

It's Complicated.....

The 2022/23 PIRC Local Authority
Analytics Service Annual Review

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It's Complicated

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The Universe

PIRC provides analysis so clients can assess their investment decisions relative to peer investors.

Two thirds of the LGPS assets are included in the survey

£243bn

Value of the Funds in the Universe at
end March 2023

35

Number of years of Fund data

63

Number of funds in the Universe

Northern

all

LPP

all

London

-all bar Croydon

Wales

all

Brunel

Cornwall

Avon

Devon

Gloucestershire

Oxfordshire

Access

Suffolk

Isle of Wight

Cambridgeshire

Northamptonshire

East Sussex

Kent

Borders to Coast

Cumbria

South Yorkshire

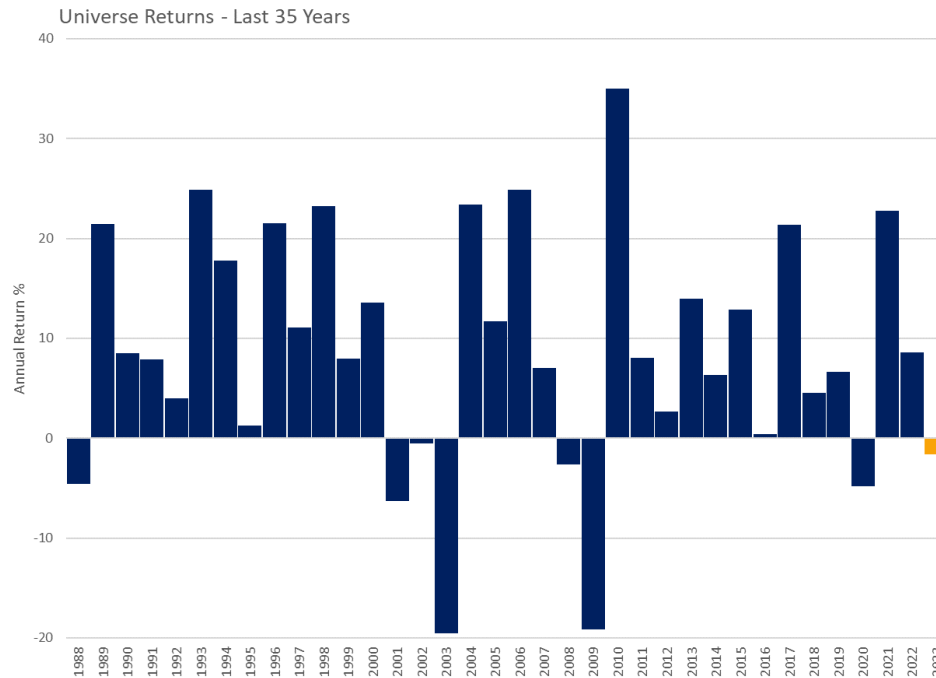
East Riding

Surrey

Scotland

Strathclyde

Investment Performance



Fund returns include:
Gain/loss on investments
Income generated

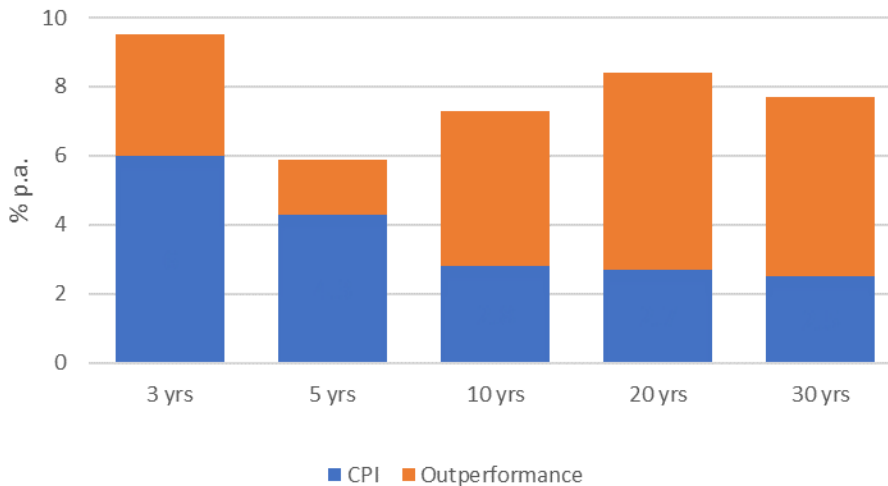
The returns will be impacted by global political and economic factors and so are not delivered consistently.

Funds accept this irregularity (volatility / risk) because longer term it should bring better results – there is a correlation between risk and return.

Strong returns keep contribution levels down and keeps the Fund affordable.

How Has The LGPS Performed?

LGPS Returns to March 2023



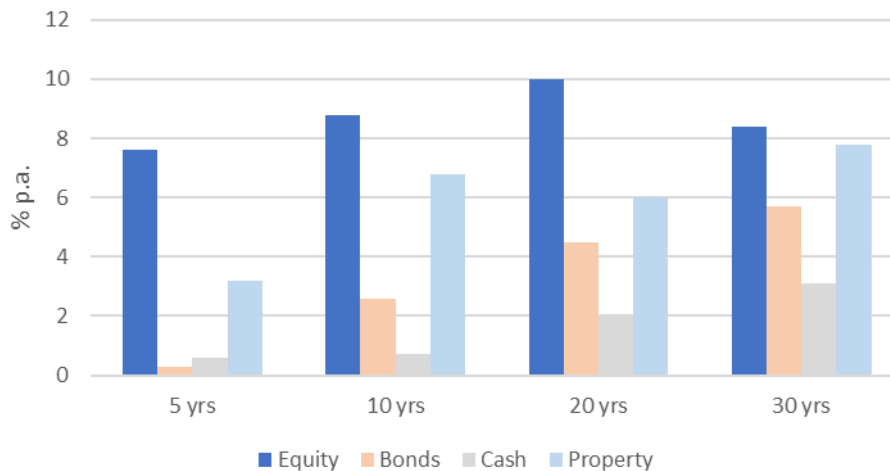
Investment performance has been extremely strong.

Over the medium term the average fund has delivered a return of around 7% p.a. A real return of 2%p.a. over 5 years and 4.5% p.a over 10 years.

Longer term results are stronger still at almost 8% p.a., 5% p.a. above inflation.

Equities Have Driven Long Term Performance

Asset Class Returns to End March 23



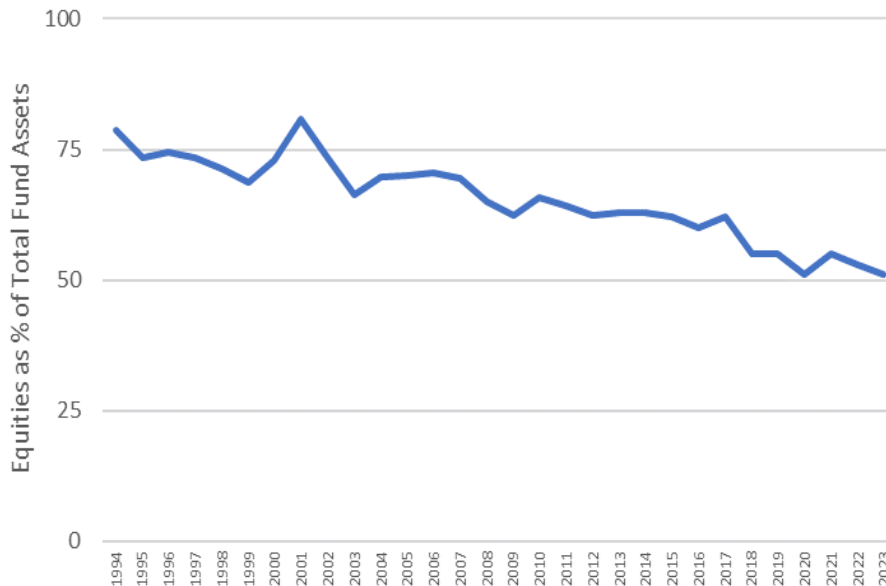
Equity performance has been strong over all time periods.

Property performance has been poor over the recent past.

Rising interest rates following government manipulated low levels, have made bonds the worst performing of the major asset classes and the only one that has failed to match inflation over the last ten years.

But Funds Have Reduced Their Commitment

Average exposure to Equities – Last 30 Years



Equities have declined over the last 30 years from three quarters to only half of the average fund's asset allocation.

This was driven by concern over equity volatility/ increased focus on mitigating risk.

The range of assets that could be invested in as an 'alternative' to equities has increased exponentially.

Alternatives Have Proliferated

	2003	2013	2023
Average No. of Mandates	5	11	17
% Passive	15	28	16
Mandate	Balanced	Balanced	
	UK Equity	UK Equity	UK Equity
	Overseas Equity	Overseas Equity	Overseas Equity
	UK Gilts	UK Gilts	UK Gilts
	UK IL	UK IL	UK IL
	Cash	Cash	Cash
	Property	Property	Property
	Private Equity	Private Equity	Private Equity
		Emerging Market Equity	Emerging Market Equity
		Corporate Bonds	Corporate Bonds
		Hedging	Hedging
		Absolute Return	Absolute Return
			Alternative Credit
			Private Debt
			Hedge Funds
			Infrastructure
			Diversified Growth
			Multi Asset Credit
			Liability Matching
			Equity Protection
			Climate Aware
			Forestry
			Residential Housing
			and many more

Alternatives to equities have been added in to reduce volatility but many are illiquid bringing a different set of issues.

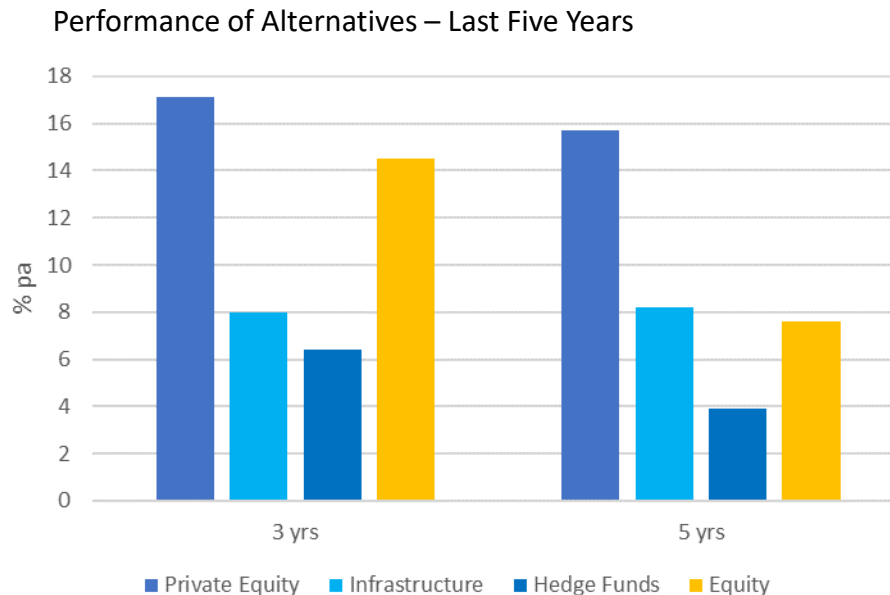
As cash flow issues become more central this is likely to require a rethink (or another set of alternatives!)

Bond alternatives have increased as funds seek to increase yields on their income generating assets.

Other risk reduction strategies have included equity protection and liability matching.

But Is Risk Reduction Still The Driver?

Recent performance of alternatives has been very strong.



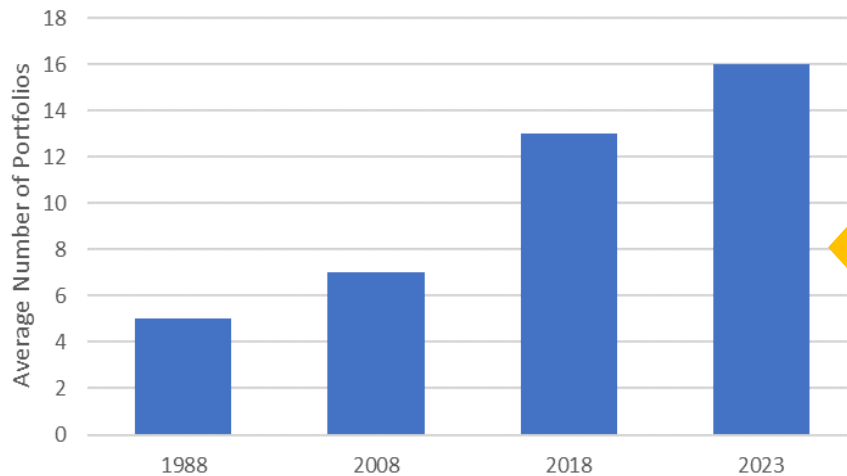
This has combined with a push from government to increase investment in infrastructure and now levelling up.

Managers are marketing ever wider ranges of product and consultants are undertaking more searches and more evaluations.

There are vested interests in expanding the investment set.

Is Such Complexity Necessary?

Growth in Complexity Over Time



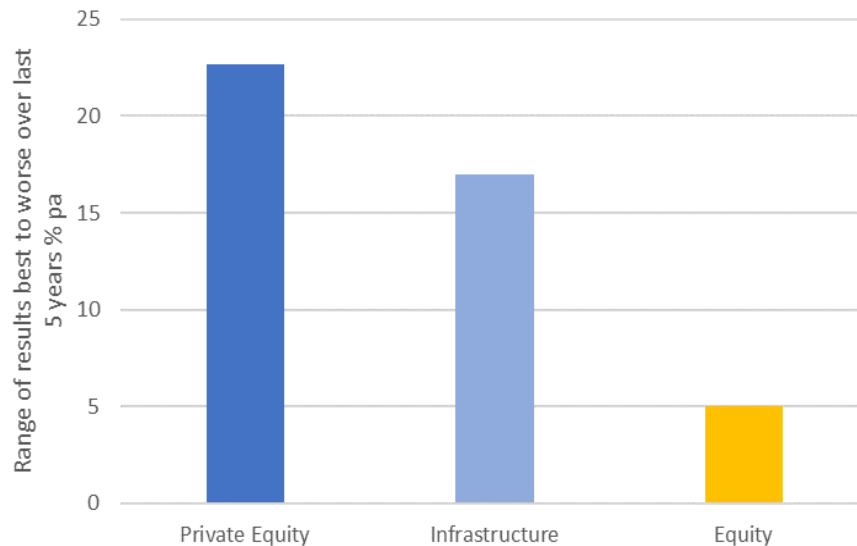
9 of these Portfolios will be 5% of the Fund value or less

Small (less than 5% of a fund's value) portfolios are statistically unlikely to have a meaningful impact on either overall return or on the overall risk profile.

Given many of the portfolios have very similar return expectations and risk profiles holding larger investments in fewer of these portfolios may provide a more optimal outcome.

Issues Around Many Alternatives Remain

Range of Results Within Alternatives – Last Five Years



Fees

The reliance on manager skill is much greater

The range of results has therefore been much wider for private equity and infrastructure than quoted equities.

Because of drawdown it is difficult to maintain target allocations.

There is a lack of availability within some pools.

The measurement and reporting is often poor and difficult to incorporate into total fund results.

While Complexity Has Risen Reporting Quality Has Fallen....

No asset class returns or bm's calculated

An illustration:

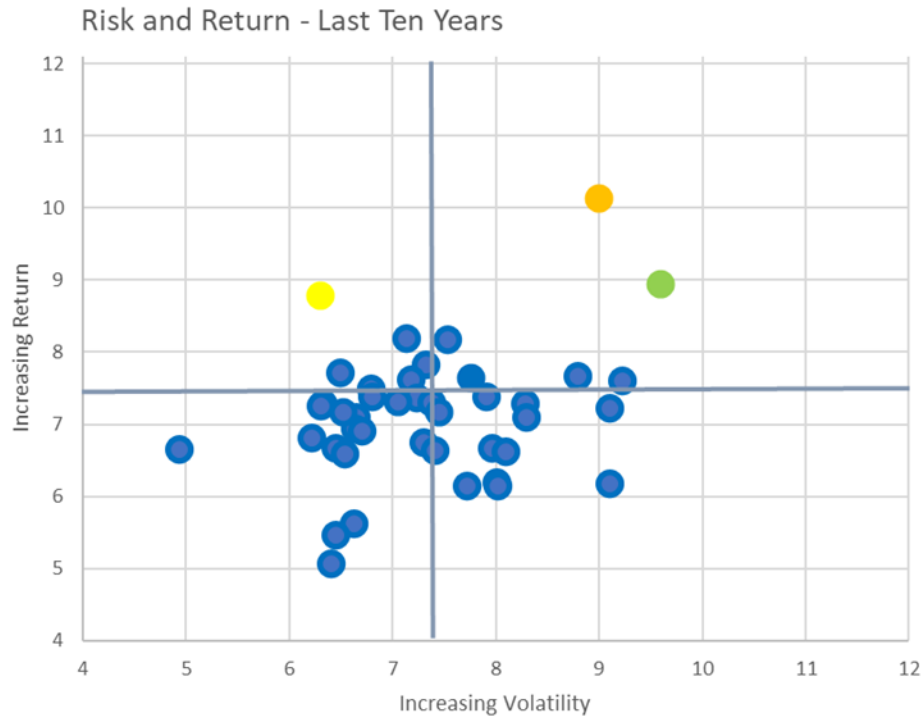
	Asset Allocation				Performance		
	£m	%	£m	%	Fund	Benchmark	Relative
Total Fund	2,377	100	2,377	100	0.8	0.4	0.4
Growth	1,366	57	1,366	57			
Equity	1,232	52	1,232	52			
Global Equity Active	361		361		0.2	-0.2	0.4
Global Equity Passive	220		220		0.2	0.2	0.0
Global Equity Paris Aligned	252		252		-0.4	0.1	-0.5
Global Equity Low Carbon	284		284		0.6	-0.2	0.9
Emerging Market Equity	115		115		1.1	1.8	-0.7
Private Equity	101		101				
Diversified Growth	134		134		-3.2	1.6	-4.7
Income	1,010	43	1,010	43			
MAC	30		30		2.7	0.5	2.2
Private Debt	0		0		1.0	1.6	-0.6
Property	454	19	454	19			
Residential Housing	308		308				
UK Property	146		146		1.0	-0.6	1.6
Absolute Return Bonds	163		163		1.4	1.2	0.2
Infrastructure	364	15	364	15			
Infrastructure	285		285		0.1	1.6	-1.5
Green Infrastructure	28		28				
Impact Infrastructure	51		51				

Returns based on manager information not fund experience.

Previous period asset values restated. and returns recast.

Stale or estimated valuations of illiquids.

What About Risk?

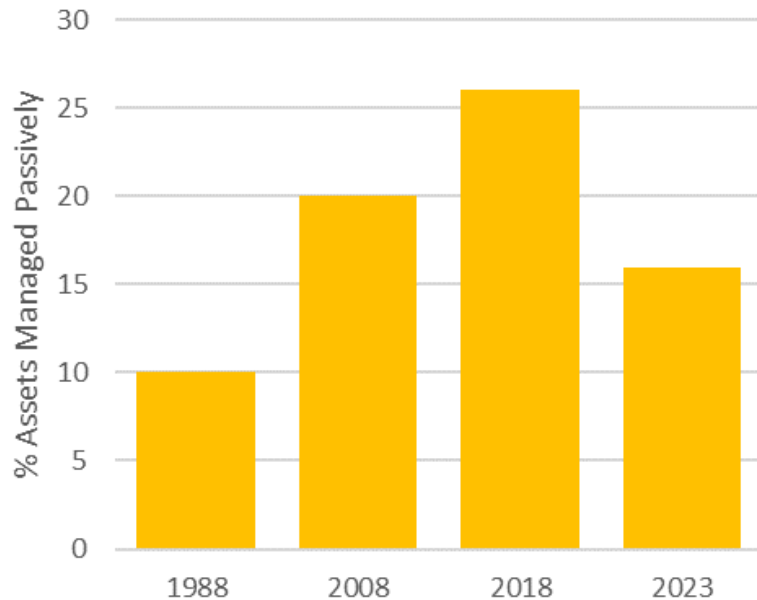


The funds that have delivered the best results over the last ten years have the least complex structures in the Universe.

While Kensington (orange) and Bromley (green) have accepted some of the highest volatility Lancashire (yellow) has delivered the third best result whilst experiencing one of the lowest levels of risk in the group.

Active Management has Increased

Decline In Passive Management

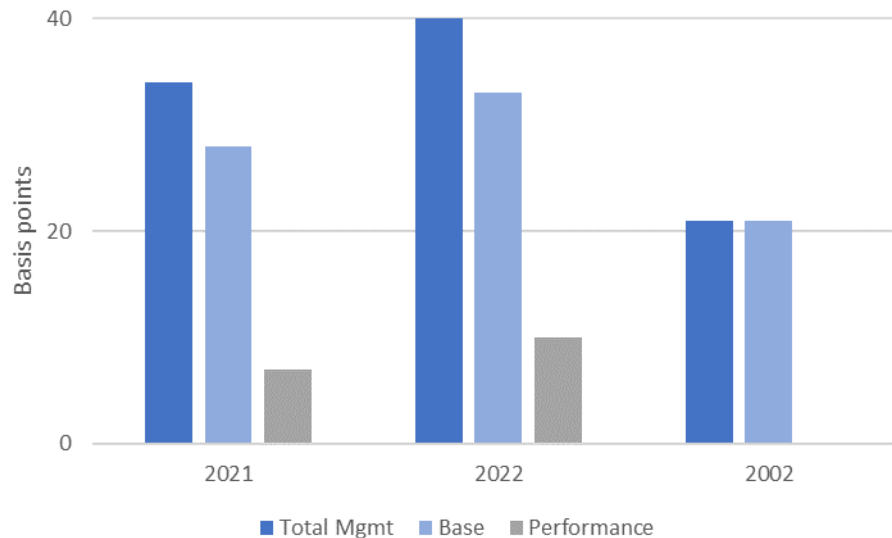


Passive management, the lowest cost of investment strategies has declined as funds invest in higher cost alternatives where there is no passive option.

Within equities, passive has declined despite the general disappointment experienced with active management.

Costs Are Rising Not Falling

Average Overall Management Fees Paid



Complexity is expensive.

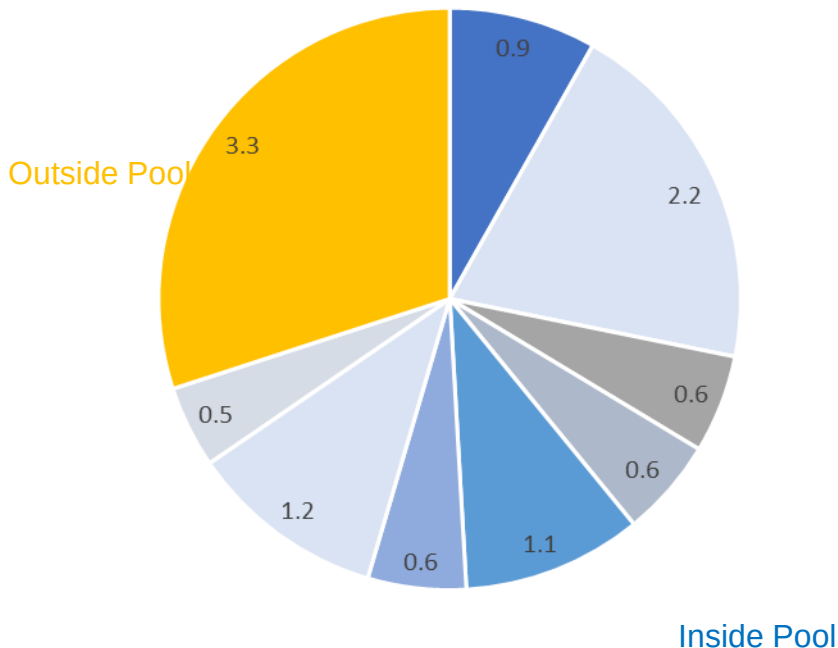
The LGPS Annual Report for 2022 shows an average management fee of 43bp, up from 34bp in the previous year.

There has also been an increase in performance related elements.

At 21bp the average fee 20 years ago was half the current level.

Pooling Has Not Attracted Sufficient Assets to Fully Leverage Scale

LCIV Active Global Equity Investment End March 23
(values in £bn)



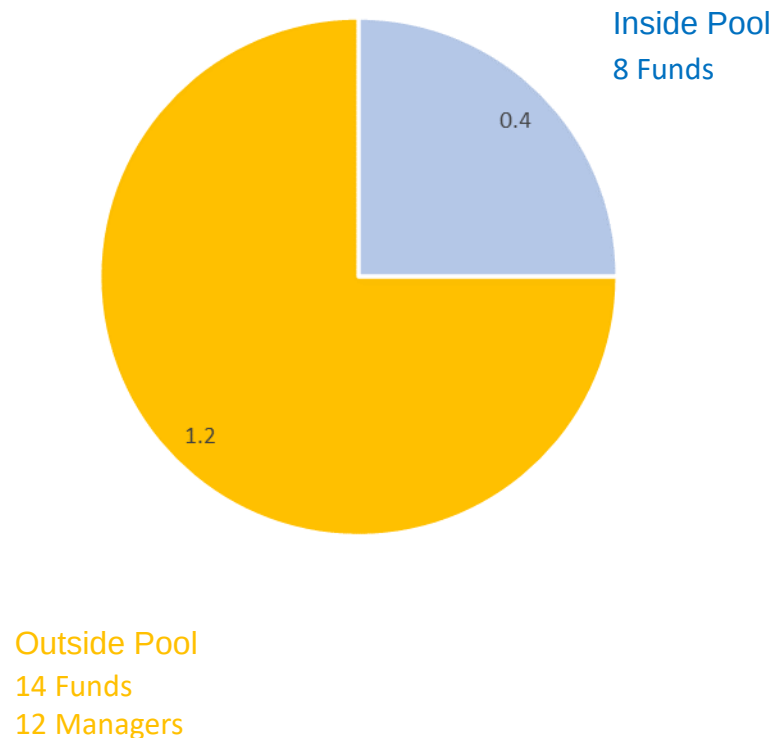
LCIV as an Example

30% of the £11bn invested in active global equities is still invested outside the Pool structure.

Of the 70% that is, it is split between eight offerings meaning many fail to achieve the anticipated scale.

Take up of Pool Alternative Offerings Has Been Mixed

LCIV Private Debt Investment End March 23
(Values in £bn)



LCIV as an Example

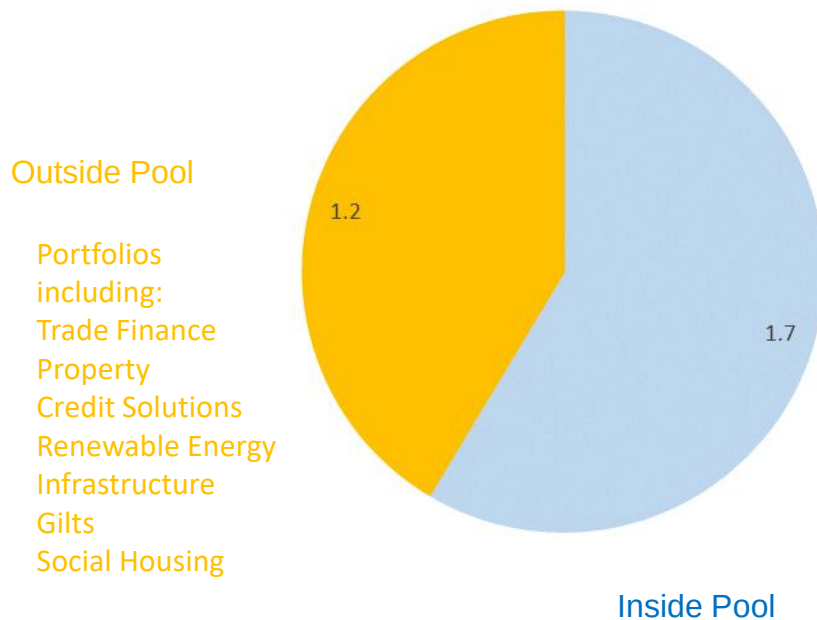
Timing has been important.

Because LCIV took time to set up the alternative offerings much of the current investment is outside the Pool.

While £0.4bn is invested with Churchill and Pemberton within the Pool structure, a similar level is invested with Churchill outwith.

Funds Continue to Invest Outside Pools

New Portfolios Funded in the year End March 23
(Values in £bn)



20 of the 50 plus new portfolios funded last year were out with the Pool structure.

These were generally (but not always) investments not offered by the Pool.

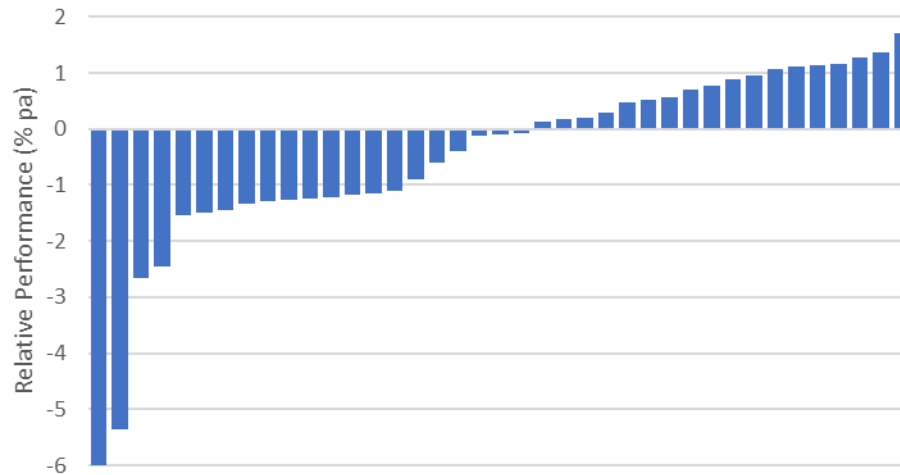
As many of these assets had absolute return benchmarks it is interesting to consider whether the funds considered an alternative asset within the Pool structure instead?



Equities

Active Management Has Disappointed

Global Equity Portfolios - Last Five Years



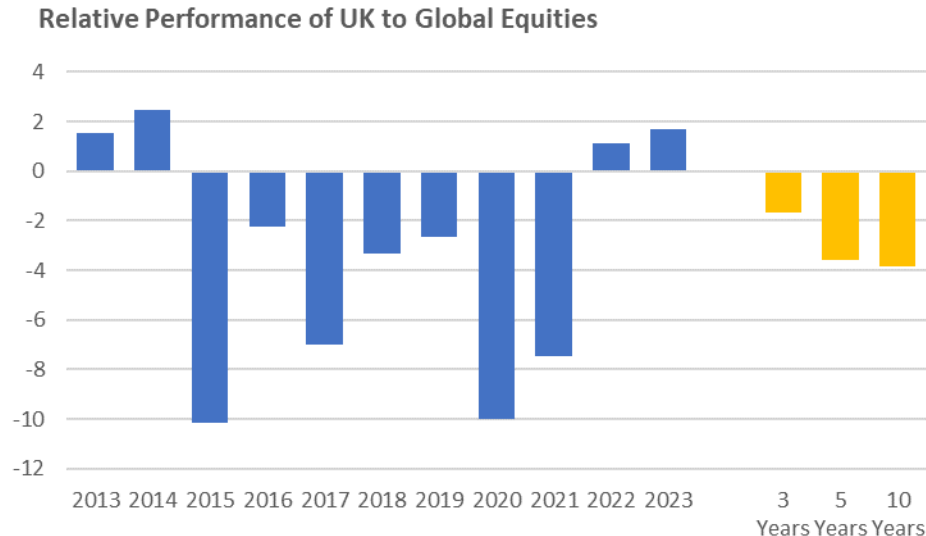
Performance disappointment combined with the move to Pooling has meant that there are only a small number of global equity portfolios that have been held for five years.

The median of the retained group has returned 0.1% pa below benchmark.

Baillie Gifford, and the preference for growth managers in general, has had an impact.

The reward for the additional risk of active management has not been well rewarded for most.

UK Equities Have Hurt Fund Performance



UK Equities significantly underperformed from 2015-2021.

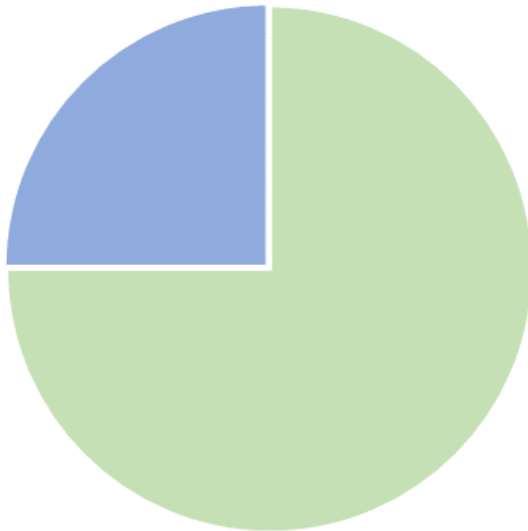
Brexit, and the UK index being overweight oil and gas and energy were key contributors.

Weak Sterling for much of the period reduced performance relative to overseas assets still further.

Holding a high allocation to the UK would have had a large negative effect on a fund's performance.

Green Equities Gain Traction

% of Funds with Green Equity Mandate in Place



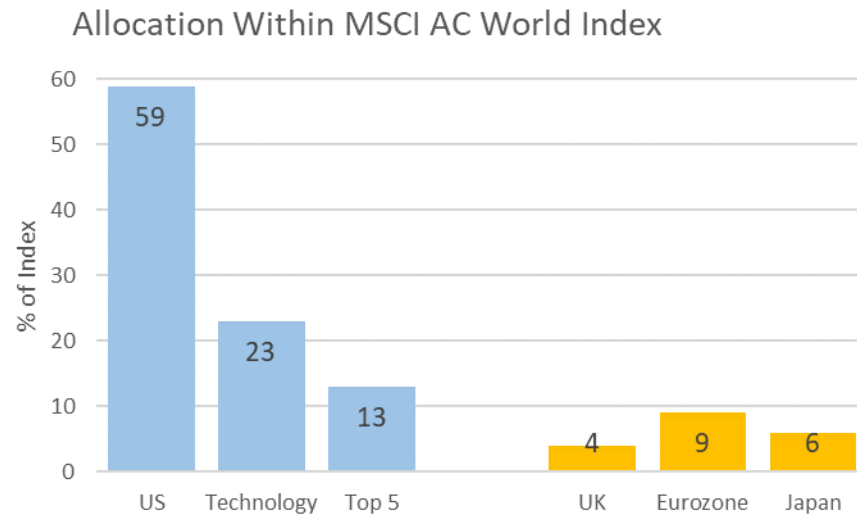
At end March three quarters of funds invested in sustainable/ low carbon/green/ renewable equity portfolios.

Much of this was brought about by moving from a broad market portfolio to a mandate excluding or reducing carbon emitters.

While this is an easy first step to the Net Zero aspirations of many funds it is interesting to consider what benefit such action will have on the wider world.

Engagement plays an increasing role for many funds and their managers.

Global Equity Stock Concentration



Some funds hold more in five stocks than the UK and Eurozone markets combined.

A fund holding half its assets in equities invested in an index tracking fund will have:

almost 30% of its total assets invested in US equities

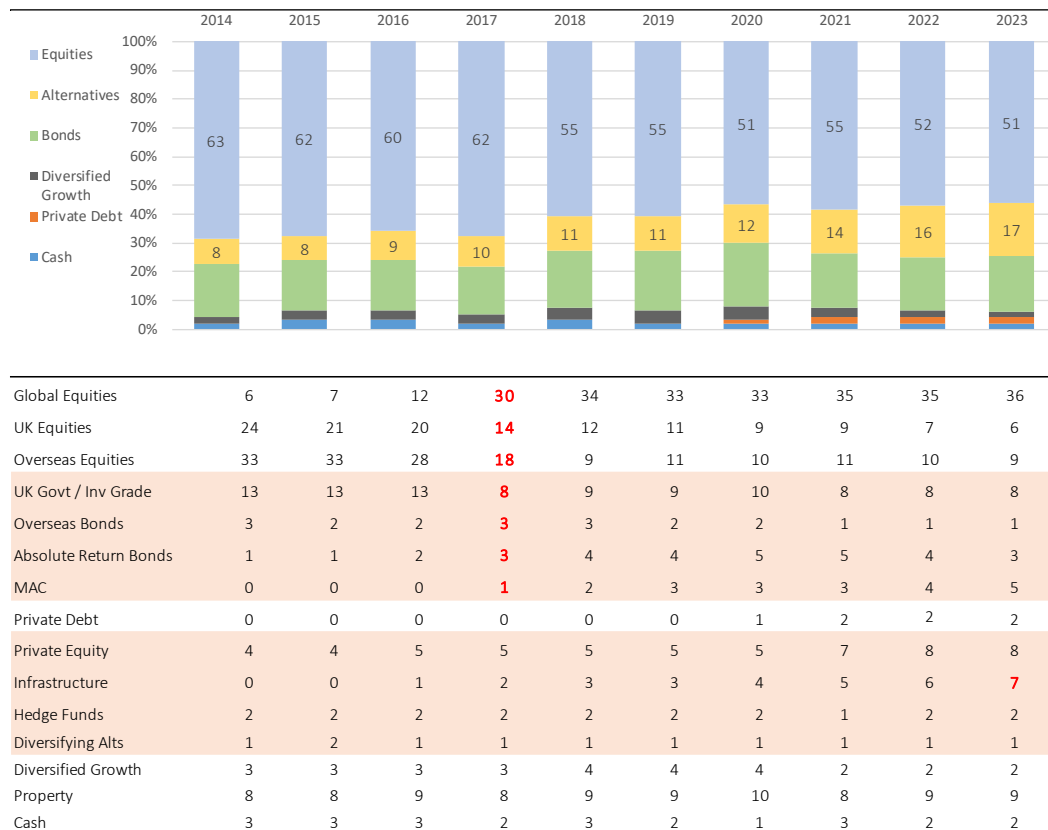
6.5% of its total assets invested in 5 companies.

Green mandates are likely to have an even higher concentration



Strategy

Fund Structures



Funds have reallocated 12% of total assets from equities into alternatives over the last decade.

This has been the key structural change.

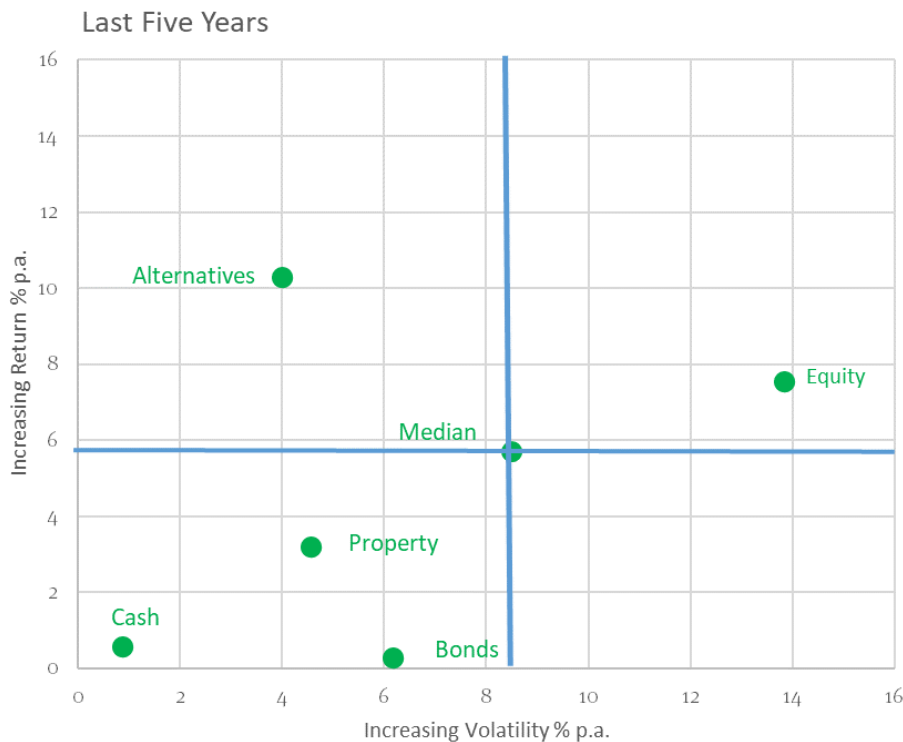
Infrastructure has emerged into a significant proportion of assets.

2016/17 (in red) was a pivotal year in terms of equity management away from regional to global mandates.

This was also the year funds really began to diversify bond exposure away from government to alternative forms of credit.

Diversification

Asset Class Performance in Risk/ Return Space



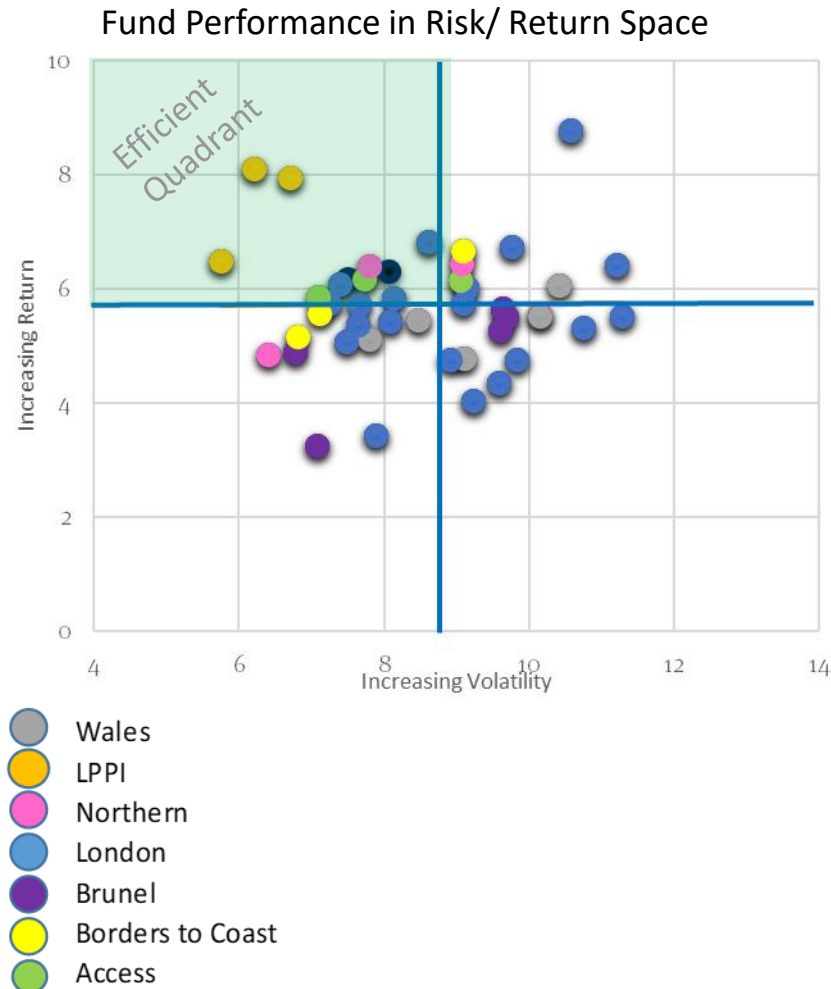
Funds hold a range of assets to provide diversification, principally to reduce the volatility of equities.

Over the last five years equities have delivered a higher return than most other assets but at substantially higher volatility.

The volatility of alternatives is understated because of the difficulty in valuing illiquid assets.

This becomes a larger issue as this asset class increases within fund allocations.

Risk And Return – Last Five Years



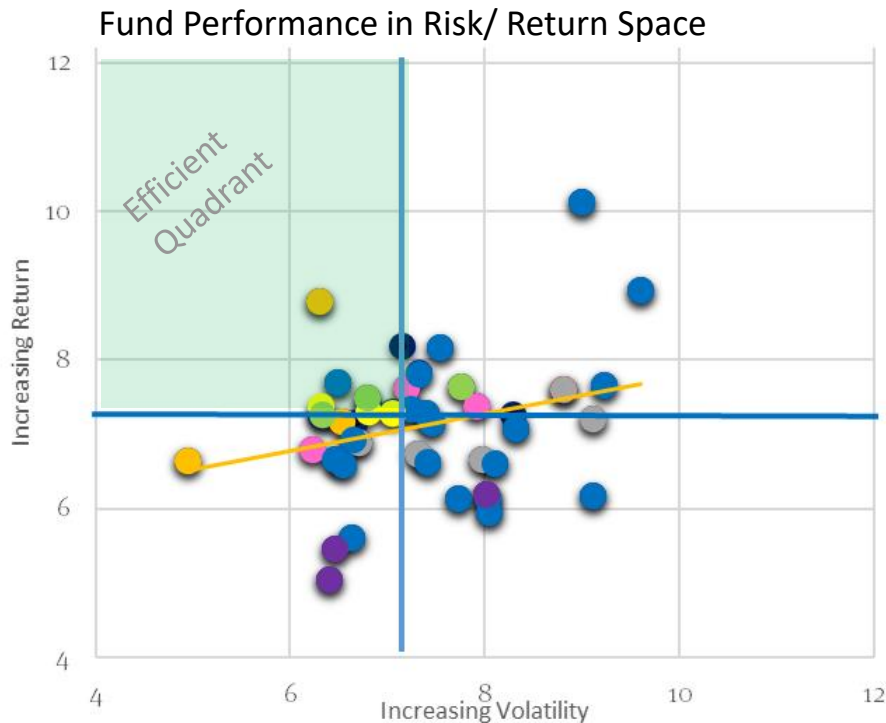
Over the last five years there has been no reward for accepting additional volatility.

Over this period Pool membership is beginning to have an impact on outcomes.

LPPI funds (in orange) have delivered above average results at some of the lowest levels of volatility in the LGPS.

While funds in other pools are seeing returns come closer together London results (blue) remain widely dispersed.

Risk and Return – Last Ten Years



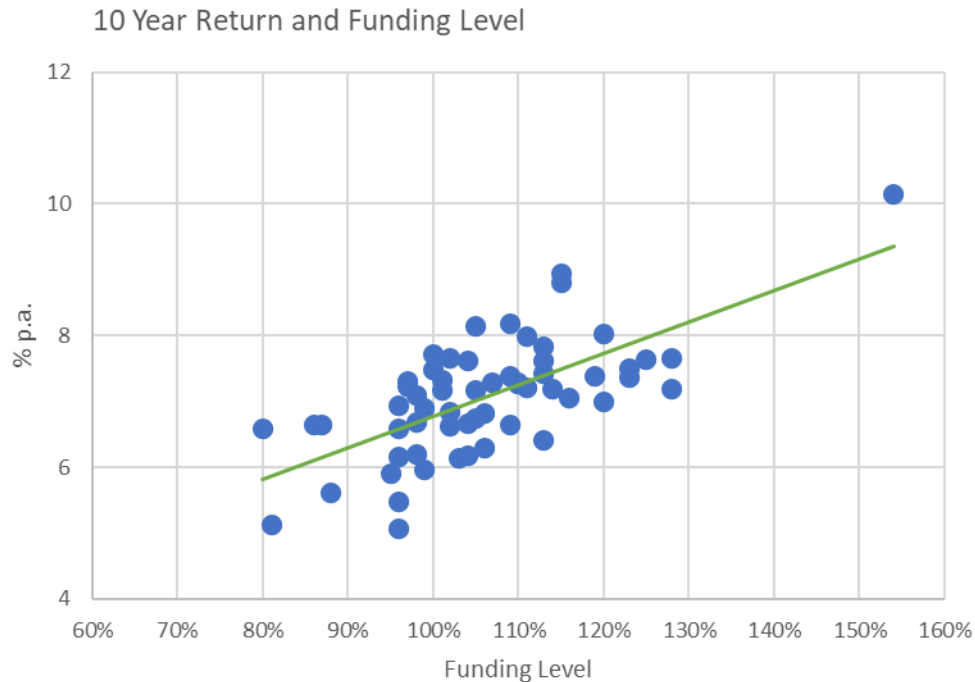
Over the last ten years the median fund has achieved a return of 7.3% p.a. with the same level of volatility.

Whilst outcomes vary across funds, in aggregate there has been some reward for accepting volatility (see orange trend line).

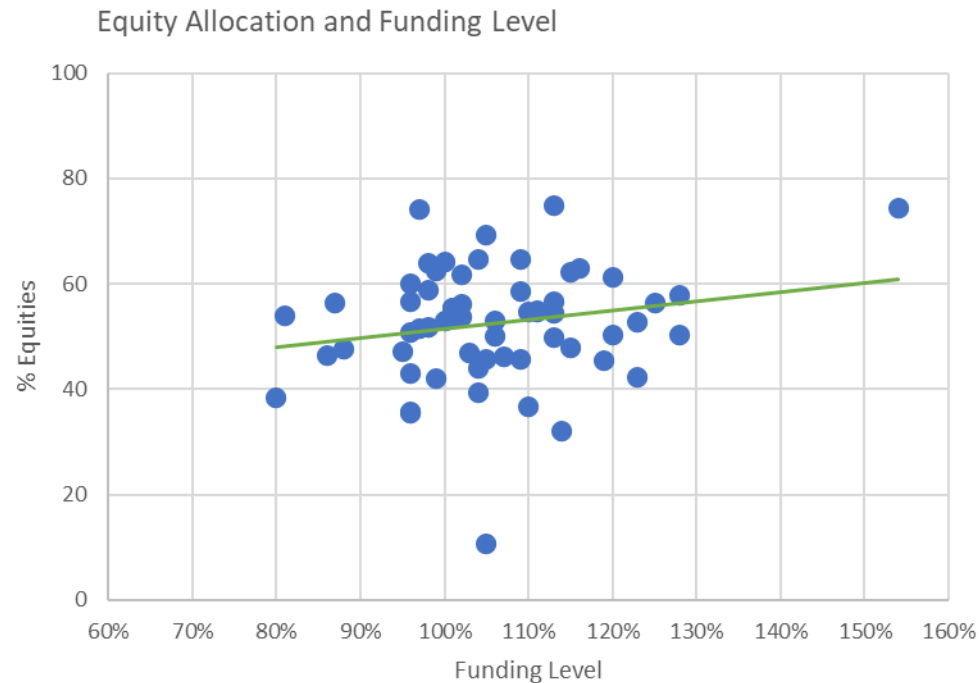
As expected, there is little commonality within Pools over this period although Brunel funds are all sub-median.

- Wales
- LPPI
- Northern
- London
- Brunel
- Borders to Coast
- Access

Funding Level and Return Are Linked



Funding Level and Structure Too



There is correlation between funding level and asset structure.

Funds with a higher funding level are more likely to have a higher exposure to equities.

The correlation was higher if we look at historical data, suggesting that there has been a small measure of 'derisking' by well-funded schemes.



Performance By Pool

Results of Funds Grouped By Pool

	No. Funds	% p.a. Return				Average Fund Size (£bn)	% Equity	Average No Portfolios	Ave. Portfolio Size (£m)
		3yrs	5 yrs	10 yrs	20 yrs				
Access*	6	10.3	6.2	7.5	8.4	4.0	51	20	202
Borders to Coast*	6	9.1	5.5	7.1	8.4	4.6	50	15	310
Brunel*	6	8.3	4.8	6.3	7.7	3.2	46	26	123
London	31	8.6	5.5	7.1	8.1	1.4	53	15	96
LPPI	3	9.8	7.9	7.9	8.5	7.1	49	11	643
Northern	3	10.5	6.1	7.4	8.6	18.9	51	21**	901
Wales	8	10.1	6.1	7.5	8.6	2.8	62	13	216
Average		9.5	5.9	7.3	8.4	3.9	51	16	

* These numbers are a sample based on the Funds within the PIRC Universe

** Excludes internally managed.

Performance Relative to Benchmark

Performance relative to other funds will depend on two factors:

- The benchmark set
- Performance relative to that benchmark

Because funds set their own strategy and benchmarks the impact of pooling can't be measured by looking at overall Fund performance.

The investment impact of pooling is also difficult to ascertain as Pools generally seem reluctant to publish performance results.

However, performance relative to benchmark should give a useful view of the success of the Pool investments.

Over the next two slides we rank performance relative to benchmark and colour code this by Pool.

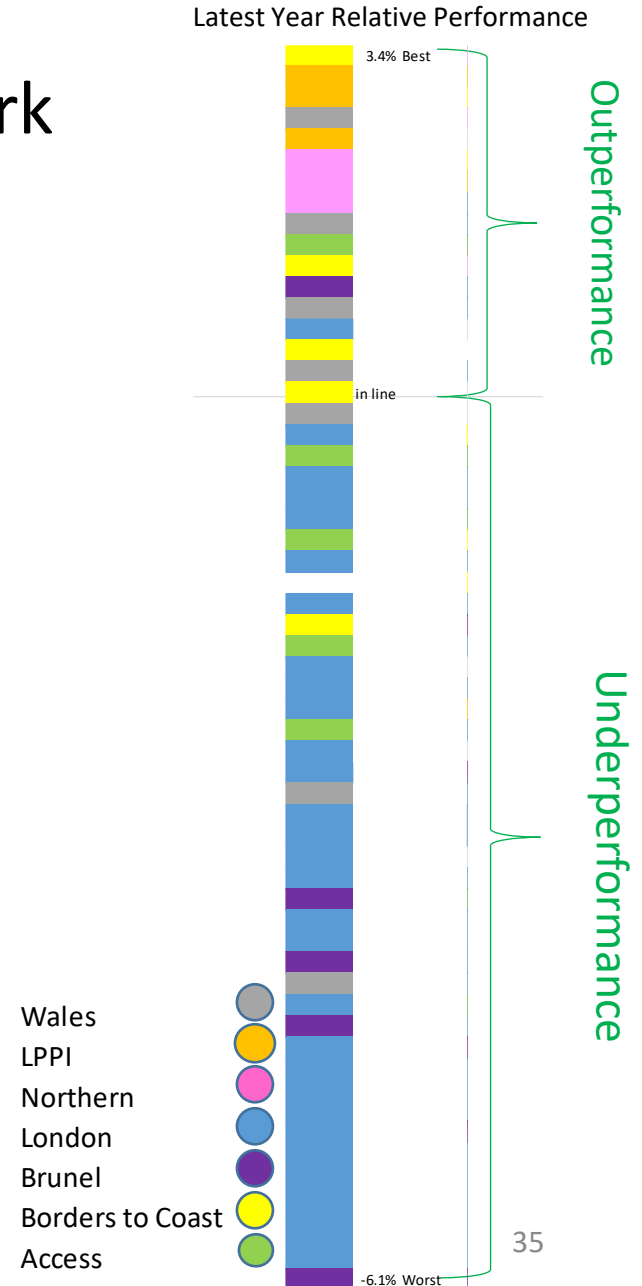
Performance Relative to Benchmark Latest Year

In the latest year, three quarters of funds failed to outperform their strategic benchmark.

The median underperformance was 1.1%.

Only one London Fund outperformed. It had no actively managed assets held within the CIV.

Conversely funds within LPPI, Northern and Borders to Coast pools performed relatively well.



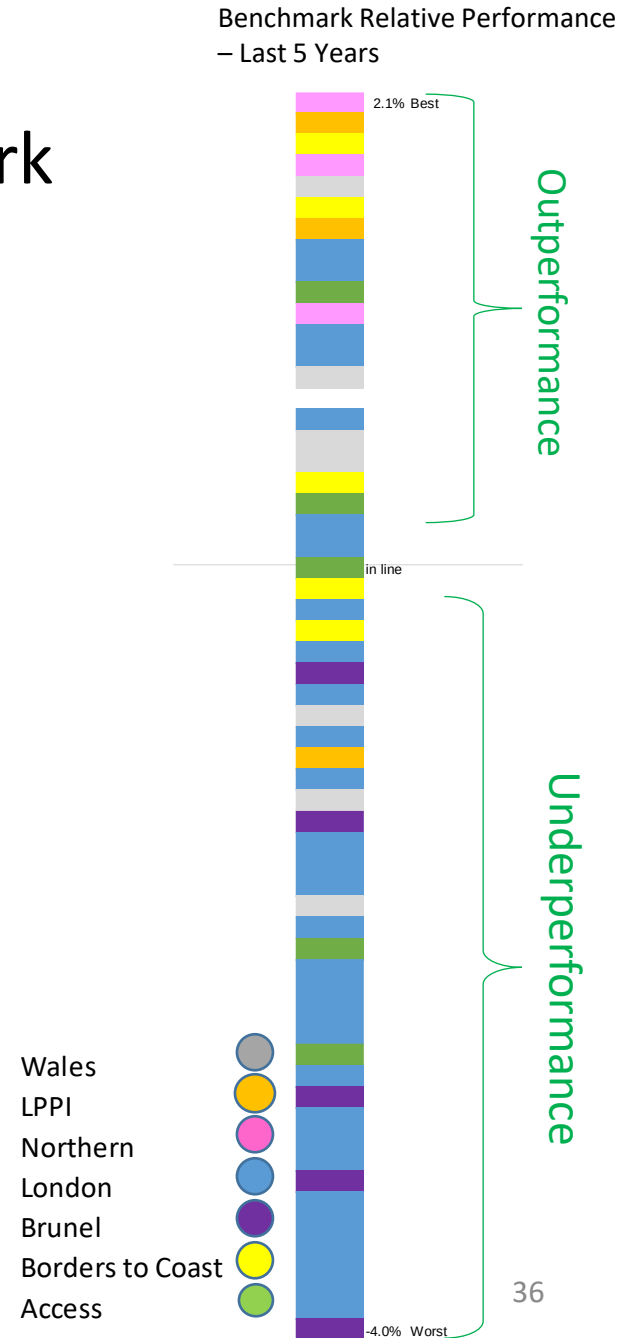
Performance Relative to Benchmark Last Five Years

Over the last five years the median fund underperformed by 0.4% pa. Not a glowing endorsement for active management.

As would be expected results are more diverse.

The funds in the Northern pool, LPPI and Borders to Coast have generally done rather better relative to their benchmarks than the London funds.

The Brunel funds have produced returns below benchmark over this period.



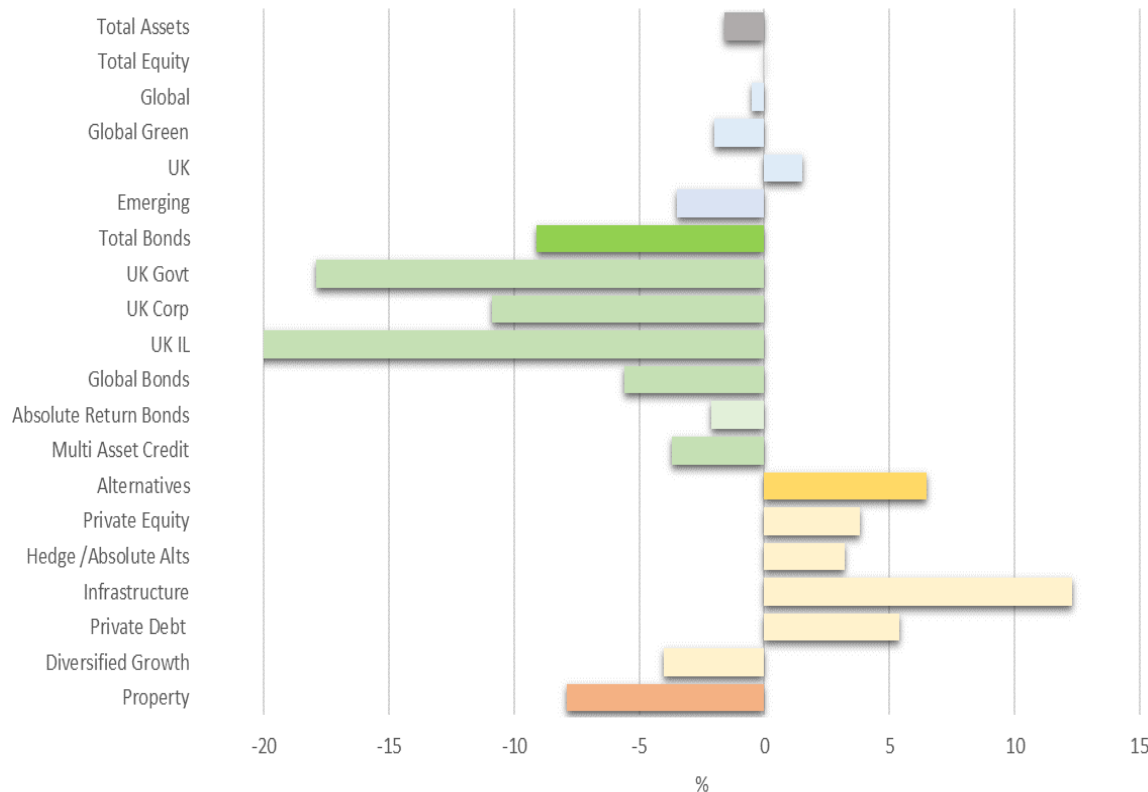
Appendices

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Latest Year Returns



A good year for alternative investments, the only area to deliver positive results.

Equity performance was flat – and most active managers failed to add value.

Bond performance was deeply negative with diversified strategies performing least badly.

Property saw a strong decline in values over the year.

The Latest Asset Allocation

Asset Allocation - Latest Year

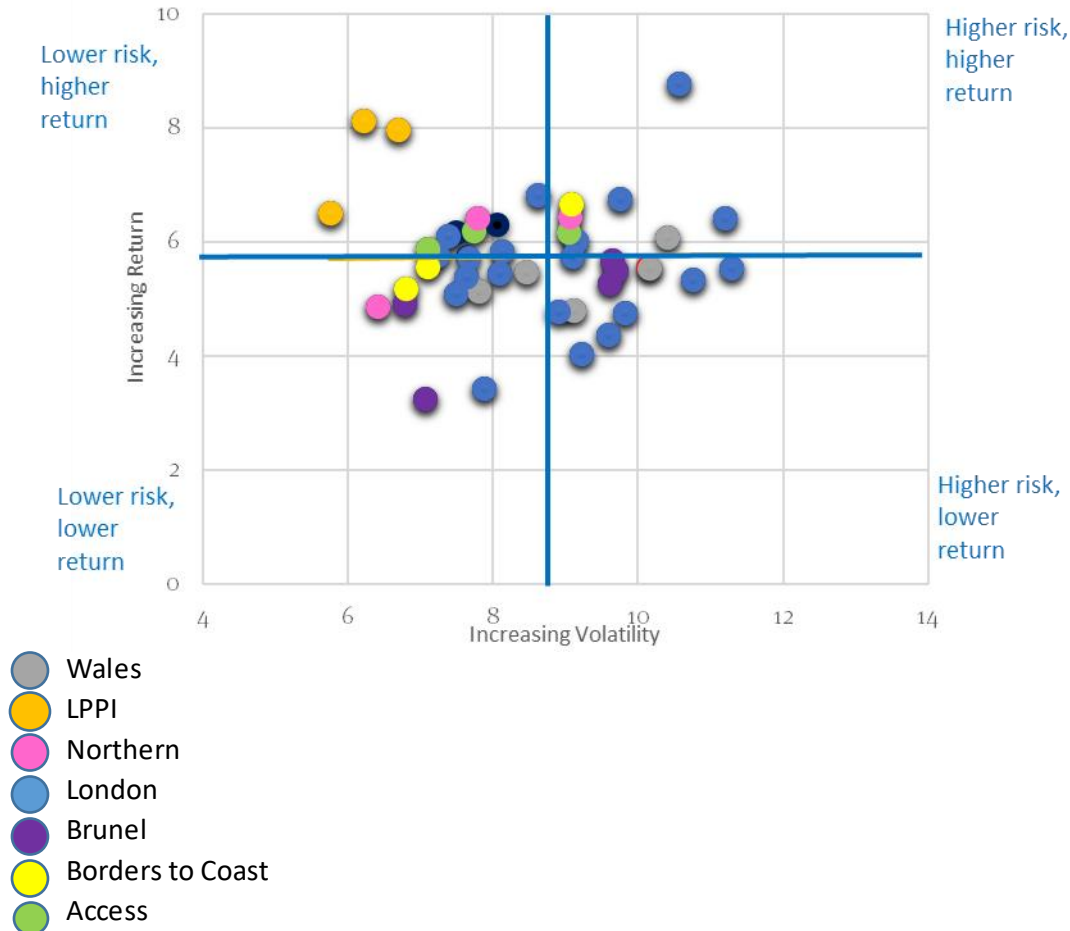
% Allocation	End March		Change
	2022	2023	
Equities	52	51	-1
<i>UK</i>	7	6	-1
<i>Global</i>	35	36	1
<i>Overseas</i>	10	9	-1
Bonds	17	17	0
<i>UK</i>	8	8	0
<i>Global</i>	1	1	0
<i>Absolute Return</i>	4	3	-1
<i>MAC</i>	4	5	1
Cash	2	2	0
Alternatives	16	17	1
<i>Private Equity</i>	8	8	0
<i>Infrastructure</i>	6	7	1
<i>Absolute Return</i>	2	2	0
Private Debt	2	2	0
Diversified Growth	2	2	0
Property	9	9	0

There was almost no change to the average asset allocation last year.

Funds put more money into bonds but the large negative returns resulted in the allocation remaining unchanged.

More money was committed to private equity and infrastructure but this has yet to be drawn down.

Guide to Risk Return Charts



Within investments there is always a trade-off between risk and return. Normally the higher a return that is being looked for the more volatility the fund must expect.

The charts show all funds with sufficiently granular data, identified by Pool.

The further along the x axis the more variable the returns have been, the further up the y axis the better the return delivered. The blue lines mark the median risk and return.

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