

June 4, 2007**The Crash Must Be Very Close Now****Tim Lee**

I sense that there is a very strong consensus view amongst professional investors that the bull market in stocks is now getting quite silly but we are not yet at the very top. An article in Barron's, on M&A fever, titled "The Froth is Yet to Come" captured this sentiment. The main reasons, I think, that many professional investors feel that this can still run longer are: First, valuation models that compare equity earnings yields and bond yields still show stocks not expensive despite the recent sharp rise in bond yields; Second, they see no end in sight yet to the 'wall of liquidity'; Third, they do not see anything in the economic outlook too disturbing at this point; Fourth, retail participation in the market is not that high. Given all this, the 'trend is your friend', or so they believe.

All of these reasons are misguided. I have discussed valuation in some detail in recent notes so I will not go through this again here. Suffice to say, a significant part of the increase in corporate earnings has been financially-generated earnings which will collapse when the markets collapse, and in a correct long-run valuation model it is wrong to derive a 'fair value' by placing a long-run average PER on a peak level of profits. It is worth noting that the recent GDP numbers showed that US domestic non-financial corporate profits have not increased over the past year.

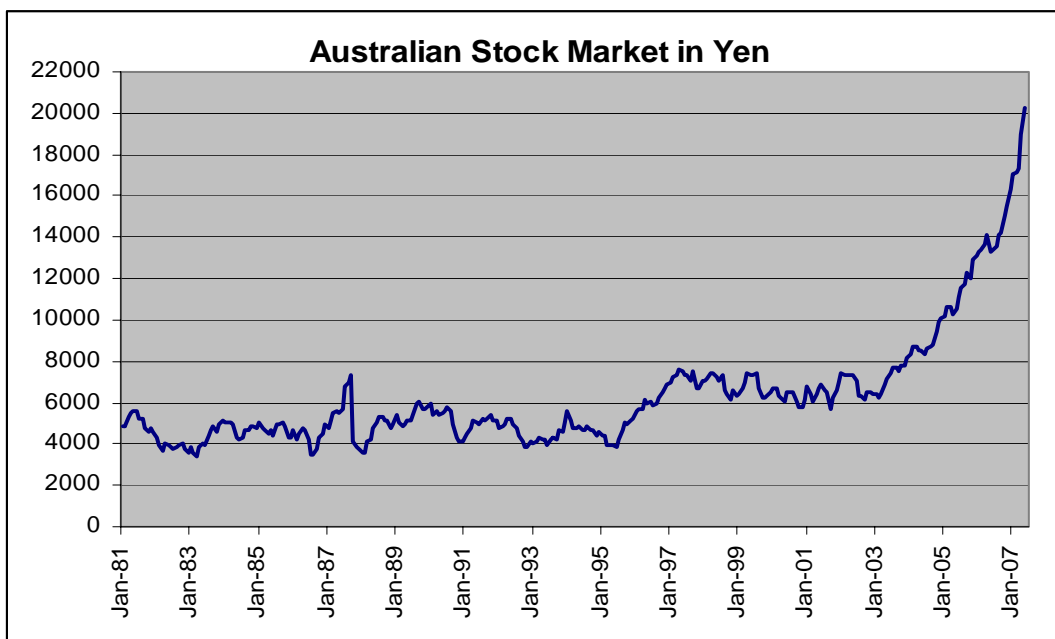
I have also discussed the 'wall of liquidity' before. As I have shown, liquidity is not being driven by central bank interest rate policy but by the speculative finance industry itself. As long as there is a perception that financially generated returns will exceed the cost of financing, credit creation continues despite central bank tightening. Higher interest rates in the US have caused more credit creation to be funded ultimately via carry trades and this is why the yen weakens for as long as the credit bubble continues. But the key point about the 'wall of liquidity' is that it will be there as long as the markets are going up. The minute the markets are going down seriously it will not be there. Therefore it is not a reason to assume that markets will keep rising.

As for retail participation in the US stock market, that is simply not going to happen. Although the US personal sector's financial deficit (that is, the difference between spending on consumption and housing, and disposable income) has been coming down – to -3.7% of GDP in the first quarter – it is still enormous and now less easily financed via mortgage borrowing. Therefore, the personal sector must continue to be a net seller of equities, as it has been for more than two years.

The main point I want to make here is to attack the notion that the markets are not yet that 'frothy'. In reality we are in the greatest mania that the world has ever seen and it is becoming more extreme every day. One of the best ways to see this is to view the performance of markets

in terms of yen. This is very valid because Japan has had no inflation and money and credit growth have been very low, so from the perspective of monetary economics the yen can be viewed as a stable measure of value. (The Japanese consumer price index is roughly at the same level that it was at 15 years ago). Generally the performance of stock markets includes a substantial element of inflation, because in nominal terms profits rise with inflation over time. In theory, over a long period of time a currency should fall if the domestic inflation rate is high relative to trading partners, and therefore the high inflation element in equity returns will disappear when the stock market is converted into the currency of a country with low inflation.

However, look at the chart below for the Australian stock market index in terms of yen.



In my view, 'frothy' would be a severe understatement to describe what we see on this chart. Bulls might object that we have been in a commodities bull market much greater than any other seen over the period covered by this chart.

However, look at the chart for Germany, also in yen, over the page. This shows a similar parabolic, and now virtually vertical, ascent. It is clear that we have seen nothing like this before.

I want to keep this note fairly short so I will not address every possible argument that bulls might come up with to justify these charts (new eras, growth of China etc). There are really only two genuinely plausible explanations; either we are in an enormous bubble, or the longer run equilibrium real value of the yen has fallen dramatically. If the latter were true, it would mean that the fair value of non-Japanese assets had risen sharply relative to the fair value of Japanese assets. The charts would just be showing this from the perspective of the Japanese investor.

A fall in the equilibrium real exchange rate on this scale would mean that Japan has become less competitive than previously at any given real exchange rate and requires having a larger current account surplus than in the past. In my view, such large shifts in equilibrium real exchange rates

are much rarer than most economists believe and for the pi Economics fair values for currencies, for instance, I always assume no change in the equilibrium real exchange rate over time. Nevertheless, there are reasons that could be considered as to why Japan might have suffered a large decline in its equilibrium real exchange rate; adverse demographic trends, poor economic policy that has undermined the Japanese economy structurally etc.



The clinching argument, though, is that it is not just the yen that has suffered a large decline in its real exchange rate. The Swiss franc has suffered similarly. At the same time, the Turkish lira, Brazilian Real, Australian dollar, New Zealand dollar, the pound, Hungarian Forint and other Eastern European currencies have seen huge rises in their real exchange rates. We all know that this is really about nominal interest rate differentials, which cannot affect long-term equilibrium real exchange rates. Apart from anything else, nominal variables cannot affect real variables in the long-term.

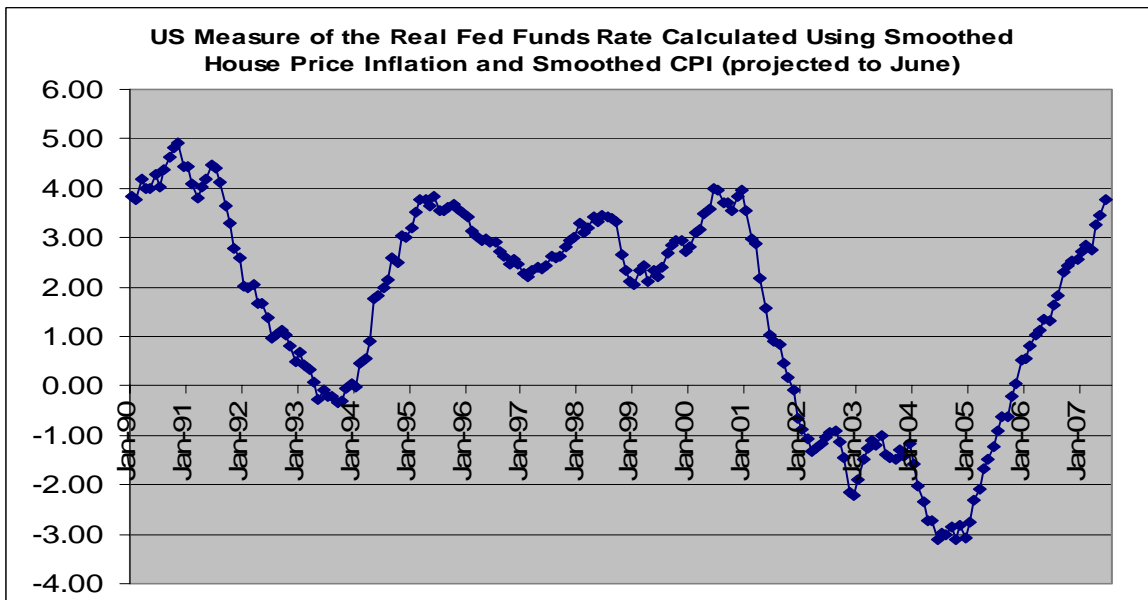
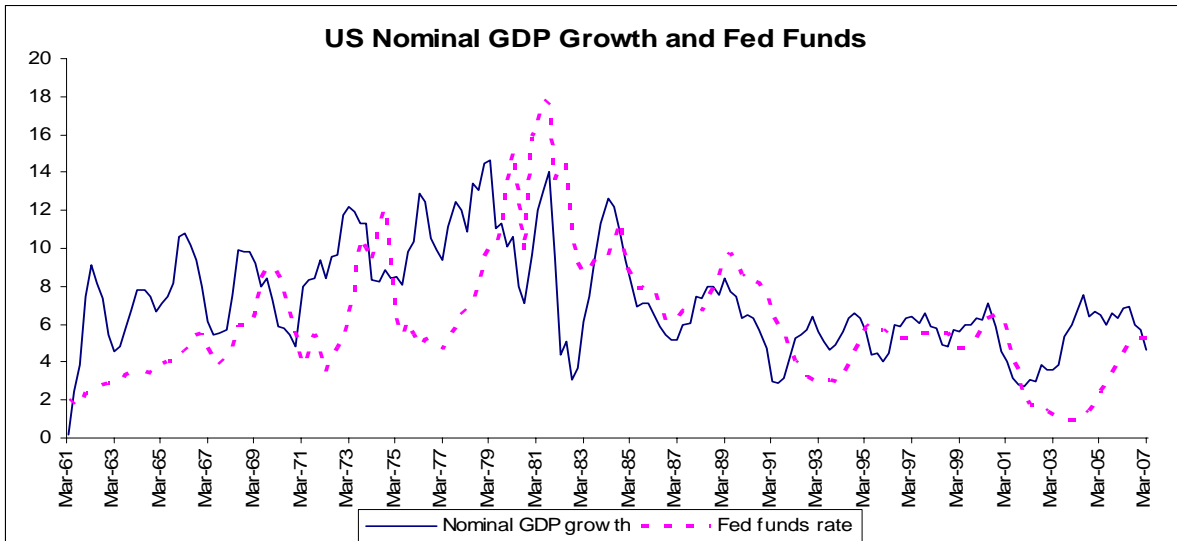
Therefore, when we look at these charts we are looking at the credit bubble, and we are looking at it in a way that gives the clearest sense of its magnitude.

Many bears – particularly the gold bugs – believe that ultra-lax monetary policies are speeding us towards a global hyperinflation. The charts make it clear that this cannot be the whole story because, as noted, Japan does not have inflation and also has a low rate of money and credit growth. I continue to believe that US monetary conditions also are tight and continuing to tighten further. As the chart over the page shows, for the first quarter year-on-year nominal GDP growth, at 4.7%, was comfortably below the funds rate. For Q2 it is almost certain to be lower still, pushing the gap between the funds rate and nominal GDP growth up towards 1% for the first time since 2001 when the stock market was falling steeply (and the economy was in recession).

'Inflationists', of course, believe that the true inflation rate is much higher than the government admits to. If this is the case then of course nominal GDP growth is also higher and the chart below is a misrepresentation. I used to be very sympathetic to that argument but I find it difficult to believe in now, now that house prices are falling. The pi Economics 'inflation pressure'

measure, which includes CPI inflation and house price inflation, both heavily smoothed, has fallen to 2.0% as of April (latest data). By June it is likely to be below 1.5%. (This can be forecast with some accuracy because of the smoothing process in the calculation). On this basis the real Fed funds rate would now be 3.8%, very close to the peak levels that we have seen in the last fifteen years (second chart below).

Surely time must be running out very quickly now for this greatest-of-all bubbles.



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