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LIPMAN BURGON & PARTNERS

Wealth Strategy
Adapting portfolio construction to a different investment landscape

Adapting Portfolio Construction

Over the last decade the global investment landscape has shifted dramatically. Central banks are having a much larger influence on markets, the risk and return characteristics of various asset classes has changed considerably, and the investment opportunity set has broadened. This paper discusses the impact of these changes on traditional Strategic Asset Allocation (SAA), the need to evolve, and the adaptation of our investment process by introducing the Total Portfolio Approach.

Challenges with traditional SAA

Traditional Strategic Asset Allocation (SAA) grew as the portfolio management tool of choice in the United States in the 1980's. At that time, investors had very few asset classes to choose from. SAA seeks to mitigate overall portfolio volatility by combining asset classes with low or negative correlations – that is, asset classes that don't tend to move in the same direction at the same time. The traditional 60/40 balanced portfolio of equities and bonds has not evolved significantly other than the introduction of 'alternatives'. The SAA approach involves having target weights for each asset class determined by the asset class expected risk, return, and cross correlations. Individual investments then populate each asset class.

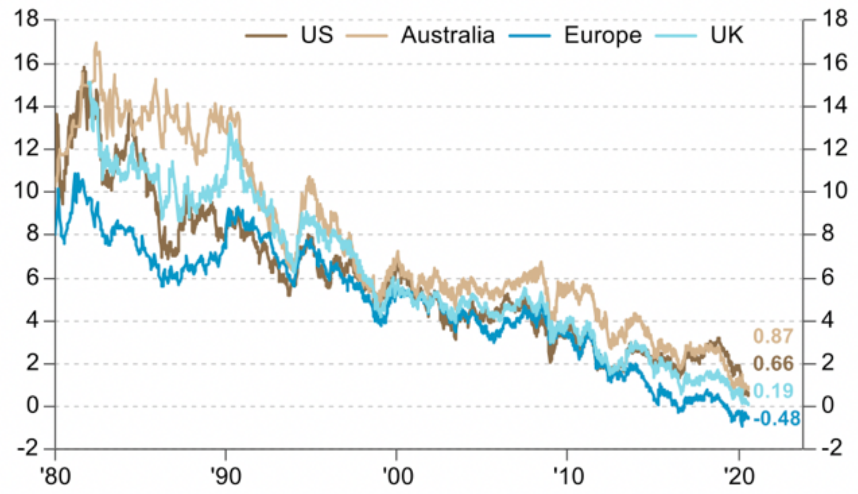
Dramatic changes in the investment landscape leading to a need to adapt.

A number of challenges have emerged with traditional SAA:

- Bonds are no longer investable
- Diminished benefits of traditional SAA portfolio
- Today's larger investment opportunity set
- Anchoring bias

We discuss these in detail below.

Chart 1 | Long term interest rate decline | 10 year government bond yields (%)



Source: FactSet/Lipman Burgon & Partners

Bonds are no longer investable

Government bond risk/return characteristics have changed enormously since SAA grew as the preferred portfolio construction methodology during the 1980's and 1990's. Nominal government bond yields have collapsed since that time from over 10% to 0% (Chart 1). Real yields (after deducting inflation) have also fallen significantly, from around 5% in the 1980's and 1990's to negative 1% in the United States today (Chart 2). The real yield of negative 1% on US 10-year government bonds implies that at maturity, the owner of that bond will have 10% less purchasing power with their invested capital than they had when acquiring the bond. **We don't see a place in portfolios for assets that are expected to lose real money over the long term.**

Chart 2 | Real interest rates negative | US 10yr TIPS real yield (%)

Source: FactSet/Lipman Burgon & Partners

Historically, government bonds have been viewed by many investors as safe haven assets that add diversification to portfolios. In the current environment, this assumption needs to be challenged. We assess safe haven assets against two criteria: protection and cost. How much protection or diversification does the safe haven asset provide to a portfolio, and what is the cost (or opportunity cost) of holding it? In the current very low (almost zero) nominal interest rate environment and negative real rate environment we believe government bonds no longer meet the criteria of a safe haven asset (Table 1).

Table 1 | Government Bonds as a Safe Haven Asset

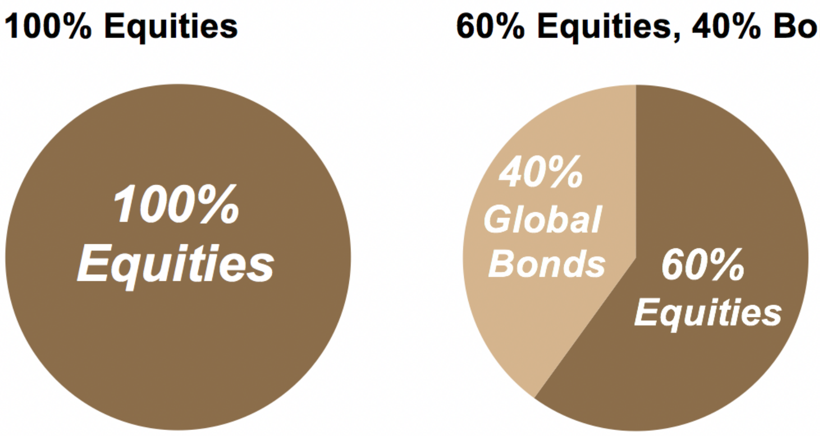
	Positive Real Rates	Negative Real Rates
Protection	Good	Questionable
Cost	Low	High

Source: Lipman Burgon & Partners

Diminished benefits of traditional SAA portfolio

The traditional 60/40 portfolio was hugely successful when interest rates were higher. As shown below, a balanced 60/40 portfolio outperformed a 100% equity portfolio between 1995 and 2015. Lower rates since 2015 have seen the 60/40 portfolio generate 2% per annum less return than the 20 years prior, predominantly due to lower bond return. Going forward, we estimate that the traditional 60/40 portfolio is likely to only generate 5.4% per annum return, with the drag coming from record low bond returns.

Global bonds – from portfolio benefit to portfolio drag.



	100% Equities		60% Equities, 40% Bonds
1995 - 2015		**1995 - 2015**	
Return:	8.6%	Return:	8.8%
Volatility:	11.1%	Volatility:	6.7%
2015 - Present		**2015 - Present**	
Return:	8.0%	Return:	6.8%
Volatility:	12.4%	Volatility:	7.7%
Looking Forward		**Looking Forward**	
Return:	8.0%	Return:	5.4%
Volatility:	13%	Volatility:	9.0% (?)

Source: Lipman Burgon & Partners

Today's larger investment opportunity set

The investment opportunity set accessible to individuals, families and small institutions has grown significantly over the last five to 10 years. Investments such as private equity, private debt, unlisted property funds, infrastructure, hedge funds and gold were much less accessible when the SAA framework was developed. From a SAA perspective, these investments are typically categorised as "alternatives" and have conventionally represented a small portion of portfolios. Combining such a broad range of investments that have very different risk and return characteristics (Table 2) makes little sense. The broad "alternative" categorisation means that the SAA framework can be limited in its ability to recognise the potential diversification, risk reduction and/or return benefits of some of these individual investment opportunities.

Table 2 | Broad range of "Alternative" investments

Investment	5 yr p.a	s.d	Mar-20
Private Equity	8.64%	6.07%	-10.72%
Private Debt	11.62%	1.83%	2.18%
Unlisted Property Funds	6.77%	5.09%	-5.43%
Infrastructure	8.34%	10.90%	-13.62%
Hedge Funds	3.47%	4.45%	-7.44%
Gold	11.30%	13.68%	3.70%

Source: Fund manager return data

NB: Numbers represent actual results of a single fund in each sub asset class

Anchoring bias

Anchoring bias is well documented as a disincentive for portfolio managers to move away from benchmark.

Anchoring is the human tendency to use a reference point to help make a decision when the inputs to making that decision carry some uncertainty. Several ground-breaking studies were conducted in the fields of behavioural economics by Kahneman and Tversky in the 1970s, finding that when people are uncertain about the correct answer, we take a guess using the most recent number we've heard as a starting point. Various studies have shown that even when people are told that the data they have previously heard is wrong or irrelevant, it is still incredibly difficult to avoid factoring it into decisions.

This anchoring bias is also well documented as a disincentive for portfolio managers to fully express their investment views in a portfolio by moving away from the "benchmark". We notice this in equity manager performance, where over the long term, the less benchmark-aware managers often have stronger performance. Within SAA, allocations tend to be anchored to history. In the context of a traditional 60/40 balanced portfolio, but with government bonds having negative real yields, should the bond holding be reduced to 35% (5% underweight) or to 0% because they simply don't make sense as an investment?

Lessons from leading global institutions – Total Portfolio Approach

Total Portfolio Approach focusses on portfolio objectives rather than asset class benchmarks.

Some leading institutional managers around the world have started evolving their investment allocation frameworks to address some of the challenges of SAA. This innovation has been dubbed the "Total Portfolio Approach" (TPA). TPA is a different method of constructing portfolios whereby each individual investment decision is based on its own risk/return merits and influence on achieving the total portfolio objectives, rather than on asset class benchmarks. Portfolio risk and diversification are managed by ensuring there is an appropriate mix of risk factors held across the investments in the portfolio. This is in comparison to traditional SAA which begins with relatively fixed asset class allocations and then populates those asset class allocations with individual investments. TPA is a more wholistic and flexible approach.

TPA is a non-siloed way of constructing portfolios, including:

- Starting with clearly specified portfolio goals
- Employing one integrated process – a competition for capital among all investment opportunities based on individual risk/return characteristics and contribution to overall portfolio outcomes
- Portfolio diversification through the risk factors of each investment rather than through asset classes

Table 3 | Total Portfolio Approach vs SAA

	SAA	TPA
Opportunities for investment defined by:	Asset classes	Assets
Diversification principally via:	Asset classes	Risk Factors
Performance assessed vs.	Benchmarks	Fund Goals
Success measured by:	Alpha	Total fund return

Source: Thinking Ahead Institute

The Future Fund has been a leading proponent of the Total Portfolio Approach.

The Future Fund has been a leading proponent of the TPA, does not operate with a fixed Strategic Asset Allocation and avoids silos across asset classes. Other institutions that moved towards this model include the Canada Pension Plan Investment Board, GIC (Singaporean sovereign wealth fund), New Zealand Superannuation Fund, TCorp (NSW government investment arm), Amundi (one of Europe's largest asset managers) and global asset consultant Willis Towers Watson.

Institutional managers see portfolio performance advantage of 0.5%-1% for TPA.

A study of 18 institutions that have introduced TPA to their process cited the following benefits:

- Better performance - over half think TPA should produce a performance advantage of at least 50-100 bps p.a. compared to SAA
- Best investment opportunities can be introduced into the portfolio and aren't limited by categorisation
- A clear total return focus removes anchoring bias
- TPA is a means of challenging assumptions, minimising unintended exposures, accommodating diverse investment programs and building line-of-sight into the true substance of a portfolio
- A factor approach to investing is better suited to TPA than the traditional asset-class-based approach

Lipman Burgon & Partners' implementation of TPA

The TPA helps to address some shortcomings of the traditional SAA framework. As such, we believe introducing a TPA overlay to our existing SAA process makes sense. Many institutions that have implemented TPA are similarly using a blended approach with SAA.

The Lipman Burgon & Partners' (LBP) modified process will use the TPA as the initial building block for portfolios and then pass the resulting portfolio through our existing SAA framework. Using TPA in the initial portfolio construction phase helps remove the anchoring bias issues inherent in SAA. Passing the initial TPA driven portfolio through the existing SAA framework also helps to ensure ongoing prudent risk management in portfolios.

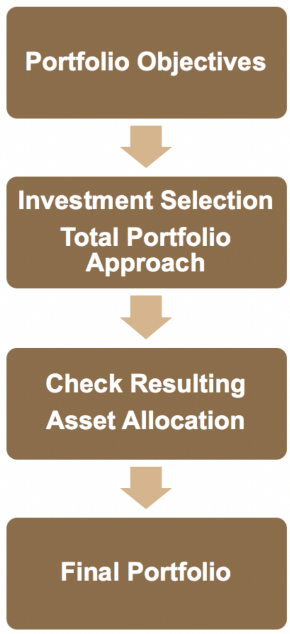
LBP's TPA return and risk framework will include an assessment of each individual investment and its impact on the total portfolio on the following parameters:

- Long term expected return
- Short term return confidence
- Risk (adjusted standard deviation)
- Beta
- Expected performance during market stress
- Risk factor exposure (equity, credit, commodities, currency, interest rate, liquidity, inflation, active management)

Impact on existing portfolios

LBP already has a relatively flexible and pragmatic approach to implementing SAA. As a result, the implementation of TPA into our portfolio construction process will not lead to significant portfolio changes. One of the key outcomes of institutions adopting TPA is the reduction or removal of government bond investments, which is something that we have already been doing. Introducing other safe haven or defensive assets that exhibit negative correlation to equities, like gold, is aided by the introduction of TPA.

Chart 3 | LBP modified portfolio construction process



Source: Lipman Burgon & Partners

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