## **Strategy Thoughts**

# September 2014

# The Beginnings of a Disciplined Solution

### Introduction

For a number of months now I have been reiterating the following mantra

I continue to believe that preservation of capital will be the most important investment goal, not chasing further gains or higher yields, for most investors over the coming months.

This continues to be my firmly held conviction, in spite of, and also because of, the continued buoyancy that has been displayed by a number of global equity markets.

As my outlook has not changed over the last month I have spent a considerable amount of time exploring the idea that a rules based solution to the investment conundrum, as I proposed in last month's Strategy Thoughts, should be possible and would be of immense value. In this month's Strategy Thoughts I outline where my thinking has gone in this pursuit and the results of these endeavours thus far. Finally, for the golfers and gamblers amongst you I also I have a recommendation, driven by the findings of my book, 'Bulls, Birdies, Bogeys and Bears' on the upcoming Ryder Cup.

### The Characteristics of a disciplined solution

Last month I wrote;

Building a portfolio from scratch requires an understanding of both long term and shorter term investment tolerances and market expectations, and also the rules that you as an investor are comfortable with. Only then can your own plan, which you are going to stick to in a highly disciplined manner, be articulated.

Over the last month I have spent many hours reflecting upon these comments on aeroplanes and in airports as we travelled to and from the east coast of the US for a number of family commitments. The results of these reflections, both while travelling and since returning to New Zealand, have been the title of this month's Strategy Thoughts; 'The Beginnings of a Disciplined Solution'.

The rules for this disciplined solution that I have formulated, in no particular order, are;

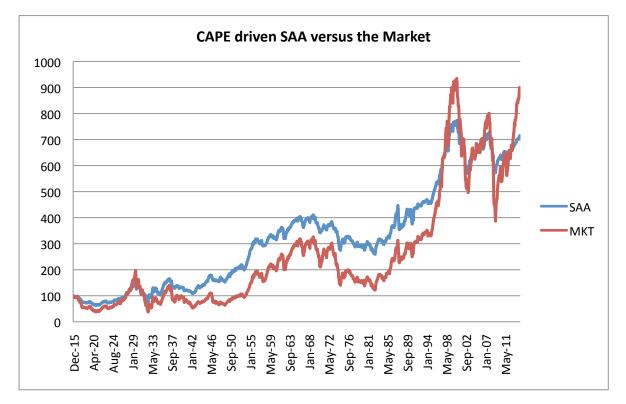
- The approach must be simple; it must not rely on complex algorithms, ultra-high speed trading or proprietary and expensive pricing information.
- It must not be dependent upon, in fact it must avoid, the sometimes comforting (but not necessarily helpful) forecasts and extrapolations of economists and analysts.
- It must capture the very long term importance of VALUE. A long term measure of value should drive the Strategic Asset Allocations (SAA) of the approach and changes to the SAA should be infrequent but of significance.
- Shorter term Tactical Asset Allocation (TAA) should be overlaid upon the SAA. TAA changes will not be driven by valuation measures; they will naturally be more frequent than SAA changes and will reflect the persistence of momentum in markets.

• Both SAA and TAA changes must be rule based so as to ensure that the approach is totally insulated from the strong behavioural biases that conspire to undermine most investors over multiple time frames.

### Value as a driver of Strategic Asset Allocation

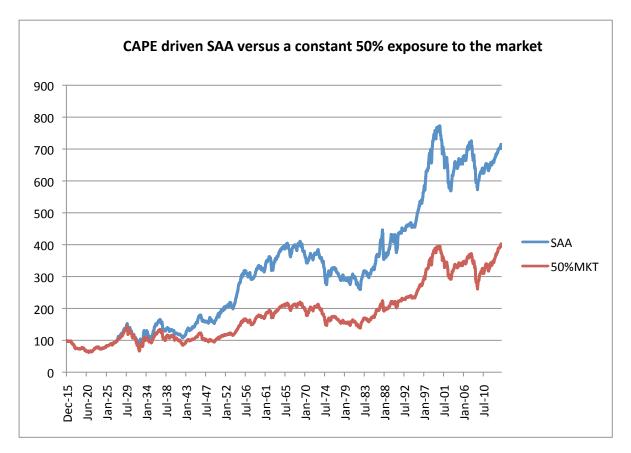
With these rules firmly in mind I downloaded the entire pricing and valuation history that Professor Robert Shiller of Yale makes freely available. This series provides more than a century of Cyclically Adjusted P/E (CAPE) ratios for the S&P500 along with the real and actuall S&P500 monthly closings.

After a careful consideration of the implications of both value and momentum in the market over the very long term a number of proprietary rules to drive SAA were devised. The result is shown below.



The chart shows the real (inflation adjusted) S&P500 since 1915 compared to the results of adjusting the SAA weighting to the market from as little as 25% exposure to as much as 75% exposure.

The obvious take out is that over the long term the performance has been broadly similar. However, the maximum drawdown, or loss from a prior peak, are substantially reduced using the SAA overlay, particularly through the GFC, and, perhaps more importantly, the average exposure to the market over the almost one hundred years shown is only 50%. The value of this SAA overlay can be seen more easily when the result is compared to the performance of an investor who regularly rebalanced his exposure to the market to be just 50%.



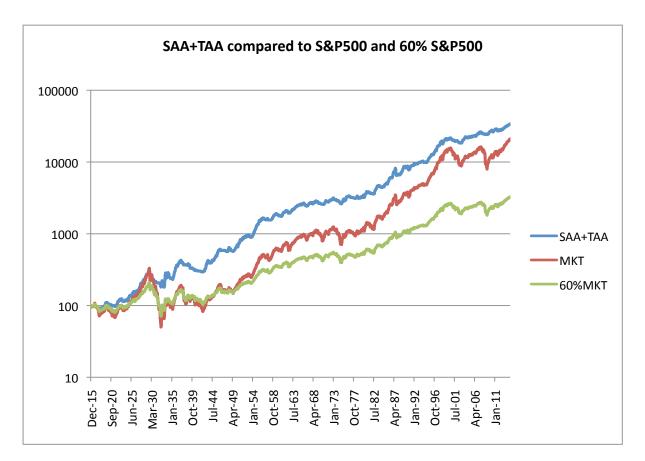
For the investor seeking superior long term returns than a similar market exposure will deliver this SAA approach is successful. It also offers the potential to deliver virtually market returns, with substantially less volatility, to the investor that wishes to be fully invested in the market.

I have long maintained that all investors should want to own more of what is historically very cheap and less of what is historically very expensive, this sounds obvious but has to be the opposite of what the majority do, otherwise nothing would ever get historically cheap or expensive. This simple rules based approach to investing clearly supports this contention and the fact that it is rules based results in investors avoiding becoming part of the long term nervous 'crowd' that make any market historically cheap or expensive. This particular bias, herding, is very powerful and has to be avoided if an investor is to be successful over the longer term.

Over the almost century long simulation shown in the charts above the CAPE driven SAA changed just forty three times which equates to one SAA adjustment every twenty eight months. It certainly meets the criteria of not being dependent upon ultra-high speed trading, particularly when one considers that readings for the market and CAPE are only taken once a month and then applied to the next month's performance.

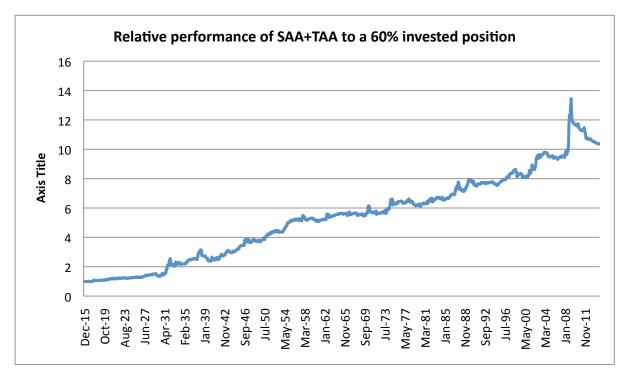
### A Tactical and rules driven overlay

Once the results of the CAPE driven SAA are established a TAA can be applied that will attempt to capture both more of the upside and less of the downside of the market recognising that momentum in markets tends to persist. The TAA approach that I have incorporated in the following chart is also not dependent upon high speed trading, takes its signals from the performance of the market over the prior month and applies the decision to the next month and is very much rules based. For this example I have used the actual S&P data rather than inflation adjusted data.



The TAA overlay does increase the average exposure to the market from 50% to 60% so the comparisons shown in the chart are for the SAA+TAA approach versus a constant fully invested position and a rebalanced 60% invested position.

It is pleasing to see that this rules based approach combining SAA with TAA delivers superior long term performance than the market alone, but more importantly that it consistently outperforms a passively invested similarly exposed position.



The outperformance is relatively steady with the exception being during the latter stages and immediately after the GFC.

All of the above supports the contention that a rules based, long term, approach to SAA and TAA can deliver superior performance, firstly by recognising and reflecting the absolute importance valuation has in determining long term returns, and secondly by employing momentum reflecting rules to determine a TAA overlay, so avoiding the many behavioural biases that we all so easily succumb to.

One of the shortcomings of using Professor Shiller's data is that it only provides the real and actual price of the S&P 500 whereas a true test of any asset allocation approach should utilise total return data as dividends, particularly over the very long term, become an important element of any investor's total return.

This is a valid shortcoming of the SAA+TAA approach compared to the market as a whole, although in the example shown above the return on the uninvested portion of the SAA+TAA portfolio is assumed to be zero. However, it is not a shortcoming of the comparison of a passively rebalanced 60% exposure to the SAA+TAA that also averages a 60% exposure. In fact it could be argued that if total return data were used in that comparison then the SAA+TAA would outperform by an even wider margin as the approach ensures higher exposures are maintained when values (and so by extension dividends) are more attractive.

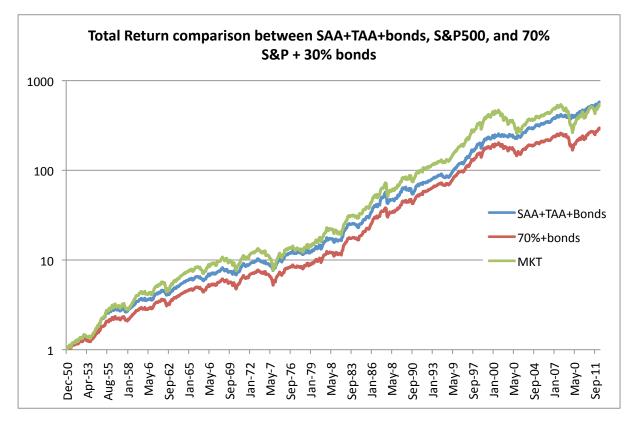
Unfortunately I do not have access to an up to date long term data series on the total return of the S&P500, however I do have long term total return data on the S&P500, US government bonds and US T bills for a little over sixty years from 1950 onwards. What follows is the application of the SAA+TAA approach in a total return world.

### A Total Return Comparison

The SAA approach has been slightly modified in the following total return comparison, rather than the invested percentage ranging from 25% to 75% it now varies between 40% and 80%, otherwise exactly the same rules based approach has been applied. There has also been a 20% reduction in the magnitude of the TAA overlay but, as with the SAA, the same rules have been applied. Given the slightly larger SAA range the average invested position has increased from 60% to 70%, therefore the comparison is made to a passively rebalanced portfolio with a constant 70% exposure to the total return of the market and a 30% exposure to the total return of ten year US government bonds.

What is immediately obvious is that the rules based SAA+TAA+Bonds has comfortably outperformed its passive comparison. \$100 invested at the end of 1950 and regularly rebalanced would, by April 2012, have grown to \$28,927. Over that same period \$100 simply left in the market would have grown to \$52,698 whilst the rules based SAA+TAA+Bonds grew to \$56,448.

The outperformance of the rules based approach over the same average allocations to the same assets does imply that there is indeed some significant value to the approach. That over the same period the approach narrowly beat the market is a nice outcome but probably more a function of where my sample ended rather than an indication that such outperformance should continue. Despite this, the single most gratifying result of this research has been the performance of the SAA+TAA approach during down periods for the market.



One of the main reasons that most investors, despite their best intentions, never achieve anything like market returns is that at the most miserable depths of a bear market, when all the news is gloom and doom, they lose their nerve and capitulate. The opposite is true at major peaks.

One of the primary aims of constructing the SAA+TAA+Bonds approach was to ensure that, being rules based, it would protect investors from themselves. It would prevent them becoming euphoric and losing all sense of proportion at peaks and the reverse at bear market troughs. Adhering to the SAA+TAA+Bonds approach would do this; however, it is really pleasing to see that the troughs in the SAA+TAA+Bonds portfolio are nothing like as deep as the fully invested market portfolio or even the passively rebalanced portfolio.

The most damaging bear markets, which would have really rattled all investors' nerves in the period studied above, were in the 1960's, 1970's, 1987, the early 2000's and most recently the GFC.

	SAA+TAA+Bonds	70%S&P+30%	S&P
		Bonds	
1960's	-17%	-23%	-29%
1970's	-26%	-32%	-43%
1987	-25%	-21%	-30%
2000's	-6%	-23%	-42%
GFC	-7%	-35%	-51%
Average bear market	-16%	-27%	-39%
drawdown			

#### Drawdowns

### Conclusion

Minimising the drawdowns, and the volatility of returns, should be the aim of all investors who are interested in capital preservation and absolute returns, the SAA+TAA+Bonds goes a long way to achieving this goal. It is a rules based approach that is not dependent upon high speed trading or proprietary pricing information. It utilises the fact that the best returns come from owning more of what is historically cheap and less of what is historically expensive and managing SAA to reflect changes in valuation. It further overlays a TAA that is again rules based and ensures that behavioural biases are avoided.

I have not outlined in more detail exactly how the results shown in this month's Strategy Thoughts were achieved primarily because a substantial amount of work has gone in to achieving the results shown and yet there is still substantially more to do.

As Warren Buffett famously put it;

"Investing is simple, but not easy"

The beliefs behind the SAA+TAA+Bonds approach are simple, and have been expounded upon many times in Strategy Thoughts, building the approach, however, has been far from easy.

It is not a magic bullet that guarantees easy profits, however, it will allow an investor to avoid the emotional highs and lows that markets always deliver and it will deliver more than satisfactory long term returns with lower volatility and shallower drawdowns.

Our next step will be to conduct similar research on other markets and asset classes with the aim of ultimately building a broader portfolio offering that can be made available to those investors looking for something more than the current relative performance obsessed and bias riddled offerings that dominate the investment landscape.

Kevin Armstrong

5<sup>h</sup> September 2014

Disclaimer

The information presented in Kevin Armstrong's Strategy Thoughts is provided for informational purposes only and is not to be considered as an offer or a solicitation to buy or sell particular securities. Information should not be interpreted as investment or personal investment advice or as an endorsement of individual securities. Always consult a financial adviser before making any investment decisions. The research herein does not have regard to specific investment objectives, financial situation and the particular needs of any specific individual who may read Kevin Armstrong's Strategy Thoughts. The information is believed to be-but not guaranteed-to be accurate. Past performance is never a guarantee of future performance. Kevin Armstrong's Strategy Thoughts nor its author accepts no responsibility for any losses or damages resulting from decisions made from or because of information within this publication. Investing and trading securities is always risky so you should do your own research before buying or selling securities.

#### After thought on the Ryder Cup

This time last year, in a special edition of Strategy Thoughts, I encouraged readers to back the European ladies in the then forthcoming Solheim Cup match. Europe were the absolute underdogs looking to win the cup on US soil for the first time ever and few if any 'experts' gave them any chance at all.

'Bulls, Birdies, Bogeys and Bears', published last year goes in to detail as to why there should be a relationship between golf and investment markets and how it manifests itself. The biennial matches between Europe and the US have been one of the most obvious and accurate examples of the relationship. Twelve months ago markets were giving a highly contrarian outlook for the Solheim

Cup, they forecast a most unexpected European victory. I know that a number of readers took advantage of the unusual forecast that I delivered and backed the European underdogs, now, with the upcoming Ryder Cup, another similar opportunity to back the underdogs has presented itself.

In an almost perfect reverse echo of the Solheim Cup build up twelve months ago the recently finalised US Ryder Cup team finds themselves the massive underdogs as they attempt to win the Cup on foreign soil for the first time in over twenty years. Most experts, and importantly the bookmakers, have Europe the strong favourite with British bookmakers offering 15/8 on the Americans and the New Zealand TAB paying \$2.65 for a US victory.

Given the 'message from the market' shown below the last few months outperformance by the US versus Europe strongly hints at an upset US victory.



I will be following the market and 'investing' in a US victory, however, given my British origins and very long standing support of GB and Ireland and then Europe in the Ryder Cup my heart will be rooting for the home team.