Why Are Funds So Complicated?

What Does A Fund Need To Do?

- Be able to pay pensions as they fall due
- Stay affordable

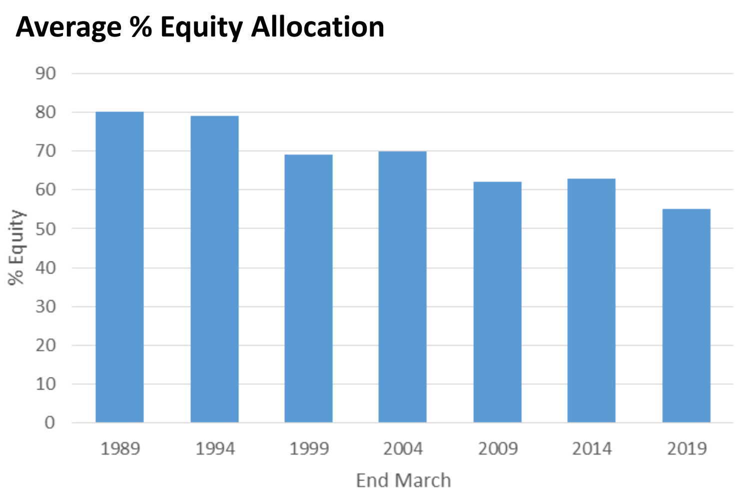
These factors need to be balanced:

- The fund needs to maximise the return earned but needs to ensure that the risk of asset values falling do not prevent pensions being paid or incur large employer contribution increases.

When funds had net positive cashflow the focus was on growing the assets – equities drive asset growth

As contributions fall below outflows income becomes more important.

Equity Allocation Has Reduced

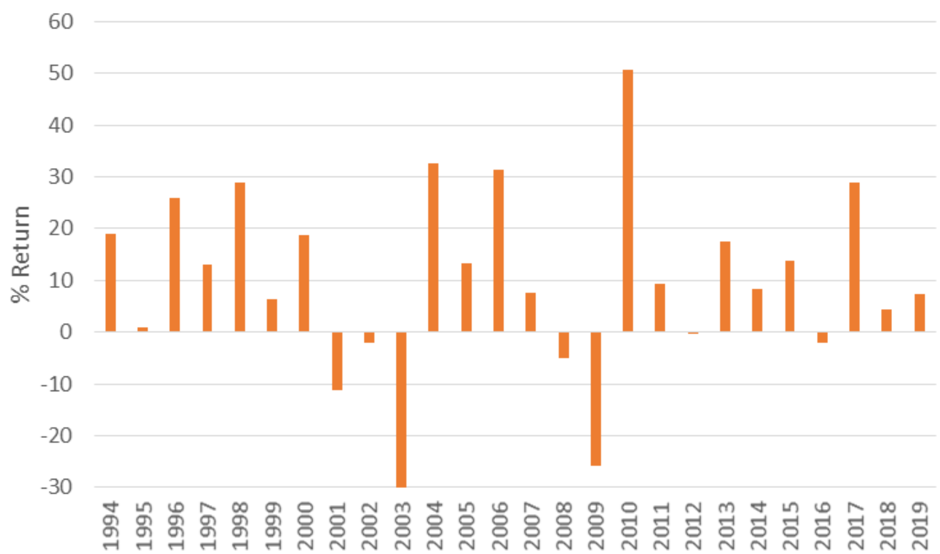


- Over the last thirty years the average equity allocation has fallen from 80% to 55% of assets.
- There has been a steady cashflow out of equities for most of this period but the sharpest decline in equity allocation has come about in the last two years.
- Will the trend continue?

  Corporate schemes now hold only around 20% - but the cost has been huge.

Equity Volatility

Annual Equity Return to End March



- There have been periods of negative equity results.
- To date these have always been followed by a strong recovery.
- Some funds are prepared to live with equity volatility whilst others have:
  - chosen to hedge some of the currency risk
  - to invest in alternative equity strategies (low volatility indices / smart beta)
  - to put in places insurance against marked falls in equity markets

Asset Return Expectations

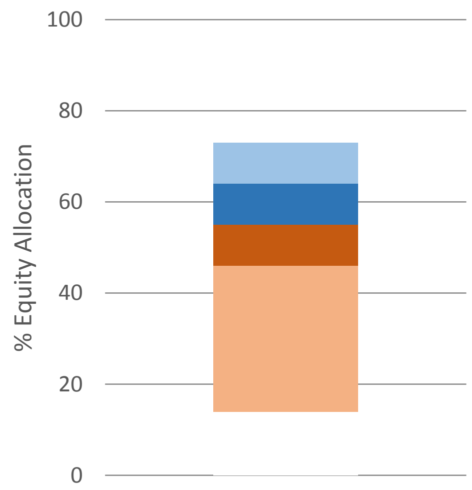
Long Term Asset Return Expectations

	% p.a. over cash
Equity	4.75
Property	4.5
Infrastructure	3.5
Credit	1.25
Govt Bonds	-0.75
Cash	2.0

- Even from current levels equities are expected to be the best performing asset over the next ten years.

Equity Reduction

Range of Fund Equity Allocation as at March 2019



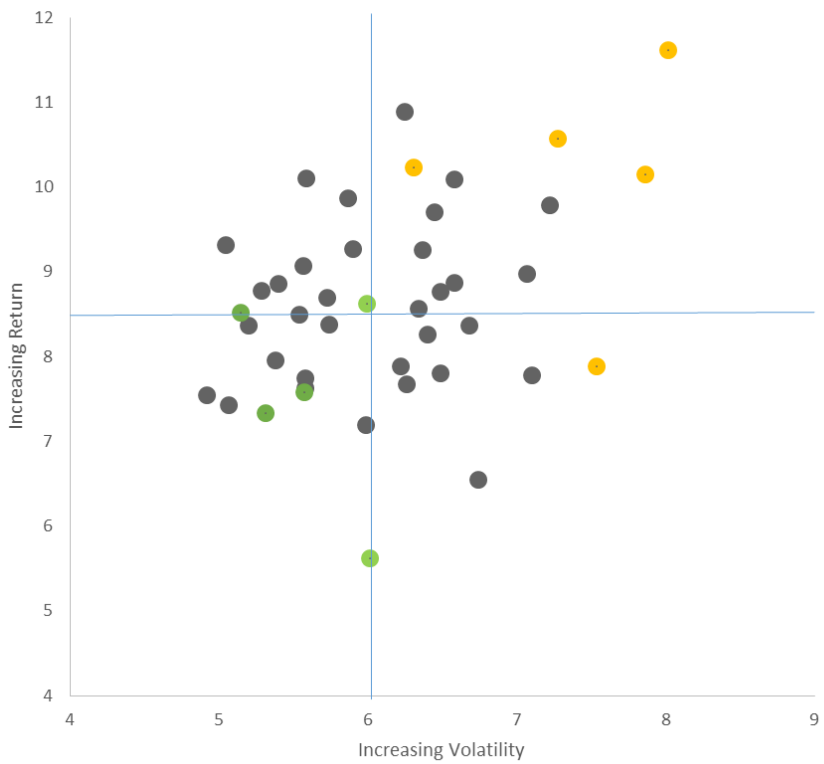
- While some funds have reduced their allocation markedly others have kept a much higher allocation.
- Currently no correlation between funding level and equity allocation.
- Intuitively surprising – a fully funded scheme should be able to reduce / remove risk?

  Not so.

  As the contribution rate is dependant on future cash expected returns, reducing the equity component will reduce the expected returns and thereby raise contribution levels.

Impact on Performance

Risk & Return by Equity Allocation – Five Years to March 2019



- The chart shows the funds with the highest equity allocation over the last five years in orange and the lowest allocation in green.
- The funds with the highest equity allocation also had the highest level of volatility.
- For some that volatility was rewarded, for others it was not.
- If funds pursue an active manager strategy then evidently the choice of manager remains key.
- Those with the lowest equity allocation tended to have much lower volatility but also lower return.

Ever More Complex

	1999	2009	2019
Number of Managers	42	116	124
Average Number of Managers	5	9	12
% Passive	9	23	27
Asset Classes	UK Equity Overseas Equity Emerging Market Equity UK Gilts UK IL Cash Property	UK Equity Overseas Equity Emerging Market Equity UK Gilts UK IL Cash Property Corporate Bonds Private Equity Hedging Absolute return	UK Equity Overseas Equity Emerging Market Equity UK Gilts UK IL Cash Property Corporate Bonds Private Equity Hedging Absolute return Alternative Credit Hedge Funds Infrastructure Commodities Diversified Groeth Multi Asset Credit Liability Matching Smart Beta Climate Aware

- The range of investments available has increased markedly.
- This has led to greater reliance on consultants and arguably less in-depth understanding by those responsible for pension funds.

Diversified Growth

Funds were shaken by the market fall in 2008.

Funds were strongly advised to ‘derisk’ – to reduce the equity component of their fund and therefore reduce volatility.

Some funds had already invested into hedge funds – some rebranded as TAA or SAA funds by the big balanced managers. Rather than be compared against market indices these were measured against an absolute target.

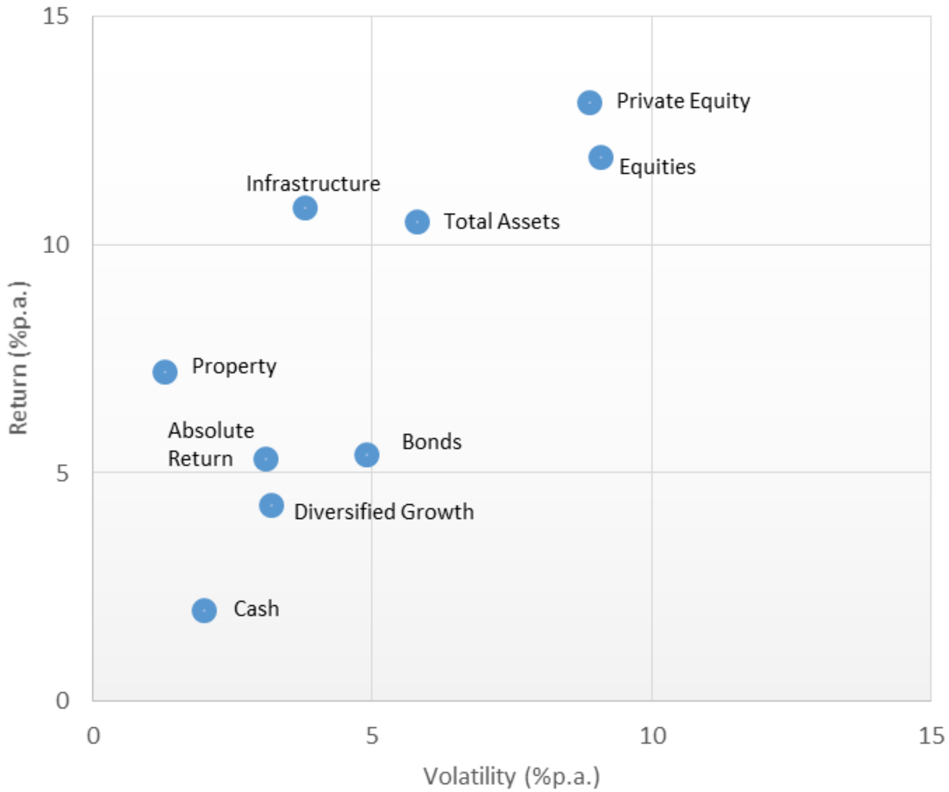
The launch of much lower fee diversified growth funds where the possibility of obtaining ‘equity like returns at lower than equity risk’ began to garner widespread consultant backing.

Over the last five years DG has produced an average return of 3% p.a. This was behind the benchmark aspirations of 4-8% p.a.

GARS failed to deliver a positive result over the five year period.

Low Risk Comes At a Cost

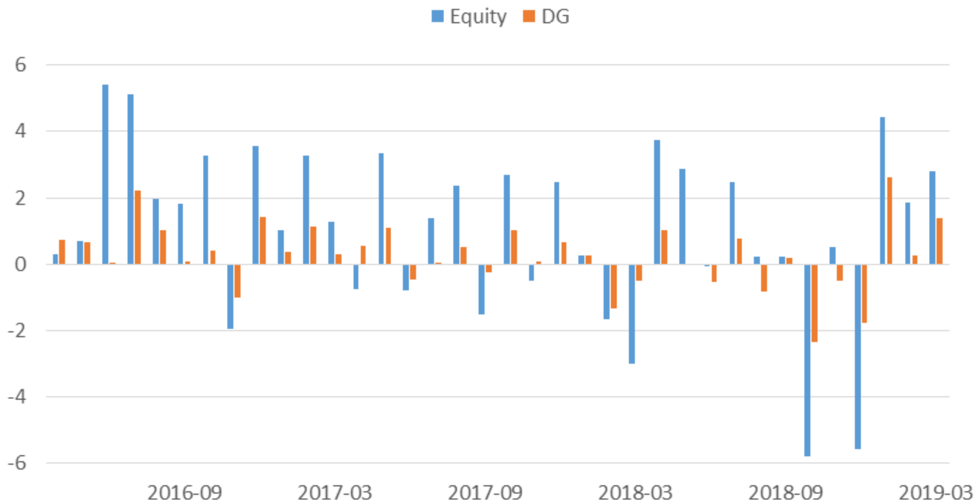
Risk & Return by Asset Class– Three Years to March 2019



- Most Diversified Growth funds target volatility of around 4%.
- They delivered volatility at this level – around half the 9% volatility of equities.
- However, the return is a third that achieved by equities over the period.

Impact on Fund Volatility

Quarterly Performance of Equities and Diversified Growth



- At an overall fund level Diversified Growth does not reduce volatility as much as may have been expected.
- Returns are delivered in a very similar pattern.
- The returns are closely correlated.

% Correlations With Equities - Three Years to March 2019

	Equity
Bonds	0.44
Property	-0.15
DG	0.83
Absolute	0.86
Infrastructure	0.31
Absolute FI	0.55

The Risk/Return Trade Off

Performance of Varying Allocations – three years to March 2019

% Allocation			% p.a.	
Equity	Bond	DG	Return	Volatility
80	20		11.5	7.6
70	20	10	10.5	7.0
60	20	20	9.5	6.4
50	20	30	8.5	5.9

- Over the last three years adding a 20% DG weighting would have reduced the overall fund volatility by 1.2% p.a.
- The cost in terms of performance would have been 2.0% p.a.
- On a fund of £2bn this represents in excess of £120m.

The cost needs to be clearly articulated, measured and understood. What benefit did the Fund gain from the reduced volatility? Was it worth the cost?

Too Much Diversification?

Impact of Strategic Allocations Five Years to March 2019

Fund Weightings							Performance Last 5 years	
Equity	Bond	Property	Alts	DG	AR Bond	Infra	Return	Volatility
100							9.9	9.1
80	20						9.1	7.7
70	20	10					9.1	6.7
60	20	10	10				9.2	6.0
50	20	10	10	10			8.5	5.4
50	15	10	10	10	5		8.4	5.4
50	15	10	5	10	5	5	8.5	5.4

- The scale of diversification has to be significant to make a tangible difference.
- At 5% they are making almost no difference to either the overall fund return or the overall fund risk.
- Challenge the value of incremental diversification – what will it achieve? Can a similar end be reached by reallocating existing assets?

Complexity Brings Challenges

- Range and complexity of asset types and products has led to a greater reliance on consultants.

It is your responsibility to understand what the Fund invested in – if you can't articulate it don't invest in it.

- Pressure continues to broaden investment.
- Increased administration and committee time burdens need added into any decisions.
- More choice makes manager selection more difficult
- Likelihood of increased manager / portfolio change
- Focus being moved from return to volatility without Funds fully understanding the cost impacts.
- Smaller portfolios likely to have limited impact and incur higher costs.

How Could Pooling Assist?

- By removing some manager selection Funds should be able to focus on understanding, defining and implementing strategy.

  May help reduce reliance on consultants.

  (But will this lead to more ‘tinkering’ with strategy?)

- More available resource and expertise to research and chose providers and create products that match the needs of the LGPS.

- Funds will have larger holdings from a smaller range of options.

  But

  Complexity potentially embedded into pool offerings

In Summary

- De-risking has got to be about more than just reducing volatility.
- Funds need to **understand** and define the key risks and ensure that they are invested accordingly.
- Be prepared to challenge advisors.
- Understand the risk / return trade off.
- There is such a thing as too much diversification.
- Pools may be able to assist in helping funds derisk but not there yet.