

Can You Spare a Dime?

by Ghene Faulcon

The size of the national debt has been a topic of discussion in the last several years. A largely held belief is that the size of the debt will at some point cause weakness in the dollar. This month we will look at this issue, asking the question: "Do we see any evidence of this in the historic data that we have." In doing so, we are not making any government policy judgments or political argument, nor are we predicting the future growth or repayment of the debt. We are solely interested in this from an investment standpoint. We shall first look at the numbers, as we are concerned only with the effects on the currency markets.

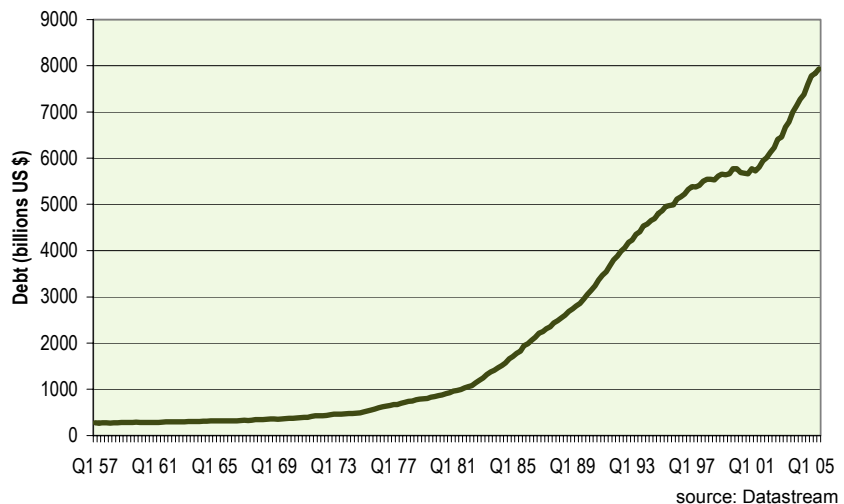
Mapping the debt landscape

1960 was the last government fiscal year for which the debt actually shrank (down 0.20%)¹, and 2000 is the last calendar year of decrease (down 1.97%) in the national debt. The national debt at \$8.1 trillion is now about two thirds of GDP, which stands at around \$12 trillion. In the chart below is the history of the debt. With the exception of a few short periods of time the debt has grown at an exponential pace.

printing the money necessary to pay off debt. In any case, foreign exchange rates are sused to suffer, maybe even before any crisis fully develops.

The mechanism for the exchange rate decline would be that the debt load would divert to interest payments capital that would otherwise be used productively, thereby slowing the economy. The US dollar would thus be less desirable and would therefore weaken.

Total Government Debt (at quarter end)



Conventional wisdom says ...

Many economic pundits as well as people in influential positions say that a very large debt will result in some type of economic crisis for the US. The results of which could be increased taxation and spending cuts to create the necessary budget surplus to alleviate the crisis, or, in the extreme, rampant inflation from

How wise is the conventional wisdom?

To find out if this is really true, we must see if there is any evidence of this actually occurring rather than relying on anecdotes and isolated incidents.

Do increases in debt really lead to future weakness of the currency?

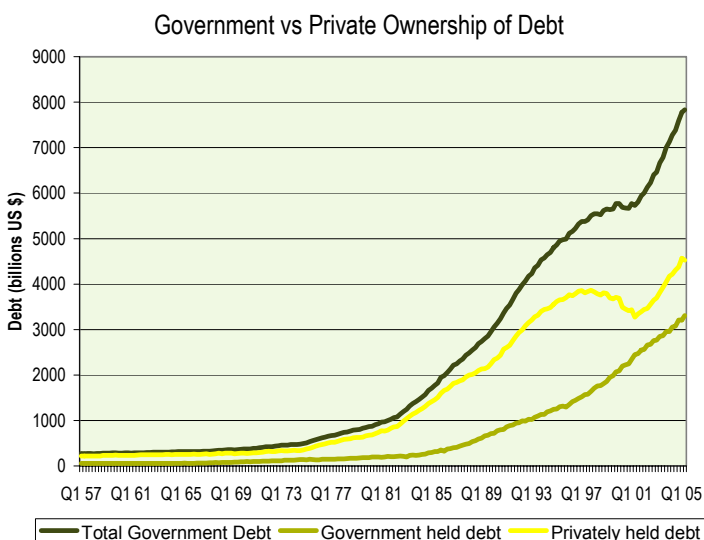
We see in table below that increases in the debt do lead to future decreases in the value of the dollar, but the proof is really in putting your money where your mouth is. In other words, the real test of this is if we can make money on this idea. Our naïve trading model will be to buy the US dollar (relative to a global basket of currencies) if current debt growth is lower than the average historic debt growth and sell if current debt growth is above average. We will make 1 transaction each quarter and ignore transaction costs. Finally, we will run this model over the time period from the beginning of 1970 through the third quarter of this year. Our results are as follows:

	Total Debt
Return	0.65%
Risk	2.74%
IR	0.2389
Hit Rate	61.97%

So we have a money making strategy, but does it really mean that we have identified the true cause? Is the government debt really the driving force here?

Government vs private ownership of debt

But looking deeper into the details of the debt, we find that over 40% of the government debt is owned by other governmental agencies. Since this debt is really not active in the market does it really matter? Once again, we go to the trading strategy for our answers.



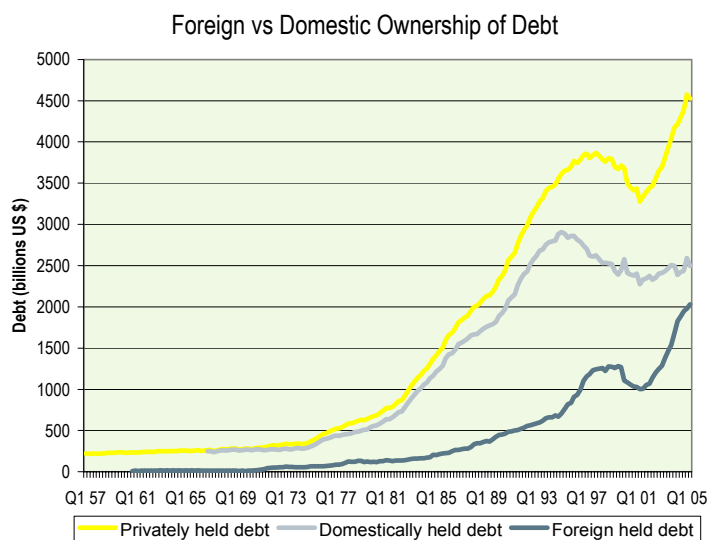
This time we separate the strategy into two strategies: one that only uses debt that is owned by the US government and the second that uses debt that is privately held (not owned by the US government).

Our two new models result in roughly the same information ratios as our original model. More importantly, the government owned debt model has worked when our first inclination was to suggest that government owned debt might not matter.

	Total Debt	Government Owned	Privately Held
Return	0.65%	1.00%	0.66%
Risk	2.74%	3.65%	3.37%
IR	0.2389	0.2745	0.1947
Hit Rate	61.97%	53.52%	61.27%

Do foreign debt owners matter more than domestic?

We can further separate the ownership of the debt. The privately held debt consists of both domestic (currently 55%) and foreign owned debt (45%). We might argue that since domestic investors are not directly sensitive to the exchange rate, the debt that they own would not influence the exchange rate. As for foreign investors, they are sensitive to the exchange rate and would see debt in one of at least two very different ways: they could buy US government debt expecting the dollar to strengthen, or at least not lose enough to overwhelm the bond returns. Or alternately, they assess the ability of the government to repay the bonds is decreasing and therefore worry about the future of the economy.



The first case is a view on the path of the exchange rate and the second is a view on budgetary crisis. But it is crucially important to note that increases in foreign debt would, in the first case, suggest a bullish market view of the dollar, while in the second case they would represent a problem on the horizon and a negative view on the dollar. As bond investors mostly hedge their foreign currency risk, the first case is less likely to be true.

Applying our trading methodology now on the domestic and foreign pools of debt ownership yields the following:

	Total Debt	Government Owned	Privately Held	Domestically Held	Foreign Held
Return	0.65%	1.00%	0.66%	0.34%	2.39%
Risk	2.74%	3.65%	3.37%	3.79%	7.35%
IR	0.2389	0.2745	0.1947	0.0887	0.3256
Hit Rate	61.97%	53.52%	61.27%	57.75%	52.11%

The domestically owned debt model shows very little ability to profit, while the foreign owned debt model has had the best performance of all our models. This suggests that domestic ownership of debt really doesn't matter as much as foreign ownership does.

There still remains one question to ask. Are we really predicting this or are we just getting lucky, simply because as the debt has risen over the last 35 years, the dollar has weakened. This is perhaps our most important question, and though we cannot get any definitive answer, we can test this too. Since all of our trading models have a bias towards a short dollar position, we can ask how well would we do if we simply took a constant short position and compare those results to our prior models.

In this final test we see that our simple trading models, with the exception of the domestically owned debt strategy, perform significantly better than simply betting short against the dollar. So this leads us to believe that these models are capturing something beyond having a short bias against the dollar.

	Total Debt	Government Owned	Privately Held	Domestically Held	Foreign Held	Static Position
Return	0.65%	1.00%	0.66%	0.34%	2.39%	0.62%
Risk	2.74%	3.65%	3.37%	3.79%	7.35%	5.81%
IR	0.2389	0.2745	0.1947	0.0887	0.3256	0.1063
Hit Rate	61.97%	53.52%	61.27%	57.75%	52.11%	51.41%



source: Datastream, WM Reuters and First Quadrant, LP

What can we conclude as a result of our investigation?

First we can say that the magnitude of debt growth does seem to matter in the cases that we have tested, but it also seems to matter who owns that debt. We can suggest reasons why this may be true, but we do not yet have evidence for establishing which mechanisms are involved. Without having such evidence, we must accept that there could be a separate cause of both accelerating debt and weakening of the currency or that there may be different reasons for which government owned debt and foreign owned debt.

How do we improve our results

We can test specific mechanisms and control for them. For example, if we believe that foreign investors are assessing the ability of the nation to repay, we could test the correlation of long-term interest rates with our signals. Furthermore, we could try this same experiment across a range of markets. We might also try to determine why the domestic private investors matter much less than foreign and US government debt holders.

Returns and Expectations

Central banks were generally quiet this month with only two countries making changes to their monetary policies. Canada increased its key rate by 25bp for the second time in a row pushing it up to 3%. New Zealand also raised rates by 25bp to 7% increasing its lead as the highest interest rate economy in our basket. The US Fed did not meet during the month, but indicated that it would raise rates at its next meeting on November 1st.

Even though there were not many official rate changes, both cash and bond rates generally increased across the world. The increase in cash rates was lead by the USA with a 33bp increase, New Zealand with 20bp and Canada with 18bp. The only exceptions to the increase were Australia and Norway, both decreasing by 1bp.

Bond yields saw a stronger increase over the month with an average increase of 17bp than did cash yields with only 9bp increase. Norway was on top with 40bp followed by Switzerland and Denmark, each with 28bp and EMU and Canada with 26 and 24bp. Japan and New Zealand brought up the rear each with 8bp of increase in bond yield.

Equity markets had a rough October overall with only Switzerland and Japan landing in positive territory with 1.63% and 1.46% respective gains. Norway (-8.0%), Hong Kong (-6.8%) and Canada (-5.84%).

The currency markets continued to be as active this month than they were last month with the best performing currency outperforming the worst performing currency by 4.8% and the average currency moving by 1.3%

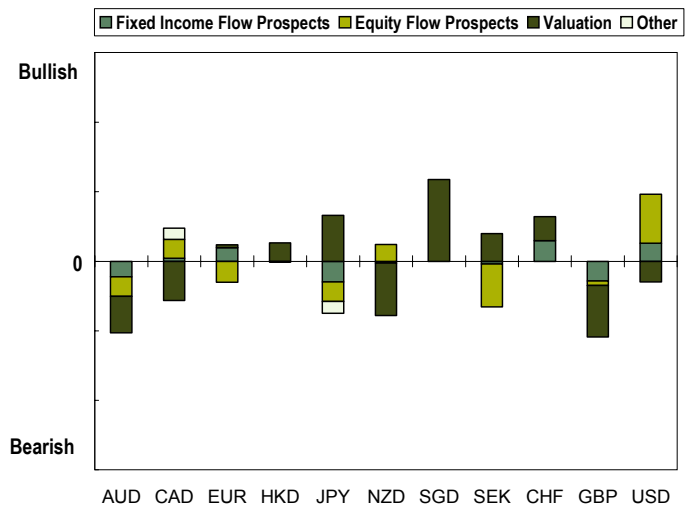
As in recent months, interest rates caused the most change in the signals this month. This resulted strengthening the Australian dollar and UK pound bear positions and neutralizing the previously bearish euro position. This also pushed the Swiss franc to a slightly bullish stance and the New Zealand dollar to a slightly bearish position, both from neutral.

In addition to having the highest interest rates, New Zealand also has the most overvalued currency. The British Pound and the Canadian and Australian Dollars remain overvalued currencies. On the other end of the spectrum, the Japanese Yen continues as the most undervalued currency followed by the Swiss Franc and the Swedish Krona.

The US and continues to be the most attractive market for equity flows while the Swedish, European and Australian equity markets are the least attractive.

Switzerland is the most attractive market for bond flows, but only modestly so. These flows would most likely come from the slightly unattractive markets in Australia and the UK.

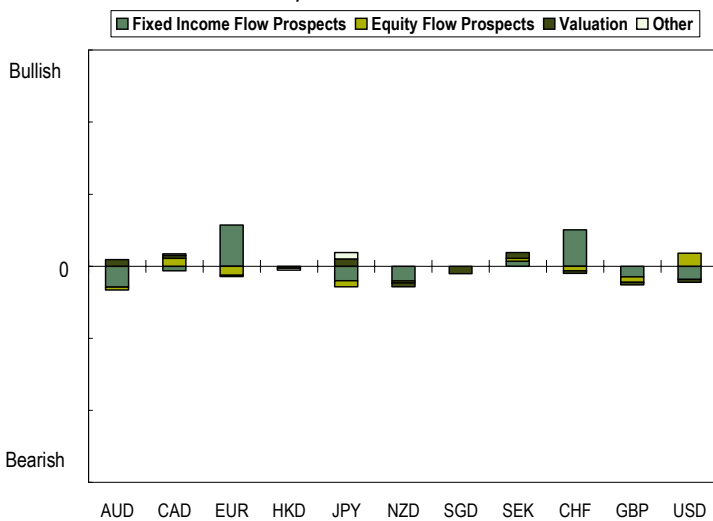
Factor Contributions to Forecast
31-October-2005



Source: First Quadrant, L.P.

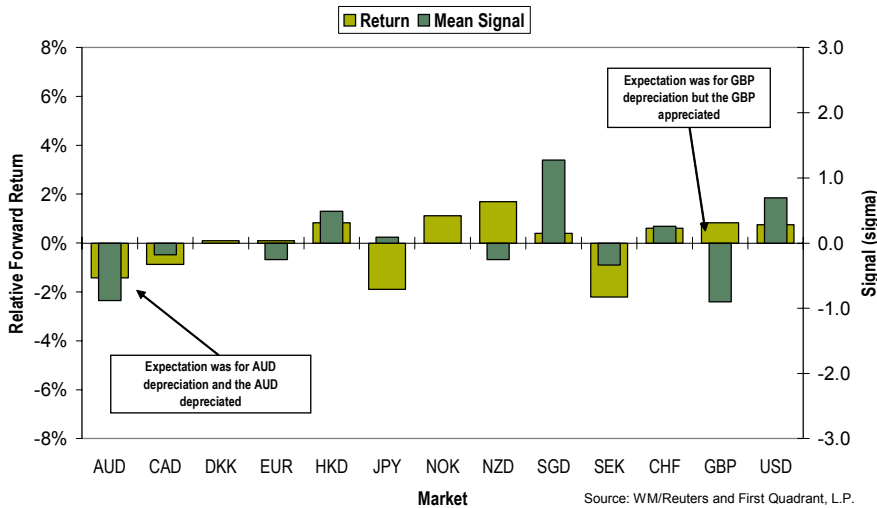
The portfolio benefited from our long position in the US Dollar, which has continued its yearlong strengthening trend. The performance was further augmented by our short positions in the Australian Dollar and the Swedish Krona. We missed the mark with our long position in Japanese Yen and our short position in the UK Pound. The rest of our positions had little impact on our performance.

Change in Factor Contributions to Forecast
30-September-2005 to 31-October-2005



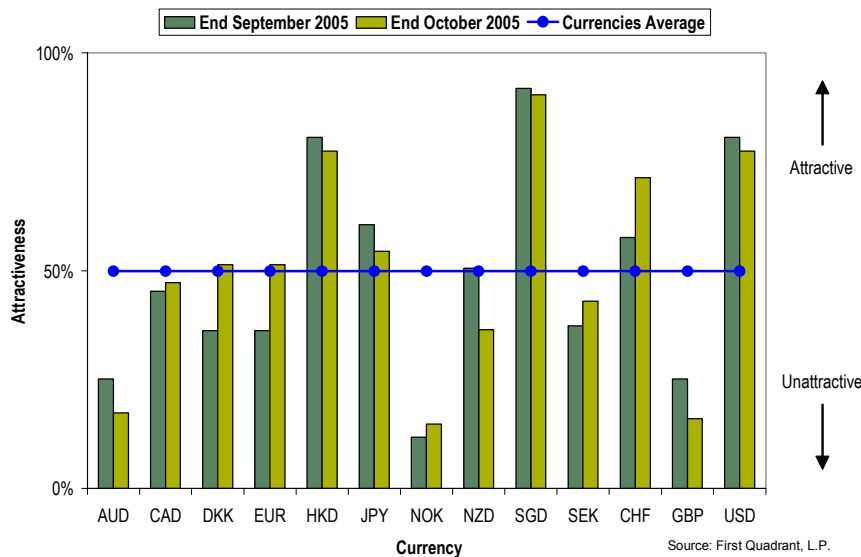
Source: First Quadrant, L.P.

Currency Returns and Expectations
October 2005



Our main positions have not changed significantly during the month. We are still bullish on the dollar and short the British pound and Australian dollar. We are starting to develop positions in Swiss franc (bullish) and New Zealand dollar (bearish).

First Quadrant Currency Attractiveness



Endnotes

¹ All data on the national debt has been sourced from Datastream and the author's calculations with the exception of the fiscal year and current debt numbers which come from the US Department of the Treasury Bureau of the Public Debt website: <http://www.publicdebt.treas.gov/>

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