

The Biggest Mistake in Investing

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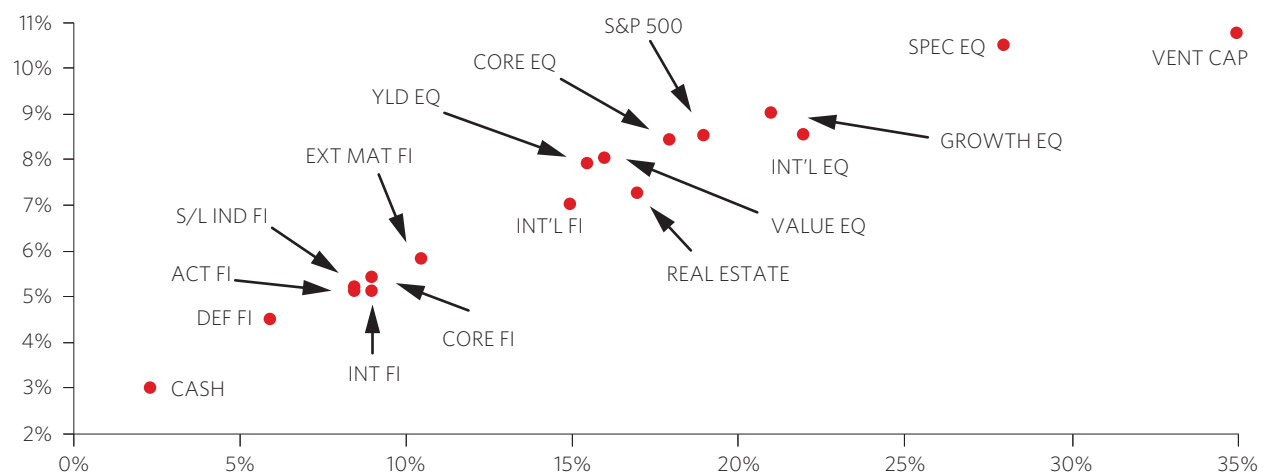
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We generally use this communication to comment on the economies and markets, but today wanted to make a brief comment on investing. The vast majority of investors (that probably means you) are making a huge mistake in their asset allocation. **Investors do not have balanced portfolios.**

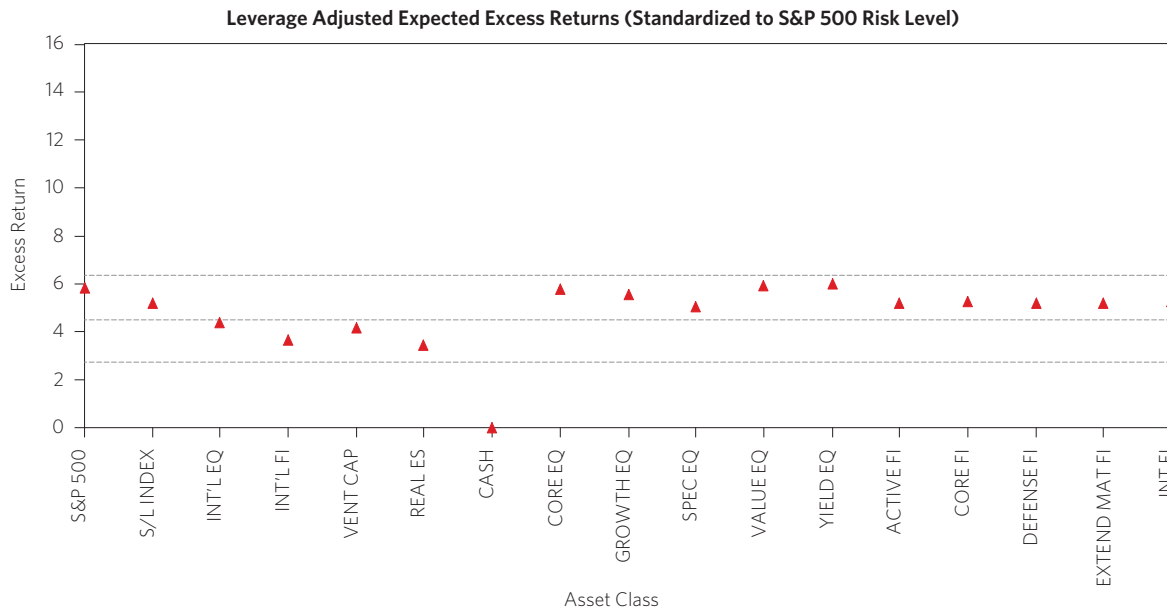
A typical portfolio has 60% of its dollars in equity and equity like (i.e. private equity or venture capital) investments and because these assets have more risk than the rest of the portfolio (generally nominal bonds) over 80% of a typical investor's risk is in equities. The existence of nominal bonds and a scattering of other assets do very little to truly balance the portfolio because they make up such a small amount of risk. **This over-investment in equities at the expense of other asset classes (nominal bonds, inflation indexed bonds, credit spreads, commodities) costs about 3% a year in expected value (which could alternatively be used for risk reduction), and dwarfs all other issues that investors face.** The mistake, once understood, is relatively easy to rectify. Yet despite our pounding the table for a decade on this issue only a tiny percentage of investors have moved significantly in the direction of truly balancing (i.e. in risk terms) their asset class exposures (we would balance them with respect to their performance in different economic environments). Here is what we think is preventing most of the investing world from taking the free lunch.

Risk and Leverage Confusion

Most investors are familiar with typical portfolio math and they take assets as they are packaged (i.e. unlevered and with the risk/return characteristics offered in the market place). Many will use assumptions of risk, return, and correlation and create an "optimized portfolio" given their return target and the asset classes that are out there. To achieve their return targets most investors end up being "forced" into a portfolio dominated by the riskiest assets out there (equity and equity like assets). By simply injecting leverage into the equation there is no longer a need to be forced into equities. The following chart illustrates a typical expected return and risk scatter chart for asset classes as they come packaged in the market place (we got this from a consultant and it is probably similar to the ones most investors are thinking about). The basic relationship is clear and logical: higher risk assets are expected to have higher returns and the relationship between risk and expected return is essentially linear (i.e. one unit of risk gets you one unit of return).

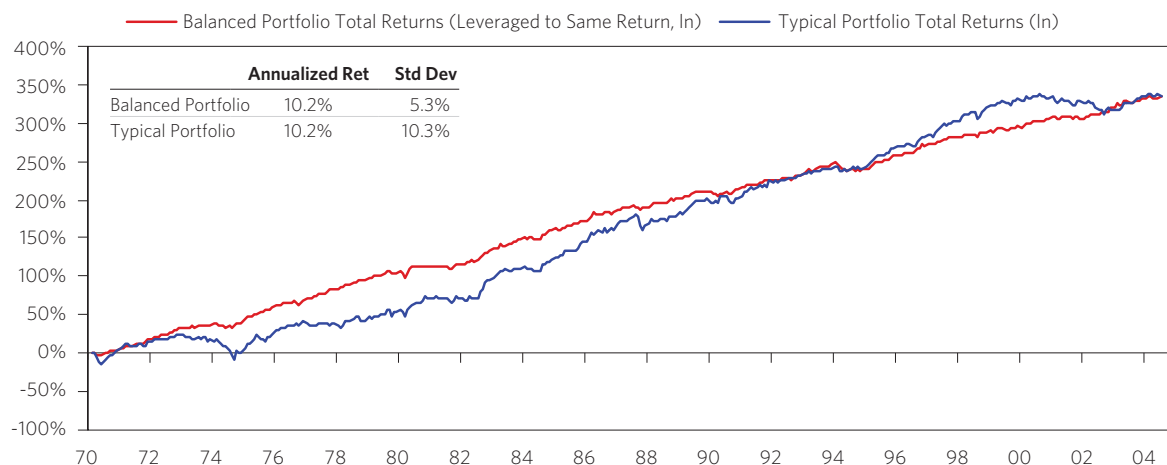


On the previous chart there are big differences between the return of different asset classes, but **if you neutralize for risk (i.e. lever up lower risk assets, and delever risky assets) the differences between asset classes disappear**. Leverage is the asset class equalizer. The following chart illustrates the expected returns (based on this typical consultant survey) of different asset classes.

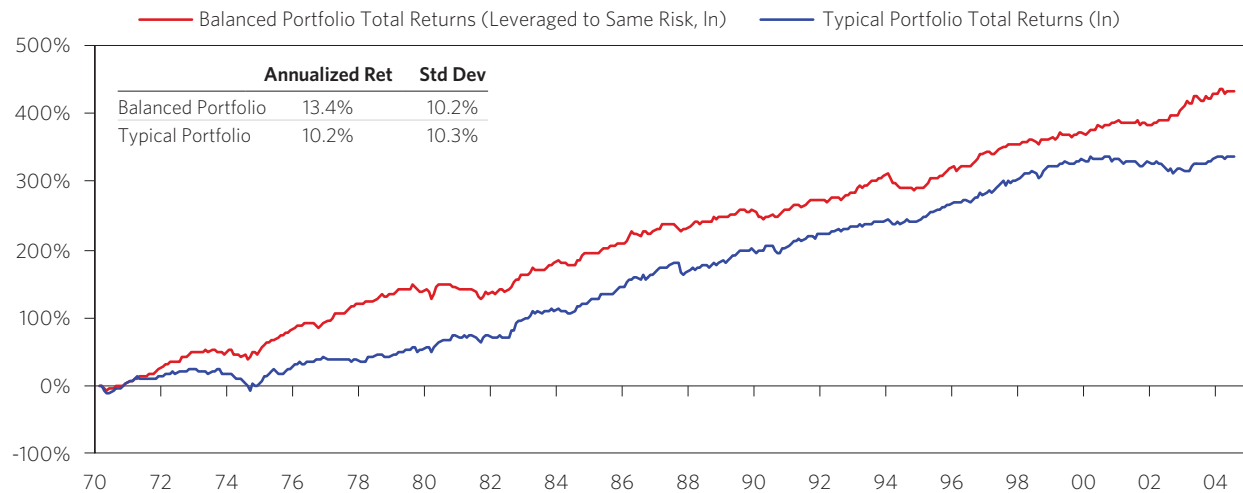


If you do not constrain yourself by the fact that some asset classes have more risk in the way they are packaged than other asset classes than you would have no reason to select an asset class on return alone (as they are all essentially equal). Practically, what this means is that by leveraging up a treasury bond, for instance, you can create an asset with the same risk and return characteristics as equities. If you accept that in risk adjusted terms asset classes have roughly equivalent returns, you essentially want to balance them in your portfolio in risk adjusted terms after taking into account the correlations between them. To get to this point and allow yourself to create the optimal portfolio you need to utilize leverage to lever up the lower risk assets. **Many people still confuse leverage with risk, but the reality is that leveraging up low-risk assets so you can diversify away from risky investments is risk reducing.** After all, most high return asset classes come with leverage in them (i.e. what is more risky, a 2:1 levered inflation indexed bond or a share of GE).

The following chart illustrates the results of the typical investor portfolio against a balanced portfolio of asset classes targeted to have the same return (the risk is cut almost in half).



The following chart illustrates the balanced portfolio against the typical portfolio at the same risk. The return increases 3.2%.



The logic and the data all point in the same direction and the potential benefits are huge, yet most investors have not begun to move in that direction. Just recently, we have seen some of the smartest investors we know re-engineering their portfolios to implement this approach. More will likely follow.

What About the Market Portfolio?

For those fully schooled in the Capital Asset Pricing Model (CAPM), the previous results may leave you shaking your head and asking why the market portfolio isn't the best portfolio. Our experience in markets, common sense, and data indicate that CAPM, while an internally consistent theory, does not reflect the real world. The rest of this is a bit tedious explanation of why.

CAPM assumes that...

...investors agree on the return, risk, and correlation characteristics of all assets and invest in all assets accordingly

- Investors clearly disagree frequently on all of these, and many investors have limits on what asset classes they can invest in.

...perfect capital markets exist: there are no restrictions on borrowing or lending

- Many investors face (or self-impose) leverage constraints, forcing them to overweight risky assets in search of higher returns.

...all investors have the same time horizon

- Investors with different time horizons consider different assets "risk-free".
- Same is true for investors with real vs. nominal liabilities.
- Different investors will choose different portfolios to leverage or de-leverage.

...investors can securitize and trade all wealth

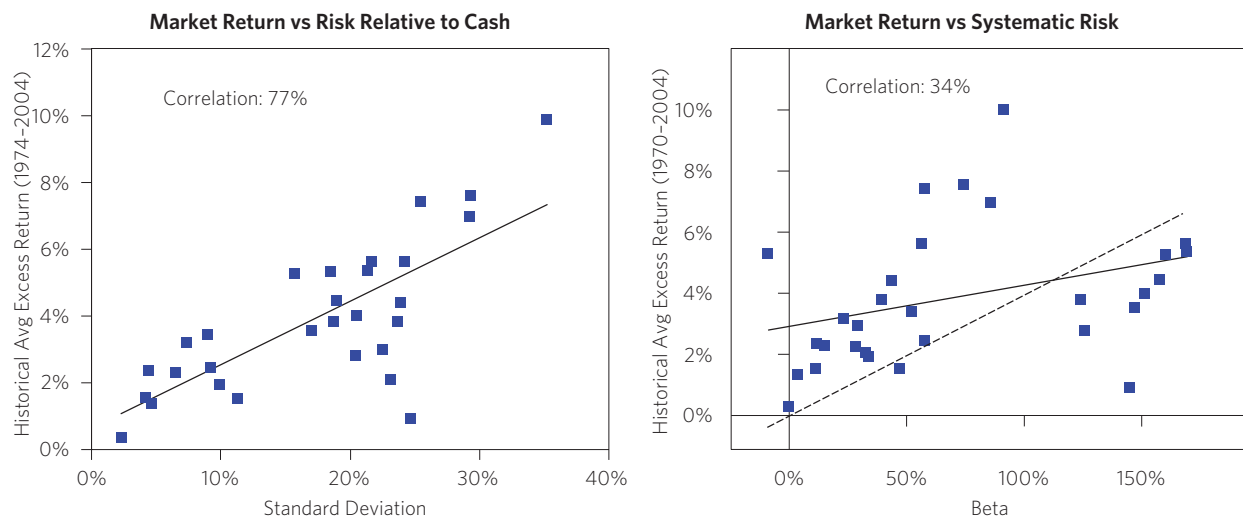
- The majority of the world's wealth is not securitized (human capital, residential real estate, etc.).
- Investors owning different non-tradable assets could choose different optimal portfolios of tradable assets.

...all investors are mean-variance optimizers

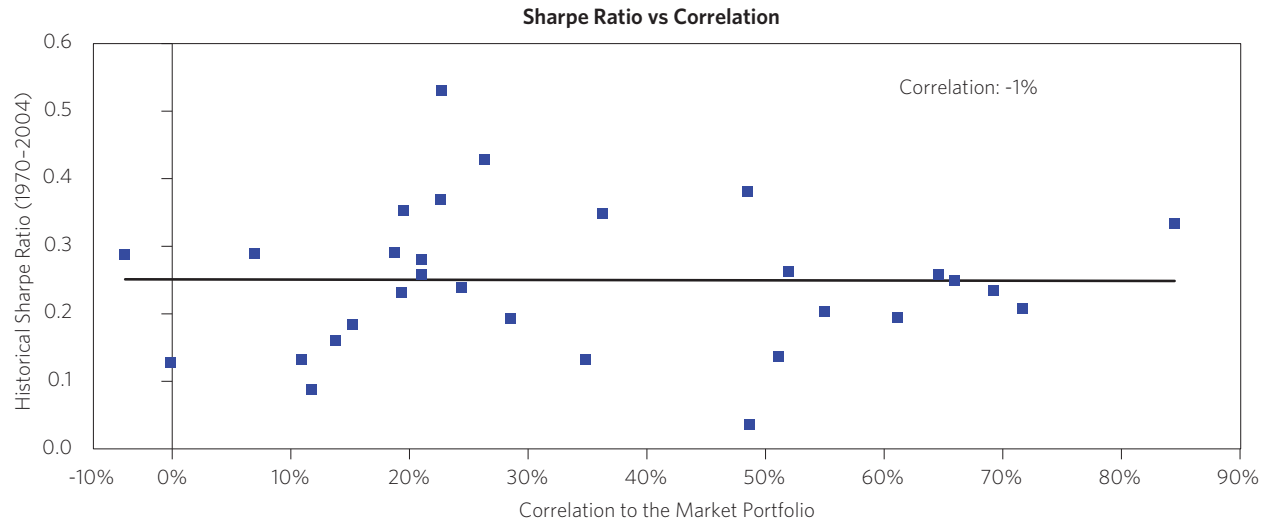
- Many are not.

Most proponents of CAPM would agree that the assumptions don't reflect the real world, but that the output does. We just do not understand that, since what one must believe to think CAPM is even roughly right stretches the imagination. You have to essentially believe that the market somehow shifts the pricing in asset classes around to force the exact expected return/risk ratios in different asset classes to match exactly the issuance by the suppliers of assets. We do not see any evidence that this is happening. CAPM theory argues that investors will value (and therefore price) any security based on how much a marginal addition of that security would increase the Sharpe ratio of the portfolio they already hold. The return demanded on a given security will depend on its volatility as well as its correlation to the market portfolio (said more technically, the excess return is supposed to be a function of the beta to the market portfolio). Does this theory hold up to evidence, do markets really clear this way?

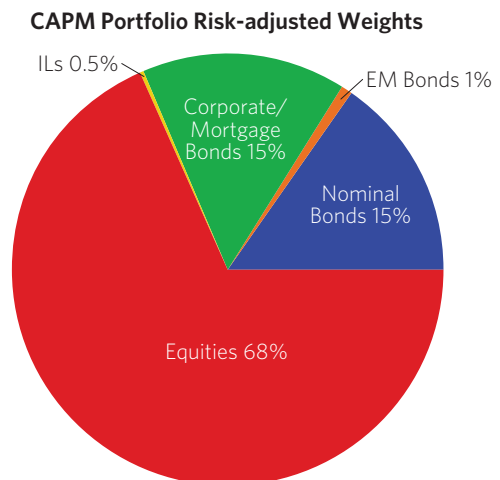
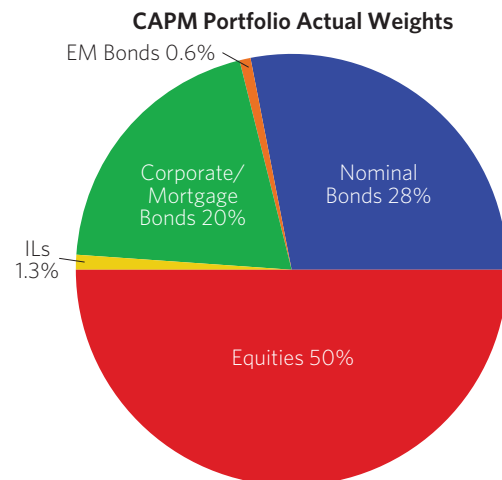
Historically it is clear that market returns have not turned out this way. We have looked at actual asset class returns and charted below the relationship between return and risk (which we think is the relationship priced into the markets) vs. the actual returns against the beta to the market portfolio. It is clear that the security market line is not a great predictor of returns, while risk is.



Said another way, if CAPM theory was right you would expect asset classes with low correlations to the market portfolio to have lower information ratios than assets that have higher correlations. This relationship does not exist. Correlation to the market portfolio has never been a determinant of asset class returns, and we don't believe the mechanism exists to make this happen in the future (we do recognize that if people adopt what we are saying the world will move towards that more efficient world, but we are just a drop in an inefficient ocean).



The previous charts illustrate that historically CAPM has not explained the world well at all. On a going forward basis the implied assumptions of CAPM do not smell good to us. The following charts illustrate the generally accepted CAPM portfolio as of today both in dollar and risk adjusted weights.



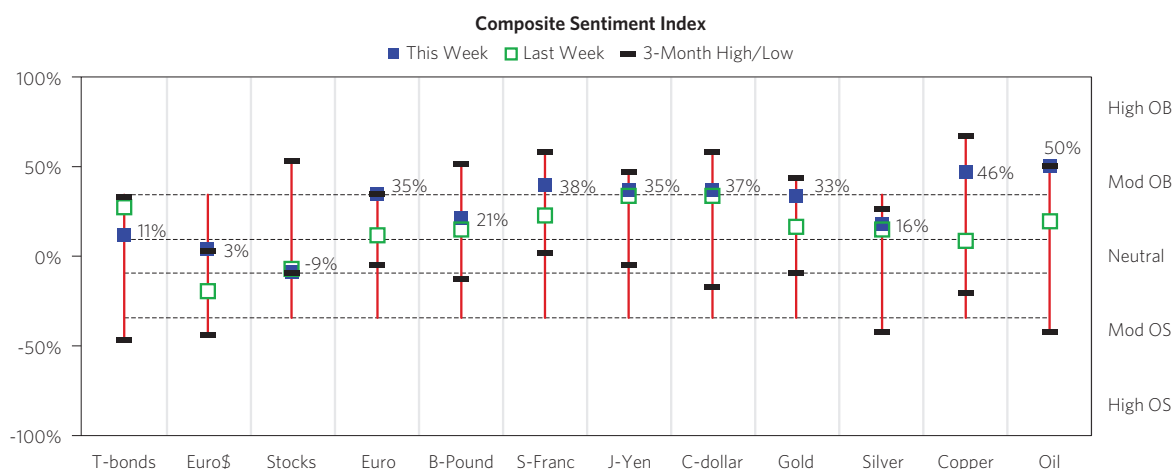
As we said, the assumptions necessary to make these weights the optimal weights are inconsistent with logic and how markets are actually priced. These weights, combined with historical correlations, would imply a negative expected excess return on inflations indexed bonds and a ratio on equities way out of line with all other asset classes. The following table illustrates the implied expectations of performance of different asset classes (you can judge for yourself).

Expected Returns/Ratios Implied by CAPM Weights assuming historical volatilities and annual correlations		
	Implied Excess Return	Implied Sharpe Ratio
World Equity	4.2%	0.31
World Bond	1.2%	0.19
World IL	-0.1%	-0.03
EMD Bonds	4.0%	0.15
Corporate/Mortgage Bonds	1.7%	0.21

Logically, we just do not see the mechanism that would force expected returns and ratios to match the assumptions implied by CAPM. We do see investors assessing return relative to risk all the time. But the data and the smell check of the output make it clear that CAPM may be nice in the classroom, but it is dangerous to your portfolio.

Weekly Sentiment

Below is our updated weekly sentiment.

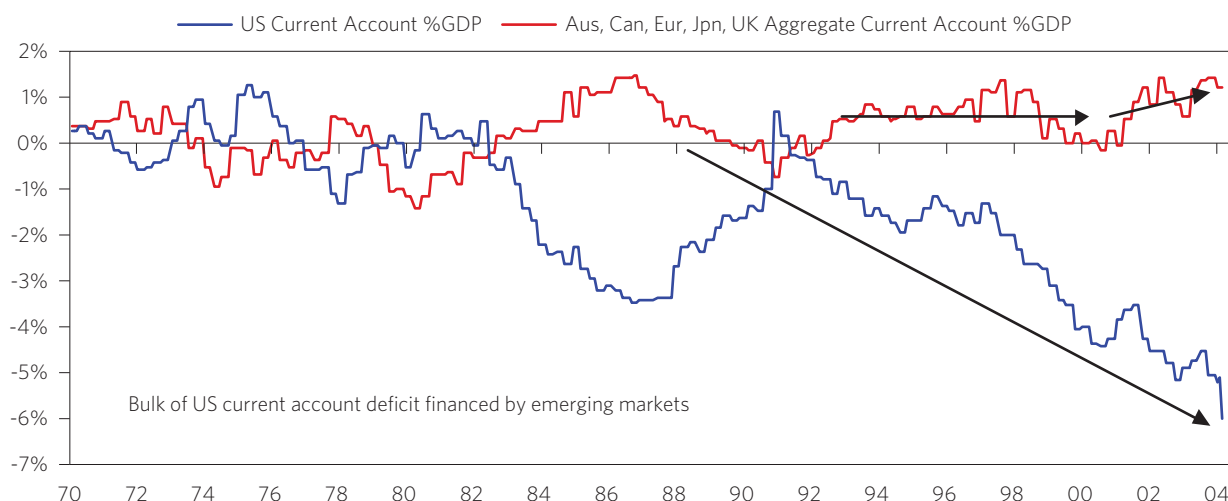


Composite Sentiment Index (avg of raw numbers)				
Market	This Week	Last Week	3-month high	3-month low
T-Bonds	53	58	61	32
Euro\$	50	40	50	30
Stocks	42	43	63	42
Euro	63	52	63	45
B-Pound	56	52	70	40
S-Franc	63	55	72	45
J-Yen	58	57	63	40
C-Dollar	61	60	71	38
Gold	62	54	67	44
Silver	53	52	58	30
Copper	66	53	66	42
Oil	87	80	87	44

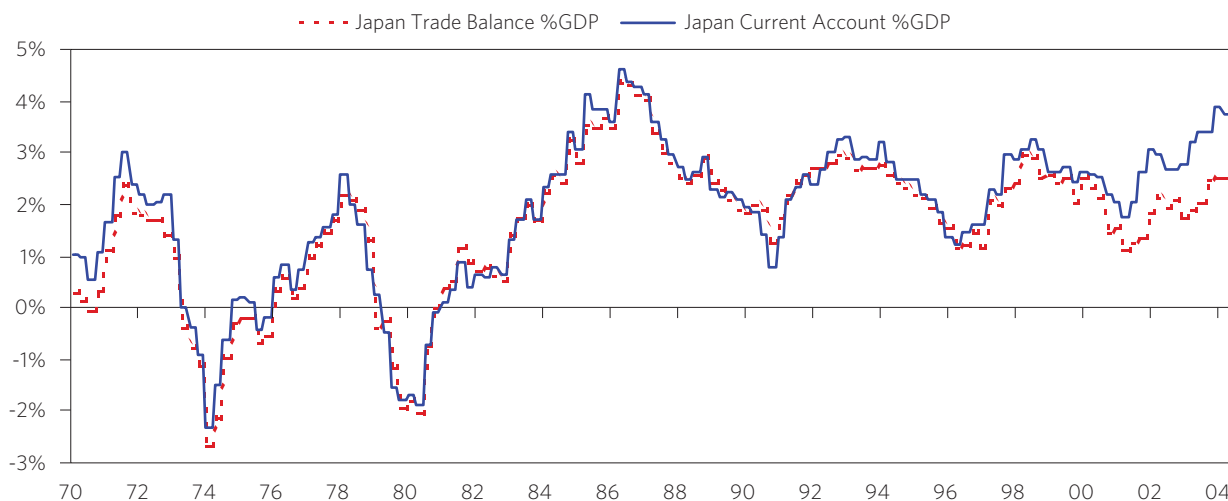
Other Industrialized Countries

External Financing Hurdle

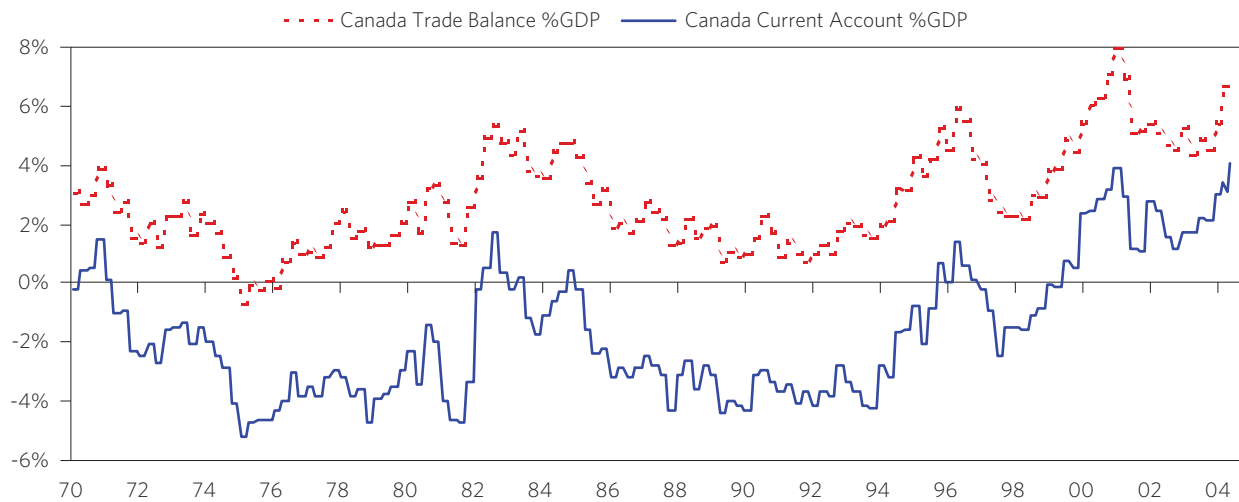
Friday's dramatic widening of the US trade deficit served as a reminder of the huge external financing gap that the US needs to overcome just to keep the US dollar afloat (with imports now being roughly twice as large as exports). The US dollar sold off, and the Canadian dollar was the major beneficiary as their trade report moved dramatically in the opposite direction. Of course a large financing gap doesn't mean for sure that a currency will rise or fall – it only tells you what the hurdle is for how much capital a country needs to attract. In the US case the hurdle is very large, particularly as it makes up about 80% of the world's net export capital, and our assessment is that it is unlikely to be met. The charts below update the picture for the US and other developed countries. The imbalance that has led the dollar to weaken over the last couple of years has only become larger. It is financed in part by other developed markets, but most of it is coming from emerging markets. We tack on the latest trade report to calculate the latest number for the US, and even if it turns out to be a fluke, the broad picture is clear.



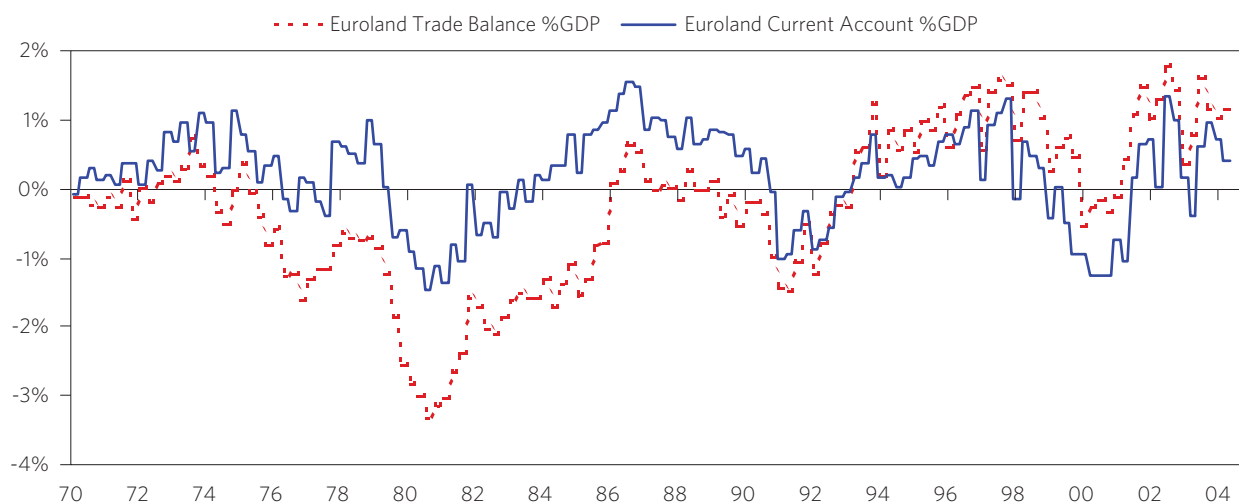
The flip side of the US has been the improving situation for Japan. As Japan accumulates foreign assets, the income on those assets rises, further increasing the financing gap with the US. In Japan's case the trade balance has not changed dramatically in recent years, but the current account is widening. Much like in the US, we expect the capital account not to be large enough to offset the starting point of the current account at current exchange rates. Japan's current account surplus is now 3.6% of GDP.



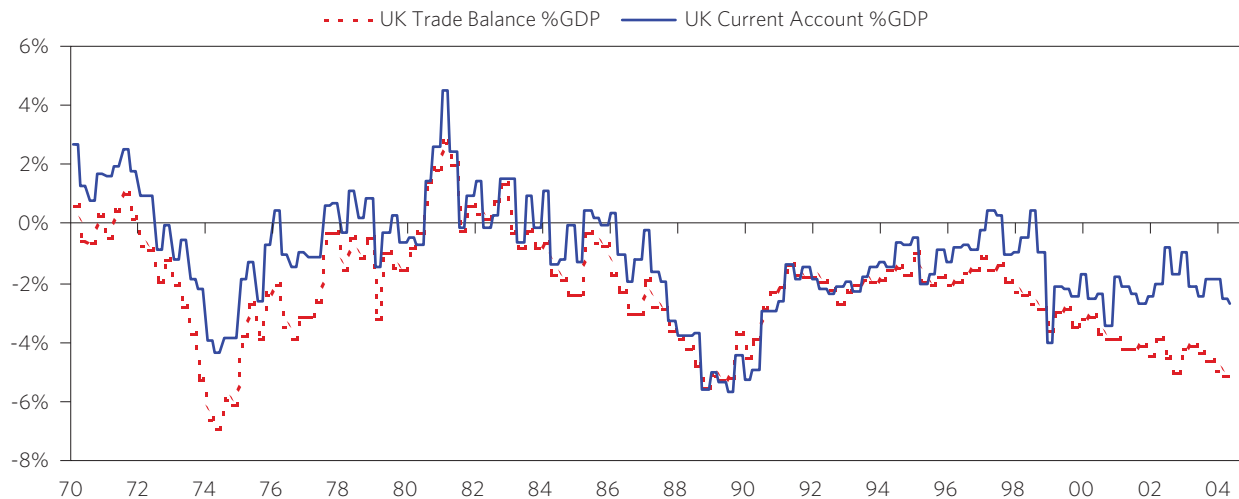
Canada's current account situation has also been improving, this time driven primarily from an improvement in the trade balance. Canada is also now a significant capital exporter, and for the Canadian dollar to fall capital outflows must exceed 2.7% per year.



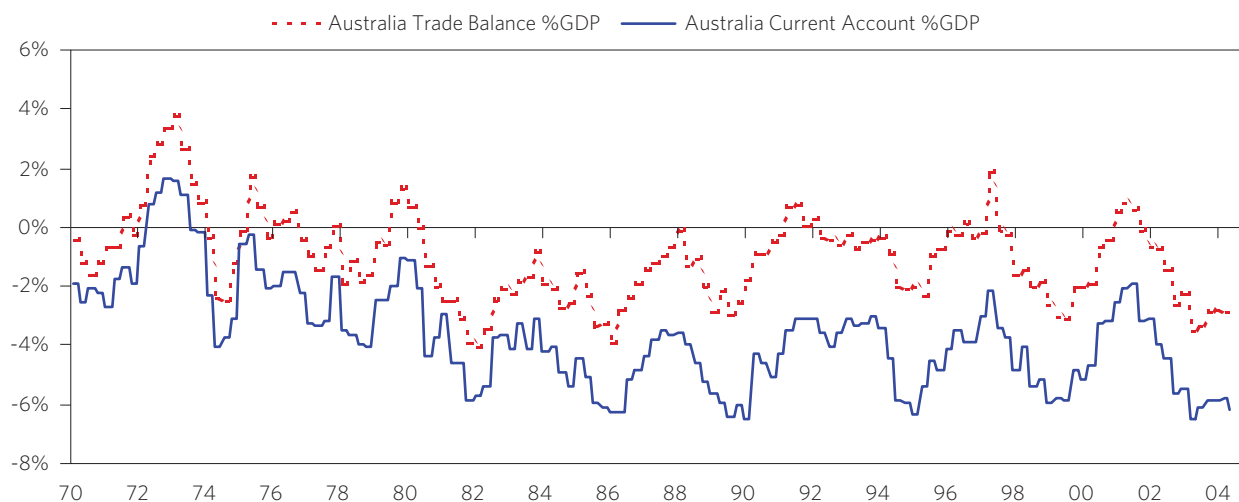
Euroland is also a net capital exporter, but its balance has been roughly stable and is not particularly large in the first place.



The UK current account deficit has been stable, despite a deteriorating trade balance. Like the US, the UK is a capital importer, but its current account is modest particularly given the strength of its economy.



Australia's deficit is larger than that of the US, relative to GDP. However, higher yields, consistent strong growth, solid commodity prices, and the fact that it is a much smaller share of the world capital pool (making it less of a strain on world resources) are some of the reasons why we expect capital inflows to be sufficient.



Knowing the starting financing hurdle is an easy but necessary step in assessing a currency. And the differences between different countries (and the US in particular) are extreme at this time.

Conclusions

Credit Markets

North America

US Bonds	Canadian Bonds	US Euro\$
Neutral	Neutral	Moderately Bullish

Europe

UK Gilts	Euroland Bonds	UK Euro £	Euroland Short Rates
Moderately Bearish	Neutral	Neutral	Neutral

Asia

Japanese Bonds	Australian Bonds	Japanese Euro ¥	Australian Bank Bills
Neutral	Neutral	Neutral	Neutral

Currency Markets

Canadian Dollar	Euro	Japanese Yen	Australian Dollar
Moderately Bullish	Moderately Bullish	Moderately Bullish	Moderately Bullish

Equity Markets

US Equities	Japanese Equities	German Equities	UK Equities	French Equities	Canadian Equities	Australian Equities
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral