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Popular Delusions

A global fiasco is brewing in Japan

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Japan's government borrows from Japanese households and has done for decades. But Japanese households are retiring, and traditionally retirees run down their savings. So who will fund Japan's future deficits, which are already within the range identified by inflation historian Peter Bernholz as hyperinflation 'red flags'? Twenty years ago, who could predict long-term JGB yields below 1%? Who sees uncontrolled inflation as the primary risk facing Japan today?

- Don't listen to fiscal scare stories - Japan proves that governments can borrow for as long as they like! Or does it? In the past, the Japanese government had a captive domestic market in which to place its debt. A large pool of domestic savers, made cautious by prior painful experience with risk assets and an increasingly fragile economy, was happy to own as much government debt as possible. After all, the JGB market was the one consistently good performer. **But those savers are now retiring, and running down their assets (see chart below). Who will finance Japan's government deficit in their place?**

- It's been so long since there was an inflation scare, let alone one caused by a government unable to fund itself, that it is difficult to imagine such a scenario today. Developed market governments can always fund themselves, can't they? Behaviourally, we know investors overweight the scenario that is easy for them to imagine and ignore that which isn't. But the 'unimaginable' happens all the time.

- Japan is the fourth largest exporter in the world. It is the second largest consumer of US Treasuries. But its more profound influence might be psychological. Its recent experience is *the most powerful argument* underpinning current bond valuations as the fiscal outlook deteriorates. In the future our 'lessons from Japan' might not be so bullish for bonds.

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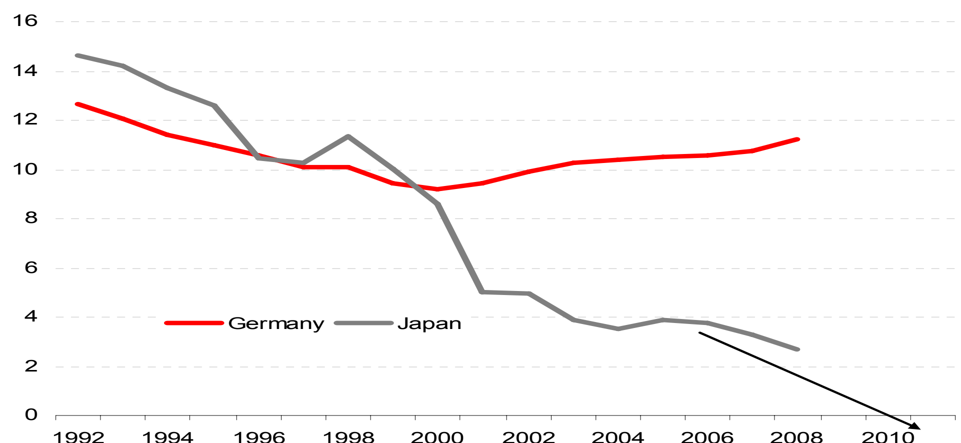
Japanese household savers to become dis-savers? (household savings as % of disposable inc)



Source: OECD

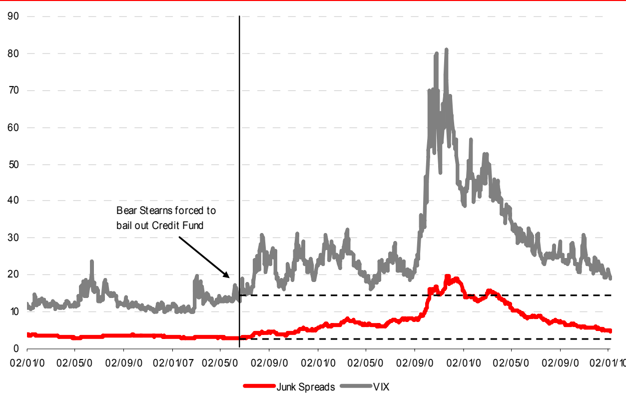
Reality doesn't exist, only perception. In one of my favourite novels, '*Ask the Dust'* by John Fante, the novel's hero Arturo Bandini – the penniless aspiring writer and Fante's alter ego – describes venturing out into 1930s Los Angeles immediately after an earthquake. He describes an 'aftershock' of emotions:

> *"The city was the same, but I was afraid. The streets lurked with danger. The tall buildings forming black canyons were traps to kill you when the earth shook. The pavement might open. The street cars might topple."*

Though it is hard to believe Bandini was unaware LA was highly exposed to earthquake risk, we can understand his sudden panic. In a similar vein, an academic study on the perception of lava-flow risk among Hawaiian residents (where three volcanoes are active) was recently highlighted by Paul Kedrosky, and found that appreciation of lava flow hazards was "*proportional to the time lapsed since the most recent eruption*" rather than to any quantitative assessment of risk.

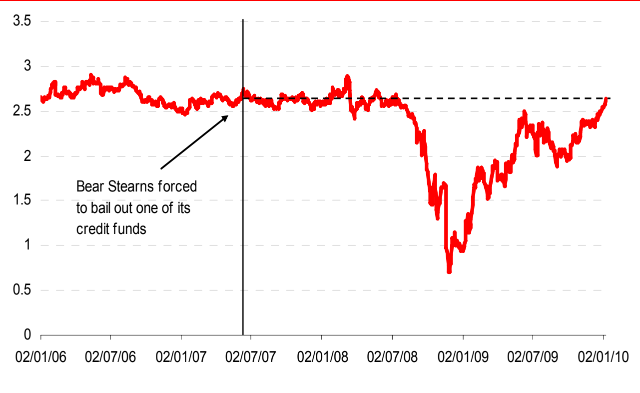
With memories of the banking crisis still vivid in investors' memories, we can see why various measures show that the market pricing risk is still considerably higher than before the summer of 2007 (albeit nowhere near high enough for my liking), and why so many people consequently seem to view the market as cheap (again, I don't think it is). But one measure of risk which is still priced right where it was before the crisis broke is that of inflation.

Real economy risk premiums above pre-crisis levels



Source: SG Cross Asset Research

Inflation risk is back where it started, i.e. close to non-existent!



Source: SG Cross Asset Research

Perhaps this is because there is no longer any meaningful inflation risk in a world with a largely de-unionised labour force and independent central banks. Perhaps it is because the deflationary risk from China, or from a de-leveraging post-bubble global economy, trumps everything else. But I can't help wondering if, like the above victims of a catastrophe, the Japanese are simply unable to perceive the risk of inflation because they cannot imagine it, and the pricing reflects that.

In their majestic history of financial calamity[1], Reinhart and Rogoff write that,

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[1] "This Time is Different: Eight Centuries of Financial Folly" by Carmen M. Reinhart and Kenneth Rogoff

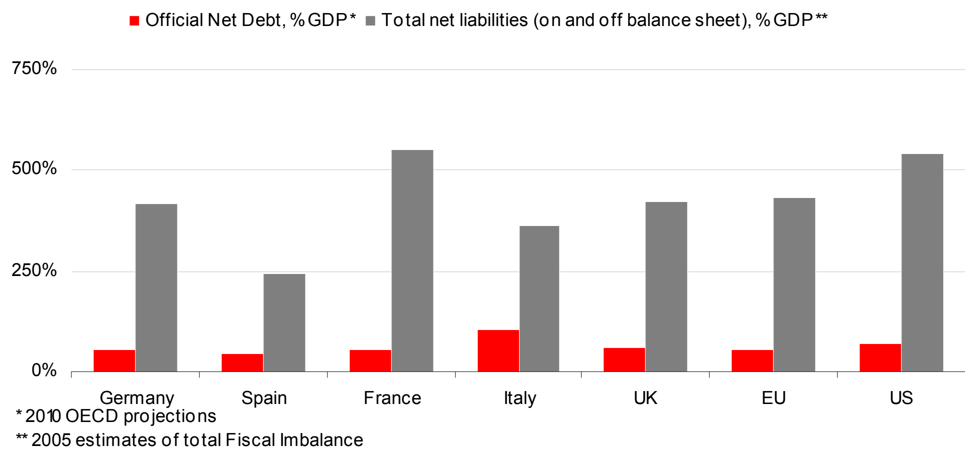
> *"Many observers … have concluded that "this time is different" and that inflation will never return. We certainly agree that there have been important advances in our understanding of central bank design and monetary policy, particularly in the importance of having independent central banks that place a heavy weight on inflation stabilisation.* ***But, as in the case of debt default, experience suggests that quiet periods do not extend indefinitely."***

Of course, the cousin of inflation is sovereign default. The fiscal pressure forcing default creates pressure to print money. Reinhart and Rogoff again:

> *" … the lull in defaults after 2002 stands out even more against the preceding century. Only the two decades before World War 1 – the halcyon days of the gold standard – exhibited tranquility anywhere close to that of 2003-2008.* ***Looking forward, one cannot fail to note that whereas one and two decade lulls in defaults are not at all uncommon, each lull has invariably been followed by a new wave of defaults."***

The insolvency of developed economy governments when account is taken of their unfunded social promises is something Albert and I have noted for some time, but here is the chart again anyway. It suggests that government liabilities are actually around 400% of GDP (Greece, not shown on the chart, 875%).

Our governments are insolvent



Source: Gokhale, SG Cross Asset Research

But as the Detroit car companies demonstrated, insolvent organizations can stay alive for as long as they can remain liquid – but illiquidity will inevitably force insolvency into the open. And there haven't been any developed market government funding crises since the days of Bretton Woods, even though we came close following the collapse of Lehmans in 2008. So such risk is not taken particularly seriously. But a fiasco is surely brewing.

Although it is difficult to predict exactly how much debt is too much, it is clear that governments are near the mark. On the left of the following frame is a chart taken from Peter Bernholz's classic study of inflationary episodes over the centuries[2] showing budget deficits

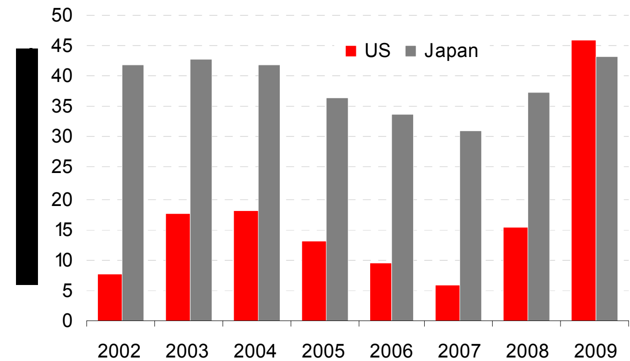
[2] See "Monetary Regimes and Inflation" by Peter Bernholz. The numbers are taken from a section entitled *Budget deficits cause inflation*.

(as a % of government *expenditures*) prior to five hyperinflations. The range in the run-up to such episodes is 33% to 91%. The right chart shows the current ratios for Japan and the US to be well within that range.

Budget deficits before five hyperinflations

Source: Bernholz, SG Cross Asset Research

US and Japanese budget deficits today



Source: SG Cross Asset Research

It would be nice to think that these deficits are just emergency measures which will be neatly removed as soon as the recovery is safely established, which seems to be the policy making consensus today. In last week's *Financial Times*, John Podesta and Michael Ettlinger concluded their op-ed with the following thought:

> *" … we should not jeopardise recovery by exercising fiscal retrenchment in the near term. Instead, policymakers must build a pathway that will facilitate the hard decisions required in the coming years to bring the federal budget back into balance."*

… or as St Augustine wrote in the Fourth Century, "*Lord, make me chaste, but not yet!*" Milton Friedman once quipped that there was nothing as permanent as a temporary government program. I think James Montier would call it *overconfidence about future self-control*.

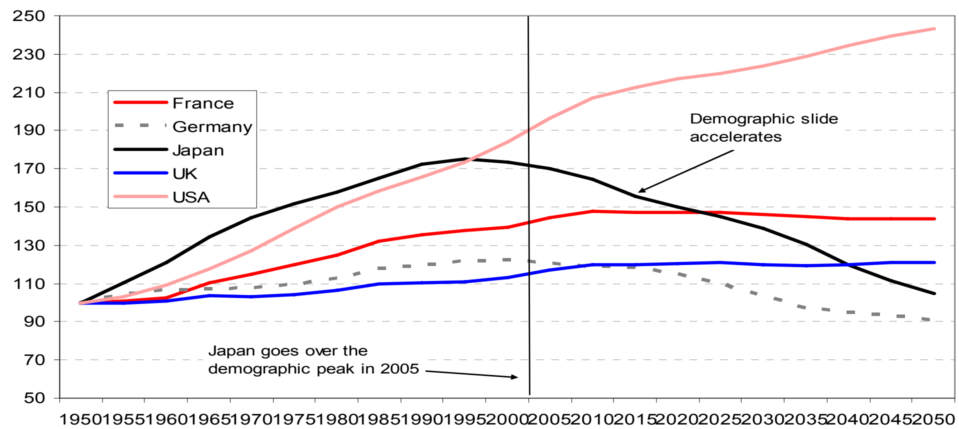
Whatever, removing the stimulus will involve pain; lower growth, higher unemployment and political unpopularity. But policy makers don't like lower growth, higher unemployment and political unpopularity. They enacted the stimulus in the first place to avoid it! At what point will they decide that they *do* want lower growth, higher unemployment and political unpopularity? Given the choice they won't, ever. So it will be imposed on them (and therefore us) by a suddenly less generous bond market via a government funding crisis.

What might such a funding crisis look like? I'm going to focus here on Japan because many believe that its experience proves debt burdens at current levels are completely irrelevant as far as government funding and bond yields are concerned. Japan has run deficits for years and has seen its debt burden explode, yet it has also seen its long-term borrowing costs collapse. Indeed, if you study the Bernholz deficit chart above, it is obvious that Japan has been running 'hyperinflationary deficits' for several years, yet it remains mired in deflation.

Maybe this time it will be different, but I don't think so. On a point of logic, Japan's ability to avoid a funding crunch to date despite its rising indebtedness does not prove that it will not at some point see a funding crunch. It does prove that this can be delayed. How has Japan been able to achieve this delay? Primarily because it has enjoyed a captive market - not only were domestic savings abundant, but risk-averse Japanese investors were happy to purchase 'risk-

free' government bonds. Indeed, Japan's economy collapsed into deflation just as its demographics 'rolled over' in the mid-1990s (see chart), and as a result it accidentally landed in the best possible asset class. So everyone was a winner. Except that the game might now be up as the investors who funded the government's serial attempts to revive the economy are now retiring.

Japan's demographic decline started in the early 2000s (rebased working-age population)

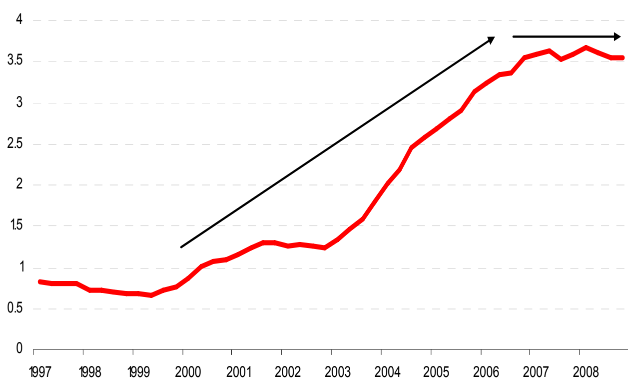


Source: UN

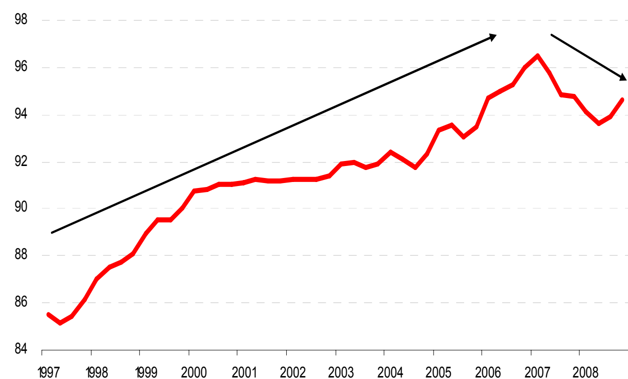
Retirees run down their assets. Our front-page chart shows Japan's savings ratio is set to fall below zero. The chart below left shows Japanese household purchases of JGBs. These purchases really took off after the collapse of world stock markets following the tech bust in 2000. For the past three years, however, JGB purchasing has levelled off. Of course, household direct purchases of JGBs are a small share of total ownership, as buyers, banks and insurance companies are far more significant. But these corporate buyers are only really recycling the same diminishing pool of Japanese savings (see chart, below right).

Hence the current trend implies that Japan's savers will grow less able to continue funding a deficit that is currently running at more than 40% of government expenditure.

Japanese household holdings of JGBs is plateauing (Ytr)



Japanese household wealth being run down (Ytr)



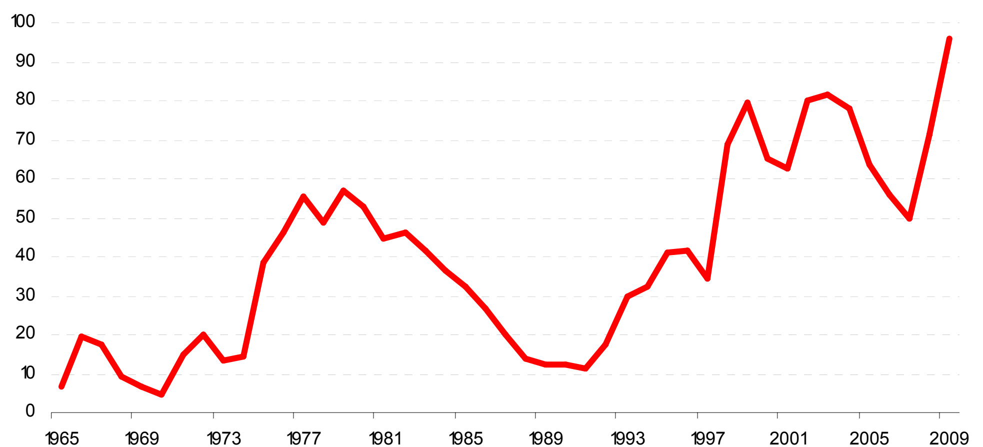
Source: SG Cross Asset Research

So who will fund the Japanese government's deficit in the future? It is not likely to be the international capital markets, especially if its bonds are offering only a 1.5% yield. But if international investors were to demand triple that, pricing JGBs in line with international bond

market peers (all priced too generously in my opinion) the game would soon be up because Japan's current debt service *already* amounts to 35% of pre-bond issuance revenues.

The following chart shows the ratio of revenues generated from bond issuance to that generated by tax collection. Next year, the MoF expects that ratio to rise above 100% i.e. **tax revenues will be less important than borrowing as a source of income**. So I doubt there is *any* yield international capital markets can find acceptable that will not bankrupt the Japanese government.

Japanese bond issuance as a share of tax revenue (%)



Source: SG Cross Asset Research

This is far from just a JGB market problem. As Japan's retirees age and run down their wealth, Japan's policymakers will be forced to sell assets, including US Treasuries currently worth $750bn, or Y70 trillion – eight months' worth of domestic financing. At nearly 10% of the outstanding US Treasury stock, this might well precipitate other government funding crises (bearing in mind that the Japanese model is *the* argument buttressing confidence in Western government bonds in the face of deteriorating fiscal conditions). At the very least I'd expect it to trigger an international bond market rout scary enough to spook all other asset classes.

But after they've sold all their foreign assets, yet still have no access to capital markets, how then do they continue to fund their schools, their courts, and their heath system or their bureaucracy? Japan could simply cut its spending to fit its cloth. But bond issuance is currently around 10% of annual GDP and such a cut would cause a sharp and painful depression. If history is any guide, and I sincerely hope it isn't, the BoJ will step in and let their printing presses roll. Of course, this will ultimately cause a depression, but it will be a depression tomorrow whereas draconian spending cuts would be a depression today.

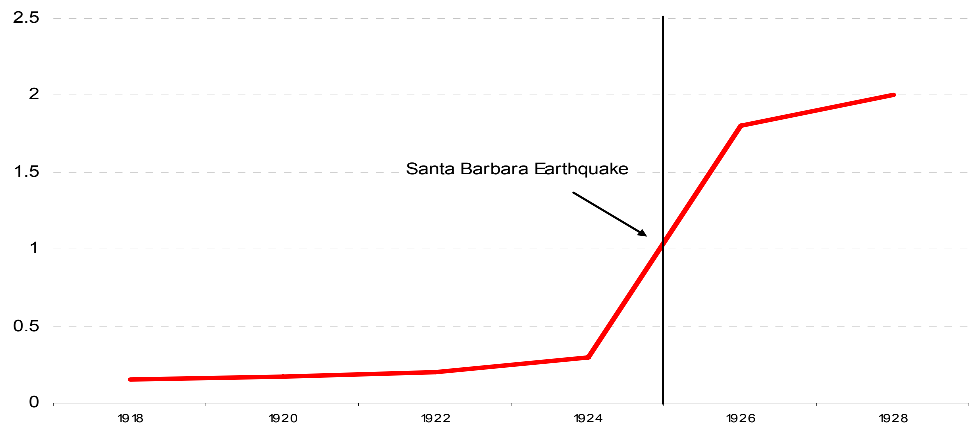
And although foreigners aren't large investors relatively in Japanese markets, capital flight will probably be enough to collapse the yen. Since Japan is the fourth largest exporter in the world, this could have profound ramifications for the rest of Asia, including China. Again, at a minimum this will spook other asset classes in other countries.

So maybe we should all be more concerned that Japan's deficit is in the hyperinflationary range. And if so, maybe we should think a little more carefully about how Western governments consider their debt burdens, both those on-balance sheet (bonds outstanding) and off-balance sheet (unfounded social promises). Maybe Japan's will be the crisis that wakes up the rest of the world and triggers some tough decisions on world-wide debt loads.

Or maybe not - maybe the Greeks will beat them to it…or the Irish … or the UK, or the US? Like banks in 2007, developed market governments today rely on sustained capital markets more than any time in their history. What if they shut? …

In 1925 there was an earthquake in Santa Barbara which 'only' registered 6.3 on the Richter scale, but caused enormous damage because the community was unprepared. The following chart shows what happened to demand for earthquake insurance before and after.

Earthquake insurance premiums sold in California before and after the 1925 quake



Source: California Earthquake Insurance Program

There's no way you could have predicted when that earthquake would strike. But it was reasonable to assume that there would be one at some point given its location on the San Andreas Fault. When would be the better time to write insurance – before the earthquake or after? Being so close to the fault line, with both risk and 'risk-free' assets in overvaluation territory, feels much like taking on earthquake risk before the quake.

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