., Tokyo Branch, a member of the JSDA licensed to use the "CLSA" logo in Japan; in Korea by CLSA Securities Korea Ltd.; in Malaysia by CLSA Securities Malaysia Sdn Bhd; in the Philippines by CLSA Philippines Inc. (a member of Philippine Stock Exchange and Securities Investors Protection Fund); in Thailand by CLSA Securities (Thailand) Limited; and in Taiwan by CLSA Limited, Taipei Branch.

United States of America: This research report is distributed into the United States by CLSA solely to persons who qualify as "Major U.S. Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934 and who deal with Credit Agricole Corporate & Investment Bank. However, the delivery of this research report to any person in the United States shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting Credit Agricole Securities (USA) Inc. (a broker-dealer registered with the Securities and Exchange Commission) and an affiliate of CLSA.

United Kingdom: Notwithstanding anything to the contrary herein, the following applies where the publication/communication is distributed in and/or into the United Kingdom. This publication/communication is only for distribution and/or is only directed at persons ("permitted recipients") who are (i) persons falling within Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (the "FPO") having professional experience in matters relating to investments or high net worth companies, unincorporated associations etc. falling within Article 49 of the FPO, and (ii) where an unregulated collective investment scheme (an "unregulated CIS") is the subject of the publication/communication, also persons of a kind to whom the unregulated CIS may lawfully be promoted by a person authorised under the Financial Services and Markets Act 2000 ("FSMA") by virtue of Section 238(5) of the FSMA. The investments or services to which this publication/communication relates are available only to permitted recipients and persons of any other description should not rely upon it. This publication/ communication may have been produced in circumstances such that it is not appropriate to categorise it as impartial in accordance with the FSA Rules.

Singapore: This publication/communication is distributed for and on behalf of CLSA Limited (for non-US markets research) and /or Credit Agricole Securities (USA) Inc. (for US research) in Singapore through CLSA Singapore Pte Ltd solely to persons who qualify as Institutional, Accredited and Expert Investors only, as defined in s.4A(1) of the Securities and Futures Act. Pursuant to Paragraphs 33, 34, 35 and 36 of the Financial Advisers (Amendment) Regulations 2005 with regards to an Accredited Investor, Expert Investor or Overseas Investor, sections 25, 27 and 36 of the Financial Adviser Act shall not apply to CLSA Singapore Pte Ltd. Please contact CLSA Singapore Pte Ltd in connection with queries on the report. MICA (P) 168/12/2009

The analysts/contributors to this publication/communication may be employed by a Credit Agricole or a CLSA company which is different from the entity that distributes the publication/communication in the respective jurisdictions.

Research & sales offices

www.clsa.com

Australia
CLSA Australia Pty Ltd
CLSA House
Level 15
20 Hunter Street
Sydney NSW 2000
Tel: (61) 2 8571 4200
Fax: (61) 2 9221 1188

China - Beijing
CLSA Limited - Beijing Rep Office
Unit 10-12, Level 25
China World Trade Centre Tower 2
1 Jian Guo Men Wai Ave
Beijing 100004
Tel: (86) 10 5965 2188
Fax: (86) 10 6505 2209

China - Shanghai
CLSA Limited - Shanghai Rep Office
Room 910, 9/F
100 Century Avenue
Pudong New Area
Shanghai 200120
Tel: (86) 21 2020 5888
Fax: (86) 21 2020 5666

China - Shenzhen
CLSA Limited - Shenzhen Rep Office
Room 3111, Shun Hing Square
Di Wang Commercial Centre
5002 Shennan Road East
Shenzhen 518008
Tel: (86) 755 8246 1755
Fax: (86) 755 8246 1754

Hong Kong
CLSA Limited
18/F, One Pacific Place
88 Queensway
Hong Kong
Tel: (852) 2600 8888
Fax: (852) 2868 0189

India
CLSA India Ltd
8/F, Dalamal House
Nariman Point
Mumbai 400021
Tel: (91) 22 6650 5050
Fax: (91) 22 2284 0271

Indonesia
PT CLSA Indonesia
WISMA GKBI Suite 901
Jl Jendral Sudirman No.28
Jakarta 10210
Tel: (62) 21 2554 8888
Fax: (62) 21 574 6920

Japan
Credit Agricole Securities Asia BV
Tokyo Branch
15/F, Shiodome Sumitomo Building
1-9-2, Higashi-Shimbashi
Minato-ku, Tokyo 105-0021
Tel: (81) 3 4580 5533 (General)
(81) 3 4580 5171 (Trading)
Fax: (81) 3 4580 5896

Korea
CLSA Securities Korea Ltd
15/F, Sean Building
116, 1-Ka, Shinmun-Ro
Chongro-Ku
Seoul, 110-061
Tel: (82) 2 397 8400
Fax: (82) 2 771 8583

Malaysia
CLSA Securities Malaysia Sdn Bhd
Suite 20-01, Level 20
Menara Dion
27 Jalan Sultan Ismail
50250 Kuala Lumpur
Tel: (60) 3 2056 7888
Fax: (60) 3 2056 7988

Philippines
CLSA Philippines, Inc
19/F, Tower Two
The Enterprise Center
6766 Ayala corner Paseo de Roxas
Makati City
Tel: (63) 2 860 4000
Fax: (63) 2 860 4051

Singapore
CLSA Singapore Pte Ltd
80 Raffles Place, No.18-01
UOB Plaza 1
Singapore 048624
Tel: (65) 6416 7888
Fax: (65) 6533 8922

Taiwan
CLSA Limited
Taiwan Branch
27/F, 95 Tun Hwa South Road
Section 2
Taipei
Tel: (886) 2 2326 8188
Fax: (886) 2 2326 8166

Thailand
CLSA Securities (Thailand) Ltd
16/F, M Thai Tower
All Seasons Place
87 Wireless Road, Lumpini
Pathumwan, Bangkok 10330
Tel: (66) 2 257 4600
Fax: (66) 2 253 0532

United Kingdom
CLSA (UK)
12/F, Moor House
120 London Wall
London EC2Y 5ET
Tel: (44) 207 614 7000
Fax: (44) 207 614 7070

USA - Boston
Credit Agricole Securities (USA) Inc
99 Summer Street
Suite 220
Boston, MA 02110
Tel: (1) 617 295 0100
Fax: (1) 617 295 0140

USA - Chicago
Credit Agricole Securities (USA) Inc
227 W. Monroe Street
Suite 3800
Chicago, IL 60606
Tel: (1) 312 278 3604

USA - New York
Credit Agricole Securities (USA) Inc
15/F, Credit Agricole Building
1301 Avenue of The Americas
New York 10019
Tel: (1) 212 408 5888
Fax: (1) 212 261 2502

USA - San Francisco
Credit Agricole Securities (USA) Inc
Suite 850
50 California Street
San Francisco, CA 94111
Tel: (1) 415 544 6100
Fax: (1) 415 434 6140

CLEAN & GREEN™

At CLSA we support sustainable development. We print on paper sourced from environmentally conservative factories that only use fibres from plantation forests. Please recycle.

CLSA Sales Trading Team

Australia	(61) 2 8571 4201
China (Shanghai)	(86) 21 2020 5810
Hong Kong	(852) 2600 7003
India	(91) 22 6622 5000
Indonesia	(62) 21 573 9460
Japan	(81) 3 4580 5169
Korea	(82) 2 397 8512
Malaysia	(60) 3 2056 7852
Philippines	(63) 2 860 4030
Singapore	(65) 6416 7878
Taiwan	(886) 2 2326 8124
Thailand	(66) 2 257 4611
UK	(44) 207 614 7260
US	(1) 212 408 5800

SYSTEM CERTIFICATION ISO 14001:2004 SGS

CLSA is certified ISO14001:2004

Key to CLSA investment rankings: BUY = Expected to outperform the local market by >10%; **O-PF** = Expected to outperform the local market by 0-10%; **U-PF** = Expected to underperform the local market by 0-10%; **SELL** = Expected to underperform the local market by >10%. Performance is defined as 12-month total return (including dividends).

01/01/2011