





**Joint Colloquium of the IACA, PBSS and IAAHS Sections
of the International Actuarial Association**
Westin Copley Place Hotel, Boston, U.S.A. – 4-7 May 2008

**An Outcome-Based Approach to
DC Governance**

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 A Survey of Default Strategies 

An Outcome-Based Approach to DC
Governance

Sample Reports

- 43 DC pension plans (21 in the FT Global 500 of the world's largest companies); £7.9bn in assets under management; 460,000 members; circa 50% of the largest trust-based DC plans in the UK.
- 80% of plan members are in the default investment strategy.
- In 90% of cases, the default investment option is 'lifecycle'.
- In more than 80% of 'lifecycle' options, investment is 100% in equities in the early years.
- Performance of default investment strategies varies significantly.

- **Most plans have passive equity funds** as their default, usually overlaid with an age-related lifecycle switch to bonds.
- **Lifecycle de-risking strategies** are a common part of default arrangements, but the de-risking period varies across plans, ranging from 5 to 10 years prior to retirement date.
- **Asset allocation** varies across 'equity' default funds, with differing degrees of home bias (i.e. UK equity allocations) and differing relative weights in overseas markets.
- The **absolute and benchmark relative performance** of default funds vary significantly across plans.

- On a net of fees basis, **active funds under-perform passive funds** on average, over most time periods.
- Across the sample, on average **79 percent of plan members invest in their plan's default fund.**
- The **investment choice in plans ranges from 3 to 170 funds**, with a median of 11 choices.
- **Investment fees range from 0 to 100 basis points**, with a median of 15bp.

A Survey of Default Strategies

▶ An Outcome-based Approach
to DC Governance ◀

Sample Reports

Good investment products do not make a good DC scheme.

PARTICIPANT A ('Tim' – 31, single, earns £28,000 p.a., etc)

	Product Performance	Benchmark	Relative	Allocation	Portfolio Performance
Cash	4.0%	4.0%	0.0%	15.0%	0.6%
Bonds	2.0%	2.0%	0.0%	25.0%	0.5%
UK Equities	12.0%	10.0%	2.0%	20.0%	2.4%
North American Equities	9.5%	8.0%	1.5%	20.0%	1.9%
ROW Equities	14.0%	12.0%	2.0%	20.0%	2.8%
Total Portfolio				100.0%	8.2%

PARTICIPANT B ('Tom' – Tim's twin, identical preferences and balance sheet)

	Product Performance	Benchmark	Relative	Allocation	Portfolio Performance
Cash	4.0%	4.0%	0.0%	5.0%	0.2%
Bonds	2.0%	2.0%	0.0%	10.0%	0.2%
UK Equities	10.0%	10.0%	0.0%	30.0%	3.0%
North American Equities	8.0%	8.0%	0.0%	20.0%	1.6%
ROW Equities	12.0%	12.0%	0.0%	35.0%	4.2%
Total Portfolio				100.0%	9.2%

These significant differences are not captured in current processes

Measuring member outcomes is a superior approach to DC governance.

Risks identified by the UK Regulator...

- **Lack of member understanding**
 - Provide clear, balanced and timely information to members
 - Enable members to make well-informed decisions
- **Poor investment choices**
 - Offer an “appropriate range of funds... suited to existing and anticipated scheme membership”
 - Review fund performance against benchmarks / markets
- **Poor decisions on retirement choices**
 - More communication and member encouragement
- **Unduly high charges**
 - Decide what services are required, how much value they add, and who pays. Review regularly, use cost benchmarks
- **Poor administration practices**
 - SLAs between trustees, managers and service providers
 - Robust internal controls to support administration procedures
 - Ensure accurate and timely record-keeping

Current Governance...

communicate more

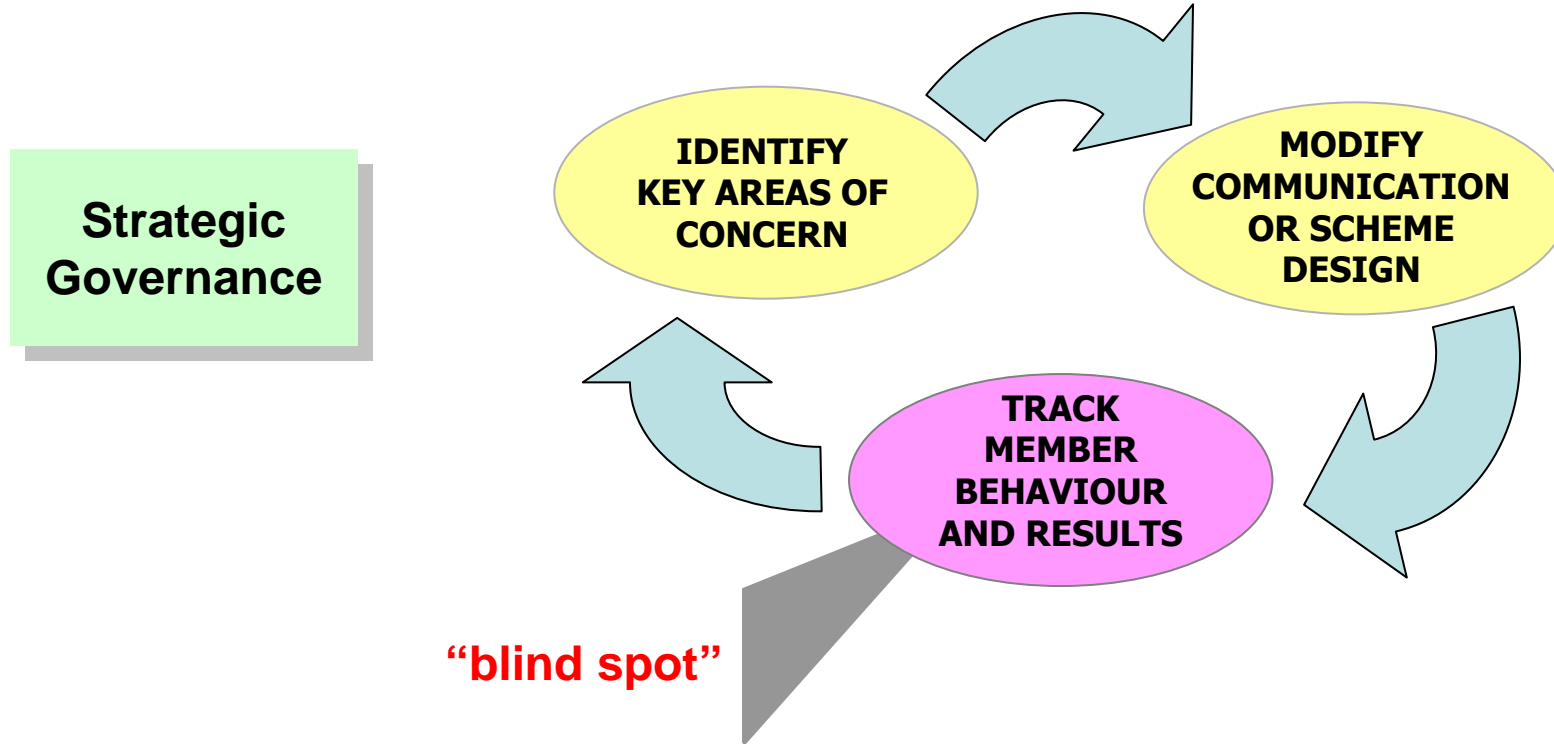
get advice &
compare fund returns
with benchmarks

communicate more

get advice &
compare costs with
benchmarks

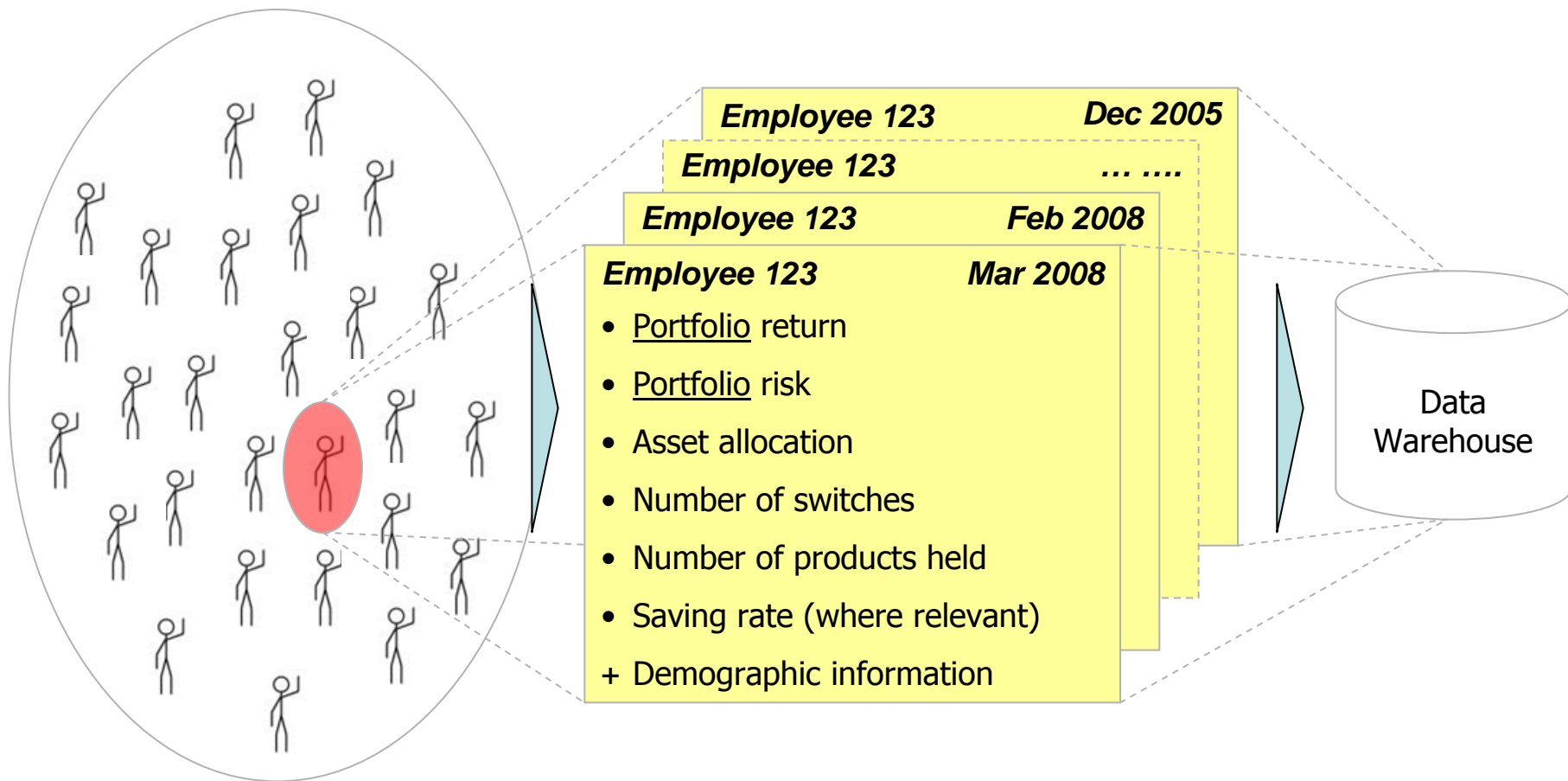
ensure administration
does what it should

Tracking member investment results strengthens governance and risk management

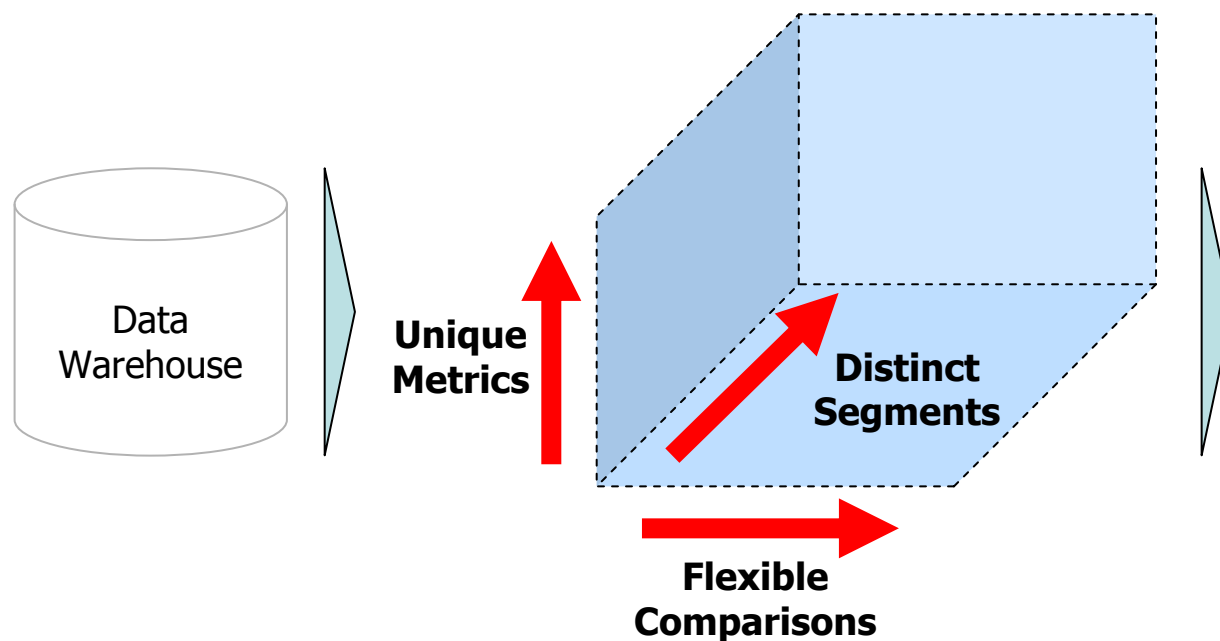


OVERVIEW OF AN OUTCOME-BASED APPROACH

The behavior and results of each member needs to be tracked over time



Ongoing development of governance reporting requires a consistent approach to data management

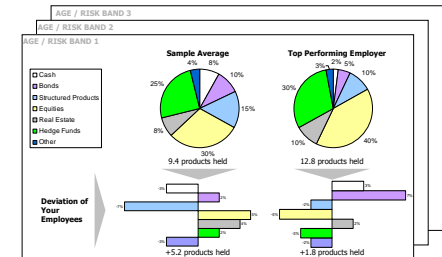
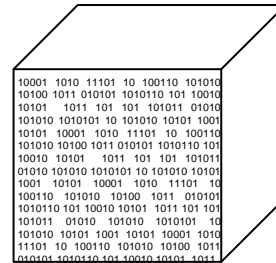
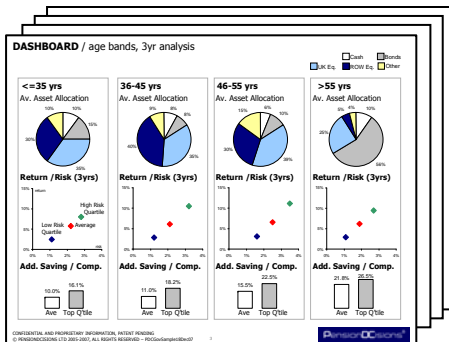


- **Provider governance**
 - Quality of service
 - Offer development
- **Employer governance**
 - Governance dashboard
 - Demonstration of value
- **EBC governance**
 - Empower EBCs to do detailed analysis
 - Maintain flexibility to develop new formats

Standardised periodic reports

Data package enabling in-house analysis

Online interface linked to the platform



- Standardised reports downloadable from online interface

- Detailed (anonymised) file with key metrics and demographic information

- Customised interface enabling direct 'slice and dice' of relevant data

Outcome-based governance is closely aligned

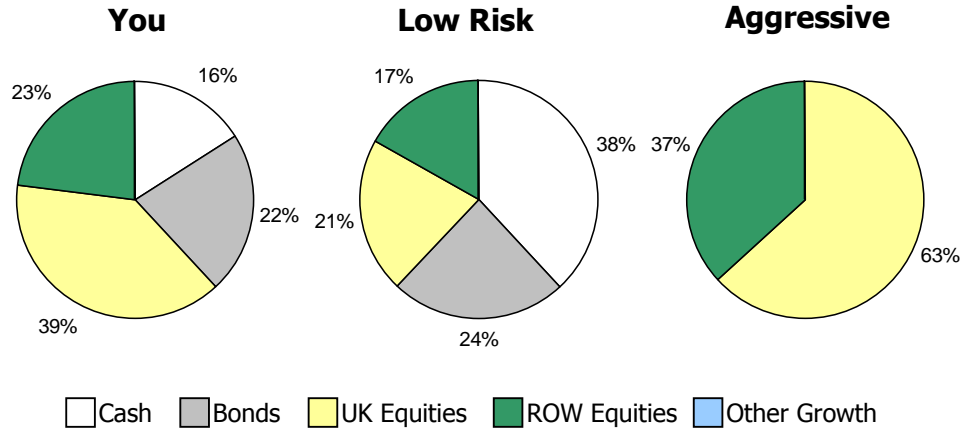
- Members consider **choice** attractive, but too much choice discourages savings
 - Iyengar & Kamenica, 2006. Choice Overload and Simplicity Seeking. *University of Chicago*
- Fund **menu design** influences members' asset allocation and risk-taking
 - Benartzi & Thaler, 2002. How Much Is Investor Autonomy Worth? *The Journal of Finance*
- **Defaults** have significant effects on saving behaviour and risk taking
 - Madrian & Shea, 2001. The Power of Suggestion. *Quarterly Journal of Economics*
- While **auto-enrolment** increases participation it reduces engagement
 - Choi, Laibson, Madrian & Metrick, 2005. Saving For Retirement on the Path of Least Resistance. *Yale University*
- Wide availability of **historical fund returns** and over-confidence about their relevance may explain why many investors chase product returns
 - Patel, Zeckhauser & Hendricks, 1991. The Rationality Struggle. *American Economic Review*
- Workplace **peer groups** significantly influences pension savings decisions
 - Duflo & Saez, 2001. Participation and Investment Decisions in a Retirement Plan. *Journal of Public Economics*
- **Asset class allocation** dominates investment product selection
 - O'Rielly & Chandler, 2000. Asset Allocation Revisited. *Journal of Financial Planning*
 - Tokat, 2005. The Asset Allocation Debate. *Vanguard Investment Counseling & Research*

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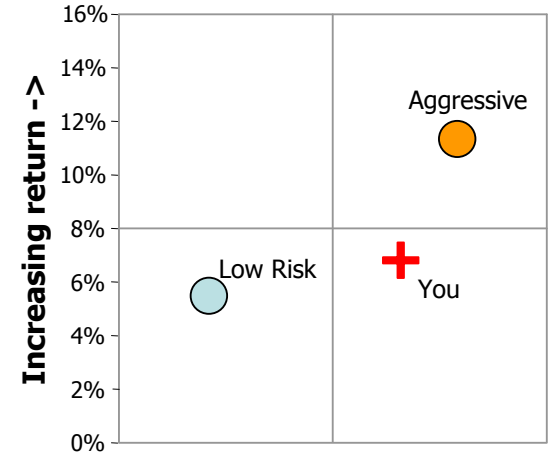
AN EXAMPLE OF PERSONALISED REPORTING

1. investment breakdown



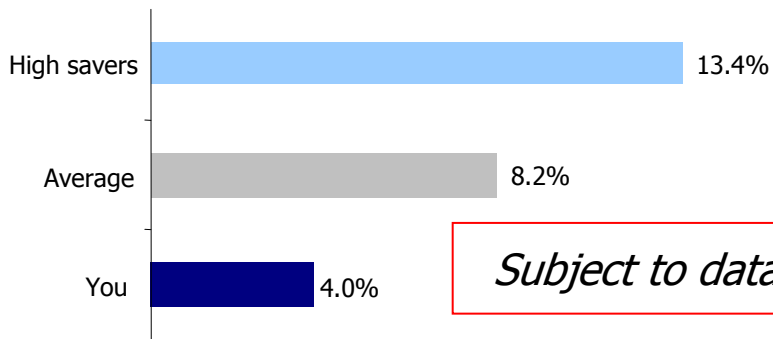
you **did** register an investment choice

2. risk / annual return (5 years)



Increasing risk ->

3. annual contributions as % of income



High savers are the 25% of individuals in your age band who save the most into their pension

your ranking: **87 / 100**

Subject to data relevance

Positioning Information

USER ENGAGEMENT - REPORT CARD 2007 IMPACT

"full marks for peer based comparison which is superb"

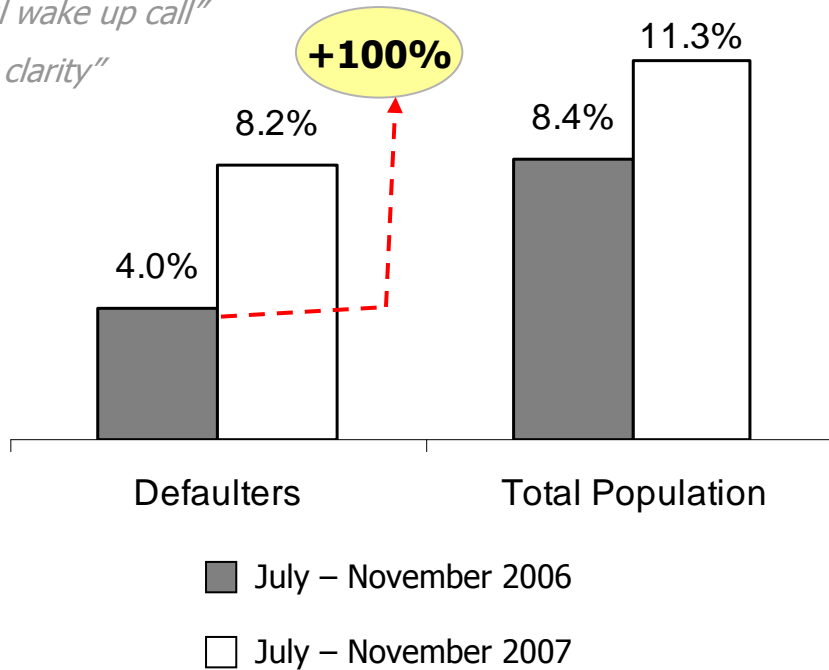
"made me realize how much risk I am taking"

"has given me the kick-start I needed"

"very useful, succinct communication"

"really useful wake up call"

"in a word – clarity"



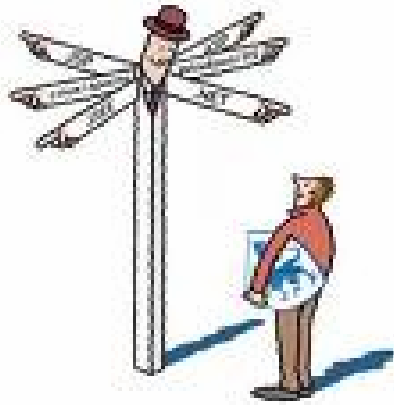
Number of instructions on investment of future contributions and product switches as percent of May '06 default group

(Data on contribution rate changes not available)

- Comparing July to November 2006 and 2007:
 - Activity amongst individuals who defaulted at the beginning of the respective period **has doubled**
 - Activity level among initial defaulters **moved significantly closer to total population** average
 - *NOTE: reports **only delivered to defaulters***

Source: TPA Data, PensionDCisions analysis

End user reporting has doubled activity among previous defaulters in one major UK scheme



Value added to members by breadth of **fund offering**



Identification of key **member segments** by behaviour and / or demographics

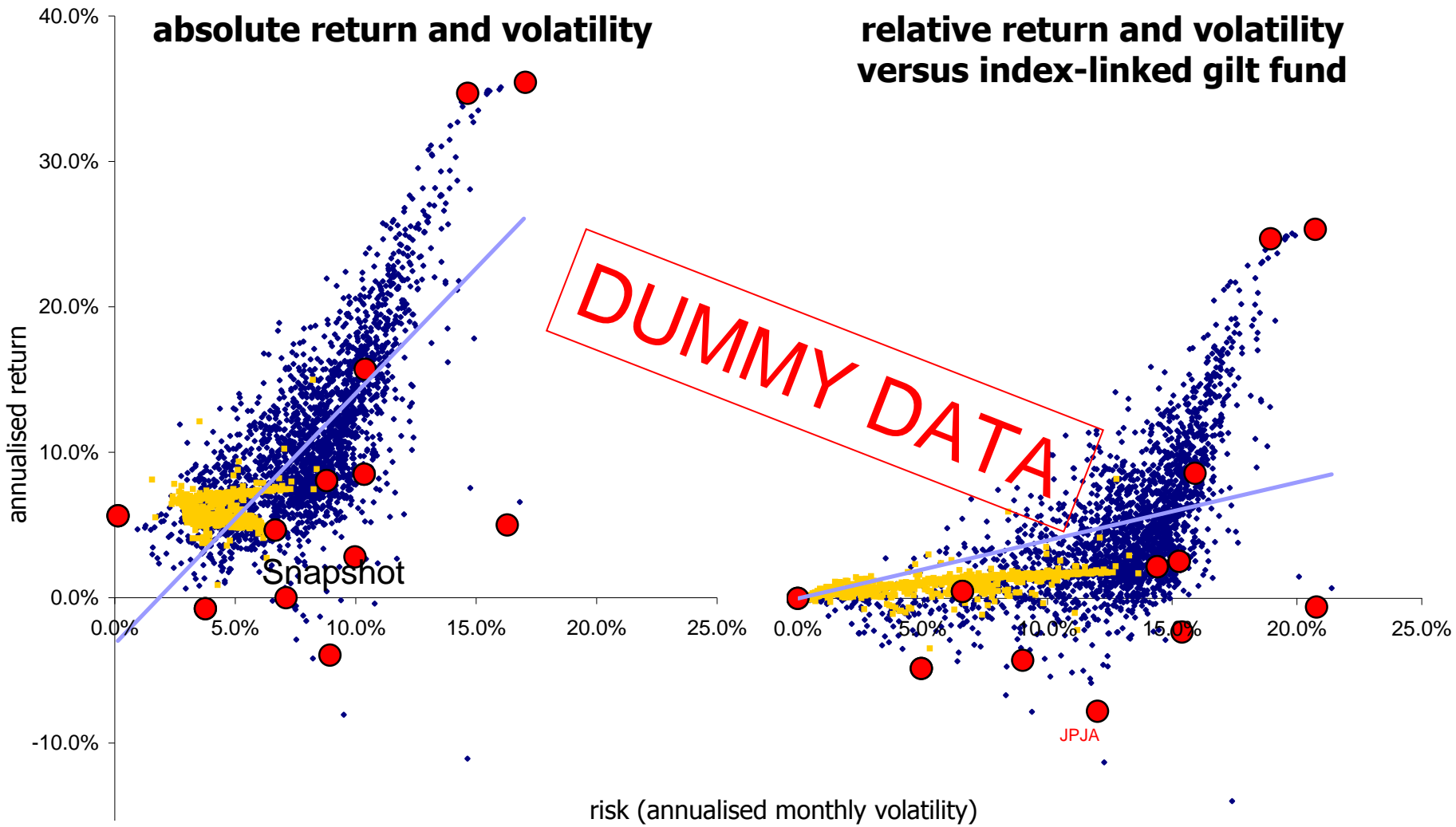


Benchmarking across individual employers

SCHEME OVERVIEW / return + risk, 3yr analysis

How my customers/members are doing relative to the products they are offered

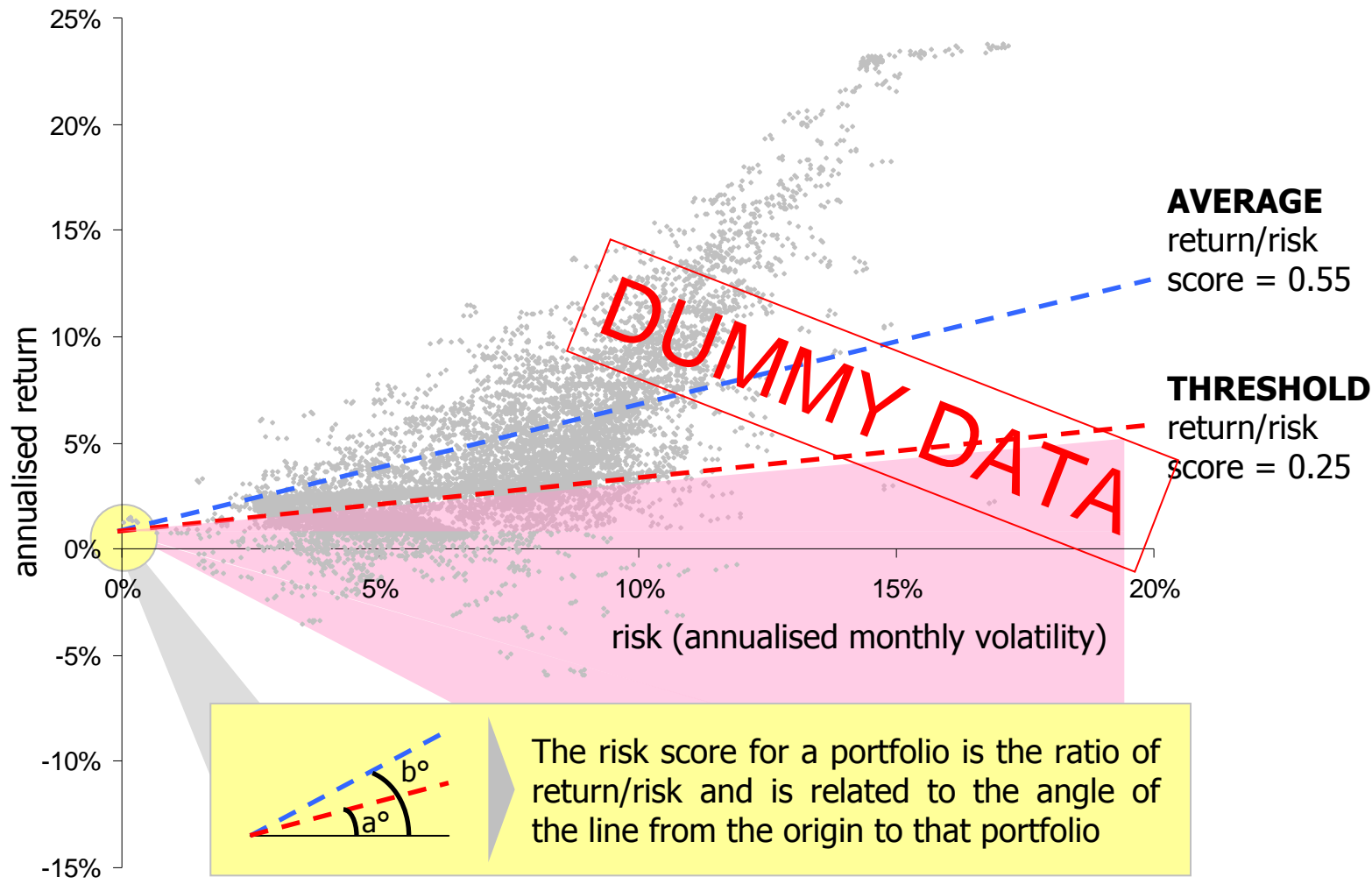
- decision makers ■
- defaulters ■
- decision makers: line of best fit —
- funds offered ●



SCHEME OVERVIEW / return + risk, 3yr outlier analysis

Where the key risks lie

- line of best fit — blue dashed line
- [90]% of clients lie above — red dashed line
- area highlights portfolios with poor performance — pink shaded area



IDENTIFYING PROBLEM CASES

RANK	PAYROLL NO.	RISK/RETURN SCORE	PORTFOLIO VALUE (£)
1 (Most Severe)	10 22 31 04	0.03	32,074
2	11 31 11 08	0.04	11,033
3	12 11 18 90	0.09	7,089
4	19 08 09 16	0.11	47,682
5	21 45 73 32	0.12	102,939
6	31 11 29 87	0.12	10,147
7	11 78 88 25	0.14	7,101
8	18 98 08 22	0.17	19,870
...
...
n (Least Severe)	23 33 38 97	0.24	7,043

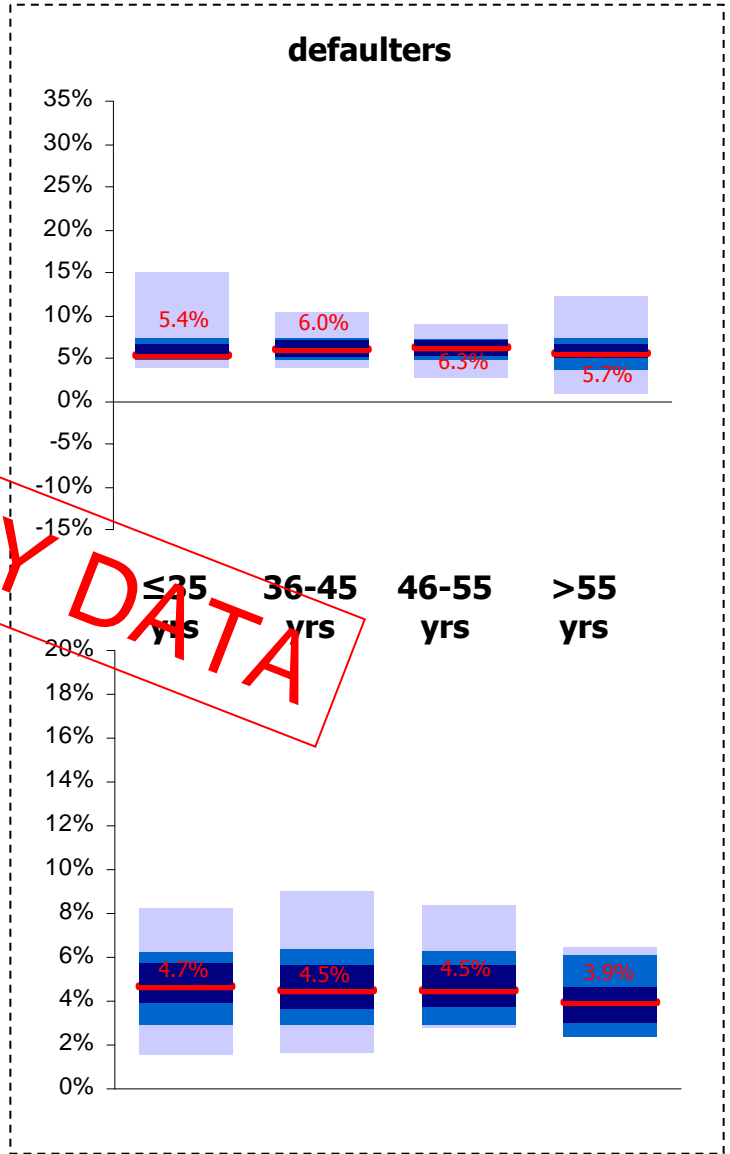
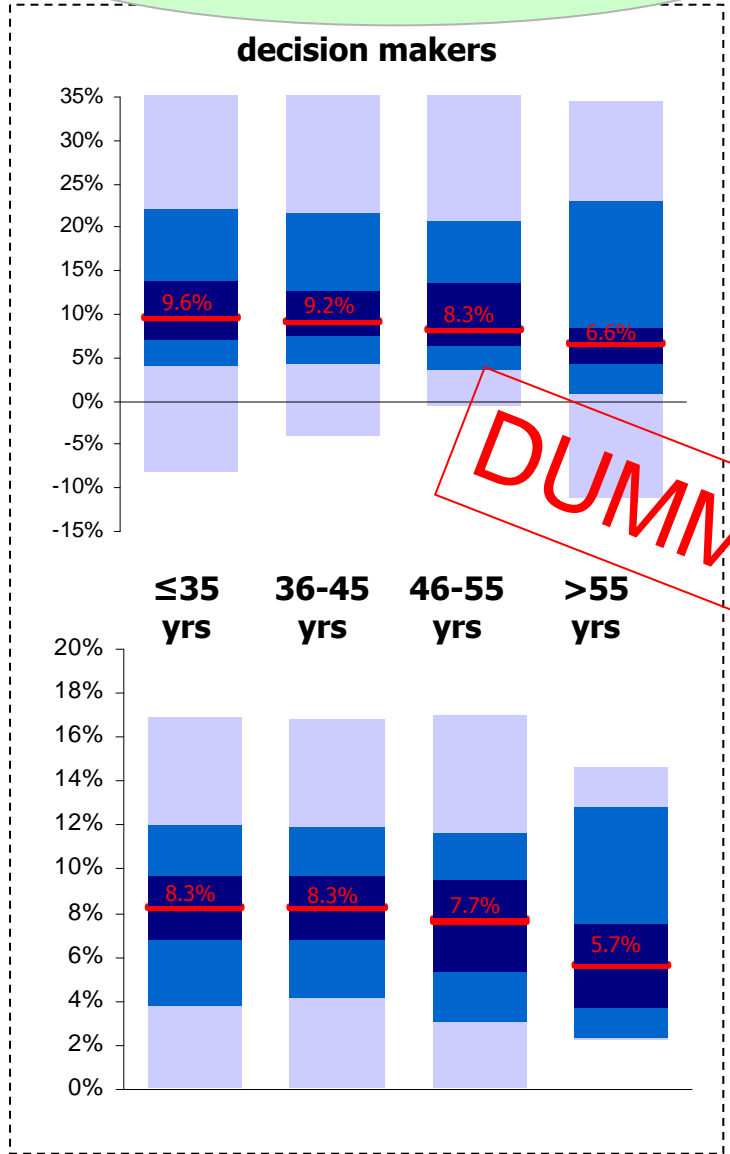
DUMMY DATA

RISK + RETURN

Comparison across age and decision making groups

range of data points 50% of data points 90% of data points median

3-yr return:
unit =
annualised
return



DUMMY DATA

3-yr volatility:
unit =
annualised
monthly
return volatility

ASSET ALLOCATION

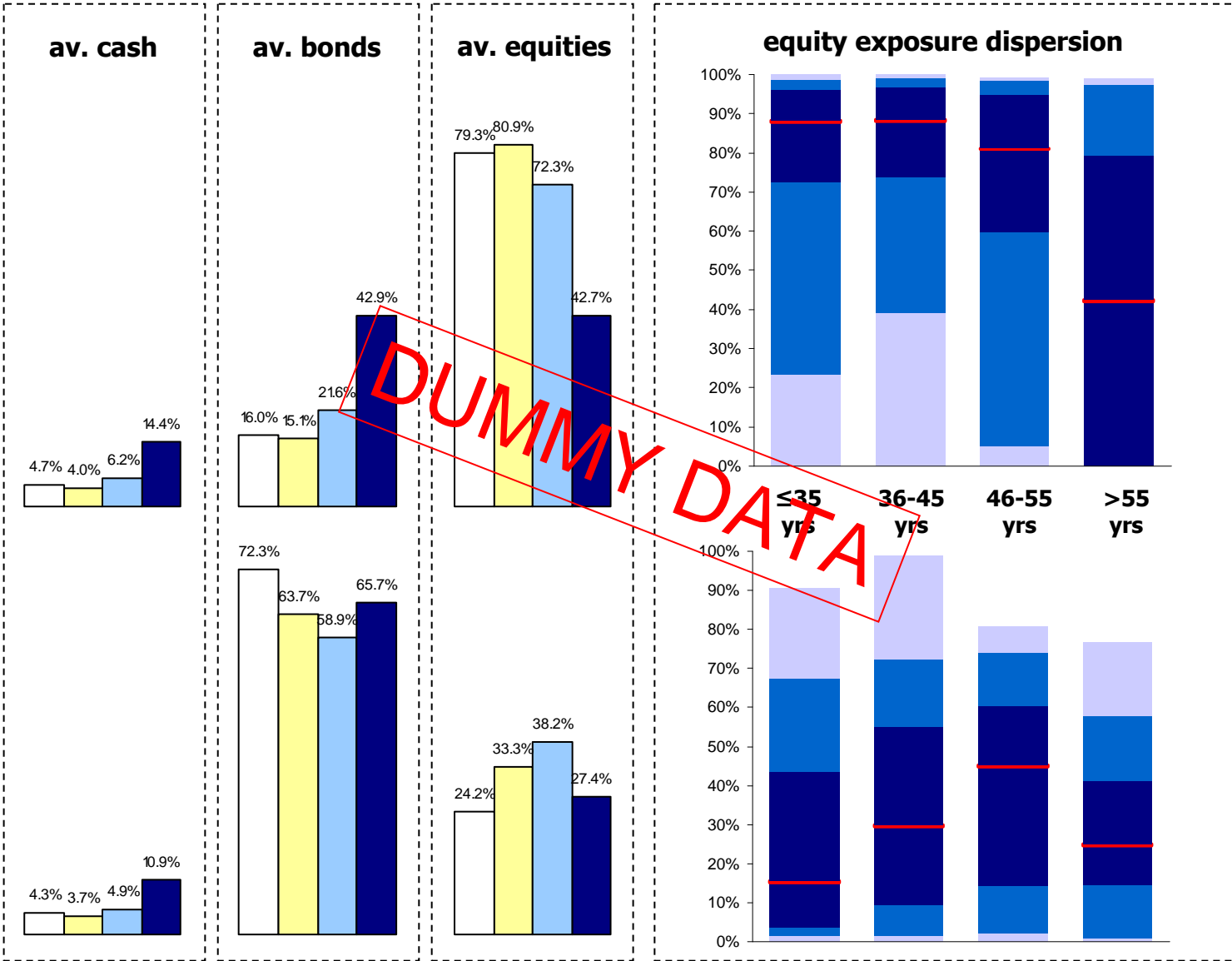
Comparison across age bands

- ≤35 yrs
- 36-45yrs
- 46-55yrs
- >55 yrs

- range of data points
- 50% of data points
- 90% of data points
- median

decision makers:
average closing portfolio asset allocation

defaulters:
average closing portfolio asset allocation



ASSET ALLOCATION

*Benchmarking of behavior
across risk levels*

RISK	MEAN ALLOCATIONS (%)						
	Cash	Bonds	Equity		Alternatives	Real Estate	Other
			Home Market	ROW			
HIGH	-	-	48.9	32.1	9.8	5.1	4.1
	-	-	41.2	28.5	12.1	7.9	10.3
MEDIUM HIGH	-	-	32.6	29.4	19.2	8.2	10.6
	-	2.7	28.4	31.2	21.0	7.6	9.1
MEDIUM LOW	0.8	10.9	21.2	26.2	17.5	12.5	10.9
	8.3	11.6	17.5	26.1	15.2	8.1	13.2
	16.7	21.4	14.3	18.7	12.4	7.4	9.1
	18.5	24.6	12.1	17.4	5.7	6.7	15.0
LOW	37.2	39.2	4.8	5.2	3.2	3.2	7.2
	45.6	44.8	2.1	2.9	0.7	0.7	3.2

DUMMY DATA

- Whether intentional or not, most employers are responsible for the investments of the majority of their DC members, by virtue of the default investment option.
- Comparison against this benchmark shows how well the chosen asset allocation is being executed, but provides no context for the performance of the investment strategy and asset allocation itself.
- Measuring the outcomes of members is the only way to understand what is actually happening in the plan.
- Raising member awareness through personalised communication is one of the most important risk management tools in DC.