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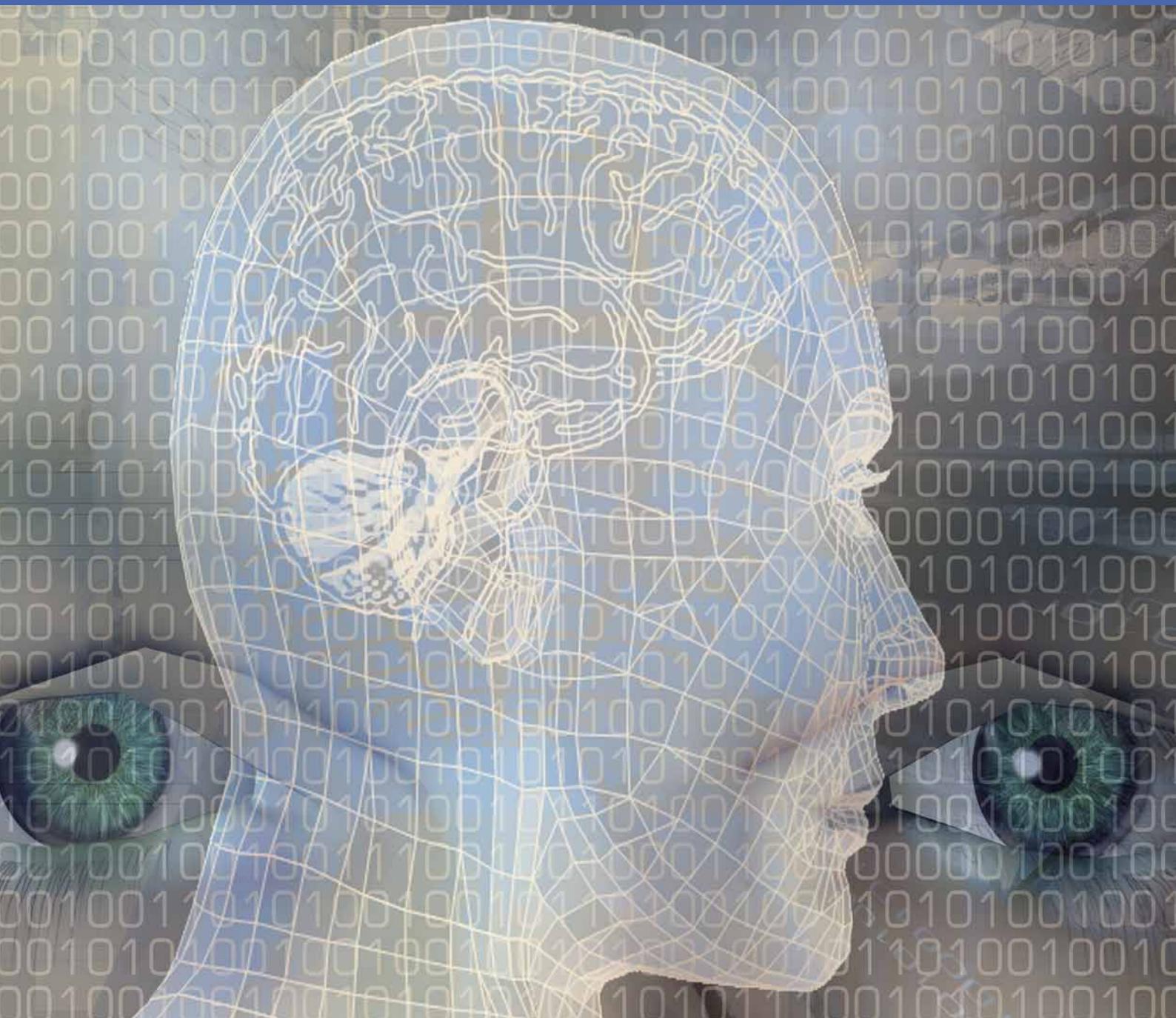
CREATE-Research 社による投資イノベーションに関する報告書

このたび CREATE-Research 社の”Investment Innovations: raising the bar”と題する調査報告書を、ホームページに掲載しました。同社は、英国の独立系のグローバルなコンサルティング会社であり、金融、航空宇宙、IT、石油、製薬、テレコム等の幅広い産業をカバーしています。

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以上

Investment Innovations: raising the bar



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Foreword

We at Principal are delighted to be involved as joint sponsors of this new report from Amin Rajan and CREATE-Research.

The topic of innovation is a very important one that has been the subject of confusing comment by many in the market over the past few years.

Up until the financial crisis, many of the 'innovations' on offer basically involved greater leverage, which proved very dangerous when times got tough. But there are more rewarding innovations, such as emerging markets, and life cycle funds for defined contribution plans.

These can help investors to attain their objectives and control their risks.

This study shows investors taking a more thoughtful approach to these innovations, and highlights many opportunities in this time of change.



Jim McCaughan
CEO
Principal Global Investors

This edition of CREATE-Research's annual survey examines the industry's continued need to innovate in order to produce better outcomes for clients.

This year, insights from asset managers have been augmented with the perspective of pension funds, with participants hailing from Asia, Europe, the US, and other parts of the globe.

Not all innovation is positive, of course. Nevertheless, new tools have allowed clients to harness the growth of emerging markets and to better manage risk across the globe.

A key aim of this year's survey is to explain why innovation sometimes works and why other times it does not.

The CREATE-Research findings show that the asset management industry needs to focus not on new vehicles but on the innovation process itself.

We at Citi are happy to partner with CREATE-Research, and through this survey we hope to provide food for thought for our clients.



Neeraj Sahai
Global Head
Citi Securities and Fund Services

Acknowledgements

This report presents the results of our 2011 annual global survey.

The last decade witnessed the widespread adoption of some 35 investment innovations. This is the first report of its kind to perform a reality check on what worked, what didn't and why.

After the traumatic events of the last decade, innovation has had a bad press. So, it is a tribute to the investment community worldwide that it has collaborated with us in highlighting the key lessons from the past as it faces a challenging future.

My foremost thanks go to 108 pension plans and 396 asset managers, consultants, administrators and distributors who participated in our two separate surveys and to those who were engaged in the follow-up interviews.

The majority of them have been our constant survey participants since 2000 when the current series started. They and others have helped to create a credible impartial research platform that aims to promote good practices in investment management.

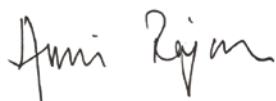
I would also like to thank Citi Securities and Fund Services, and Principal Global Investors who jointly sponsored the publication of this report, without influencing its findings in any way. It has been an enormous privilege to work with them.

On this occasion, their excellent contacts in Asia Pacific helped me greatly in understanding the future fund dynamics of this vibrant region.

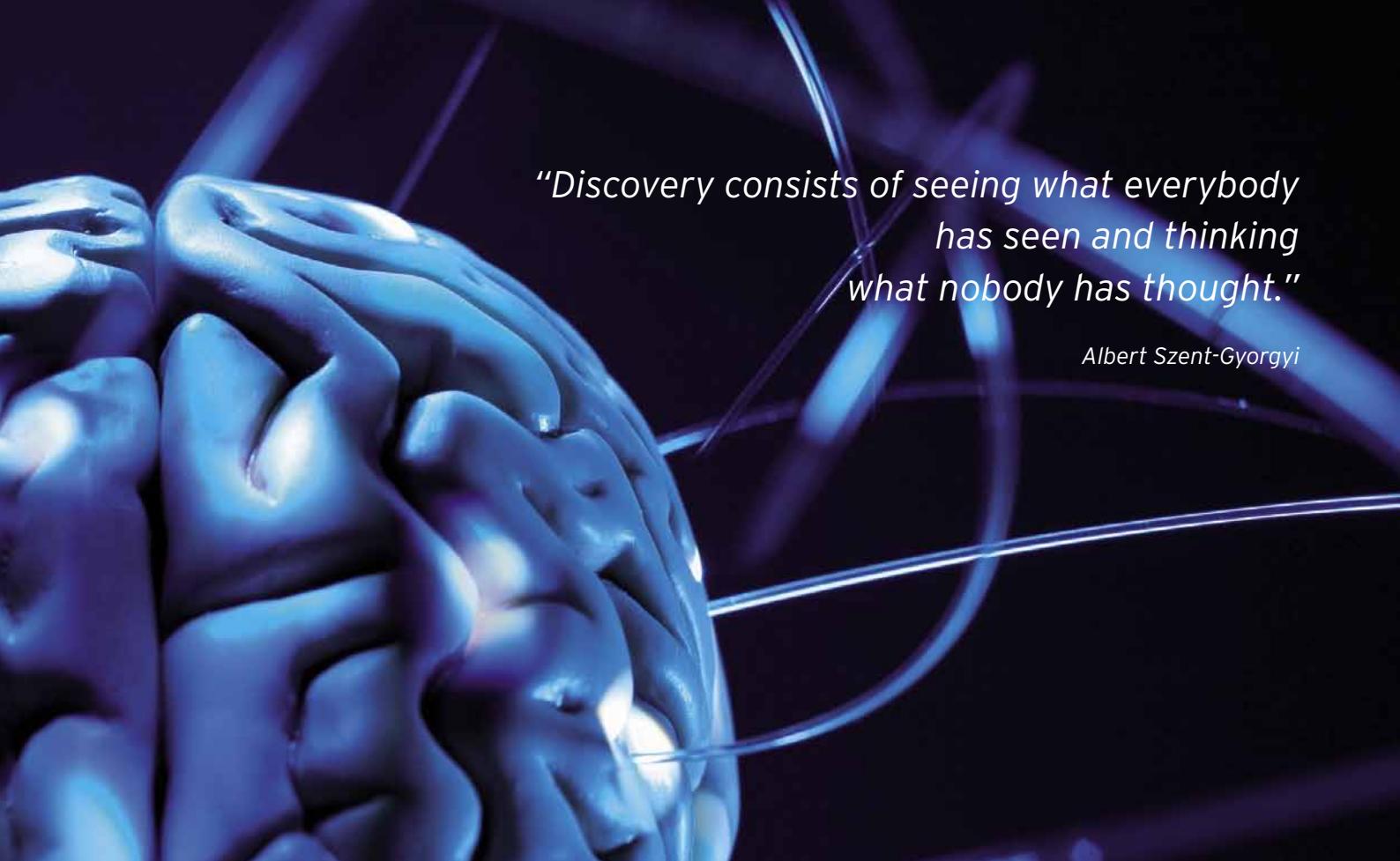
My special thanks also go to our media partners, FTfm and IPE, for their help in launching the two surveys on which this report is based.

Finally, I would also like to thank my colleagues who helped at every stage of the research programme with their customary zeal and diligence: Naz Rajan, Dr Elizabeth Goodhew, Leanne Perry and Kirsty Langley.

I have had more help on this occasion than before. Even so, if there are errors or omissions in the report, I am solely responsible.



Prof. Amin Rajan
Project Leader
CREATE-Research



*"Discovery consists of seeing what everybody
has seen and thinking
what nobody has thought."*

Albert Szent-Gyorgyi

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1 Executive Summary

Since 1980, investment innovations have come in five distinct clusters:

- new asset classes
- new asset allocation techniques
- new risk and returns enhancing tools
- new theme funds
- new business models.

Although coming on-stream at different times, their substantive adoption occurred in the wake of the 2000-02 bear market.

Focusing on the last decade, this report assesses their impact on the basis of two global surveys.

One involved 108 pension plans and the other involved 396 asset managers, pension consultants, third party administrators and distributors - from 30 countries.

Together, they represent a combined AuM of around US\$29 trillion.

Four headlines have emerged from our surveys.

1. Innovations work as long as we know their limits

Adoption of the identified clusters gained significant traction across the Atlantic in the last decade.

But the 2008 credit crisis overwhelmed their impact.

Strategies that were meant to thrive on volatility - e.g. hedge funds and currency - came unhinged. Their idiosyncratic risks were overwhelmed by the systemic ones.

Even so, five innovations delivered most value:

- emerging market equities
- emerging market bonds
- high yield bonds
- liability-driven investing
- exchange traded funds (ETFs).

Pension plans that benefited from them attribute their success to strong beliefs in their intrinsic worth, a disciplined approach to buying and selling, and in-house capabilities to chase early mover advantage.

They got the timing right.

Innovations that delivered least value include:

- leverage
- structured products
- portable alpha
- currency funds.

Pension plans that lost out attribute the outcomes to the absence of intrinsic value, herd instinct and low engagement with their asset managers.

They did not heed the 'health warnings'.

Nor did they have the skills and governance to enter into anything complex or risky.

2. Asset managers should improve the old before creating the new

Pension plans want asset managers to take four actions that can potentially improve the outcomes of the last crop of innovations:

- deliver better returns per unit of risk within a more symmetric fee structure
- deliver greater transparency and simplicity, so that the intrinsic worth of their assets is not concealed by devices such as derivatives, leverage and shorting; these should complement, not conceal, product integrity
- create a strong overlay of human judgement in risk models and investment processes
- develop better proximity to clients in order to minimise the 'wrong-time' risks.

3. The innovation boat is unlikely to be pushed out too far

A number of innovations are in the pipeline. Their impact will be modest over the next three years but will build up as the decade progresses.

Their immediate aim will be to improve the product features outlined above.

Over time, four innovations are likely to prove especially disruptive to the existing business models:

- the likely abolition of commissions in the retail space in Europe and Asia
- the adoption of high watermark fees in the absolute return space
- the morphing of defined contribution (DC) products in the retirement space
- the emergence of state-of-the-art data warehouses in the administration space.

4. There needs to be a clear line of sight between innovations and client needs

Pension plans accept that innovations cannot deliver replicable outcomes. Nor can they do without them.

Both the size of their current deficits and the returns required to fix them remain daunting in today's low return environment.

Thus, they want to be assured that their asset managers seek 'best endeavour' outcomes via product integrity, process integrity, operational excellence and interest alignment.

The likelihood of such outcomes may increase if:

- there is greater client engagement that seeks new ideas as much as manages expectations of what can and can't be achieved in today's markets, with random bursts of risk-on/risk-off that ignore the fundamentals
- innovations stem from managers' core skills as distinct from pure market opportunism
- innovations walk the fine line between revenue streams for asset managers and credible opportunity sets for their clients.

Over this decade, the investment value chain will be distinguished as much by introspection as innovation.

2 Report Synopsis

"Is this the magic moment to remake the investment industry?"

In the last decade, the charm of uncorrelated absolute returns captured the imagination of investors who had hitherto relied on a raging bull market to do the heavy lifting for them.

Numerous investment innovations were duly adopted: some new, some revived versions of the old.

New asset classes emerged. Some were offshoots of long only funds. Others were genuine alternatives.

New asset allocation techniques were also created as strategic asset allocation became more dynamic.

New risk hedging and return enhancing tools accompanied them in the institutional market.

Finally, new theme-based products were introduced in order to meet the diverse needs of retail investors.

Coming in dribs and drabs over the previous 20 years, their substantive adoption accelerated in the wake of the heavy losses inflicted by the 2000-02 bear market.

It shifted attention from relative to absolute returns; from mainstream to alternatives; from asset investing to liability matching.

To assess their impact, we have conducted two global surveys of two groups of asset management buyers and sellers – as outlined in the Executive Summary.

These were asked four questions central to our remit:

- which innovations worked, which didn't and why?
- what improvements are essential?
- what should be the main thrust for innovations over the next three years?
- what specific actions do they call for?

In the second survey, involving asset managers, pension consultants, third party administrators and distributors, asset managers predominated. Hence for brevity, it is referred to as the "asset managers' survey" in this report.

The details of countries and the asset coverage of each survey are given in the table below.

Survey participants by geography and size of AuM

Australia	Hong Kong	Saudi Arabia
Austria	India	Singapore
Bahrain	Ireland	South Africa
Belgium	Italy	South Korea
Canada	Japan	Spain
China	Kuwait	Sweden
Denmark	Luxembourg	Switzerland
Finland	Malaysia	Taiwan
France	Netherlands	UK
Germany	Norway	USA

AuM (US\$ trillion)

Asset Managers
27.6

Pension Plans
1.75

The surveys were followed up by structured interviews with senior executives in 90 organisations in 12 major fund markets around the world.

Given the multi-lingual background of these participants, their views as presented in the case studies in the main body of this report are necessarily paraphrased.

Adoption: an overview

Some 35 innovations saw significant adoption in the last decade: 29 were customer-focused that aimed to deliver better returns (the four outer circles in the diagram below); and 6 were service provider focused that aimed to improve business resilience (inner circle).

In most cases, the US was both the principal innovator as well as the early adopter.

Its long-renowned entrepreneurial culture is one factor. Another is its large pension backyard which currently harbours 58% of the world's total pension assets of some US\$27 trillion.

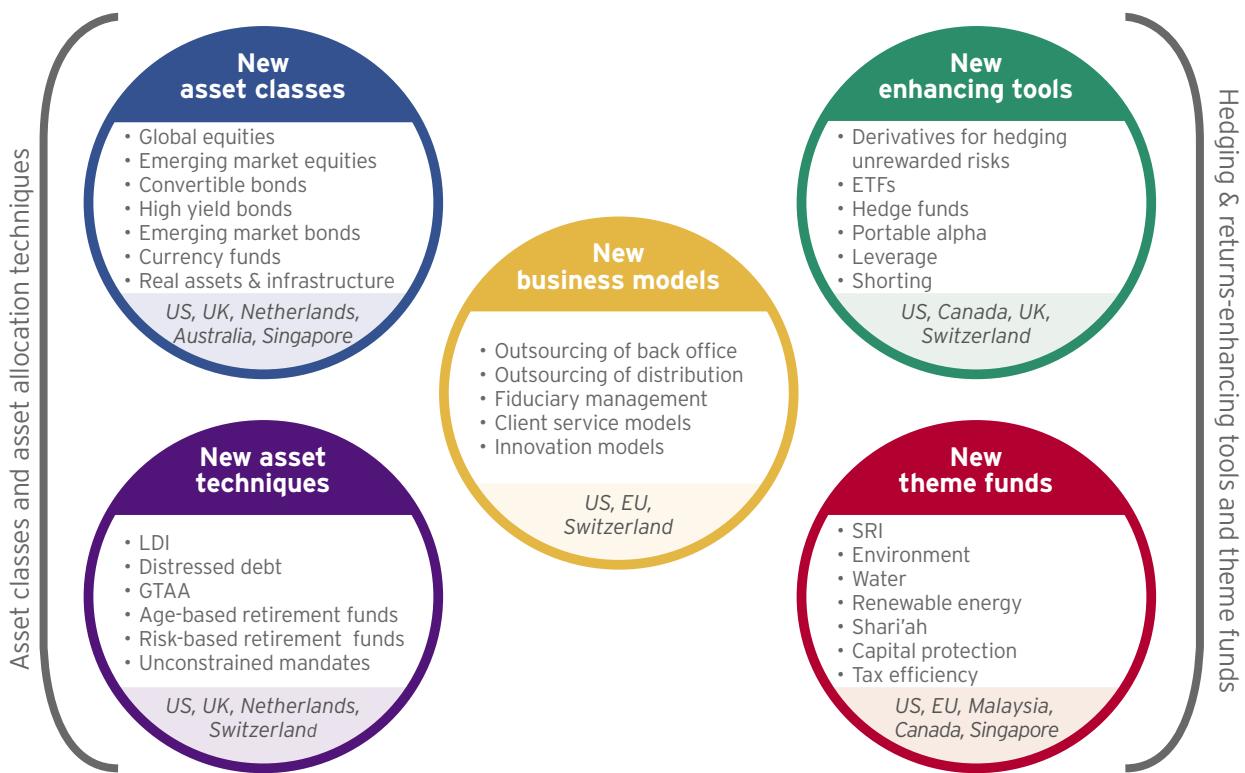
The UK and Continental Europe were late adopters, embracing most innovations by the middle of the last decade, but they led the way with LDI.

In marked contrast, other large pension markets like China, Japan and South Korea chose to remain home-biased, bond-biased and peer-biased.

Now, their maturing liabilities are forcing them to look at more innovative solutions. Before long, adoption of the mark-to-market rules will also emerge as another driver of adoption.

Against this background, the next two pages shed more light on our key findings on the study's four central questions. They are immediately followed by the core themes emerging from them.

Which innovations were widely adopted in the 2000s and who were the early adopters?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"By 2007, asset management resembled investment banking: a product machine pushed to the tipping point."

"Our innovations were incremental; their effects were not."

"By staying away from complex products, were Asian investors unsophisticated or smart?"

The score card

The 2008 crisis overwhelmed most innovations. Even a seen-it-all investor was stunned.

Yet, for the decade as a whole, five innovations have been identified as delivering most value (chart below): emerging market equities (a stand out), emerging market bonds, high yield bonds, liability driven investment (LDI) and ETFs.

Those pension plans that benefited single out three factors acting in their favour.

First, they had clear investment beliefs that guided their choices. Second, they had a disciplined approach to buying and selling that minimised behavioural biases. Third,

they had the skills and governance that chased intrinsic worth via early mover advantage.

Innovations that delivered least value include: leverage, structured products, currency funds, and portable alpha. They worked for some investors but not others.

The rest of the innovations fell between the two extremes, as shown in Sections 3 and 4.

Pension plans that lost out report three contributory factors.

First, they relied on financial engineering to extract value where there was none. Second, they relied on external advice to the extent that often promoted a herd instinct that prevented buying on the dips.

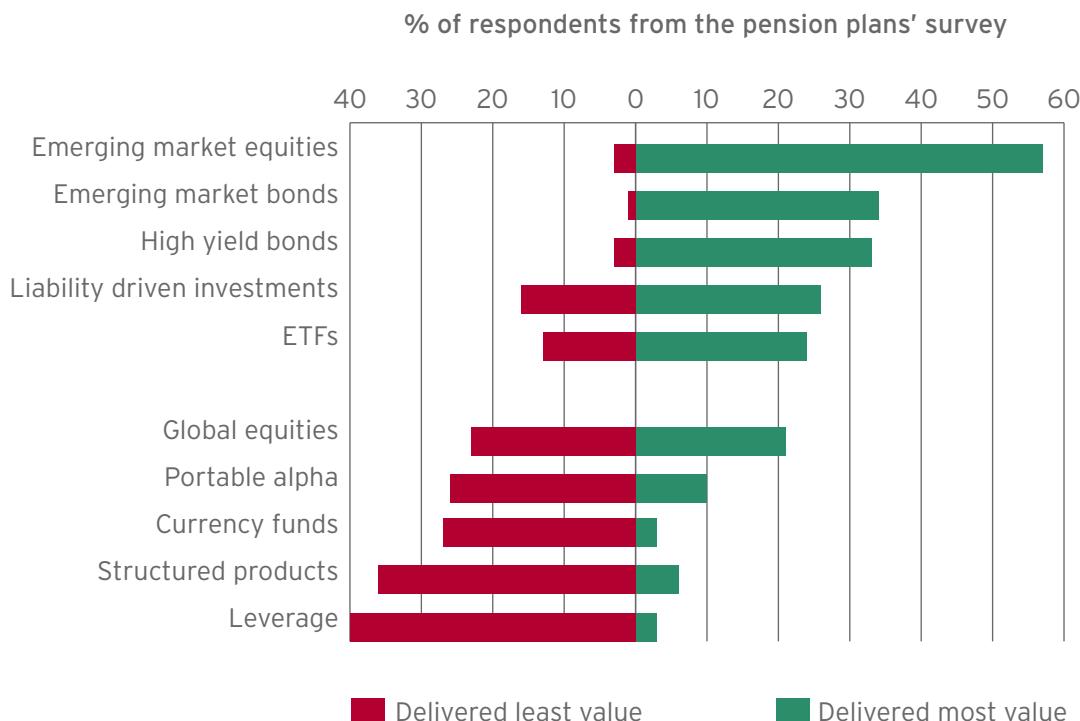
Third, they were less aware of the conditions in which innovations work because of low engagement with their asset managers.

This assessment by pension plans is duly echoed by their asset managers, but with one caveat: innovations were not inherently unsound if their 'health warnings' were heeded.

Clients have learnt one lesson: unlike cars and computers, fund products don't have replicable outcomes and a definable shelf life: timing and market environment matter.

Hence, it is unwise to throw the innovation baby out with the bath water.

In the last decade, which innovations delivered most value and which delivered least value?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Which asset manager can claim Apple's historic run of successes?"

"Many innovations may enjoy a 15-minute fame. What matters is how you use them."

"Best innovations minimise investor foibles and choose the right time. Success is as much about 'when' as 'what'."

Required improvements

In the last decade, as the equity risk premium dried up, liability-matching became essential. Neither asset managers nor pension consultants receive high plaudits for helping pension plans to manage the ensuing transition: a sign of new urgencies as much as old weaknesses. Overall, asset managers score better.

The pension promise was easy to make, hard to keep. Three changes will help in the future.

First, pension plans want future innovations to improve two product features that directly impact their bottom line: the risk-return trade-offs and their fees and charges. A new asset class won't help while all the money is locked into the old.

Second, they want risk models and investment processes to have a strong overlay of human judgement, especially while the global economy remains exposed to systemic shocks. Investors can no longer rely on the rear-view mirror.

Third, pension plans in Asia go even further: they want their managers to have a strong regional presence, as China reshapes the global economy and emerges as a fund superpower. Proximity is vital for promoting diversification and the buy-and-hold culture.

Future innovations

Over the next three years, innovations will aim to deliver the three identified changes via product-deepening more than product-widening: improving the old before creating the new.

Client pressures will be one factor. Another will be fresh headwinds from four sources: product commoditisation by banks; regulatory creep; uncertainty in the global economy; and scarcity of talent with new insights and gut instincts required to exploit this uncertainty.

More than ever, talent will be a key differentiator. There is a shortage of people who understand the new global economic dynamics and its impact on financial markets.

As highlighted in the Executive Summary, some innovations are likely to prove especially disruptive to the existing business models.

These will change, in any event, as the established trends continue.

In particular, the multi-boutique model will spread from the West to the East in pursuit of local presence; and outsourcing will spread from back to middle office activities in pursuit of operational excellence.

The US will retain its pre-eminence as the pioneer as well as the early adopter of new innovations; even though fresh net inflows will mostly emanate from the East.

Conclusion

Lessons have been learnt by investors and their managers.

Pension plans have learnt that asset allocation is the alpha behind alpha.

That means not going to anything radically new without strong investment beliefs, a disciplined approach to trading and skill sets to understand risky products. Hence, attempts are being made to develop these requisites within better governance structures.

Two lessons have been learnt by asset managers.

First, innovation is no longer about competitor leapfrogging.

Rather, it is about creating products via a robust process that generates new ideas, evaluates them, converts them into something that is fit-for-purpose and seeks the 'best endeavour' outcomes. Such processes are now being taken on board.

Second, clients as well as third party administrators need to be involved as innovation partners.

Accordingly, client engagement is improving.

Administrators are also being encouraged to fast forward their progress on the investment value chain by developing core functionalities that ensure product integrity.

The crisis marked the end of a chapter in the history of investment innovations: more a moment of introspection than the mother of invention.

Clients have wised up. Asset managers have started a fresh narrative on what they can deliver.

Time will tell whether their current efforts will fare better than previous ones.

The rest of this section drills deeper into these findings by expanding on the core themes that emerged from our two surveys.

Theme 1: Client engagement is rising in order to minimise inflated expectations

Just under a third of asset managers have engaged their pension clients when innovating the products sold to them.

At the other extreme, another third have rarely consulted their clients.

Such engagements typically solicit new ideas, manage expectations and raise awareness.

On the surface, client engagement seems weak. Below it, however, positive undercurrents are evident.

Engagement was even lower five years ago, when asset managers were largely dis-intermediated by consultants in most of the defined benefit (DB) and DC markets.

The resulting gulf has been one of the reasons why clients do not rate highly their asset managers and pension consultants in various activities that add value.

However, the crisis has forced asset managers into a more concerted effort to understand, anticipate and meet the needs of pension plans.

It is being driven by regular focus groups, pulse surveys, informal contacts and joint seeding of new products.

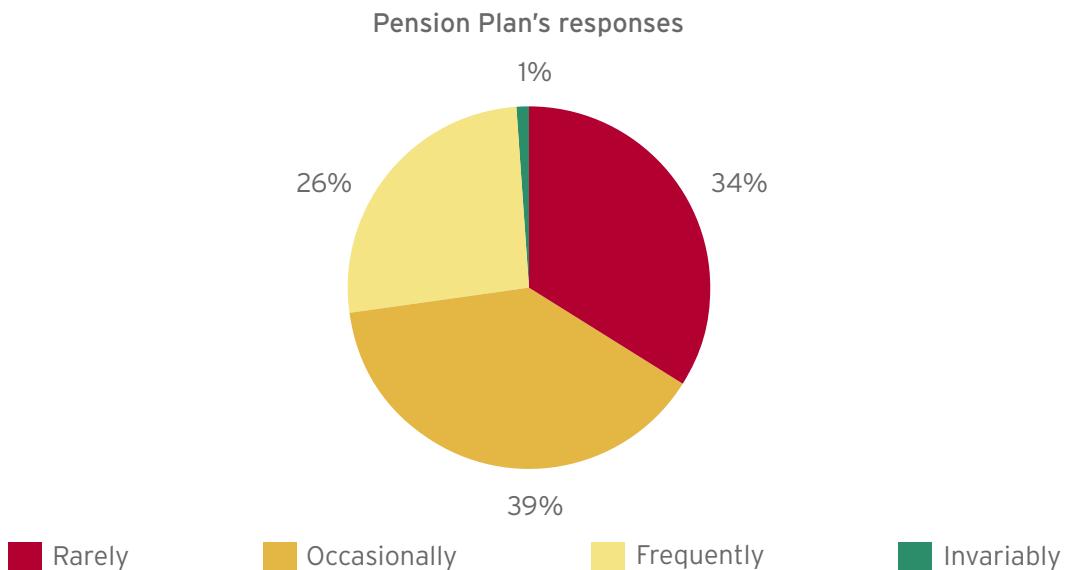
Clients are being made aware that innovation is not about predictable outcomes.

Rather, it is about managing money within a definable range of outcomes. Every position in the range is a matter of conviction, not guarantees.

Even fat-tailed risks cannot be managed without a high tolerance for ambiguity that looks at risks from different angles.

It is now widely acknowledged that without greater client engagement, hopes will always run ahead of expectations.

Figure 1.1 How often has your asset manager involved you when innovating the products that you buy from them?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"No wonder so many plans are on their knees. Their peer and market benchmarks removed accountability for outcomes."

"We knew that Madoff was stealing from someone. We didn't think it was us."

"In today's real-time world, correlated mistakes are common. The herd mentality amplifies market cycles."

Theme 2: Regulatory creep will ease the innovation tempo

According to over 40% of pension plans and asset managers, two drivers will influence the pace and content of innovations after the crisis: an accelerated switch from 'products' to 'solutions'; and fall-out from new regulation.

In the DB space, the switch will be led by LDI, as the use of the mark-to-market rules spreads from Europe to the US, Japan, Canada, and South Korea.

In the DC space, it will be led by advice-embedded products, diverting assets from DB plans and trust-based DC plans.

Another important driver will be regulation. Unlike banks and insurance companies, asset

managers do not expect anything draconian beyond the AIFM Directive and the revised MiFid Directive in Europe; compulsory registrations of hedge funds in the US; a review of supers in Australia; and more stringent scrutiny of mutual funds in Asia.

Even so, the current regulatory creep is forcing introspection.

The Dodd-Frank Act in the US will demand more onerous oversight and operational capital from bank-owned asset managers, without reducing systemic risks.

Beyond that, Solvency II rules in the EU will force insurance companies to divest risky assets; reinforcing doubts about whether equities will

ever roar back to life again.

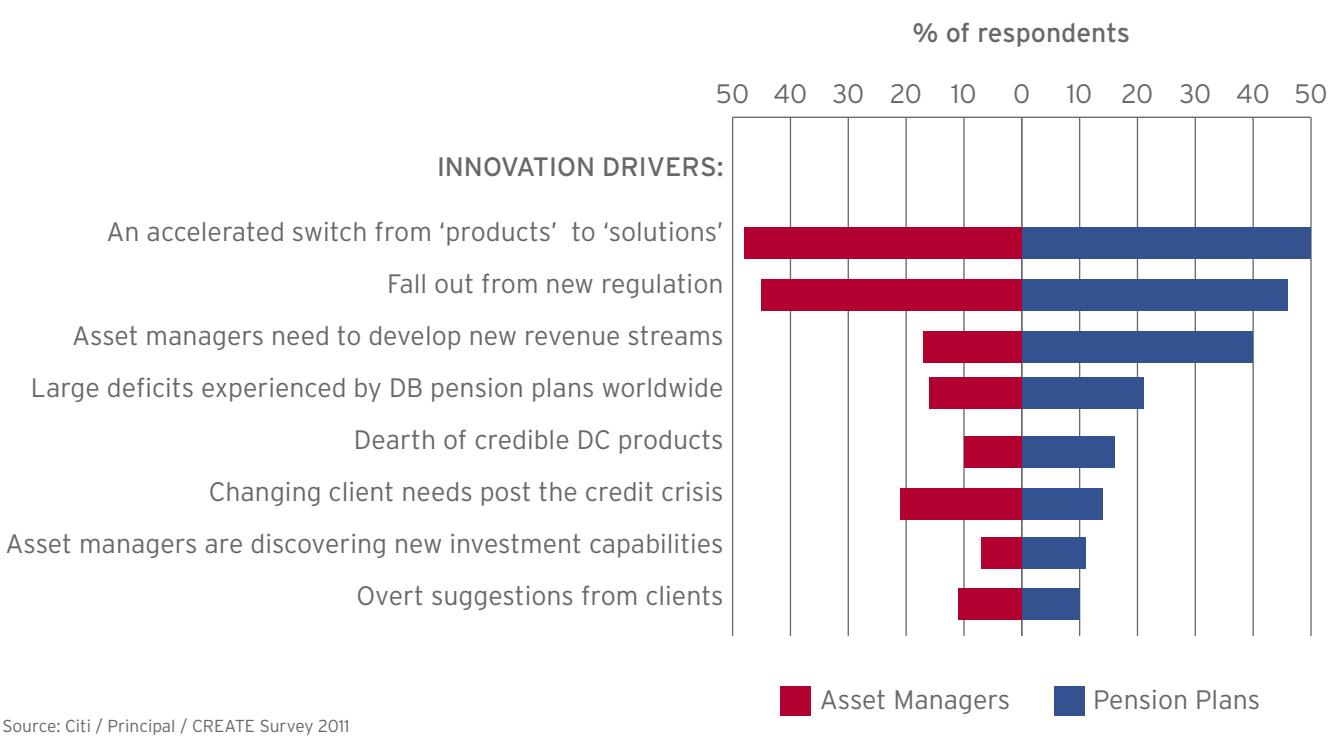
Regulators are also creating unintended consequences by re-interpreting the old rules.

For example, pension plans in the Netherlands are obliged to value their illiquid assets conservatively and declassify gold as a monetary asset. Some Scandinavian plans are prevented from investing in emerging markets.

Worse still, a Japanese style 20-year flatline is not inconceivable, especially since the S&P's recent downgrade warning on the US economy.

The identified innovation drivers are unlikely to favour copycats.

Figure 1.2 What factors will drive innovation in global asset management over the next three years?



Interview quotes:

"After 20 years, average DC plan balances are \$45k in the UK, \$58k in the US and \$119k in Australia. What can that buy?"

"The mutual fund model is flawed: with few 'sale' recommendations, hidden charges, and no big switch to cash when necessary."

"Solvency II and Basel III will divert interest from risky assets. Who will buy equities in 5 years?"

Theme 3: Product-widening and product-deepening will characterise future innovations

2008 was a watershed. It forced a discernible shift from product-push to investment-pull. Before then, new product ideas principally came from sales and product development teams. Clients and investment professionals took a back seat. Now, it is the other way round. This speaks to an important theme: innovations only work if we know their limits. Problems arise from delusions that markets can be tamed.

Against this background, 88% of asset managers foresee further product innovations over the next three years. Of this, 52% expect 'incremental' ones. These will aim to improve the inherent features of existing products more than creating new ones. Another 36% expect 'wholesale' innovations.

In the DB space, these will embrace assets such as agriculture, carbon rights, intellectual property rights, catastrophe bonds, shipping contracts and wind farms. In the DC space these foresee major improvements in existing products by creating a dynamic glide path, a stop loss mechanism and a seamless rollover into a retirement solution that blends income draw-downs with annuities.

On the business model side, 'incremental' innovations will see the continuation of well-established trends, whereas 'wholesale' changes will see their acceleration.

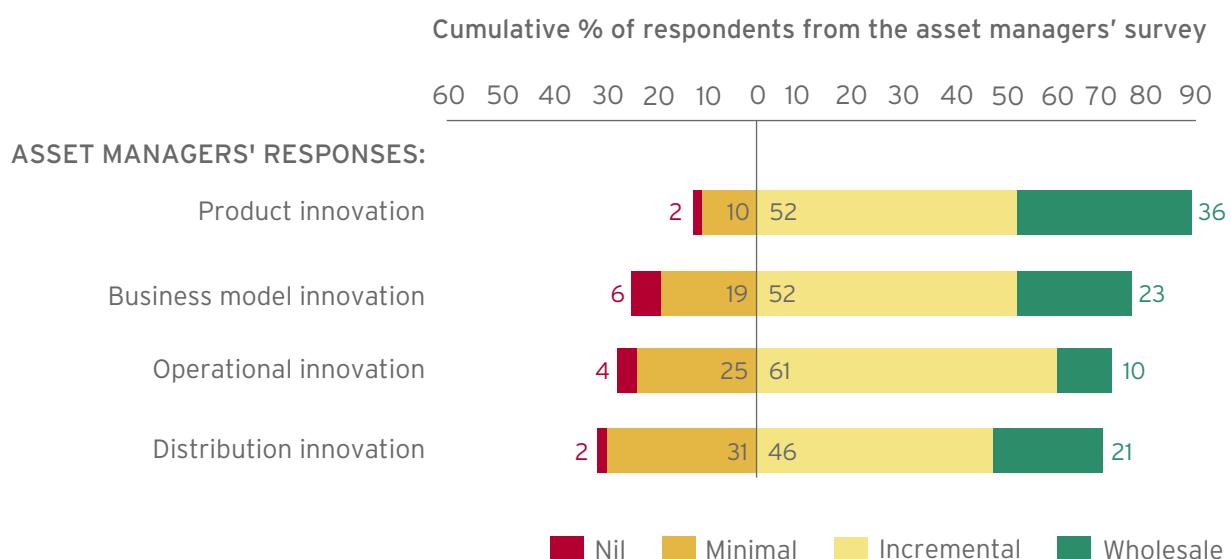
They will involve one or more of the following: middle and back office outsourcing, distribution alliances, multi-boutique model, client service model and new innovation processes that deliver more robust products.

Likewise, operational innovations foresee improvements in fund restructuring, data warehousing, new technology and risk analytics.

Finally, distribution innovations foresee 'incremental' improvements in service models and sales channels; and 'wholesale' changes in fee structure resulting from the dismantling of the old style front-end, trail and exit commissions in response to likely regulatory pressures especially in Europe and Asia.

Among the innovations in the works currently, five may prove especially beneficial to end-clients over this decade: the phasing out of commissions, the adoption of high watermark fees, new DC products, state-of-the-art data warehouses and innovation tools.

Figure 1.3 What will be the scope of four distinct types of innovation in your business over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Real innovations will be very slow, as in physics: from Archimedes to Newton to Einstein."

"Embedded advice products and client education will dominate the next wave of innovation."

"Multi-locals in the East will take the form of multi-boutiques in the West. They will have a strong local focus."

Theme 4: Pension plans have an open mind about future innovations

When asked whether further product innovation will deliver genuine value for money to end-clients over the next three years, 39% of pension plans said 'yes'; 32% said 'no'; and 29% said 'don't know' (right hand chart). In contrast, asset managers are decidedly more optimistic (left hand chart).

Pension plans anticipate no groundbreaking innovations that will markedly help them.

Currently, 60% of DB plans worldwide have funding levels below the statutory watermark. 70% need annual returns well in excess of 6% to meet their deficits. These numbers sound like mission impossible in today's low return environment.

Hence, investment and non-investment solutions are in progress now.

On the investment side, LDI is catching on fast, especially in Europe and, to a lesser extent, the US.

Its returns-enhancing portfolios invest in a range of strategies: with high alpha at one end and low-cost beta at the other. Its dynamic version progressively immunises risk as the funding ratio improves. Its oversight requires transparency of returns, charges, liquidity and scalability as part of innovation. This is a far cry from the old 60:40 equity-bond mix, or its refined version like the risk-parity portfolio.

On the non-investment side, a series of incremental changes have

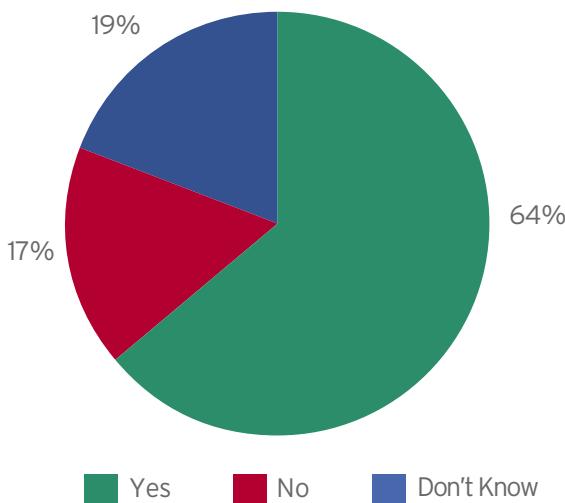
been introduced since 2005, on top of the closure of DB plans to new members.

They include raising the retirement age and the contribution rate. Benefits based on final year salary are being replaced by those based on career average salary. Discretionary indexation has been suspended, where possible. These changes have come in both private and public sectors, via messy law suits and piecemeal compromises.

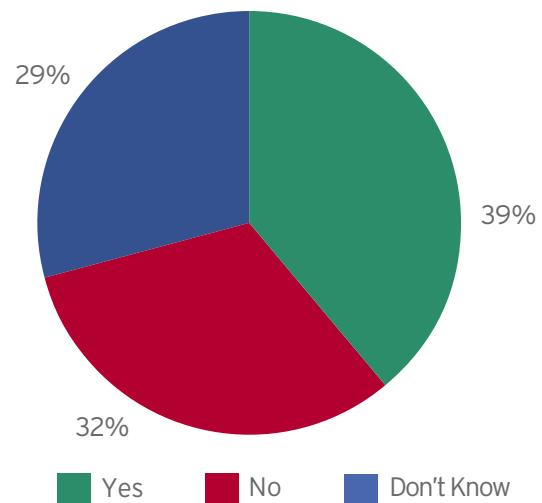
By the end of this decade, most private sector DB plans in Canada, Ireland, the UK and the US may close even for existing members; with the balances reinvested in DC plans. What was unthinkable five years ago may be commonplace 5 years from now.

Figure 1.4 Overall, do you think that further product innovation will deliver genuine value to end-clients over the next three years?

Asset Manager's responses



Pension Plan's responses



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Five years ago, 70% of our new business came from products that were less than three years old. Now, it is 25%."

"The result is not the writing on the wall for investment innovations, but only the opening lines of a new chapter."

"As cash continues to pile up in Asia, the fear is that all this money cannot be put to work responsibly."

Theme 5: Pension plans want to see in place mechanisms for 'best endeavour' outcomes

Few innovations are path-independent: the unexpected often happens. In the 2000s, leverage was the key source of out-performance while it lasted. It concealed the scarcity, persistency and scalability of alpha. Investors' foibles compounded the problem. Lessons were learnt.

When asked in our interviews what should feature in the next wave of innovations, eight were singled out by pension plans worldwide: four relating to products and the other four to business models (see chart). The regional unanimity was

striking, albeit for different reasons: plans in the West need innovations to remain solvent; plans in the East need them to remain credible.

But they stressed that, insofar as innovations cannot deliver predictable outcomes, they should at least seek 'best endeavour' outcomes.

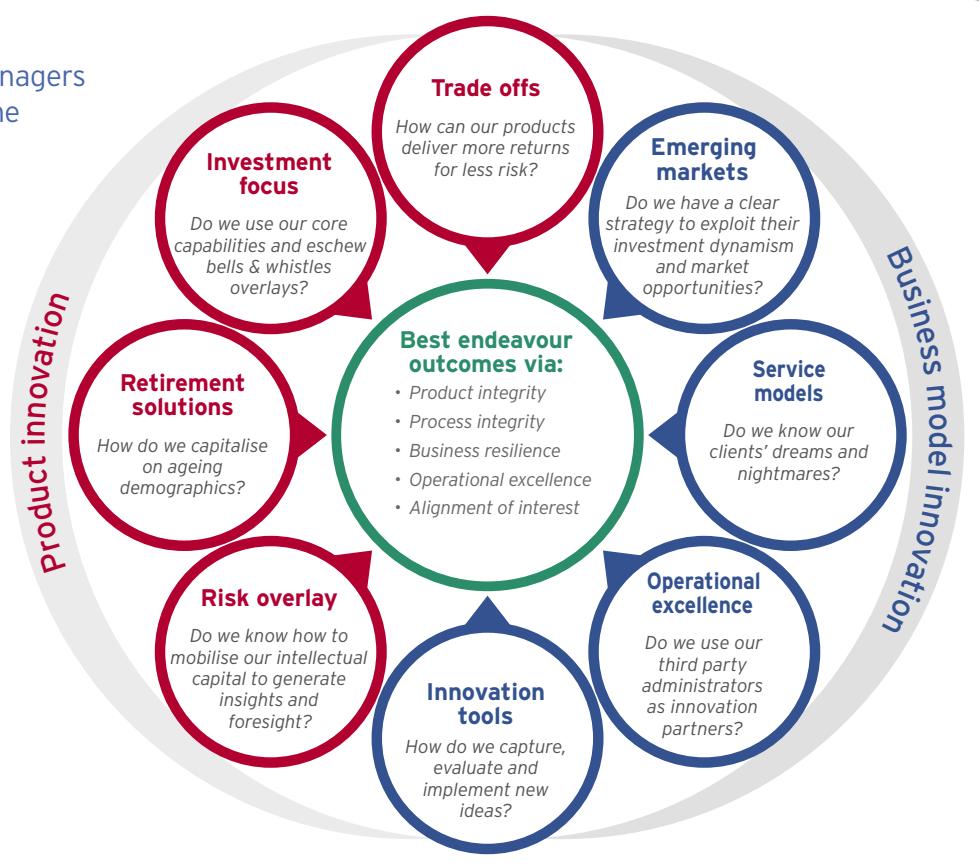
These must be based on product integrity, process integrity, business resilience, operational excellence and interest alignment (the inner circle in the chart).

Via these, asset managers must exercise a 'duty of care' and create products that are fit for purpose by addressing the eight questions listed in the outer circles. Of these, five represent areas regarded as being crucial in delivering a win-win for clients and managers alike: trade-offs, investment focus, risk overlay, emerging markets and operational excellence.

Each of these is now considered in turn.

Figure 1.5

What questions do asset managers need to address to deliver the 'best endeavour' outcomes?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"For much of the last decade, asset managers spent a lot of time worrying about almost everything but their customers."

"Problems arise from the delusion that markets can be tamed."

"It's time to improve the existing mousetraps rather than create new ones."

Theme 6: Pension plans want a better risk-return trade-off within a value-for-money fee structure

According to pension plans, the top five features that need improving are as follows:

60% of pension plans want improvements in the risk-return features of different asset classes. New products also need to be stress tested against extreme scenarios.

51% want fees and charges to be the cornerstone of the alignment of interests. Worldwide, a meritocratic incentive structure remains a dream. Whereas the poorest performing managers charge the lowest fees, the best performing managers do not always charge the highest fees.

43% want greater transparency in the investment process as well as

outcomes. Many want independent performance attribution analysis that singles out, for example, the roles of skill, luck, momentum, industry sector and growth.

33% want greater simplicity in product design, its marketing and its after-sales service.

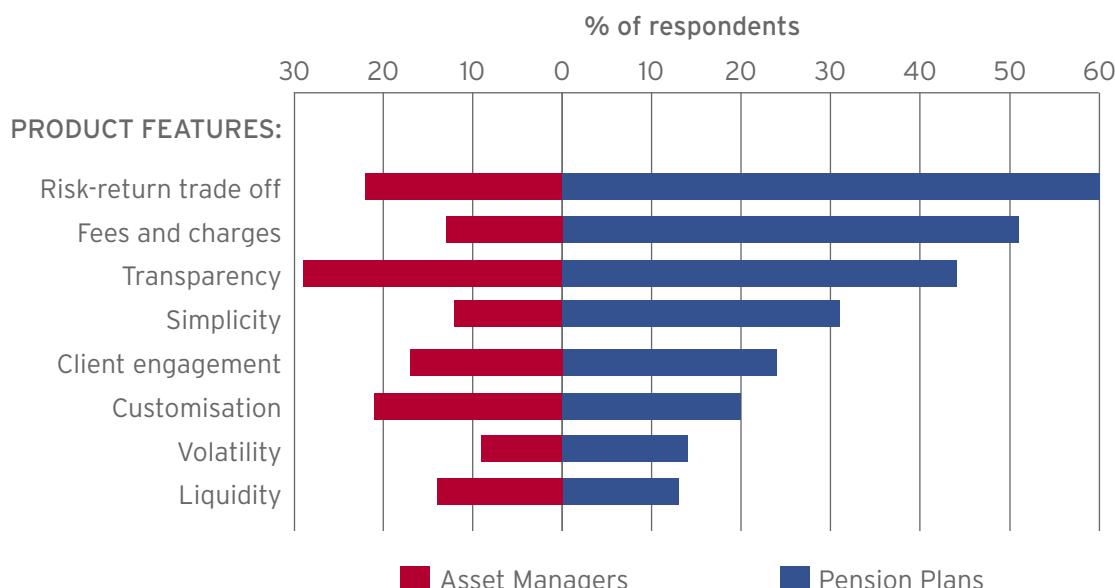
23% want better client engagement in product design and follow-up portfolio reviews.

Notably, far fewer managers perceive the need for improvements in each of these areas. The perceptions gap is especially striking in the two areas that directly impact on clients' bottom line: risk-return trade off, and fees and charges.

Asset managers recognise these imperatives but many doubt whether they can be delivered over the next three years. The trade-off is a matter for markets as much as human ingenuity; fees and charges are difficult to adjust in what is a fixed cost people business that cannot be leveraged in a flat market; and greater transparency may undermine the competitive edge.

Yet, the winds of change are evident.

Figure 1.6 Which of the following fund product features will need to improve most over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"High watermark fees will be the biggest disruptive innovation in this decade. They killed off many 130-30 strategies."

"With mediocre returns, Australian supers are under pressure to drive down fees and improve returns."

"Without better returns, DC plans will be on the same death road as DB plans."

Theme 7: Asian plans want innovations to be rooted in distinct skill sets

In Japan, 20-year duration zero coupon bonds are common. Some 80% of pension assets sit in passive funds. Asset allocation is driven by law or peer pressure. Bond-bias and home-bias are pronounced. These anecdotes tell a bigger story: Asian institutional investors are very risk averse.

However, due to their fast maturing liabilities, pension plans, state social security plans and insurance companies are variously showing interest in areas characterised by seven distinct product buckets (see chart below).

But they want to be satisfied that innovations in these buckets solely stem from managers' core skills, as distinct from pure market opportunism - as happened when some long only managers went into hedge funds after 2004, as if they were fads requiring no unique skill sets.

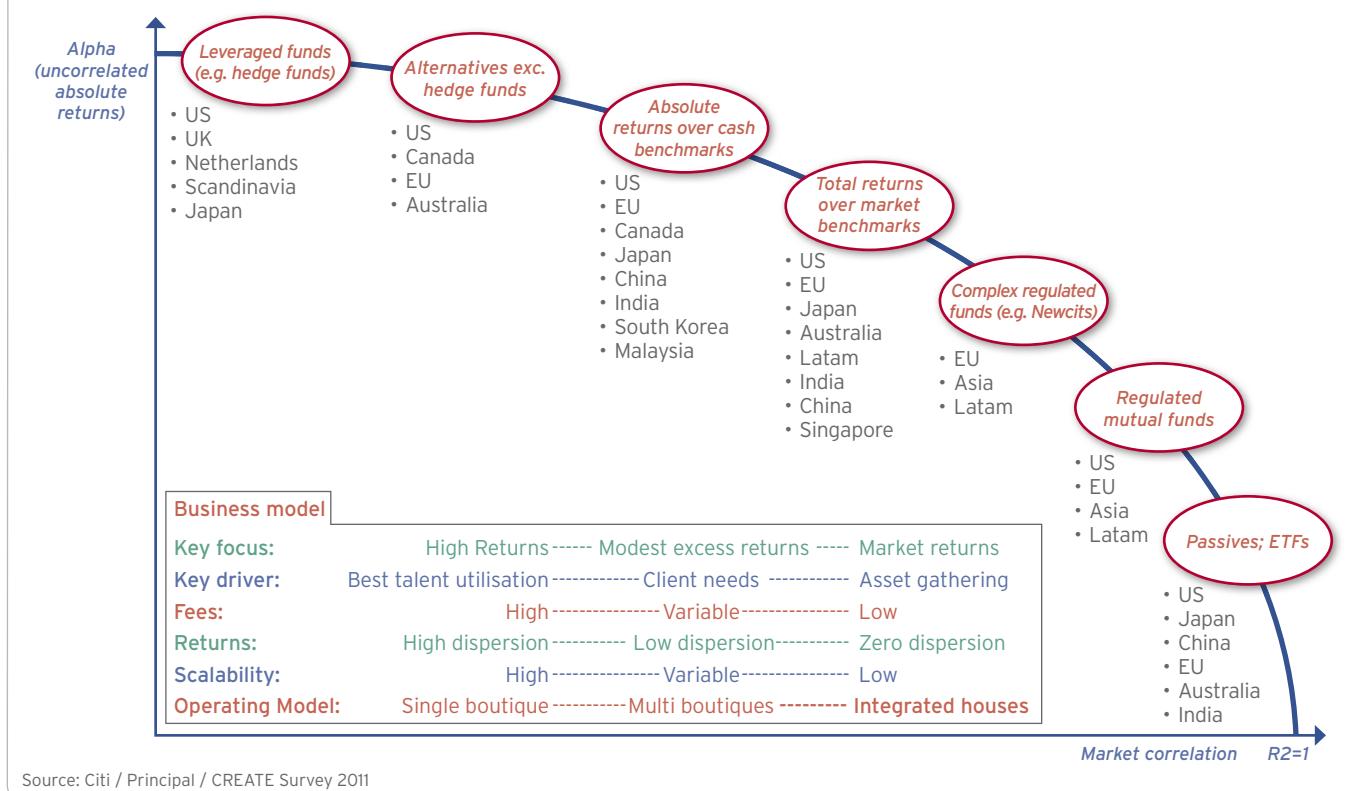
They also want each bucket to have a clear value proposition that is aligned with the underlying business model of the manager (see the box in the chart).

For example, the model should ensure that managers have genuine capabilities that can minimise the

gap between actual and expected returns for each bucket. It should ensure that the fee structure reflects the value added in each bucket. It should ensure that managers can afford to close funds that do not scale. Finally, it should ensure that each bucket has an operating model that is most appropriate to its value proposition.

Notably, these imperatives are also echoed by institutional investors from various countries listed under each bucket. Their solutions-driven investing is now relying on distinct product sets for the necessary components.

Figure 1.7 In the next wave of innovation, how do clients in different jurisdictions want their asset managers to focus on their core capabilities?



Interview quotes:

"Absolute return is a mental concept. You can't do it unless you really believe in it. Never fall in love with stocks you own."

"Innovations only work when they build on the manager's core competency. Asian investors don't go for funky stuff."

"Independent performance attribution analysis is blowing the cover on alpha managers."

Theme 8: Uncanny instincts for threats and opportunities should dominate risk overlays

It is widely held in the global pension industry that the existing risk models and investment processes came unhinged in the last decade when they didn't foresee the two vicious bear markets; they didn't detect the time bomb concealed in cheap money; they didn't see asset class correlation going through the roof; and they didn't anticipate the unintended consequences of the mark-to-market rules that turned the US subprime crisis into a global disaster.

They do not capture subtle nuances of the evolving investment landscape where risks are springing up from unexpected sources: e.g. the sovereign debt crisis in Europe, upheavals in the Middle East and the earthquake in Japan.

Black Swans cannot be predicted. The least that asset managers and consultants can do is to stress test their ideas under extreme scenarios via fundamental judgement that is based on insights and foresight in the hierarchy of knowledge (the top two layers in the chart below). These combine what people think in their brain with what they feel in their gut.

Existing quant models are good at digesting the bottom three layers - data, information and explicit knowledge - which are widely available.

However, they miss out the fresh nuances which can only be captured via gut instincts, hunches and intuitions gained from years of experience on the part of investment professionals. These

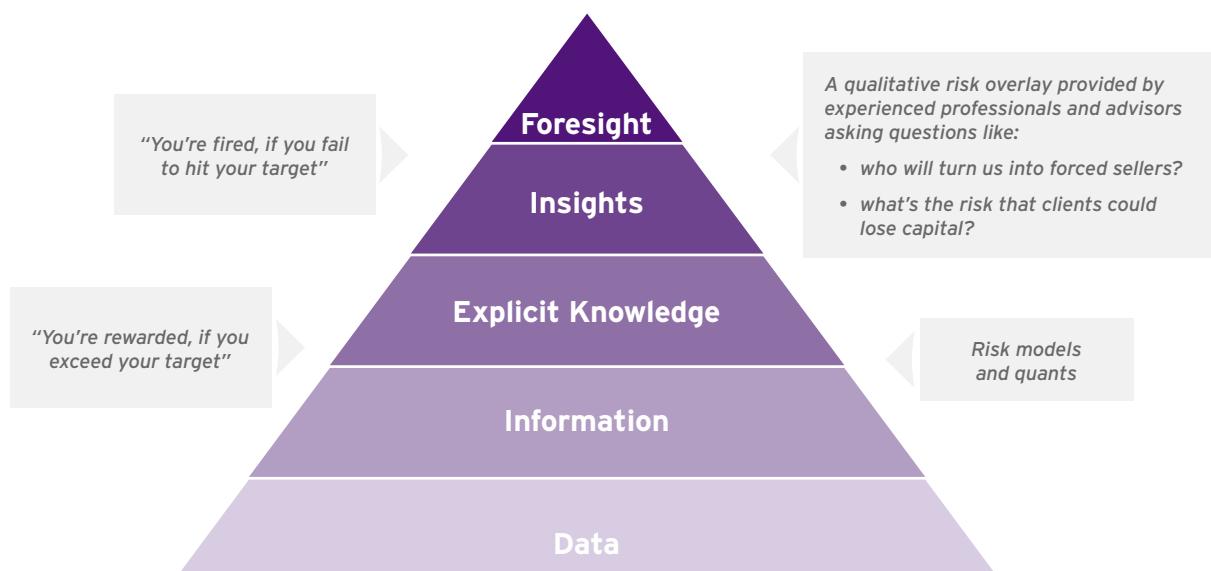
cannot be modelled. Yet they are sorely needed as risk has gone ever more dynamic.

Usually, intuitions are sparked by intensive "what if" type discussions involving people with highly diverse views and a high tolerance for ambiguity.

Pension plans want to see quant models and fundamental judgement combined within a careful marriage of the two, duly underpinned by incentives and sanctions. The narrative in the chart exemplify different considerations in the hierarchy.

Concepts like VaR, information ratio and tracking error have lost credence when decision speeds are compressed from calendar time to real time; and markets are moved more by sentiment than history.

Figure 1.8 How do risk models need an overlay of human judgement and individual incentives?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Like alchemy and quack medicine, risk models thrive on investors' wish to believe impossible things."

"A good risk overlay combines personal insights, transparent processes, efficient operations and well crafted incentives."

"Intuitive people have a high tolerance for ambiguity. They know that there are several ways of looking at the same thing."

Theme 9: Emerging markets will be the new frontier where mind space is more important than shelf space

In this decade, emerging markets are expected to be the principal sources of new funds as well as their destination. For them, the West will be a safe haven during periodic turmoil; not an investment magnet. China is a nascent fund superpower. It faces two challenges, like its neighbours.

First, its institutional investors are ultra-cautious, trading quality for simplicity. Second, in contrast, its retail investors are momentum-driven: buying high, selling low. Investment invokes gambling undertones.

Hence, most jurisdictions are taking baby steps towards incremental diversification for pension investors, and financial education for retail investors.

In the process, they want to involve asset managers from the West provided they create manufacturing capability on the ground, instead of distribution alliances, as happened in the last decade.

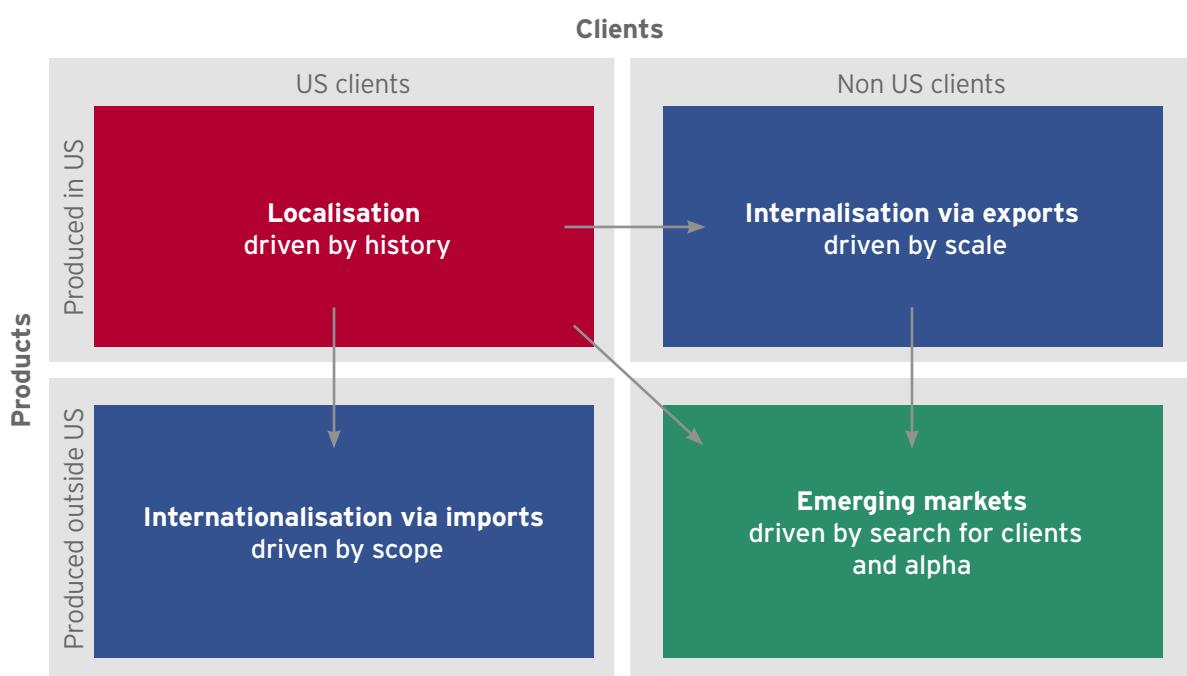
For example, the US-domiciled managers went global largely by exporting their domestic funds (north east box in the chart) or importing foreign funds (south west box).

As the decade progresses, Asia increasingly will shape the global economic dynamics. Its governments are creating an indigenous industry for top-down and bottom-up strategies to promote cross border trade in funds across the emerging markets (south east box). Those who venture into this box are likely to do well.

Client visibility will become ever more important in the Asian markets, as they promote financial literacy directly and a buy-and-hold culture indirectly.

For non-Asian asset managers, proximity will differentiate 'price makers' from 'price takers'.

Figure 1.9 Why do emerging markets want asset managers from the West to create manufacturing presence on the ground? (a stylised version of how US asset managers have globalised their business via imports and exports)



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Asia is a treasure trove of investment opportunity. It requires boots on the ground and a lot of patience."

"Across Asia, losses are frowned upon. Asset managers have a big educational task in promoting a buy-and-hold mentality."

"Now, innovations flow from West to East. Soon that may go the other way as well."

Theme 10: Persistency of good returns needs operational excellence

Independent attribution analysis shows that the persistency of good returns depends upon a number of factors - operational excellence being one of them.

Not only does it create the right environment, it also reduces costs. As a result, it now features strongly when pension plans award fresh mandates.

In response, asset managers continue to outsource many of the middle and back office activities, while encouraging their third party administrators to improve the six core functionalities that feed into the innovation engine of asset managers.

These are: data warehouses that give real-time information on trades; simulation models that stress test new products; risk analytics that give second opinions; fund structuring that extends global footprints; independent valuation of illiquid assets that gives 'fair value' estimates; and performance attribution analysis that ensures product integrity.

Over the next three years, asset managers expect their administrators to continue an upward advance in the investment value chain (see chart below).

34% expect them to improve the ease of fund structuring in separate jurisdictions.

20% expect them to develop state-of-the-art data warehouses.

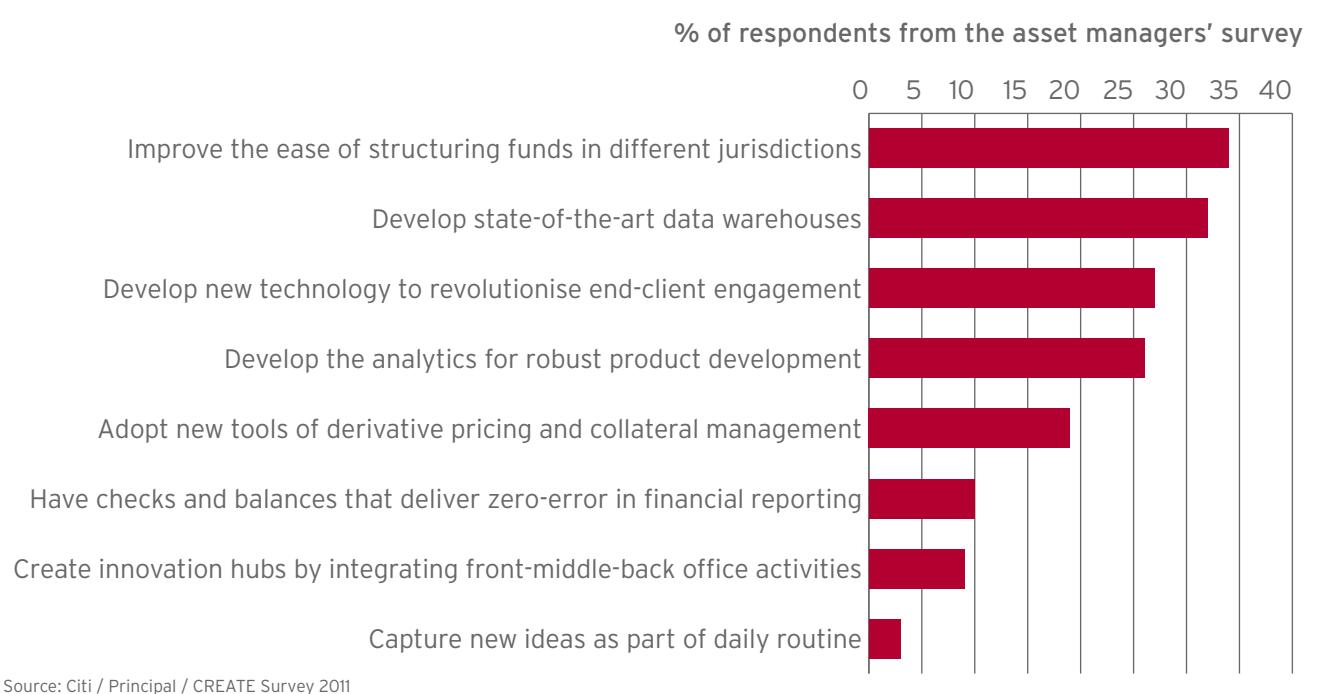
27% expect them to develop technology to enhance client engagement via online interactive decision support tools.

26% expect them to develop more robust analytics for product development.

If performance is the target, focus is its silver bullet. By taking over non-core activities, administrators are emerging as innovation partners.

Asset managers have barely scratched the surface of Web 2.0. Via alliances, they will before long.

Figure 1.10 In order to deliver operational excellence, what will be different about third party administrators' approaches to innovation over the next three years?



Interview quotes:

"Service providers are helping us create currency funds in the Ucits structure."

"70% of Australian supers have outsourced their back office."

"Everything in our data warehouse is real time: information capture and its analytics. It's a reliable decision-support tool."



3 An open mind

"The world of investment is cyclical, fashionable and self correcting. Only intrinsic value triumphs in the end."

Issues

This section presents the results from the pension plans' survey and the follow-up interviews. It covers the following questions:

- which innovations that applied to pension plans delivered the best value for money and which delivered the least value in the last decade?
- what factors influenced the outcomes?
- how have asset managers and pension consultants fared in helping their clients to achieve their goals since the crisis broke in 2008?
- going forward, what challenges do pension plans face?
- what actions do they require from asset managers and pension consultants?

Key findings

- Many investment innovations were first introduced in the 1980s and 1990s. But their substantive adoption by DB plans came in the wake of the losses inflicted by the 2000-02 bear market. It shifted attention from relative to uncorrelated absolute returns.
- The 2008 credit crisis hit all innovations indiscriminately. Only emerging market equities are singled out by more than 50% of pension plans as delivering most value in the last decade.
- The four that came after them are: emerging market bonds, high yield bonds, LDI and ETFs.
- Strong beliefs in their intrinsic worth, the right timing, and prime mover advantage contributed to their relative success.

- The ones that delivered the least value are: leverage, structured products, portable alpha, currency funds and global equities.
- Absence of intrinsic value, systemic risks, low client engagement and herd instincts contributed to their relative failure.
- The crisis exposed the design faults of the new suite of DC products and inspired improvements.
- It also marked a defining moment for asset managers and pension consultants. Their value-add has been variable since then: managers score better. But scope for improvement remains.
- The size of current plan deficits and the returns required to fix them are daunting in today's low nominal return environment.
- Pension plans are left with two actions: trim benefits and seek more bang for their buck.
- For the majority of them, risk failed to generate return in the last decade.
- Some are unsure whether that would improve in this decade, due to the recurring bursts of risk-off/risk-on activity that has ignored fundamentals since 2009. Others believe that active managers should have a field day.
- Both camps want asset managers and pension consultants to develop deeper insights into the dynamic nature of risk. Current risk models tend to rely on the rear-view mirror even though investment has become heavily nuanced.
- Both camps want significant improvements in two product features that impact on their bottom line: the risk-return trade-offs (i.e. how much returns per unit of risk), and fees and charges. They perceive high watermark fees as one of the disruptive innovations of this decade.
- They also want more transparency and simplicity, so that the intrinsic worth of their assets is not concealed by devices such as derivatives, shorting and leverage. These should complement, not conceal, product integrity.
- The message is simple: their service providers should improve what they currently offer. A new asset class won't help while the bulk of money remains locked in the old.
- Notably, before long, pension plans in the East aim to diversify into new asset classes and geographies in ways that would help managers in the West. But they see past innovations as costing too much and delivering too little.
- They also want their managers to have a strong local or regional presence for top down as well as bottom up strategies, especially while Asia reshapes the global economy.

“Chance favours only the prepared mind.”

Louis Pasteur

Most innovations were overwhelmed by the credit crisis

The 2008 crisis hit all innovations indiscriminately.

Even so, more than one in four plans who responded to our survey singled out five innovations as having delivered most value over the last decade.

These are: emerging market equities, emerging market bonds, high yield bonds, LDI and ETFs.

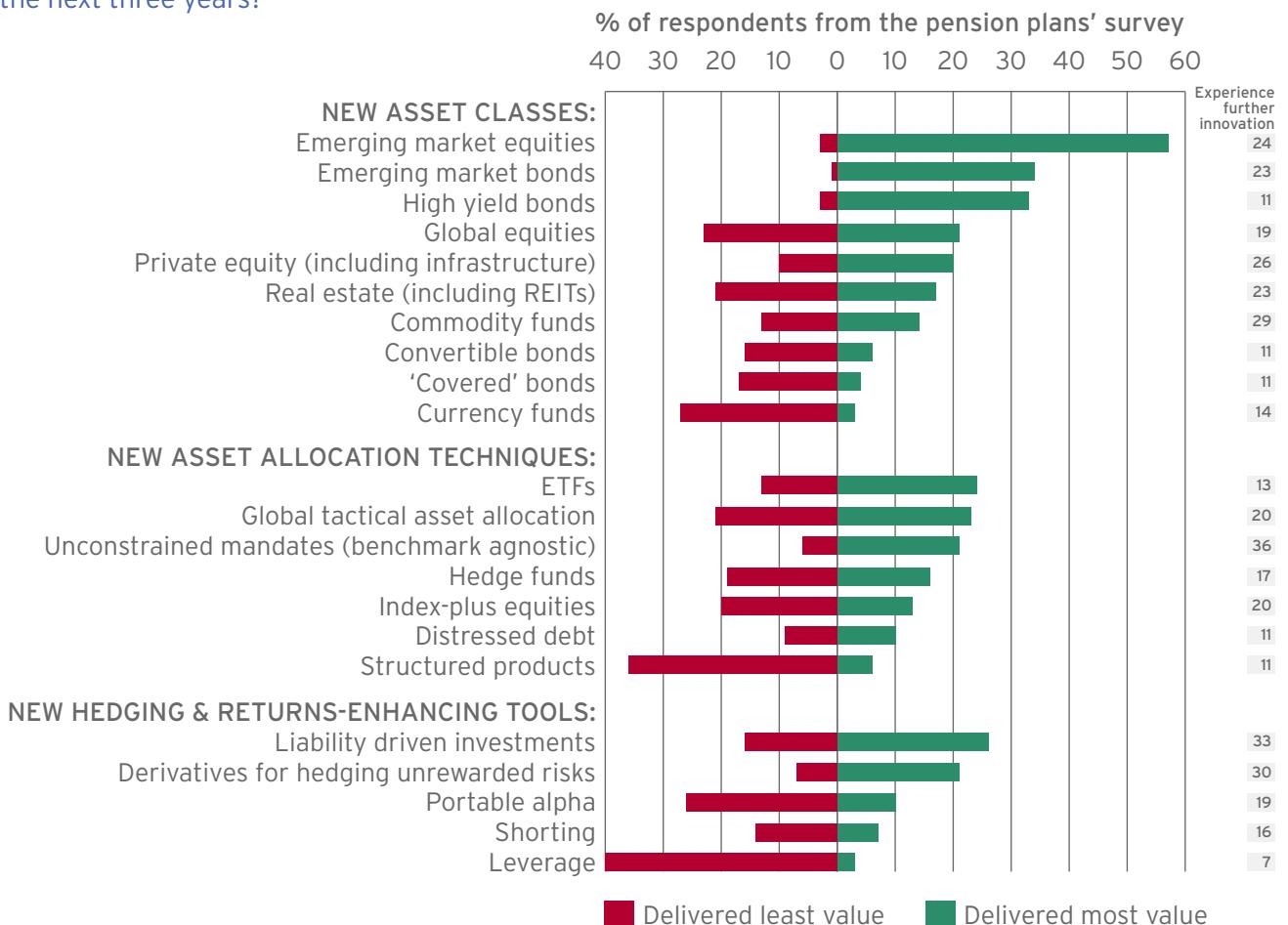
Three factors contributed to their relative success, according to our post-survey interviews.

First, they had the skill sets and governance structures to capture intrinsic value created by unique conditions: e.g. rise of BRIC economies, the acceptance of non investment grade debt, availability of de-risking tools, and the

appearance of low cost means to get market exposure.

Second, the timing of their moves was broadly right. From past experience, DB plans had learnt that the success of their investment calls had as much to do with timing as with inherent quality, especially so in a decade that experienced two fat-tailed events.

In the last decade, which innovations in the three subsets delivered most value to DB clients and which delivered least value? Which ones will experience further innovation that will benefit clients over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"There's no free lunch in diversification. You need clear beliefs rather than blind faith in ex ante numbers."

"ETFs allow you dynamic asset allocation at low cost and full liquidity."

"Correct timing has turned high yield into a great hit. From here on, it'll do no better than coupon."

58%

put emerging market equities at the top

Third, they chased opportunities that chimed with their gut beliefs (see box below). These were instrumental in giving them prime mover advantage before opportunities were arbitraged away by newcomers.

At the other extreme, five innovations delivered least value, according to one in every four plans. These are: leverage, structured products (guaranteed equity bonds), portable alpha, currency funds and global equities. Three different factors were at work.

To start with, leverage and structured products tried to squeeze value from their underlying assets - where there wasn't much. Nor was there much alpha to port. Strategies that were meant to thrive on volatility - e.g. hedge funds and

32%

put emerging market bonds second

currency - came unhinged. Their idiosyncratic risks were crushed by the systemic ones.

Likewise, after a brilliant decade, global equities lost their bloom with the 2000-02 bear market. For some pension plans in Australia, they worked well. For their peers in the US and the UK, they did not.

Another factor was herd instinct on the part of pension plans. New asset classes and tools either reinforced their behavioural biases in some cases or countered them in others. Many plans went into alternatives when their peak returns were history. Nor did they have the governance and skills to monitor the use of complex tools like leverage, shorting and derivatives.

Finally, their engagement with asset managers was low to the extent that

40%

put leverage at the bottom

they were less aware of the limitations of their investment choices.

Looking ahead, DB plans want their asset managers to improve the design features of their offerings, not invent new ones.

They want asset managers to do a few specific things: seek governance improvements in emerging markets where corporates are seen as being run mainly for the benefit of the country rather than their shareholders; develop deeper insights into the risk-return features of all asset classes at a more granular level and the inter-correlation between them; and create a distinct overlay of human judgement on all risk models so as to manage systemic risks.

A view from the top...

Two bear markets in a short span of a decade destroyed a large chunk of pension assets worldwide. The market recovery since then has helped.

Our most important lesson was that, unlike physical innovations, investment innovations are at the mercy of the prevailing market conditions. They do not deliver predictable outcomes; they cannot be pre-tested in a lab; they do not carry a fit-for-purpose certificate.

We use internal and external managers. Some of our innovations have been very successful. They aimed to identify price anomalies prevailing at various times and exploited them by buying low and selling high. The resulting success has relied on intuiting how other investors are likely to respond to new developments in the light of their well-known behavioural biases.

Accordingly, we rely on our seven time-honoured beliefs: timing is everything; risk generates returns; diversification works; new asset classes and tools create prime mover advantages; liquidity erodes the risk premia; active management works; and, above all, asset allocation is the alpha behind alpha.

Arguably, many innovations have come when these basics have been ignored: new fixes for old foibles. No wonder; some worked, others didn't work.

For us, emerging market equities and high yield bonds have delivered great value, as have catastrophe bonds, infrastructure and private equity. Apart from the right timing, we followed four guiding principles: invest only if you know when to exit; control costs as they are a key source of out-performance; chase only a small number of risk premia at any time; and avoid fads.

~ A Dutch pension plan

Interview quotes:

"Sentiments drive most investments. Wishing for predictable outcomes is an ideal dream."

"Herd mentality often ignores investment basics. Common sense has not been that common."

"Far from amassing the predicted US\$3 trillion by 2010, the 130-30 funds flopped due to ill timing and limited capacity."

The latest generation of DC products will morph for the better after the crisis

As background, worldwide, the challenges faced by DB plans multiplied over the past decade accelerating two trends: closures to new members and the switch towards DC plans. This switch will continue in this decade. Ever more private sector DB plans- especially in Canada, Ireland, the UK, and the US - will close completely, with balances switched into DC products of members' choice. DC plans will come of age.

Currently, however, there are marked differences in investment choices both within and between countries.

In some countries, DC plans are privatised: members make the choices and bear all the risks. Australia, Hong Kong, Ireland,

Japan, Sweden, the UK and the US fall into this group.

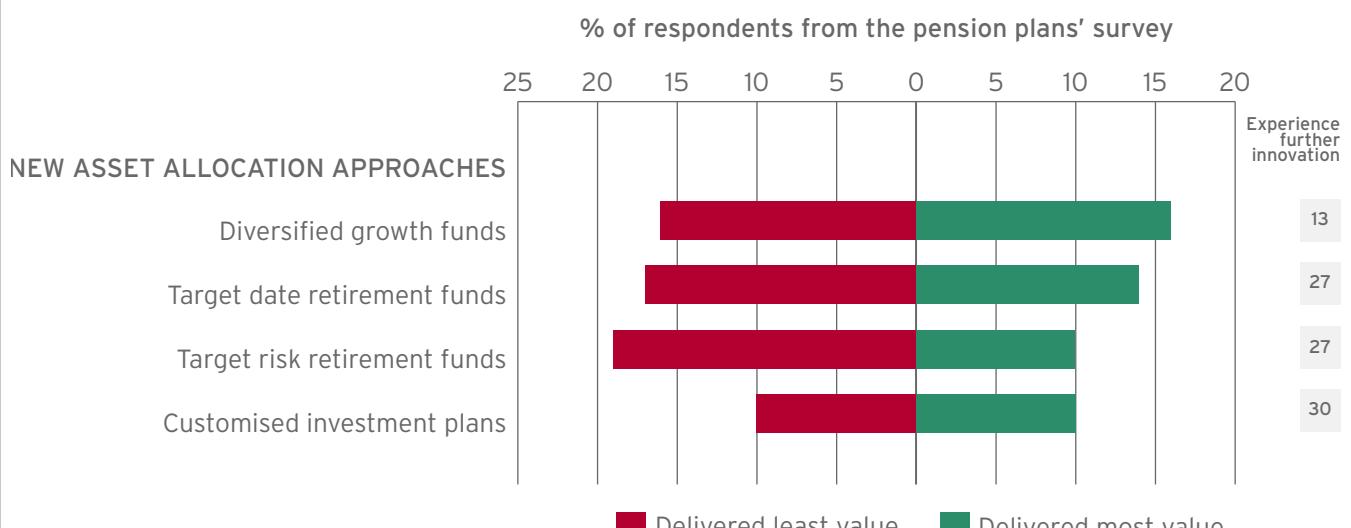
The second group covers countries where plans are run by trustees, who mostly target relative returns, with members bearing all the risks. Examples include Australia, Brazil, Chile, Denmark, the Netherlands, Singapore, South Africa and Sweden.

The third group comprises countries where plans are run by employers, who not only make investment choices, but are also legally obliged to protect the value of contributions against major market events. Examples include Denmark, Germany, Switzerland and France. They mainly use insurance contracts.

The latest innovations in the DC space are nascent. Currently, they target investors in the first group and, to some extent, the second. They embed advice and target solutions.

So far, four innovations have been notable (chart below): diversified growth funds, blending different asset classes with periodic rebalancing towards new opportunities; target date retirement funds, following an age-based glide path that replaces aggressive equities with cautious bonds over time; target risk funds, following a pre-agreed risk profile; and customised plans, offering advice and a dynamic risk profile.

In the last decade, which innovations delivered most value to DC clients and which delivered least value? Which ones will experience further innovation that will benefit clients over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Trustee-run plans are either overly cautious or overly reliant on bull markets. Neither adds value over time."

"There's a detailed scrutiny of waterfall strategies when some 2010 target date funds lost 40% in 2008."

"By exposing their design faults, the credit crisis has acted as a catalyst for improvements in the existing DC products".

16%

put diversified growth funds at the top

As yet, none have proved especially successful, as the chart shows. The collateral damage from the 2008 meltdown is the main reason. None have design features that can withstand major market events. That does not detract from their intrinsic worth.

After all, left to their own devices in the past, members made wrong choices; chasing the fads; often buying high and selling low. Greater choice ended in causing confusion.

However, the DC product pipeline is likely to improve in this decade with

14%

put target date funds second

accumulation and decumulation options in order to attract ever more assets from trust-based plans.

The ageing population will be another contributory factor. Over the next 10 years, ranks of retirees will swell by some 80 million in America, some 75 million in Europe, some 20 million in Japan and some 3 million in Australia: with a collective pot in excess of a mouth watering US\$15 trillion.

Yet, there is a dearth of decent retirement products. Even before the credit crunch, annuities had

10%

put customised plans at the bottom

a bad press due to their all-or-nothing nature. After the crisis, they have become even less attractive: counter party risks have inflated the re-insurance rates.

Now only three countries in the world have compulsory annuitisation: Chile, Switzerland and the UK. The last plans to discontinue it in 2012.

Many OECD countries are contemplating a form of compulsion. But not much action is likely over the next three years. We return to its implications on pp.33-34.

A view from the top...

Just how good are Australian superannuation funds? How many of them have the ability to attract funds as a result of what they offer and not just as a result of compulsion? My answer is 'not many'.

In fact, despite the absolute amount of money in industry funds and retail funds growing each year, the market share of both these funds has been falling. So much so that now there is more money in self-managed super than in industry funds and retail master trusts combined.

This is because the supers are paralysed by perceived business risks and the mediocrity that results from a desire to be average. There is a morbid fear of underperforming the next guy and losing AuM or members. That's why there is so little switching between funds even after the great financial crash. Isn't it interesting that in a low switch environment, self-managed funds are flourishing? Clearly, in theory, supers are a good tax-efficient way of achieving a retirement outcome. But they have lost their primary aim: to deliver decent retirement incomes.

Going forward, therefore, they need to do nine things to counter the criticisms in the recent Cooper Review: de-emphasise peer-risk; use dynamic asset allocation and portfolio insurance to align time horizons; enhance fund

design; reduce fees and increase alignment; go passive when appropriate; take different investment bets; get a better measure for risk; improve currency and cash flow management; and introduce life cycle investing.

This desire for life cycle investing is universal. For example, Hong Kong has followed the US in letting members of its Mandatory Provident Fund make investment choices under the so-called Employee Choice Arrangement; this is in the belief that the bigger the choice, the lower the cost. Costs have not come down. Members continue to chase the latest fads.

In contrast, the trust-based DC plans on the Continent offer minimal choice to their members. But in the hands of inexperienced lay trustees, choices have involved insurance contracts (Germany and Switzerland) or deferred annuities (Denmark and France).

There and elsewhere, DC plans suffer from design faults and excessive charges. For example, the Dutch DC plans deliver 50% higher retirement benefits than their UK peers due to lower charges and more risk sharing. In the US and UK, poor asset allocation choices have cost investors dear in the last decade. Plan balances are pathetically low, even after two decades of investing.

~ Australian pension consultants

Interview quotes:

"Unless DC plans embody some of the attractive features of DB plans, they will follow the same death road."

"Like the internet, retirement products will morph for the better, after a messy start."

"Today's US\$9 trillion global DC market will have 10% CAGR in this decade."

Since the crisis, asset managers score relatively well

We asked pension plans to assess the value added by managers and consultants in their 10 core activities. Taken as line items, asset managers are rated as 'good' or 'excellent' in five of them by at least 50% of respondents. The corresponding figure for pension consultant is only one. Asset managers out-score consultant in 8 out of 10 categories. In the top 6 value added activities -

strategic asset allocation, manager selection, portfolio construction, stock selection, risk management and investment returns - asset managers do better as well. Notably, the 'excellent' rating is awarded by no more than 12% of respondents to any single item in the chart below. The scope for improvement is big.

These numbers are symptomatic of the problems that pension plans have experienced as they have

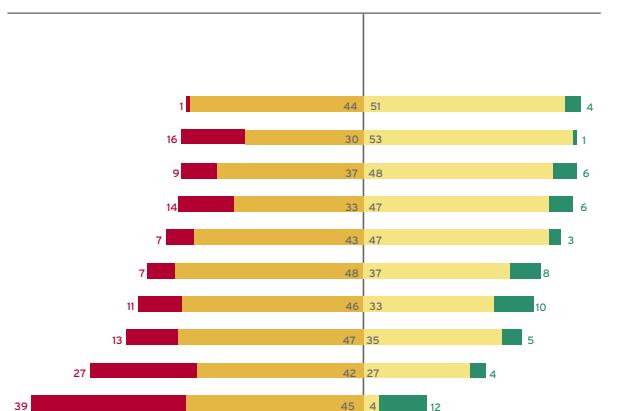
progressively switched to liabilities-matching in the wake of past losses and subsequent accounting rules. In the bull market of 1986-2000, DB plans had targeted equity risk premium - typically 5% - as an end in itself in the hope that it would meet their future liabilities. In the last decade, as the risk premium dried up, there was a reversal: liabilities became the ends and investment the means.

As a pension plan, how would you rate the contribution of your asset managers and pension consultants in helping to meet your investment goals over the past three years?

Cumulative % of respondents from the pension plans' survey
90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

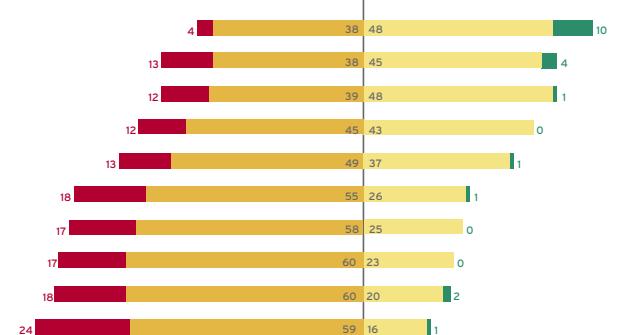
CONTRIBUTION BY ASSET MANAGERS:

- Portfolio construction and stock selection
- Manager selection
- Strategic asset allocation
- Risk management
- Access to new investment insights
- Returns on your investments net of fees & charges
- Listening and understanding each client's unique needs
- Tactical asset allocation
- Fiduciary management/strategic partnership
- Asset-liability modelling



CONTRIBUTION BY PENSION CONSULTANTS:

- Listening and understanding each client's unique needs
- Asset-liability modelling
- Manager selection
- Strategic asset allocation
- Access to new investment insights
- Risk management
- Returns on your investments net of fees & charges
- Portfolio construction and stock selection
- Fiduciary management/strategic partnership
- Tactical asset allocation



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"In 2005, most of alpha was leveraged beta. Why couldn't our advisors see that?"

"Successful innovations must reinforce investment basics, not ignore them"

"How many pension consultants have ever managed money? There's the world of ideas and the world of practice."

58% give highest acceptable rating to pension consultants for any one item	55% give highest acceptable rating to asset managers for any one item	83% give lowest rating to pension consultants for any one item
<p>This switch towards goals-oriented investing has also been evident in DC plans where solutions have emerged in different guises in the last decade (see case study below).</p> <p>It became inevitable as two traditional pillars of asset allocation were weakened by systemic forces: the buy-and-hold strategy was not working, as equities were outperformed by bonds; nor was the core satellite model, as actual returns diverged markedly from expected returns for most</p>	<p>asset classes. As the risk universe expanded, asset allocation had to go dynamic. Paradoxically, factors that caused it are also the ones making it hard to implement.</p> <p>Asset managers and pension consultants need fresh insights into three factors on which successful dynamic asset allocation now depends: the causes, symptoms and consequences of systemic risks; the risk-return features of different investments at granular level; and changing correlation between</p>	<p>different asset classes. In this context, two points were repeatedly made by pension plans involved in our interviews, especially in Asia.</p> <p>First, the current generation of risk models used by managers and consultants overly relies on the rear view mirror. They can neither predict risks nor help mitigate them. Second, if they are to develop the necessary insights, asset managers need to focus on their core capabilities and not stray too far in their innovation efforts.</p>

A view from the top...

Our funding ratio has dropped from 104% to 89% since 2007. One lesson we've learnt is that everything in the name of innovation carries a 'health warning'.

Ten years ago, our DB plan was closed to new members. Lately, we have launched a programme of dynamic LDI which immunises risk in distinct tranches as and when our funding ratio recovers. We have cast off the slavery of market benchmarks and focused on liability matching. The returns-seeking portfolio is a blend of equities, bonds and alternatives. Risk is back on the table. It's the only remaining way of attacking the deficit, after having raised the retirement age and the contribution rate.

On the DC side, we've moved towards solutions-driven investing by offering four options: capital preservation, excess over cash, wealth accumulation via diversified growth funds and balanced funds.

As a result, we've had extensive contacts with asset managers and pension consultants in the past 3 years. In their separate ways, they have been constructive and helpful. But history teaches us that, in the globalised world of investing, the unexpected often happens. By definition, Black Swans are impossible to predict. The least that asset managers and consultants can do is to stress test their ideas under extreme economic, political and physical scenarios. They also need to go back in history and understand the intricate interplay between

three variables that have longed moved markets in different periods: growth, inflation and interest rates.

The models currently in use are overly backward-looking and do not capture subtle nuances of the evolving investment landscape where systemic risks are springing up from unexpected quarters: e.g. the sovereign debt crisis and political upheavals in the Middle East. The models need a strong overlay of human judgment.

Finally, our move towards a solutions-driven world is underpinned by a variety of investment approaches that can be classified into distinct buckets such as hedge funds, infrastructure, absolute returns, total returns, illiquid assets, ETFs and so on.

On their part, asset managers and consultants need to develop distinct capabilities in each bucket. Many don't have USPs other than a physical market presence.

Hitherto, the tendency has been to shift effortlessly between some of these buckets, as if they were fads that needed the same skill sets. That's untrue.

During 2004-07, the convergence between mainstream and alternative strategies lost us money. All innovations in the mainstream area have been derivatives of equities and bonds. A new asset class will not solve anything.

~ A UK pension plan

Interview quotes:

"Those who present numbers are rarely without bias. Besides, the past rarely foretells the future."

"After paying layers of fees, investors don't know what they will get and when they will get it."

"Nothing short of a gold standard in client engagement will restore trust. We need clarity on returns and charges."

The current deficits of DB are large enough to force a raft of non-investment as well as investment solutions

Roughly two out of every five respondents to our survey currently have funding levels above the statutory watermark. The rest are below it. Around 20% are below 80% - some as low as 50% (chart on the left below). At the surface level, therefore, three out of five plans are under funded.

The figure is an underestimate, however, since many of the largest plans are below the watermark. Furthermore, in jurisdictions like the Netherlands, the watermark is 105% and rises with the riskiness of assets in the portfolio.

Hence on an asset-weighted basis or risk-adjusted basis, the deficits

are worse than indicated by simple averages.

The same observation applies to the annual average returns targeted by our respondents in order to meet their long term liabilities (chart on the right).

Around a third target up to 5%; a further third between 5.1 and 6.5%, and another third target 6.6 to 8.0%. Only 2% target in excess of 8%.

These numbers are optimistic, too. For only the private sector pension plans in Europe are obliged to follow the mark-to-market rules which enjoin them

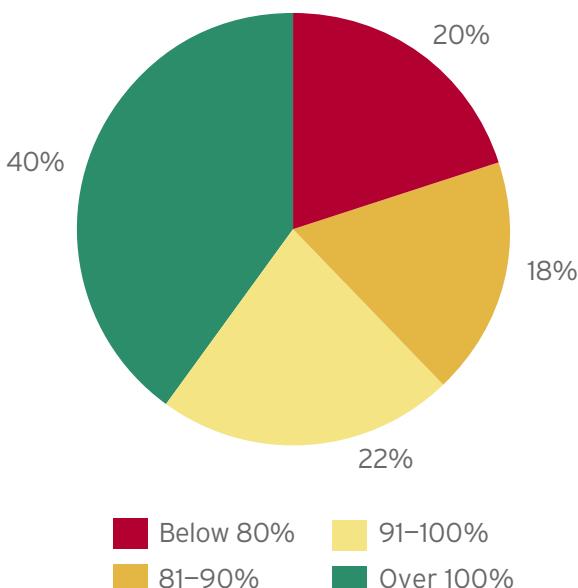
to use a conservative discount rate to calculate the present value of their future liabilities. The rest use rates that are less cautious. They inadvertently understate the liabilities as well as the projected investment returns to cover them.

These observations serve to underline the important point: numbers don't tell the full story.

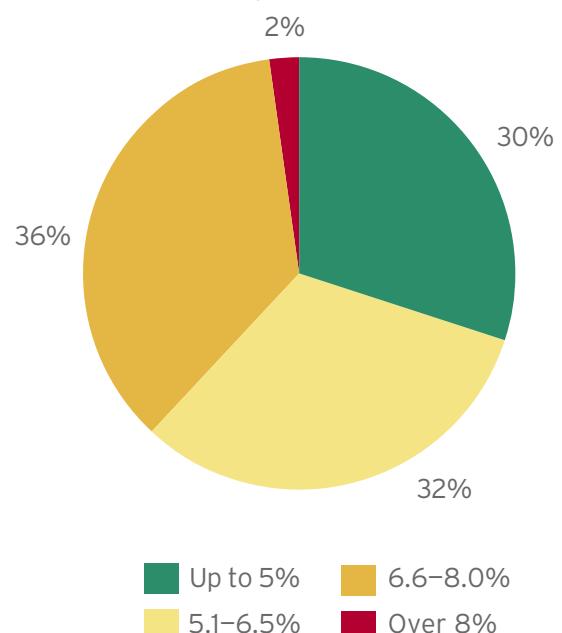
Be that as it may, pension plans have been forced to act on two fronts: investment and non-investment.

If you offer a DB plan, what is your current funding level? What annual total returns on your investments would meet your long term funding needs?

Funding levels



Target returns



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Corporate DB plans in the US are going into LDI-lite by using Libor bonds: swap spreads are not attractive."

"Endowments invested in illiquid alternatives are setting up credit lines to avoid forced selling, if markets tumble."

"The Dodd-Frank Act will not reduce systemic risks: chances of policy mistakes are high with the current debt mountain."

40%

of DB plans have funding ratio of over 100%

On the investment front, more and more of them are adopting asset-liability optimisation. This means giving up the tyranny of benchmark hugging - both peer and market - and using liability as the core target. It means putting money into buckets that encompass a range of distinct approaches. These single out liquid from illiquid funds; capital preservation from capital growth; and market-returns from excess-returns.

To cope with the resulting governance needs, more and more plans are recruiting in-house CIOs

20%

of DB plans have funding ratio below 80%

and investment experts on to trustee boards.

On the non-investment front, a series of small changes have also been implemented since 2005, on top of the closure of DB plans to new members.

These include raising the retirement age and member contribution rates. Benefits based on final year salary are being replaced by ones based on career average salary. Discretionary indexation has been introduced.

Before long, many plans will close to existing members, too, by using

38%

of DB plans need annual returns in excess of 6.5%

the cash balances route (case study below).

These changes have been more pronounced in the US, the UK, Canada and Ireland. However, changing old entitlements is proving hard. Piecemeal changes and messy lawsuits will be the norm.

In contrast, in other big DB markets like Japan and South Korea, no notable revisions are anticipated to the benefits structure pending adoption of mark-to-market rules.

A view from the top...

A pension promise is easy to make but expensive to deliver. Nowhere is this more evident than in the US where the state and municipal pension plans are currently nursing unfunded deficits well in excess of \$2.5 trillion. Some have 50 year recovery plans.

Four key items are on the negotiating table: later retirement age, higher employee contribution, no automatic indexation, and a pension based on the employee's career average, rather than final year, salary. These changes are easier said than done at a time when pension entitlements have been hardwired into employment contracts for over half a century and an ever higher proportion of people's lives are spent in retirement. Lawsuits have been frequent, especially where a significant minority have already retired on terms that are being denied to those who follow them. Pension plans are left with two actions: prune the benefits and make their assets sweat harder. In line with national trends, via small steps, we have negotiated an employee contribution where there was none before; dispensed with indexation altogether which provided a 3% protection; and raised the

retirement age by two years. Welcome though they are, these changes will improve our funding rates by only 8% when they bite in earnest over the next 10 years.

In the meantime, we're changing our investment approaches. Our sponsor covenant risk is at its all time high, after making a series of one-off cash injections of over \$3 billion over the past ten years. Recently, the sponsor decided to switch to mark-to-market rules in advance of their implementation in the US in 2012, so as to write off past losses in one go, as a prelude to starting an LDI programme.

The sponsor is also investigating the possibility of turning the DB plan into 'cash balances' for individuals, following the precedent set by a US-based global IT giant. The idea is to do a big one-off cash top-up, distribute the fund to its members, encourage them to re-invest in 401k vehicles of their choice, and thereby transfer all risks - especially investment, inflation and mortality. What was unthinkable five years ago may well become common five years from now.

~ A US pension plan

Interview quotes:

"Without reduced benefits and increased retirement age, few DB plans have any future."

"More and more DB plans are recruiting in-house CIOs and experienced investors on the board."

"No major regulations are planned in the US. But there is a lot of reinterpretation of the old rules."

Pension plans want to see significant improvements in product features that impact directly on their bottom line

As we saw on p.20, pension plans want improvements in a number of investment strategies and tools. Four features have been cited by at least one in every three respondents: risk return trade-off (60%); fees and charges (52%); transparency (44%); and simplicity (32%).

If there was one recurring message in our post-survey interviews, it was that risk failed to generate return in the 2000s, giving rise to two camps.

The glass-half-empty group holds that investment returns will follow a random walk while the global

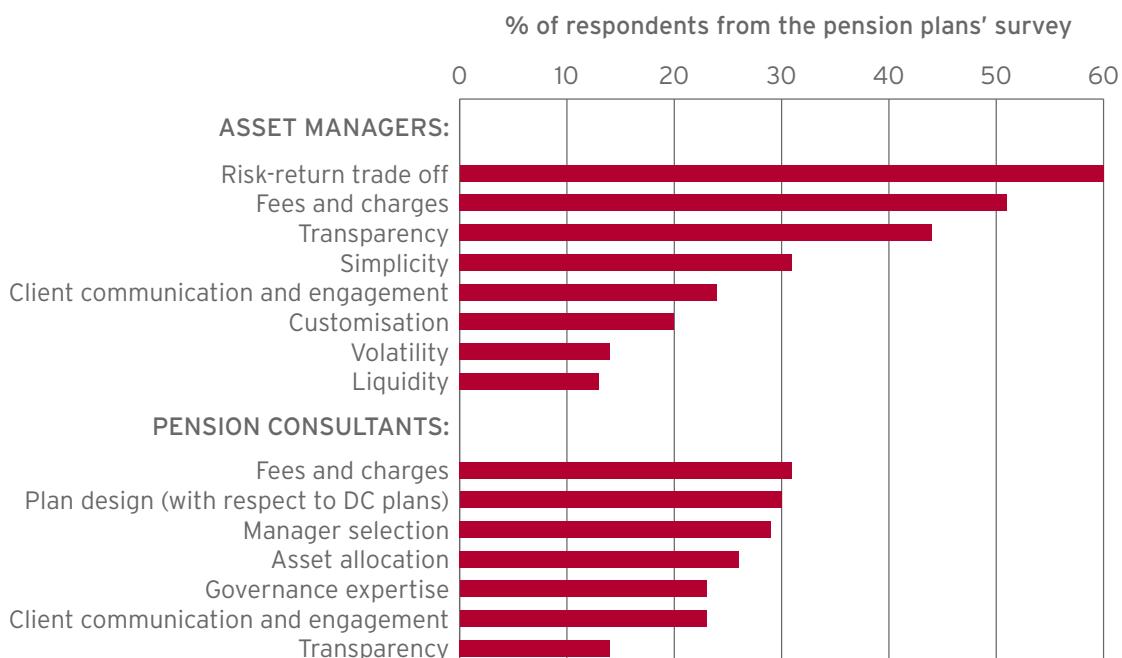
economy remains vulnerable to frequent systemic shocks: e.g. rapid deleveraging and currency wars. They will create frequent bursts of risk-off/risk-on activity that ignore fundamentals, as witnessed since the middle of 2009. Investors can only make money by taking big risks.

The glass-half-full group holds that the periodic shocks can also be a blessing in disguise for managers with instincts to exploit them. Some of the best returns in the past came in periods of major upheaval: e.g. meltdown

Monday in 1987; the collapse of communism in 1989; the collapse of LTCM in 1998; the collapse of Enron in 2001; and the Iraq war in 2003. Many plan sponsors missed these opportunities because they were unable to act on the pricing dislocation due to capital calls, fears and queues.

Asset managers with trained intuition should be able to extract higher returns per unit of risk in today's environment. This should be the golden age of active management.

In which areas do asset managers and pension consultants need to make significant improvements, if they are to receive mandates from your plan in future?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Asian plans demand a strong risk overlay as a pre-condition for diversification out of government bonds."

"A rise of each 1% point in interest rates improves our funding ratio by 14%, so unreal are the pension accounting rules."

"Consultants are forcing the pace on fee compression on behalf of their clients."

60%

want improvements in the risk-return features

Additionally, pension plans want more transparency in investment products, so that their intrinsic worth is not obscured by devices like derivatives, shorting and leverage.

As for fees and charges, pension plans see them as a key source of out-performance over time. The current heads-I-win, tails-you-lose fee structure is coming under increasing pressure from pension plans and their consultants alike, as reported in our 2010 report. Performance-related fees are duly on the rise.

51%

want improvements in fees and charges

Indeed, the glass-half-full school also holds that their high watermark variant will be a key disruptive innovation of this decade. It will force managers to be distinct by exploiting their core capabilities.

This was especially emphasised by Asian pension plans, noted for their home bias and conservative choices (case study below). In South Korea, for example, the largest pension plans already own a large chunk of domestic equities and bonds. They and their regional peers want to diversify by asset class as well

44%

want improvements in transparency

as geographies in ways that could potentially benefit asset managers in the West. Once they embark on a more realistic valuation of their liabilities, diversification will follow.

However, as pre-conditions, they want to see improvements in the existing products and their price tags. They also want Western managers to have a manufacturing presence in Asia to improve their client proximity and market understanding.

A view from the top...

Institutional investors in Asia Pacific are very risk averse. For example, hedge funds have yet to score in this region, outside Japan. Even in a sophisticated market like Australia, equities and bonds predominate. Elsewhere, tools like derivatives, leverage and shorting are either banned or shunned. Behavioural biases play a part, too. For example, pension plans in Japan prefer passives over ETFs, being cheaper.

Overall, Asia Pacific significantly trails behind the US and Europe in three major areas: diversification into alternatives, adoption of new asset allocation tools, and deployment of returns-enhancing techniques like shorting and leverage. Local pension plans have yet to adopt the mark-to-market rules that have forced their peers in the West to be more innovative. In China, Japan, South Korea and Taiwan, asset allocation is governed mostly by local regulations or peer pressures.

There is a lot of talk about reforms across Asia. But it is safe to assume that changes will be slow and measured. In the meantime, we shall continue to diversify. But it will not be radical until we see improvements in the integrity of the products manufactured in the West. Looking through the prism of the East, innovations in the West

have not worked with the degree of consistency that we expect. They seem to have favoured asset managers more than their clients.

Our diversification will continue to progress along two distinct tracks: strategic stakes and portfolio investments. The first will focus on long-term assets in Africa, Europe, Latam, and North America that can deliver stable cash flows over 20-30 years on the one hand, and continuity of raw material supplies on the other. The second track will focus on emerging markets. Asia will be the source of alpha as well as assets. But attempts to gather assets here are more likely to succeed if asset managers have manufacturing capability on the ground, especially if they want to be 'price makers' more than 'price takers'.

Even for top down investment strategies, we would like our asset managers to be in our time zone. As Asia's growth re-shapes the dynamics of the world economy, it will also influence the top down macro strategies now run from centres like London, Paris and New York.

Client proximity is essential as we promote financial literacy directly and a buy-and-hold culture indirectly.

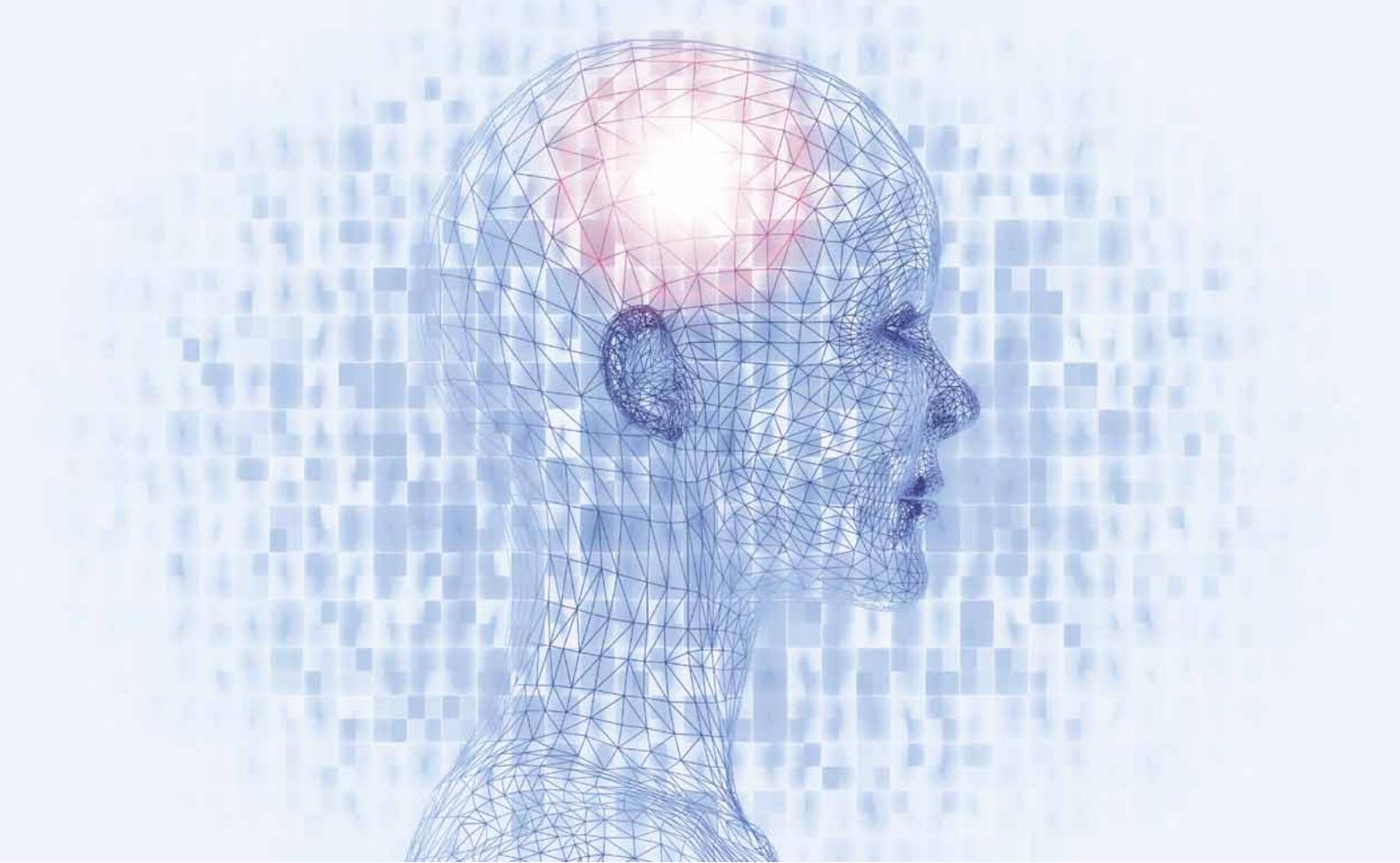
~ A Chinese institutional investor

Interview quotes:

"We have small allocations to timber, catastrophe bonds and music rights: good opportunities are rare."

"Success will go to those with insights into how to apply investment basics in an age of fat-tailed risks."

"Hedge funds will become bigger, safer, duller and cheaper, after their near-death experience in 2008."



4 Room for improvement

“Unlike computers or cars, asset products do not have replicable outcomes and definable shelf life, irrespective of their external environment.”

Issues

In a separate survey, asset managers and other service providers such as pension consultants, third party administrators and distributors were asked the following questions:

- which innovations delivered best/least value to the end-clients in different segments in the last decade?
- which factors influenced the outcomes?
- what is the current thrust of innovation and what factors are inhibiting it?
- what actions are being taken to deliver better innovation in the future?

- Responses to the first two questions were classified by three client segments: DB plans, DC plans and retail clients.

Key findings

- For DB plans, innovations delivering most value are emerging market equities, ETFs, emerging market bonds, high yield bonds, and LDI.
- The list is similar to the one identified by pension plans in the last section. The contributory factors are: timing of investments and the negative perceptions of long only actives

- Those delivering least value include: structured products, leverage, portable alpha, private equity and currency funds. The list is similar to the one compiled by pension plans in Section 2; the only missing item is global equities.
- Contributory factors are also similar: lack of intrinsic value, poor timing and herd instinct on the part of investors. The only one missing is low client engagement.
- Asset managers recognise that their pension clients want better returns, lower costs and more transparency for many of their products.
- However, they doubt whether these can be delivered over the next three years.
- Returns come from the market environment as much as managerial ingenuity; cost reductions are hard in a fixed-cost people business that cannot be leveraged in a flat market; and too much transparency risks dumbing down returns.
- However, as we shall see below, asset managers are attempting to improve their innovative capability in response to demands that directly impact on their clients' bottom line.
- Moving on to DC products, none of the new ones that first came on line in the last decade is rated highly. Given their long-term nature, however, it is too early to judge, especially after such a major market event.
- But they will morph, due to changes now in the works and deliver probably one of the most disruptive innovations of this decade – in the sense of changing the existing models for the better.
- Retail innovations are mainly perceived as copycats. None is rated particularly highly, with structured products perceived as delivering the least value. But there is a caveat.
- New theme funds – like ESG, SRI and Shari'ah as considered here - also deliver psychological value that is difficult to assess.
- Fresh headwinds are shifting the focus of innovation from creating new things to doing old things better.
- These are caused by: growing product commoditisation; mounting uncertainty in the global economy; continuing behavioural biases on the part of clients; a growing scarcity of talent that can cope with the random bumps in today's markets; and regulatory creep powered by new rules as well as the re-interpretation of the old.
- Asset managers are responding by re-engineering their innovation approaches; adopting new tools for generating ideas, organising talent in small groups; and using their service providers as innovation partners.
- In the process, product deepening ranks higher on the agenda than product widening: improving the old, before creating the new.

"Everything that can be invented has been invented"

Charles H. Duell, US Commissioner of Patents, 1899

Like their clients, asset managers caution against throwing the innovation baby out with the bath water

In a separate survey, when asked which innovations delivered most/least value in the last decade to their DB clients, asset managers' choices are roughly similar to those identified by pension plans (Section 3). According to one in four respondents, the following delivered most value: emerging market equities (39%); ETFs (28%); emerging market bonds (26%);

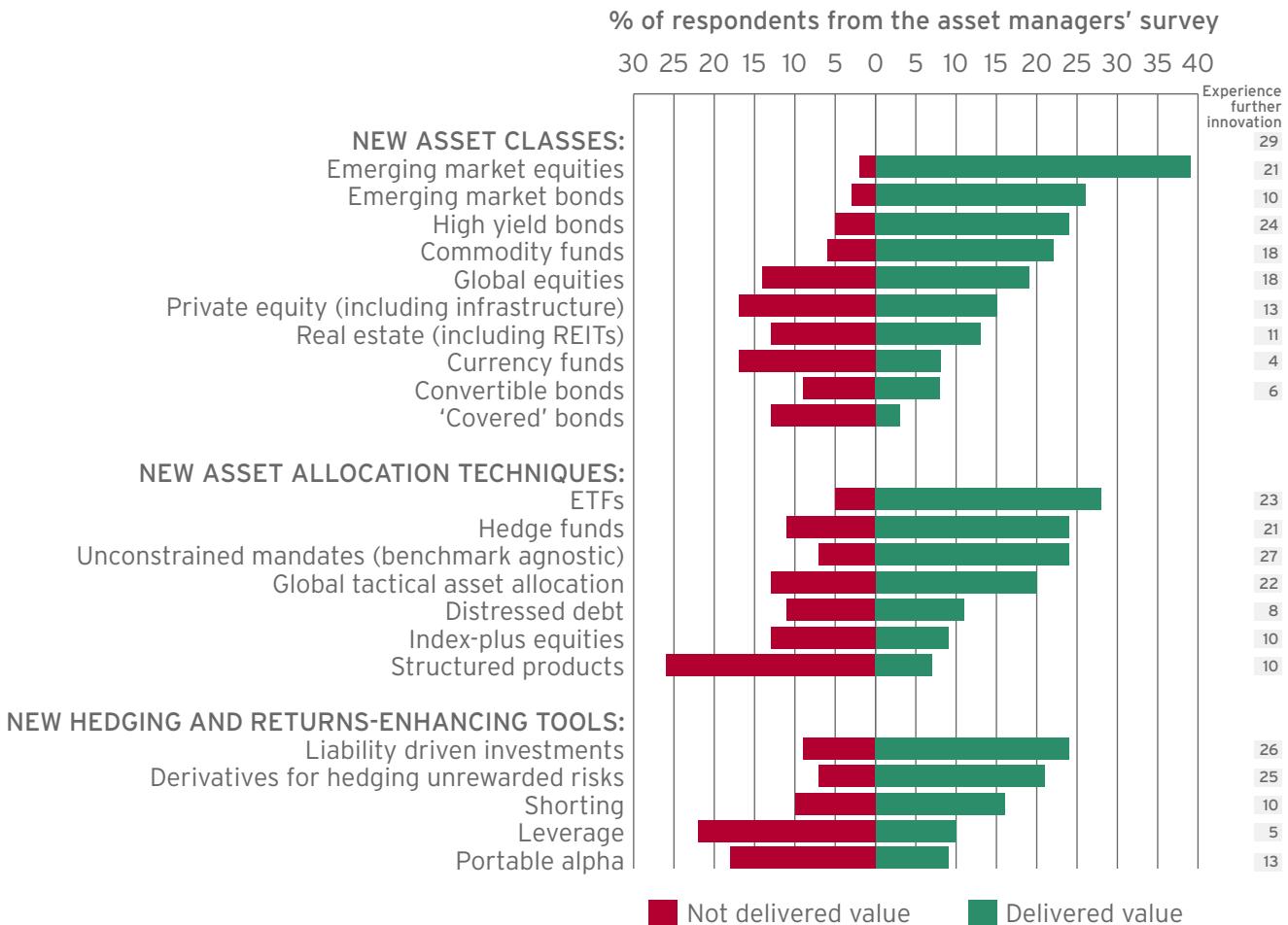
high yield bonds (24%); LDI (24%); hedge funds (24%); and unconstrained mandates (24%). Two contributory factors were singled out.

The first was timing of investments. For example, the legendary dynamics of emerging markets sparked a momentum that attracted over US\$1 trillion. Roughly three-quarters was opportunistic;

and one-quarter buy-and-hold; causing frequent big corrections. Similarly, the right timing also helped high yield bonds, when the much-predicted spike in default rates did not materialise in the wake of the Lehman collapse.

The second contributory factor was the negative perception of long only active management, in the face of rising pension plan deficits.

In the last decade, which innovations in the three subsets below delivered most value to DB clients and which delivered least value? Which ones will experience further innovation that will benefit clients over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Most products add value at one time or another - even derivatives. It's all a matter of where you are in the market cycle."

"Leverage was the prime source of out-performance while the going was good. It worked until it didn't."

"High yield bonds sparked while the default rates declined. Now what?"

39% put emerging market equities at the top	28% put ETFs second	26% put structured product at the bottom
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Turning to the innovations that delivered least value, five topped the list: structured products (26%); leverage (22%); portable alpha (18%); private equity (17%); and currency funds (17%). The list is similar to the one identified by pension plans (Section 3), with global equities missing.

Notably, the contributory factors cited by asset managers were also similar to those singled out by pension plans: lack of intrinsic value, poor timing and herd instinct on the part of DB clients.

As for improvements, asset managers recognise that clients want better risk-return trade-offs, lower costs and greater transparency for many of their products. There are doubts whether these can be delivered over the next three years: the trade-off is a matter of market environment as much as managerial ingenuity; cost reductions are hard in what is a fixed cost people business; and more transparency may undermine the competitive edge. Even so, managers are improving their innovation processes (pp.39-40).

They are responding in other ways, too: e.g. emerging markets are segmented by size, economic development and risk profiles; the Reits structure is being applied to real estate and infrastructure to improve their liquidity; hedge funds are being revamped to improve liquidity, charges and fees. Overall, the focus is on improving the old rather than creating anew.

A view from the top...

We have invested in long only as well as alternatives, in every asset allocation technique and every risk enhancing tool. We've used external managers as well as in-house ones. You name it, we've done it. Some of our innovations have worked well, some haven't. Overall, we could have done better.

To start with, investment is more nuanced now than ever: opportunities disappear only as fast they appear. We implemented the Yale model only to discover in hindsight that its peak returns were history by the time we moved in. With alpha, he who dares first, wins; or so it seems. It involves real time investments that only work within nimble governance structures with a lot of delegated authority to full time professionals.

In contrast, today's governance structures remain suited to the world of long only investing. In any case, a 20-year bull market since 1981 lulled us into a sense of complacency that any bear market will be brief, mean reversion is the norm, and innovations the saving grace. You can't blame us for believing that, since even the then Governor of the Federal Reserve repeatedly played down any threat of systemic risks, at the time, when the global economy was awash with cash that severely distorted

asset values and asset correlations alike. When it dried up in late 2008, few innovations could weather the storm. So, a charitable view would be that innovations in the last decade were inadvertently adopted in an environment alien to their inherent features. They were at the right place at the wrong time.

Most of all, we have discovered that it is inadvisable to judge the success of innovations on the basis of their market-beating abilities. The cap weighted indices - the de facto judge and jury of active strategies - suffer from momentum and concentration risks to the point where they no longer represent the intrinsic value of their component stocks. On the bond side, too, indices represent neither the vast fixed income universe nor the regular turnover forced by the differing maturity profile of the constituents.

Accordingly, we use the traditional 4-factor risk model to construct the true value of beta and use it as a benchmark for assessing the value added (or detracted) by our innovations. The results are not spectacular. But they caution against throwing the innovation baby out with the bath water.

~ A Scandinavian pension plan

Interview quotes:

"How do you price an ETF when liquidating a whole index? What is the price discovery mechanism?"

"LDI has not taken off in the US due to low funding levels and reluctance to use long-dated swaps with counter-party risks."

"Clients want liquid products from illiquid assets. It is like sprinkling magic dust to create a liquid fairy."

DC products will undergo significant improvements

In the last decade, substantive innovations in the DC space came via four new products: diversified growth funds, customised investment plans, target date retirement funds and target risk retirement funds, as described in Section 3. Originating in the US, each sought to embed asset allocation advice, in the light of clients' pre-stated risk appetite and retirement preferences.

Before their arrival, the two key private DC markets - the US and the UK - were beset by two daunting problems.

First, as employers switched from DB to DC plans, there was no auto enrolment for new members: participation rates fluctuated from 50% to 70%.

In the US, this has been corrected by auto enrolment under the

Pension Protection Act 2006, which also endorsed target date funds. The UK will follow suit in 2012 via the new state sponsored National Employment Savings Trust.

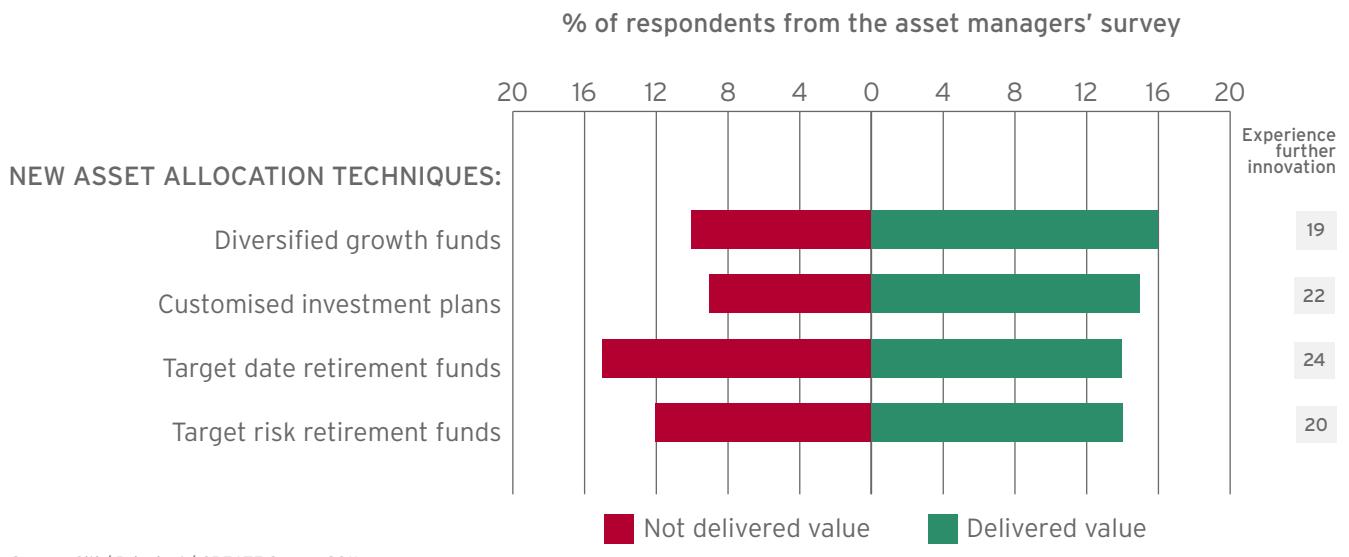
Second, before then, most buyers of 401k funds in the US made wrong asset allocation choices by opting for top Morningstar funds - in initial investments and their periodic rebalancing. For example, many ended up overweight in tech stocks. In the 2000s, the pursuit of the next rainbow was just as prevalent: the lessons from the tech debacle were soon forgotten.

Much the same behaviours were evident in the UK, where a significant minority also went to the other extreme and invested in ultra safe assets like bonds, insurance contracts and cash plus products - with low returns and high charges.

The reforms have gone a long way towards countering these tendencies. In the process, the four products in the chart below have been in the ascendancy. At this stage of their evolution, however, only around 15% of asset managers rate them highly; and just as many rate them lowly. The vast majority in between reckon that, given their relative newness, it is too soon judge.

Those who rated them highly gave two reasons. First, their inherent 'buy-it/forget-it' feature prevents ill-informed choices on the part of clients - both at the outset and over time. The buy-high/sell-low mentality is increasingly a thing of the past; as is the urge to chase the latest 'hot' stocks. Second, via these funds, large 401k providers have been able to mount effective education campaigns on raising the

In the last decade, which innovations delivered most value to DC clients and which delivered least value? Which ones will experience further innovation that will benefit clients over the next three years?



Interview quotes:

"German DC plans guarantee the value of contributions. Employers remain liable for losses. So, capital growth is tiny."

"DC plans using 60:40 structures went for risk parity portfolios. They've loaded up on fixed income after its best run in history."

"Across Europe, DC results range from a car crash to a walk in the park, depending on your time frame."

16% put diversified growth funds at the top	15% put customised plans second	14% put target date funds third
<p>level of financial literacy on the part of private investors.</p> <p>Those who rated these products poorly focused on their mechanical nature.</p> <p>Citing the target date fund as an example, it was stressed that its glide path was fine in principle: with aggressive equities at the outset and cautious bonds towards the</p>	<p>end. But it was over influenced by the investor's age.</p> <p>Furthermore, it embodied few tactical tilts in the belief that risk premia were bound to accrue over time; notwithstanding its history over the past 10 years.</p> <p>Most of all, it has no overt mechanism to protect against major market events that wreak</p>	<p>havoc on plan balances. For example, in late 2008, certain 2010 target date funds were down by 40%. Some even had toxic credit products dressed up as bonds.</p> <p>By general account, the DC revolution is at a nascent stage. New flows, new jurisdictions and new regulations are already driving improvements (case study below).</p>

A view from the top...

DC products have come a long way in the US in the past decade. But they still have a long way to go. As a leading 401k player, it is clear to us that clients want holistic solutions at two distinct phases in their retirement planning - accumulation and decumulation - to be rolled into a single product.

In the accumulation phase, clients want a flexible variant of the existing target date funds that sequentially provides: advice on how to identify their own risk profile; choice to go cautious at the outset in the light of early loss aversion and other commitments like marriage and mortgage; choice to go aggressive once the plan balances build up to a reasonable amount; choice to go cautious in the approach to retirement; and, above all, an inbuilt stop-loss mechanism - via physical limits, tactical tilts or deferred annuities - to counter major adverse market events. The suggested product differs from the currently available life style or life cycle funds by: providing a dynamic risk profile as well as a dynamic glide path; and offering protection against fat-tail risks as well as eschewing the one-size-fits-all approach based on mechanical, age-based or risk-based algorithms.

Then in the decumulation phase, retirees want a blended solution embracing annuity income, income draw-down, insurance cover, spouse benefits and residual wealth transfer on death. Specifically, they want their accumulated assets rolled over into a single 'cafeteria plan' where benefits are available on a pick 'n' mix basis; and where certain benefits are negatively correlated, so

that their total cost is less than the sum of the parts (e.g. annuity and life insurance).

The product envisages part of the retirement pot to be invested in an annuity to provide regular income and longevity hedge; with the rest invested (or re-invested) to generate income upside and some capital growth to augment the annuity income. Alongside annuity, the pot should also be used to buy life and health cover, if required. The cost of insurance cover should allow for the negative correlation between annuity and the targeted insurance cover.

This proposed product should mark improvements on the existing arrangement. It will counter the three negative features of annuities, as perceived by clients: their expense, their 'all-or-nothing nature' and their zero balances for intergenerational wealth transfer. Furthermore, it will provide an opportunity to grow the asset pot even after one has retired. Finally, it will be a cost-effective way to enjoy insurance-oriented retirement benefits by targeting scale economies in their delivery.

Asset managers have the tools to provide most of the components needed in the two identified phases. The biggest drawback, however, is that no insurance company in the world today has the balance sheet to underwrite the volume of annuities envisaged under such a product. But that should not stop us providing other benefits. And we will before long.

~ A US asset manager

Interview quotes:

"DC products must embed advice. If you want to see what lack of financial acumen costs investors, come to Hong Kong."

"Today's DC product will morph over time into something more holistic. Most of the core components are there in the US."

"Given their long term nature, it's unwise to make a judgement on the latest DC products so soon after the 2008 meltdown."

Retail innovations are widely seen as copycats

Worldwide, the retail scene witnessed rapid product proliferation in the last decade. For example, the number of share classes more than doubled in Europe. Freshly minted products were churned out at record speed in an elaborate leapfrogging exercise fuelled by distributors.

Elsewhere, the story was much the same. Warren Buffett became the role model in places like Hong Kong, India and Singapore, where day-trading had been the norm.

Not much was new apart from seven mostly minor innovations, embracing new asset allocation techniques and distinct themes (figure below).

The two that delivered most value were income-in- retirement funds

and mutual funds that deployed hedge fund type tools - both cited by around 15% of asset managers.

Tax efficiency and stable cash flows were contributory factors behind the modest success of the first; and better returns behind the second.

However, at least as many managers singled out five innovations that delivered least value: structured products, social funds, religious funds, environmental funds and mutual funds that used hedge fund type tools.

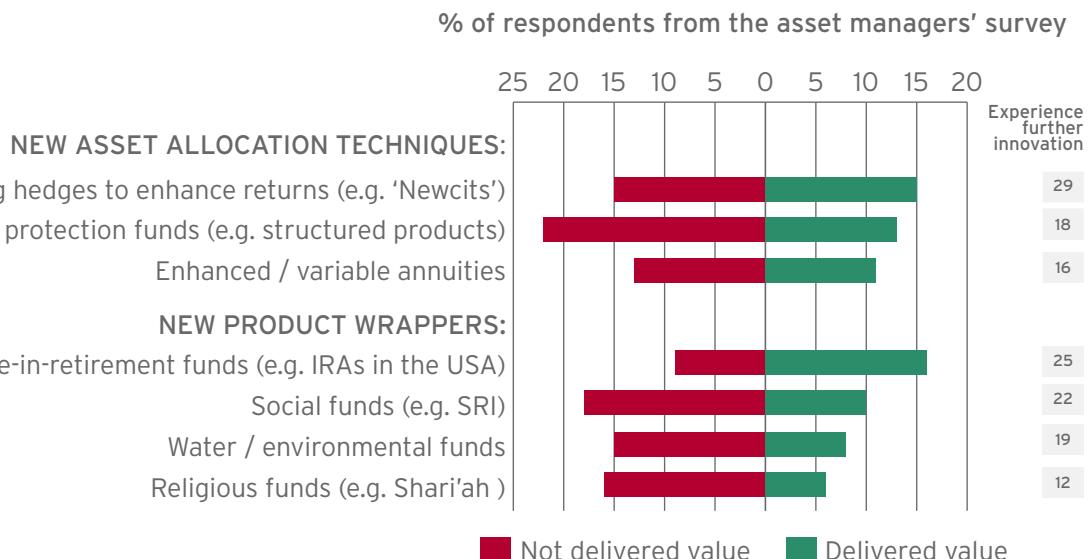
Either way, there are no standouts. Our post-survey interviews explored the reasons.

First, as the decade progressed, the underlying weaknesses of the mutual fund model became glaringly obvious. On top of its

hidden charges, it rarely closed funds, despite the limited scalability of many of the underlying strategies; nor did it generate 'sell' signals or rebalance in favour of cash beyond the 10% threshold. These limitations forced huge redemptions in the down market. Accordingly, innovations in the mutual fund space have admirers and detractors in equal measure. Newcits have gained traction lately but it is too soon to assess their impact due to their newness.

Second, structured products experienced an explosive growth, thanks to a strong product push from banks, using their own distribution channels. The guarantees on offer were dubious and the charges high. Currently, they are being re-branded as income

In the last decade, which innovations delivered most value to retail clients and which delivered least value? Which ones will experience further innovation that will benefit clients over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Shari'ah products deliver good relative returns and ethical investments; but are hard to market outside the Islamic world."

"The savings culture is so powerful in Asia: people want quarterly dividends at the expense of capital losses: a Ponzi scheme."

"In Europe, labour unions favour SRIs for their members. Since 2007, investments have doubled to US\$7 trillion."

16% put income in retirement funds first	15% put mutual funds with hedging tools second	22% put structured products at the bottom
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bonds or equity bonds, commanding hefty charges. Many only guarantee capital, if the benchmark index falls more than 50% in a 5-year period. There are also issues about counter-party risks, in view of their reliance on derivatives.

Third, theme products are fundamentally designed to deliver psychological benefits. In the process, they influence portfolio

construction and stock selection. But they can guarantee outcomes no more than other approaches. Worldwide, some 10% of assets are currently held in SRI and ESG funds, for example.

Their performance has been variable: Shari'ah funds have done well since the crisis (see case study below).

Yet, theme funds retain powerful appeal. Their real worth is in providing benefits that are highly subjective.

Finally, annuities are viewed as a mixed blessing: a good hedge against the longevity risk; but an expensive means to secure a modest income stream in the face of low interest rates.

A view from the top...

One innovation that has delivered good relative returns is Shari'ah funds. But their popularity has been held back by their religious image.

Over the past 5 years, they have delivered average excess returns over the Dow Jones World Index of 1.97%, plus lower volatility.

Whether by AuM, client base, product mix or geography, their growth has been strong, albeit from a low base. Some \$50 billion is now invested by clients in the Islamic world, in places such as Egypt, Gulf Co-operation Council States, Malaysia, Indonesia and Pakistan.

Worldwide, there is a growing interest in themed funds: ones that are anchored in the personal values and religious beliefs of investors. The end of the last decade, for example, saw the emergence of SRIIs. This was followed by new interest in ESG (environmental, social and governance) funds. Nearly 10% of global assets are now held by these funds.

Interest in Shari'ah funds is part of a wider trend under which clients in distinct segments are looking for decent returns within a value-for-money fee structure in line with other competitive products on the shelf; and psychological benefits in line with their values or beliefs.

It is not hard to see why interest in Shari'ah funds has been so strong in this decade. Their clear emphasis on Koranic principles of interest, speculation, uncertainty, fairness and ethics has obviously enhanced their appeal in the Islamic world.

However, due to their three distinctly ethical undertones, such funds are also attracting interest from non-Islamic institutional clients keen on SRI.

First, these funds focus on businesses founded on real and productive activities that generate fair and legitimate profit. Exotic instruments like derivatives, unrelated to underlying assets, are shunned; as are excessively leveraged and speculative activities.

Second, these funds have high standards of disclosure that enforces market discipline and minimises informational asymmetries.

Finally, Shari'ah-compliant investments are not restricted to investors of the Islamic faith, nor limited to Islamic companies. Investors of all stripes are drawn into a values-based approach that filters out businesses engaging in activities deemed unacceptable: e.g. alcohol, tobacco, pornography and gambling.

However, their underlying investment engine has to deliver returns at least as good as the ones from the conventional funds, if not better. In sum, their image has set a high hurdle.

Before long, they will be re-branded under a different theme (e.g. ethical funds) outside the Islamic market, duly highlighting their intrinsic merits and performance track record.

~ A Malaysian asset manager

Interview quotes:

"Product customisation requires intuiting customer emotions. Few asset managers can do that."

"For most funds, themes will remain add-ons; not a driver of client choices."

"Themes must connect with their underlying investment engines. Many SRI funds do not."

Headwinds are shifting the focus of innovation from creating new things to doing old things better

Since 2008, the pace of investment innovations has not only slowed markedly. Its scope is also being redefined.

Faced with the need for fresh capital under the latest clutch of regulation (case study on the opposite page), banks and insurance companies are stepping up their product push. They are also switching towards low-touch commoditised products that can be sold on-line without a costly advice interface.

Just under 50% of asset managers cite this as a factor limiting the scope of their current innovations.

The second factor cited by 42% is the uncertainty in the global

economy, due to rising inflation in the East and mounting unemployment in the West: a far cry from the synchronised global expansion of the 2000s.

The third factor is clients' behavioural biases, as cited by 38%. This is causing them to agonise about every good investment idea, in case it's a bad idea. Due diligences are prolonged, stringent and thorough. Clients know that daily liquidity comes at a price. They also know that volatility is a concealed opportunity. Yet, some of them act as if the 2008 market crash was a foretaste of things to come. Some are both rational and irrational at different

and unpredictable times. For asset managers, reputational risk is high.

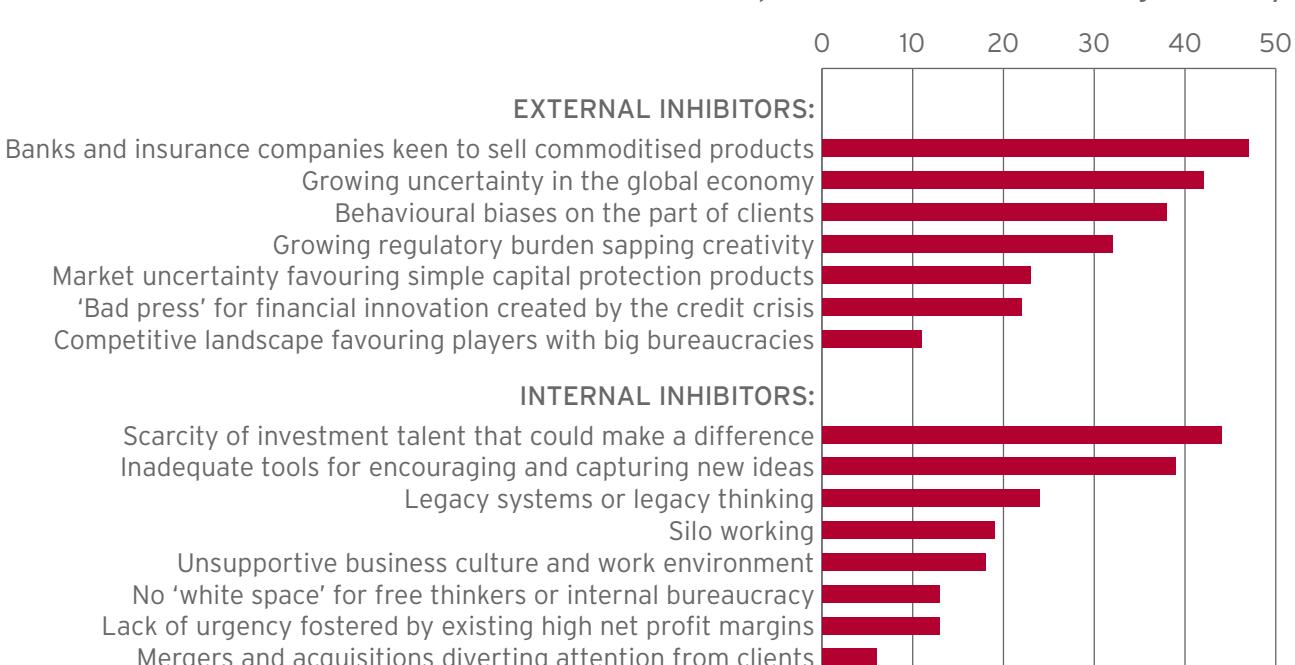
32% of managers cite regulation as an inhibitor. The worry stems from the indirect impact of the new banking and insurance rules rather than the direct impact of the new fund industry rules; and from the tighter enforcement of the existing rules rather than creation of the new ones.

As if the external inhibitors of innovation are not enough, there are two internal ones as well that are worthy of note.

43% of asset managers cite scarcity of investment talent as one of them. This is not to say the industry has

What external and internal factors are conspiring to inhibit asset managers' scope of innovation currently?

% of respondents from the asset managers' survey



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Across Asia, regulators will tighten the rules on front load, exit load and hidden charges to avoid big mutual funds churn."

"Regulators in Europe and the US are getting more hands-on with tighter enforcement."

"Banks' crazy compensation models need a big product push in the mass market, flogging savings products as investments."

47%	43%	42%
cite commoditised products first	cite talent shortage second	cite economic uncertainty as third

suffered a talent drain post 2008. With the time-honoured practices in asset allocation, manager selection, portfolio construction, stock selection and above all risk management coming under attack, personal insights and gut instincts have become major differentiators.

Worldwide, there is a shortage of people who understand the

changing dynamic of the global economy and its impact on financial markets.

Finally, few asset houses have had innovation processes that remotely resemble what prevails in innovative companies in other knowledge-intensive sectors like IT, pharma and engineering. Such processes overtly

encourage the generation of new ideas and their robust evaluation. 38% of asset managers cite the lack of such processes as yet another inhibitor.

The implications are clear: improve what you have rather than search for the new.

A view from the top...

There's a switch in our innovation effort: from creating new offerings to improving the existing ones. Re-invention rather than new inventions is what we do now.

In the last decade, we created a number of new products for global clients. We introduced an LDI proposition in the US. We were active in the Ucits arena. We took alternatives to places like Singapore and Japan. We became active in Islamic products. We adopted the multi-boutique model.

But, as I reflect back, my overriding thought is that new doesn't necessarily mean better. Nor does it imply big strides. Nor does it mean immediate impacts from everything we have done. Everything is work-in-progress, nothing is finished. Don't forget, change management is not exactly a forte of asset managers! Going forward, softly-softly will be the name of the game. Three big concerns figure high on our agenda.

The first and the most worrying is the deteriorating global economic outlook. Although unprecedented, the recent S&P warning on the US economy was hardly unexpected. Public finances in most OECD countries remain dire in the face of loose policy responses to the credit crunch. Some continental banks remain shaky. Markets remain turbulent. Deleveraging remains on the back burner. So, it's best to stick to knitting.

Another external inhibitor is regulation: indirect as well as direct. When transposed into rules, the Dodd-Frank Act in the US will require more compliance oversight and operational capital for bank-owned asset managers like

us. Solvency II will force Europe's insurance companies to offload equities and corporate debt in sizeable chunks in favour of government bonds. This is at the time when some sovereign debt faces big downgrades. Who will be buying equities five years from now? How many sovereigns can avoid default?

Regulators are also re-interpreting the old rules for our clients. For example, in the Netherlands, pension plans are obliged to value their illiquid assets very cautiously and declassify gold as a monetary asset. In Scandinavia, large plans are dissuaded from investing in emerging markets beyond an arbitrary limit. In the US, the Volcker rule prevents fund seeding beyond a year.

There is also direct regulation in the pipeline. In the US, asset managers have to cope with the Fair and Accurate Credit Transactions Act on top of the Dodd-Frank Act. In Europe, the AIFM Directive, the updated Ucits rules, revised MiFid prospectus, and Target-2 Securities will preoccupy us for a while. Regulatory creep is in overdrive. Will it cause more pain than gain?

Finally, we have an internal challenge with our multi-boutique model. The oversight role of the mother ship sits uncomfortably with the entrepreneurial spirit of individual boutiques. The model is experiencing teething problems.

While we tackle these questions, product-deepening, rather than product-widening will top our agenda for the foreseeable future.

~ A French asset manager

Interview quotes:

"Talent is now defined by special intuitions that deliver fresh insights into new challenges thrown up by today's markets."

"Talent begets talent; and ideas beget ideas. Work environment and incentives are the key drivers."

"We rely on our talent pool to generate ideas. But you also need rigorous tools to do the necessary reality checks."

Tools for generating new product ideas and escalating the good ones are being adopted by asset managers

In the aftermath of the crisis, business models came under scrutiny. One area has received particular attention: the innovation process.

This involves four distinct and sequential functions that are critical to successful innovation. The first stage is ideas generation: inviting individuals concerned to post their ideas. The second stage is evaluation: doing a feasibility study and crafting a business case. The third stage is design: constructing prototype products that can be subject to a 'wind tunnel test' as in cars, for example. This involves paper-trading to provide 'proof of concept'. The fourth stage is delivery: launching the product with seed capital to road test before going public. The robustness of the process is measured by the number of kill-offs at each stage, compared

with the successful launches. The aim is to weed out the 'dogs' from the 'stars'.

Around 40% of asset managers are currently adopting such a process, or variants of it. This is in marked contrast to what happened in the last decade where product innovation was a matter of personal ego or competitor leapfrogging. Time-to-market mattered more than robustness.

Around 35% are promoting innovation as an integral part of corporate culture and business strategy. The key tool being used is 'provoked creativity': framing specific challenges around long standing problems and inviting a team of experts to craft workable solutions within a set timeframe.

Around 33% are changing their operating model to create

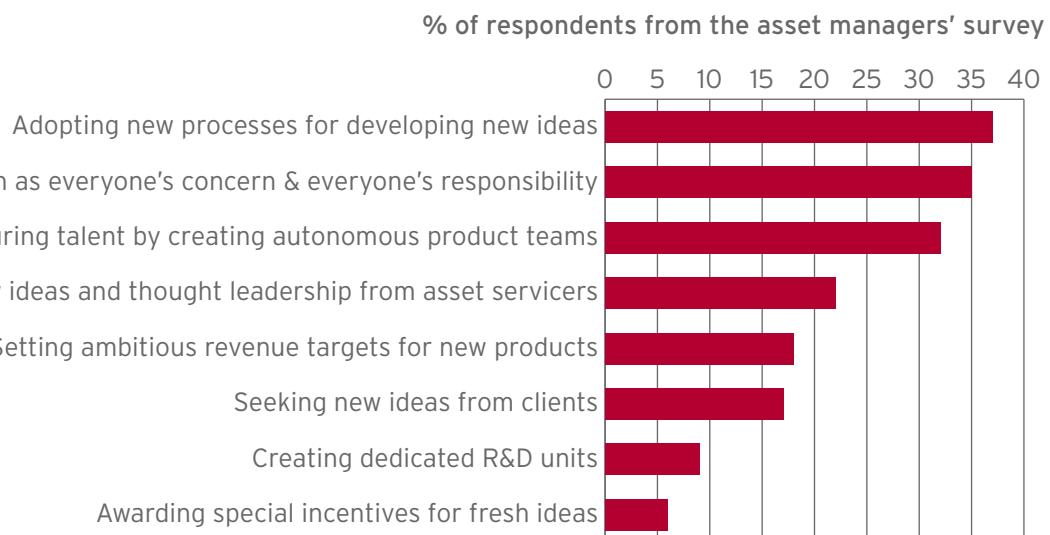
autonomous product teams - working as actual or virtual boutiques - with autonomy and 'white space' to generate high conviction ideas and implement them with due accountability,

Around 20% are seeking ideas from their third party administrators that provide additional insights into areas as diverse as stress tests, risk analytics, attribution analysis, and fund structuring. With the growth of data warehouses, administrators are emerging as asset managers' external thinking partners.

Around another 20% are setting credible targets for new products, as part of corporate strategy. The aim is to go into new client segments and new geographies via better products.

A small but notable minority (8%) are also setting up dedicated R&D

How is your business fostering innovation despite the identified constraints?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Innovation often results when people are frustrated with the status quo. We constantly challenge it."

"Ideas generation only works if there is a follow-up fast track process."

"Asset servicers know a lot about our products, clients and jurisdictions. We solicit ideas from them."

37%

put ideas generating processes at the top

units for generating breakthrough ideas. So much for the tools for generating new ideas and escalating them. They target the knowledge residing inside individuals and leverage it to expand 'corporate memory'.

Experiences of innovative fund houses in our interviews underline the importance of three other related factors.

One is work environment. The best ideas often come from serendipity.

35%

put innovation culture second

They emerge via frequent and intensive discussions in small informal groups, with minimal bureaucracy. Successful hedge fund managers, for example, attribute their success more to their free thinking environment than to their inherent talent.

Another factor is the corporate culture. It not only needs to have innovation as a line item in personal balanced scorecards. It also needs to provide financial

32%

put talent third

incentives and personal recognition for successful ideas.

The final one is a fast track process that by-passes corporate bureaucracy and encourages staff to post new ideas on a dedicated website, thus creating a portfolio of ideas. The good ones are escalated through the five stage process described on the previous page. Technology thus helps to harness latent creativity.

A view from the top...

Innovation appeared on our radar screen in the wake of the 2000-02 equity bear market when clients, saddled by huge losses, started demanding better ways of investing, and forcing two ideas on to our agenda: one about ends, the other about means.

The first centred on uncorrelated absolute returns, irrespective of the market cycle. Its seductive emphasis on skills of asset managers - rather than market movements - captured the imagination of investors who had hitherto relied on a raging bull market to do the heavy lifting for them. The second set centred on improving business models to create a competitive edge via stellar performance and operational excellence that could sustain it into the future. So, we did a benchmark study and discovered that our peers were using - or planning to use - one or more of five innovation tools.

Some set aggressive revenue targets under which staff were mandated to create new products to penetrate new client segments and geographies not already in their existing portfolios.

Some used a fast track system that overtly encouraged staff to post new ideas on our corporate intranet and escalate the good ones via a step by step process that filtered the likely winners from the rest.

Some created dedicated R&D labs that were enjoined to come up with breakthrough discoveries, resulting in offerings that didn't exist anywhere before. Some organised their front office people into virtual or actual boutiques to give them autonomy to generate high conviction ideas as part of the day job. Some overtly promoted a culture where ideas generation was everyone's concern and everyone's responsibility.

Of course, these tools overlap. In our business, we have blended most of them. Often, we also bring together people from cross functional areas into virtual teams.

Each is framed a specific challenge around a long standing problem - in front, middle or back office. They are then invited to come up with ideas on fixing it. Each team has a top level executive sponsor with responsibility to ensure that the team's remit is clear and doable within the required time frame.

This eclectic approach works for us. It helps in creating an ideas-seeking culture in which ideas breed new ideas. However, it is hard to assess its direct or indirect impact because asset products are not like physical products (e.g. car or a computer) that have consistent replicable outcomes and a definable shelf life irrespective of their external environment.

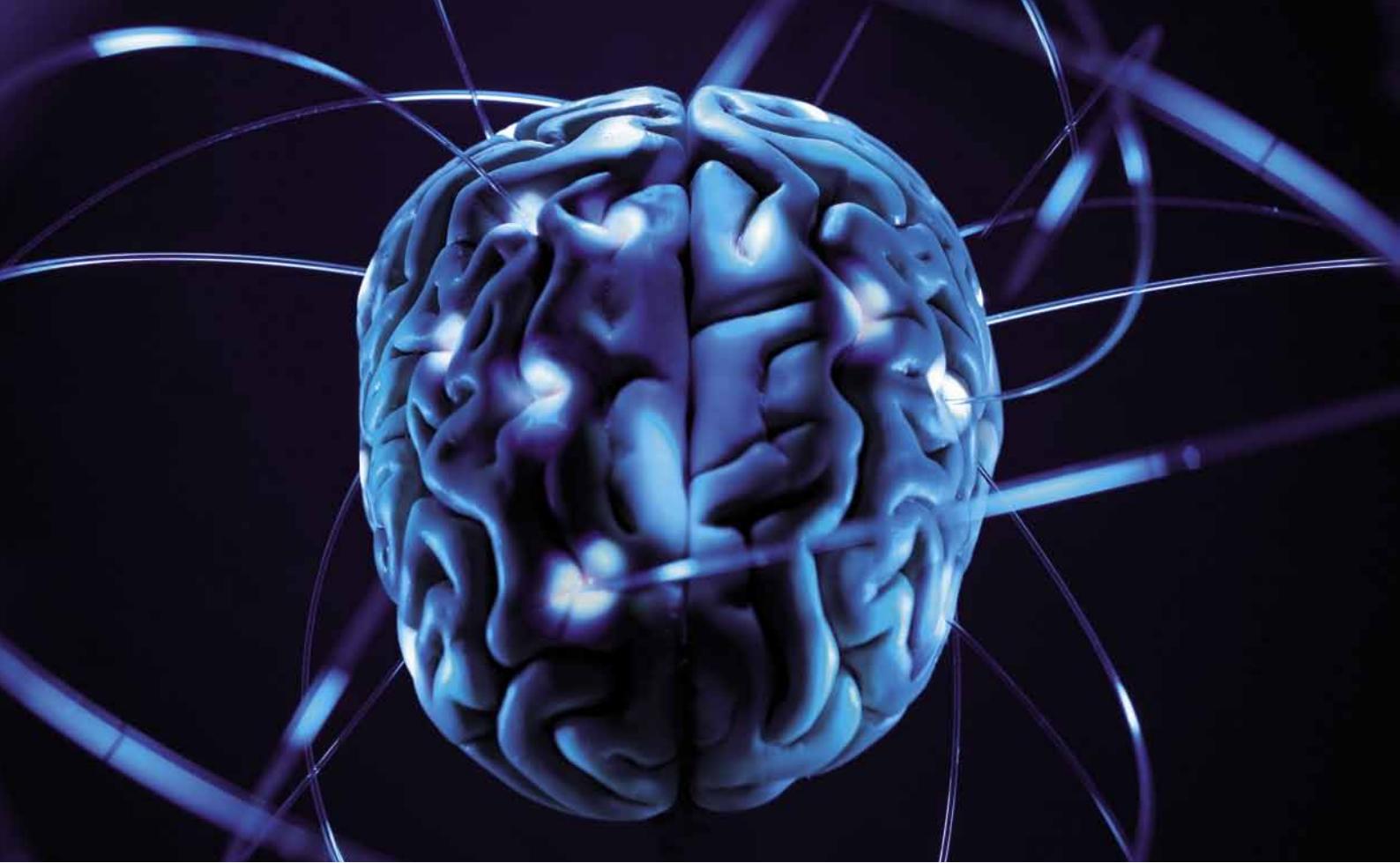
~ A UK asset manager

Interview quotes:

"We seek ideas from clients. We also use clients to road test what we think."

"Bureaucracy is the kiss of death for talented individuals."

"Our multi-boutique model gives people the 'white space' to generate high conviction ideas."



5 Ideas beget ideas

How do asset managers aim to do better in future?

"Most asset allocation models and manager selection tools are good at forecasting events that have already occurred. They need to look beyond history."

Issues

Our survey of asset managers and other service providers also aimed to shed light on the following questions:

- how do they generate and capture new ideas?
- what will they do differently in the next three years?

Key findings

- The changing nuances of today's investment have shifted the centre of gravity in ideas generation among asset managers: from product push to investment pull.

- Investment professionals and clients are in the driving seat, unlike the last decade when sales and product development teams led the charge.
- It speaks to a new theme: investment innovations work only if we know their limits. Problems arise from delusions that markets can be tamed.
- Clients need to be more aware, therefore, about what can and can't be delivered at a time when pension liabilities are maturing fast due to an ageing population.
- Client engagement is growing via focus groups, pulse surveys and informal contacts.

- On the other hand, the role of consultants in the ideas generation process is perceived as invidious, on balance. They walk a fine line between client interests and personal convictions.
- Looking ahead to the next three years, many things will be done differently.
- Asset managers aim to: improve the quality of their products, develop better alignment of interests with their clients; and improve operational excellence.
- More likely, they will adopt more robust processes for promoting new ideas and stress-testing the resulting products.
- Improvements are being made in four sequential activities: ideas generation, inviting people to post their ideas; evaluation, doing a feasibility study; design, creating prototypes and subjecting them through ‘mental wind tunnels’; and delivery, using seed capital before going public.
- Asset managers also aim to seek better alignment by countering clients’ behavioural biases and avoiding products that are not fit for purpose.
- Finally, they will improve operational excellence by seeking new alliances with third party administrators so as to focus on their own core capabilities.
- Faced with the prospect of fresh regulation on banning front-end commissions, distributors face disruptive changes. They will be obliged to improve service standards and advice infrastructure.
- As a result, they will segment their service proposition by client groups and merge their channels for retail, institutional and HNWI clients in pursuit of operating leverage.
- Finally, caught between a rock and a hard place, consultants’ scope for innovation will be limited.
- Their recommendations have to be evidence based. On the flip side, that will continue to limit the scope for fresh thinking and gut instincts that are so essential when markets are moved more by sentiment than by history.
- The brunt of their changes will focus on their business model. Large houses will move ever more into implemented consultancy. Niche players will develop greater client proximity.
- The investment value chain will be distinguished as much by introspection as innovation.
- The projected changes constitute modest steps. But they have the potential to improve the retirement outcomes as the decade progresses.

“Brilliant spirits often encounter violent opposition from mediocre minds”

Albert Einstein

The changing nuances of today's investment landscape has shifted the centre of gravity in ideas generation

When asked to cite the significant sources of new ideas, at least one in every three asset managers identifies their investment professionals and their clients as a key group.

The second notable group, cited by at least one in five managers, includes: sales and CRM; product development teams; and senior management. Other sources are less widely cited.

The 2008 crisis was a watershed. It elevated the role of the first group, according to our interviews. Before then, the second group was in the driving seat. The switch reflects a subtle shift from product push to investment pull.

It speaks to a broad theme: investment innovations work only if we know their limits.

Nobody can guarantee outcomes: all they can do is to minimise 'wrong-time' risks. Few investments are path-independent: the unexpected often happens.

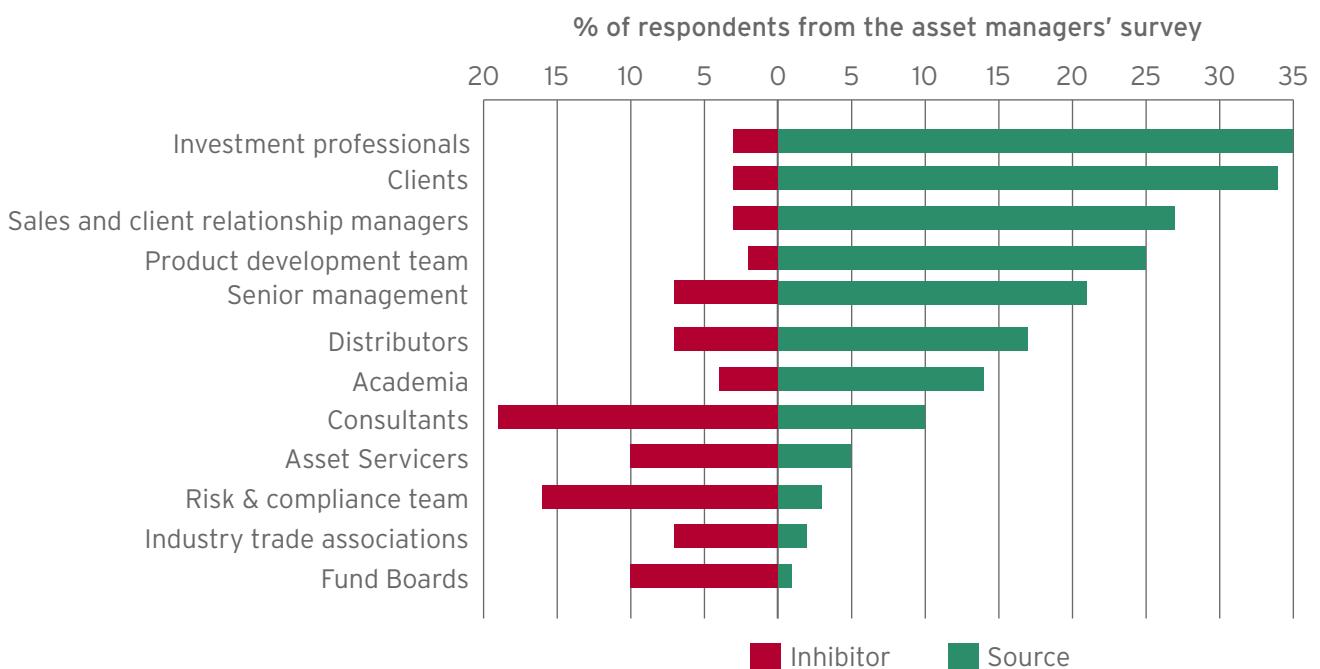
Hence, future innovations should seek more balanced revenue streams for asset managers and more robust opportunity sets for their clients.

More than ever, innovation is about applying intellectual rigour via tools and techniques to manage money within a defined range of outcomes. Every position in a

portfolio is a matter of conviction, not guarantees. Fat-tailed risks cannot be predicted. But one can have conviction about them via a high tolerance for ambiguity: looking at the same picture through diverse lenses.

All this requires greater engagement with clients in order to understand, anticipate and meet their needs. Pension liabilities are likely to mature exponentially within next ten years as the post-War baby boomers head for retirement. Clients need to be more aware about what can and can't be delivered while the global economic outlook remains uncertain. For example, as cash continues to pile up in Asia, there

Which of the following are the most significant sources of new ideas in your business? Which are the most significant inhibitors of new ideas?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Hong Kong has experienced a big talent inflow from the West lately."

"We don't believe in the wisdom of the crowd. Being lonely is often a precursor to being successful."

"As CEO, I attend all big client events to know the complexity of their challenges and subtleties of their decisions."

35%

put investment professionals at the top

are worries about whether it can be put to use responsibly. In China and Japan, over 50% of household assets are locked into low interest bank accounts.

Before the crisis, asset managers worldwide were increasingly disintermediated by distributors in the retail space and consultants in the institutional space. Since then, the gulf has been narrowing, as more and more asset managers use

34%

put clients second

focus groups, pulse surveys and informal contacts to understand the heartbeat of their clients.

Turning now to the sources that inhibit the generation of new ideas, two merit attention: external consultants and internal risk & compliance teams, as cited by 15%.

Consultants' roles remain invidious. As advisors and guardians of clients' interests, they have to challenge new thinking. Who can

27%

put sales & CRM third

blame them after a decade in which nearly 90% of active managers failed to hit their benchmarks? They have to walk a fine line between client interests and personal convictions.

As for the risk & compliance teams, their heightened role since the crisis has created an extra layer of oversight for investment professionals. They are the lightning rod for regulatory creep.

A view from the top...

In the 1990s, we were like other large pension plans in North America: with a 60:40 equity-bond portfolio. This worked so long as the markets powered ahead. The crash in 2000 forced a major reappraisal. It showed that equities had been over-valued for too long, thanks to pump priming by the Federal Reserve at every whiff of market correction. It also showed that the time profile of our liabilities favoured assets with strong and stable cash flows within a realistic fee structure.

We duly initiated incremental rebalancing that blended buy-and-hold investing with opportunistic investing. It favoured infrastructure, private equity and real estate alongside high yield, distressed debt and hedge funds. Their overall weighting soared from 5% to nearly 35% over the past decade. We cherry picked some prized assets in Europe and the US in the down markets. Over 50% of our assets are managed internally, targeting absolute returns by nurturing talent.

The experience of successful hedge fund managers had taught us that talent is only as good as the environment in which it is deployed: having the right bench strength is one thing; getting the best out of it quite another.

The latter requires three sets of benefits conducive to a high performance culture: an employer brand that generates personal pride; an interesting job that stimulates personal commitment and a balance of hard and soft rewards that inspires self-motivated creativity.

In the past, mutual misunderstanding was rife: bosses saw their investment professionals as greedy arrogant individuals with a highly inflated sense of self worth. In turn, professionals saw their bosses as glorified bean counters detached from the heart beat of investment. For both groups, the regular parting of the ways was no more than a futile chase for the next rainbow. With the rebalancing of the portfolio, talent management shot up on our business agenda.

We motivate our talent pool via light touch management, a liberal dose of open honest communication, a meritocratic incentives system and peer recognition.

We accept that they are more interested in managing money than people. So we let them work in small teams with minimal hassle that ensures that ideas breed new ideas, following the law of increasing returns. Too many of them working together usually results in chaos, debates and low performance. Above all, we offer them the two things which they value most: autonomy and space within wide parameters of discretion; and a boss they admire. No hero worshippers, they prefer nuts & bolts leadership above visionary rhetoric.

This approach has worked well for us in achieving what is widely admired as one of the most successful rebalancing in the pension industry.

~ A Canadian pension plan

Interview quotes:

"We seed new products with our own money - occasionally with small support from our clients."

"We use quant tools and fundamental judgement within a careful marriage of the two."

"For consultants, there's no incentive to break ranks and stick their heads above the parapet to protect client interests."

Product quality, better alignment and operational excellence will dictate the thrust of innovation in the near term

For asset managers, the crisis has been more a moment for introspection, than the mother of invention.

Over the next three years, their innovation effort will build on the past by doing old things better. Their industry is not Darwinian enough to cope with disruptive changes. Likely improvements will fall into three clusters.

The first cluster covers product quality. 42% of asset managers expect to adopt a more robust process for generating and evaluating new ideas, as described at the end of the previous section.

37% aim to stress test their new products before bringing them to the market.

27% aim to have longer time-to-market to create a track record for their new products.

At least 20% aim to use these means to deliver three product outcomes: upside protection while limiting downside risks; lower correlation between asset classes; and less complexity.

Product quality may improve but new killer products are unlikely. The existing ones will be upgraded to target better outcomes.

The second cluster of improvements will cover alignment of interest with clients, as cited by 51% of asset managers.

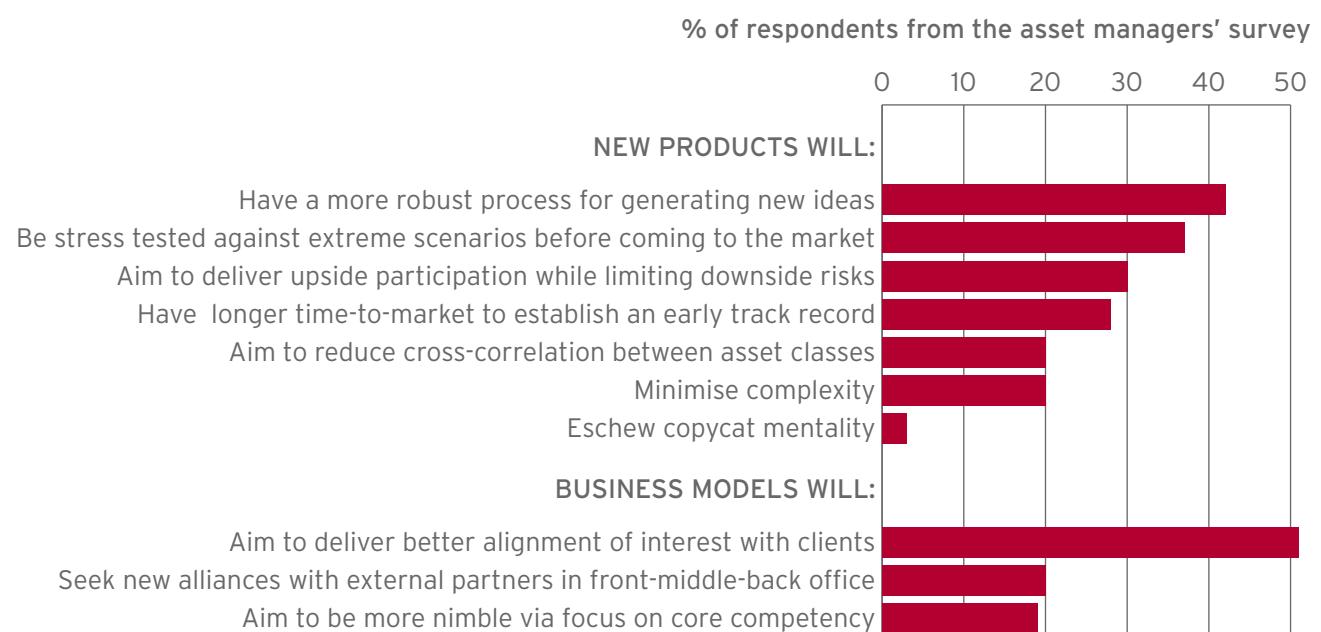
As our last year's report showed, this will be done by creating a

fiduciary overlay that does one or more of the following: it counters behavioural biases that have cost clients dear in the last decade; prevents asset managers from selling products that are not fit for purpose; offers symmetrical incentives in which gain and pain are shared more equitably; develops common investment beliefs and time horizons.

Progress will crucially hinge on the extent to which pension plans, consultants and distributors are able to drive down the current levels of fees and charges. The pressure is building up, as we shall see later in this section.

The third cluster covers operational excellence. 20% expect to seek new

What will be different about asset managers' approaches to innovation over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Investment products cannot be tested in a lab. We put them through mental wind tunnels."

"Our innovations embrace honesty in what can be delivered and rigour in the way it is delivered."

"External administrators are no longer peripheral; they've rapidly progressed from the back to middle office."

51%

put alignment of interest at the top

alliances with external partners in front-middle-back office. 19% aim to become more nimble by focusing on their core capabilities. Since the middle of the last decade, an increasing number of activities have been outsourced to third party administrators, starting in the back office and then spreading to the middle and front offices. As asset managers have ventured into new strategies, jurisdictions, channels, alliances and client

42%

put new ideas generating process second

segments, business complexity and diseconomies of scale have been rife, due to too many moving parts. Alliances and outsourcing have been the principal means for accessing expertise, improving operational excellence and maximising scale economies.

Indeed, more and more medium and large managers have adopted the multi-boutique model to minimise the bureaucracy

37%

put extreme scenario stress testing third

that comes with size. Run as autonomous or semi-autonomous units, these boutiques aim to become centres of investment excellence around different product areas. They also provide inputs into multi-asset class products. In combination with outsourcing and alliances, they aim to sharpen the business focus (case study below).

A view from the top...

Large asset houses are often perceived as creatures of legacy systems and legacy thinking: bloated and flat-footed, always hell-bent on protecting their existing revenue streams. As we have evolved into a global house through organic and acquisition routes, we have gone out of our way to counter this popular caricature by ensuring that our business model is more outward-looking and more ideas-seeking. Our guiding ethos is that innovation comes from learning-by-doing, learning by experimentation and learning from others.

Over the past decade, we have earned numerous innovation awards thanks to two factors.

The first is the way we blend our investment processes, research engine, risk platform and human ingenuity. We use vast amount of information in formulating our investment thesis. We solicit new ideas and then subject them to reality checks via quant models and intensive small group discussions. Out of these normally emerges what we term the 'X-factor': special insights and foresight. These combine what people think in their brain with what they feel in their gut.

The second success factor has been our alliances with third party administrators. Initially, they minded our back office. In the last five years, they have gone up the food chain by delivering six core functionalities that feed into our innovation engine: data warehouses that give real time information on our trade positions; simulation

models that do the stress testing of putative products; fund structuring that allows us to customise our products for far-flung jurisdictions; risk analytics that give us a second opinion on our risk profile; independent valuation of illiquid assets that gives our pension clients a realistic measure of their funding levels; and performance attribution analysis which enhances our credibility in the eyes of our current and prospective clients.

With globalisation and regulation, the asset industry has too many moving parts and too many compartments. If performance is the target, focus is the silver bullet. So, we rely on asset servicers to provide operational excellence that seamlessly aligns the front office with the rest of the business via a professional overlay of the latest expertise and physical infrastructure.

Based on their relationships with other asset managers, the servicers have been a good sounding board: they help us to learn from the mistakes of others rather than pay the price for our own. Also, given their knowledge about our clients, we can envisage the time when asset servicers will design and host our websites, offering a raft of DIY or educational tools to institutional and retail clients in areas like risk management, asset allocation, portfolio construction and stock selection. Asset managers have barely scratched the power of Web 2.0.

~ A German asset manager

Interview quotes:

"Being a multi-boutique house enables us to assess cross correlations between credit, equities and physical assets."

"As CIO, I often frame challenges and invite new ideas around them. I help escalate the ones that are selected."

"Operational excellence gives us an edge in costs, quality and credibility."

Distributors face disruptive changes in this decade

Worldwide, distributors remain conflicted: more so in Asia and Europe than in the US.

Dominated by banks in the non-English speaking countries, they typically channel their clients' money to asset managers that give them the highest up-front, trail or exit commissions; irrespective of client needs, managers' track record and scalability of the underlying strategies.

In the English-speaking world, independent financial advisors predominate. Commissions drive their decisions, according to our interviews. The US is the only major country where independent advisors have their prime oath of allegiance to their end clients, in return for advice and transaction fees.

However in Australia, Europe and India, regulatory pressures are building up (see case study

on the facing page). The shape of the regulation may be hazy at this stage but its intent is clear: to attack conflicts of interest which have long thrived on high fees, high churn and poor choices.

Commissions may well be history in this decade, according to distributors participating in our interviews. In anticipation, four developments are likely over the next three years, according to our respondents.

37% expect improvements in service standards.

35% expect them to switch from 'products' to 'solutions'.

20% expect improvements in the advice infrastructure.

18% expect growth in embedded advice products.

Emulating institutional managers, large distributors are improving

their service by classifying clients into different segments, on the basis of a number of criteria: e.g. growth potential, family situations, asset size and risk appetite. Some are even classifying clients into four segments: platinum, gold, silver and bronze. Each segment has a clear service proposition.

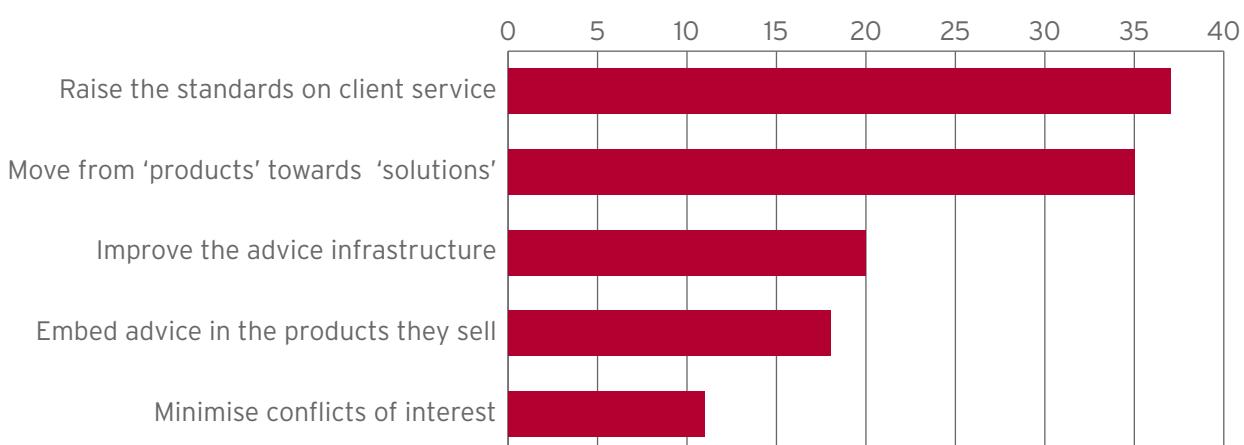
For example, a platinum client will have regular detailed investment reviews and portfolio rebalancing. Advice will be the main element. At the other extreme, a bronze one will have accurate timely information. Mutual funds will be the main focus.

That apart, regular pulse surveys and focus groups are increasingly coming into vogue. Not only do they provide a picture of client needs, they also act as an external tool to drive internal change.

As for the shift towards solutions-driven products, its main thrust

What will be different about distributors' approaches to innovation over the next three years?

% of respondents from the asset managers' survey



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"The UK's RDR will shift asset allocation to distributors who will keep the lion's share of the wallet by opting for ETFs."

"The changes in the global distribution landscape are evolutionary. But over time their impact will be revolutionary."

"Outside the US, retail investors are not ready to pay for advice. But they will, once they know about the hidden commissions."

37%

put service standards at the top

is likely to be different on either side of the Atlantic. In Europe, the shift will be driven by ETFs, which are increasingly marketed as asset allocation products. In the USA, the shift also incorporates a range of retirement funds like target date or target risk funds.

As spin offs, segmentation and the shift towards solutions-based products are increasingly expected

35%

put solutions second

to improve the advice infrastructure and sell embedded advice products. Initially, private banks on both sides of the Atlantic are likely to be the key drivers of change.

The large European ones are already venturing into the institutional market by offering asset allocation advice, manager selection and asset management. Some are offering advice on

20%

put infrastructure

design of the next generation of DC plans. In the process, they are using common asset allocation and manager selection tools for both retail and institutional clients.

Their distribution channels between client segments are also converging.

Strong winds of change are evident, especially in Europe

A view from the top...

Of all the areas in the investment value chain, distribution will possibly experience the most disruptive changes over this decade, especially in Europe and Asia Pacific.

As a background, there was too much choice. Today, for example, there are 50,000 share classes on offer in the EU, nearly five times as much as in the US, but with half as many assets. Most are copycats that look different outwardly to attract higher fees.

Furthermore, conflicts of interest are rife. In places as diverse as Australia, China, India, Japan, Singapore, France and the UK, distributors have remained heavily conflicted. They've poured money into funds that have given them highest front load, or trail commissions or exit load; irrespective of client needs, managerial track record and strategy scalability. The charge sheet reads the same whether distribution is done via banks as on the Continent and in Japan; or via IFAs as in Australia, Hong Kong, Singapore and UK.

India has led with the new rules. UK will follow suit in 2012 and probably the rest of Europe thereafter. Under them, old-style commissions will be disallowed for a wide range of retail funds. Instead, distributors are obliged to charge advice and transaction fees to the end-client. The impact in India has been swift in the past year: a collapse in net inflows. Clients mistakenly thought that they were being charged for a service which had long been 'free'!

In Europe, distributors have wised up ahead of regulatory intervention. On our part, to start with, we are moving

heavily into ETFs where fees are low and hidden transaction costs high. We increasingly use ETFs in our dynamic asset allocation products and earn good commissions on transaction fees, thereby protecting our revenue stream.

However, over time, the negative knock-on effect on active managers will be huge. Mediocre active managers who have existed at the mercy of commissions will struggle to survive in the face of the gathering competition. Over time, our proposition for the mass affluent market will be commoditised.

Alongside that, we are strengthening our propositions for HNWI and institutional clients - both DB and DC - offering advice on asset allocation, plan design and manager selection in Europe and the Far East. As a part of that, we are segmenting clients into platinum, gold, silver and bronze categories, with distinct sets of services for each category. The segmentation is done on the basis of various objective and subjective criteria. The aim is to get closer to our clients by anticipating and meeting their needs.

Lastly, the biggest change we have implemented lately is to roll different sales silos into one. Retail, HNWI and institutional clients are served via the same channels, partly due to convergence in their needs and partly due to high operating leverage in our asset allocation and managerial selection capabilities.

~ A Swiss private bank

Interview quotes:

"Poor asset allocation decisions and opaque structures have cost clients an average of 2.5% in lost returns per year."

"Sales channels for retail, institutional and wholesale clients will converge in order to reap the operating leverage."

"Distribution will become segmented by distinct client groups."

Caught between a rock and a hard place, consultants' scope for innovation will remain limited

Pension consultants are in a Catch 22 situation.

Clients want predictability; markets deliver uncertainty. Clients want to be prime movers; but their allocations demand track record.

No wonder consultants got more flack than asset managers for much that went wrong in the last decade, as we saw in Section 2.

To compound the problem, consultants also experienced a talent drain to asset managers, investment banks and new start-ups in every major financial centre in Europe and the US.

As advisors, their approaches are perceived as backward-looking, especially in asset allocation and manager selection. Implicit in their approach is the assumption that the past is a good guide to the future. Yet the last decade showed that markets are moved more by

sentiment than by history.

In defence, their recommendations have to be evidenced based, in view of their independent role. As we saw in the last two sections, investment innovations have had variable outcomes. So, consultants are obliged to question their worth. Besides, they also know all too well that most small and medium-sized pension plans do not have the skills and governance structures to venture into anything new.

Against this background, over the next three years, our survey respondents expect consultants to make four improvements.

26% expect them to improve their expertise in dynamic asset allocation.

17% expect them to rely more on foresight than past performance in manager selection.

17% expect them to develop expertise in implemented consultancy, providing a one-stop-shop solution to clients.

17% expect them to improve the risk tools that underpin their investment advice.

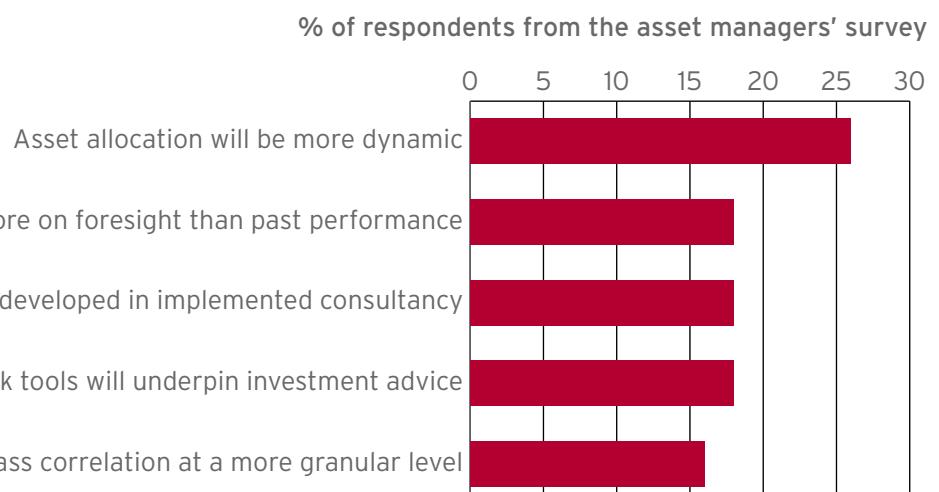
Our post-survey interviews with consultants drilled deeper into these numbers, in the face of contradictory demands made on their expertise.

While their advisory role limits the scope of innovations, consultants are more likely to tinker with their business models.

First, the consultancy model is already bifurcating.

Large houses are likely to venture into implemented consultancy, in order to fortify their market position, in the face of competitive threats posed by the rapid growth

What will be different about asset managers' approaches to innovation over the next three years?



Source: Citi / Principal / CREATE Survey 2011

Interview quotes:

"Our industry is not Darwinian. Everybody has their place in the investment food chain; nobody wants to rock the boat."

"Consultants must understand the big swings in asset classes. Few of them have worked at the coalface."

"Concepts like alpha and beta should be thrown out. The correct benchmark is clients' long term goals."

26% put asset allocation at the top	17% put manager selection	17% put implemented consultancy
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of fiduciary management in the Netherlands. They will be creating centres of expertise in critical areas like asset allocation, manager selection, and portfolio construction. It remains to be seen what conflicts of interest will arise in the face of the cross-selling it entails.

Niche consulting will continue to rise. Via its narrow specialisation, it is developing closer proximity to

clients and minimal conflicts of interest.

Second, talent will differentiate winners from losers.

The demand for investment advice is growing in every jurisdiction, as new client segments emerge. The weight of new money will come from four segments in the emerging markets: SWFs, state social security funds, new DC plans and insurance

companies divesting their asset management function.

On their part, consultants recognise that without breadth of knowledge and depth of expertise, they will not be able to compete with large asset managers who are also targeting these segments for their one-stop-shop offerings.

A view from the top...

Let's get one thing straight: pension deficits are eye-popping. Naturally, asset managers and we pension consultants are cast as villains. It's hard to dispute that in the face of the appalling reality of numbers.

Some of our pension clients who operate municipal funds in the US, for example, require up to 60-year recovery periods.

The way they operate encourages bad behaviour: e.g. arbitrary promotions or needless overtime in the last year of retirement that inflate their entitlement in the final-year schemes. But such abuses don't explain the whole truth. For, on the investment side, they have been victims of too many unknown unknowns.

Few of us saw the two bear markets coming; few of us detected the time bomb concealed in cheap money; few of us understood the unintended consequences of the mark-to-market rules; few of us expected the asset class correlation to go through the roof.

Quite simply, most asset allocation models and manager selection tools make great PowerPoint slides. Their predictive power is confined to forecasting events that have already occurred. They can't look beyond history.

After a turbulent decade, we have learnt five lessons. Correlation between asset classes is asymmetrical; low in the upturn, high in the downturn. Risk return characteristics of asset classes are hard to ascertain except over very long periods; in the meanwhile, they can

be ravaged by fat-tail events. Risk models based on past events are more a therapy than a barometer: while the past may be our best guide to the future, it is still a pretty imperfect one. There is no free lunch with any asset class: systemic risks are increasing relative to idiosyncratic risks. Finally, liquidity, for long incidental, has moved centre stage as a direct result of the credit crunch.

These unpalatable facts are forcing us to raise our sights by at least 30 degrees, in order to retain our relevance in an environment fraught with uncertainty.

No wonder clients are very suspicious of innovations. They see them as con tricks to fleece them. The principal-agency problem is as acute now as it has ever been. One way to ease it - although it won't be easy - is to play down the role of our models and tools that have produced so many wrong calls.

It's time to apply the greater insights to make sense of the unusually high 'noise' levels in today's markets. The false rigour and spurious accuracy of some of the things we do are fabulously effective in managing our career risks. But, inadvertently and over time, they raise client expectations only to dash them.

We're applying a far stronger overlay of human judgement to everything big that we do for our pension clients.

~ A global pension consultancy

Interview quotes:

"As advisors, it's been very hard regaining our credibility after 2008. We were the first to be blamed by clients."

"We are ratcheting up fee pressures on behalf of our clients. Our manager selection is far more judgemental than before."

"We are becoming a key conduit for private banks, DC plan sponsors and SWFs."

Other publications from CREATE-Research

The following reports and numerous articles and papers on the emerging trends in global investments are available free at www.create-research.co.uk

- Exploiting Uncertainty in Investment Markets (2010)
- Future of Investments: the next move? (2009)
- DB & DC plans: Strengthening their delivery (2008)
- Global fund distribution: Bridging new frontiers (2008)
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