Pension Funds as Universal Owners: Opportunity Beckons and Leadership Calls

Roger Urwin

Roger Urwin is Global Head of Investment Content at Towers Watson (United Kingdom). He is also Advisory Director at MSCI, a Board Member of the CFA Institute, and an Editorial Advisory Board member of this Journal. Universal owners are asset owners who recognize that through their portfolios they own a slice of the whole economy and the market. They adapt their actions to enhance the return prospects of their portfolios, and hence the prospects for the whole economy and the market as well. This approach is a logical but ambitious interpretation of investing sustainably. Universal owners focus their actions particularly on active ownership practices and active investment strategies that integrate environmental, social, and governance considerations. They also collaborate with other asset owners to produce network benefits. Externalities such as resource degradation and depletion, greater complexity, and connectedness make the methods of universal owners increasingly important. The challenge now is to adapt the roles of the state and the market. By fostering a better-balanced collaboration between the two, universal owners would increase both their legitimacy and effectiveness in pursuing actions that are value-enhancing for their beneficiaries and for society.

Keywords: Asset Owners, Externalities, Pension Fund, Sustainable Investing, Universal Ownership

The Concept of Universal Ownership

The core idea of a universal owner is a large institution investing long-term in widely diversified holdings across multiple industries and asset classes, and adapting its investment strategy to these circumstances. 1,2 For universal owners, overall economic performance will influence the future value of their portfolios more than the performance of individual companies or sectors. This suggests that universal owners will support the goals of sustainable growth and well-functioning financial markets. A universal owner will also view these goals holistically and seek ways to reduce the company level externalities 3 that produce economy-wide efficiency losses.

Sustainable investing is central to the universal owner approach. Sustainability as a general concept involves making sure that actions today do not compromise outcomes tomorrow. This concept in investment carries the features of long-term investing and preserving equity between the potentially competing claims of different generations of beneficiaries of an institutional fund. So although *responsible investing* has come to focus on integrating environmental, social, and governance considerations (ESG) and active ownership practices, *sustainable investing* also carries the elements of long-term investing and inter-generational equity.

The universal owner approach applies sustainable investing to large institutional investors who through their assets own and will always own a slice of the whole economy, and, who consciously direct their ownership and allocation actions to improving their long-term performance. The universal owner is signing up to these principles:

- Recognize context: that both individually and in aggregate through the connections in their holdings, universal owners own a significant slice of externalities which risk being internalized to their fund's net cost, now or in the future:
 - · Directly through individual stocks.
 - Indirectly through other holdings.
 - Obliquely through socialized externalities social costs to others.
- 2. Develop and act on beliefs: that universal owners can successfully protect/grow the value of their holdings by managing their risk exposure to externalities through:
 - Ownership strategies such as active ownership and collaboration in public policy efforts.
 - Allocation strategies, including integration of ESG factors; investment in targeted ESG-related mandates like clean tech; and, investment in all affected asset classes (i.e. public/private equity, real estate, infrastructure, and bonds).

3. **Recognize that universal owners produce** *ancillary benefits:* their actions effect system-wide change of net benefit to other investors (who gain free-rider effects) and to broader society. However, they view these ancillary benefits as secondary to their financial purpose.

In a nutshell, universal owners adapt their actions to try to directly enhance the values of their portfolios and indirectly help the whole economy to a more prosperous and sustainable future. In working towards this philosophy, universal owners uphold the principles of sustainable investing by being long-term investors attuned to the need for inter-generational equity.

A key feature to be emphasized is that as the motivating force is purely financial, the universal owner approach is easy to support from the perspective of fiduciary duty. Universal owners can justify their actions with beliefs about the desirability of managing the impact and risks of the externalities of their holdings, plus the opportunities for adopting hedging or insurance that would improve the chances of favorable long-term outcomes. Societal system-wide benefits accrue as spin-offs of these primary considerations.

History So Far

There has been discussion and development of the universal owner approach since Monks and Minow (1996) first used the term. Other major research works include Hawley and Williams (2001) and Saint Mary's College of California (2006). Thamotheram and Wildsmith (2007) emphasize the opportunities in asset owner collaboration. PRI (2010) also published a report on universal ownership which focused on the ownership actions area. Research from asset owners that espouse universal ownership include Gjessing and Syse (2007) describing the approach of the Norwegian Pension Fund Global. More recent discussions of universal ownership appear in the Norwegian Ministry of Finance Report (2010), where the emphasis is on active ownership and engagement with lesser attention given to stock and sector allocation.

There are relatively few asset owners that are active in promoting the universal owner philosophy. The documented investment policies of the world's leading funds carry few explicit references. Examples of funds that have expressed statements connected to universal ownership include Norway, CalPERS (United States), CPP Investment Board (Canada), ERAPF (France), New Zealand Superannuation Fund, and PGGM (Netherlands).

There is relatively limited familiarity with the universal owner concept among asset managers. Arguably, they are only indirectly connected as its principal application is to asset owners. However, many asset managers work on mandates that specify long-term absolute return targets that could benefit from using

the investment concepts of universal ownership. Two suggested reasons for limited progress with universal ownership are:

- Asset owners have tended to focus on short-term targets reflecting endemic short-term pressures including career risk issues.
- The universal owner philosophy has been considered too academic and impractical to warrant much attention. In particular, asset owners have found the financial case hard to express and validate.

The mechanisms for measuring the impact of universal ownership have been limited thus far, and present challenges for asset owners. For example, many potential universal owner strategies produce increasing returns to scale, but the opposite is also true. Potential strategies may not produce net gains after costs if the scale of opportunity is limited.

How might these perspectives be altered? Two catalysts are at work:

- There are various indirect pressures building for funds to explicitly exhibit more responsibility, analogous to the corporate social responsibility pressure on corporations.
- The increased complexity and connectivity in the institutional investment and macro-economic areas have increased the size and impact of externalities.

Externalities can be both positive and negative. Positive externalities from the private sector are essentially the spill-over benefits of businesses to unrelated parties. The social benefits of businesses in their local communities can produce substantial positive externalities (Bernstein, 2010). Negative externalities result in broad spectrum impacts. One of the most sizeable and prominent is the spill-over effects of climate change.

Costing Negative Externalities

PRI (2010) gave estimates of the costs of externalities produced by listed corporations (as summarized in Table 1).⁵ Their analysis included this description of externalities:

Externalities can affect shareholder value because they lead to a more uncertain, rapidly-changing economic environment and greater systemic risks. Inefficient allocation of capital to highly-polluting activities can cause a decline in asset values over time. For a diversified investor, environmental costs are unavoidable as they come back into the portfolio as insurance premiums, taxes, inflated input prices, and the physical cost associated with disasters. These costs could also reduce future cash flows and dividends. One company's externalities can damage the profitability of other portfolio companies, adversely affect other investments, and hence overall market return. Ultimately, externalities caused by companies could significantly affect the value of capital markets or their potential for growth, and with that, the value of diversified portfolios.

Table 1: Environmental Impact of Listed Company Externalities

Category	External Costs Generated in 2008 U\$M	% Arising from Supply Chains	Costs Relative to Company Revenue
GHG (Greenhouse Gas Emissions)	1,444,864	44%	4.47%
Water Abstraction	366,555	66%	1.13%
Pollution [Sulfur Oxides (Sox), Nitrogen Dioxide (NOx), Particulate Matter (PM), Volatile Organic Compounds (VOCs) and Mercury]	314,001	54%	0.97%
General Waste	21,157	40%	0.07%
Fish	6,099	79%	0.02%
Timber	1,542	68%	0.01%
Total	2,154,218	49%	6.66%

Source: Trucost Plc and PRI

Largest 3,000 companies. Carbon priced at \$85 for each ton of GHGs. Total external costs equivalent to 3.6% of GDP

In the future there will be more attention paid to the coverage of externalities of highly competitive fields where investors search incessantly for an edge. One incident that brought up the issue was the Britsh Petroleum (BP) Gulf of Mexico oil spill. This case study is discussed in the following section.

The Britsh Petroleum Accident

The history of the BP Gulf of Mexico accident can be summarized in four phases as set out in Table 2. An interesting aspect of this case is how the market valued the impact of the accident through its effect on BP's share price: starting small, moving to staggeringly large (peaking at around 50% of BP's value) and then steadying as the financial uncertainty decreased.

Oil extraction has arguably had a long history of producing externalities which materialize as costs to others which often emerge with a lag. On certain occasions the costs are subsequently internalized back into the company, as occurred with the BP accident. This internalizing of costs is a highly uncertain process which is problematic to analyze. Spill-over effects are complex and contentious to calculate, and there are always issues of where compensation should start and end. Then there is the time delay before externalities crop up in internalized costs to other companies in the industry.

Application of the universal owner approach to the BP example could involve three avenues: ownership, influence on public policy, and portfolio strategy:

- Ownership interests: are opportunities to influence corporate boards in directions that optimize the sustainability of their long-term interests. This begs the question of why any engagement might suggest ways to improve upon the current corporate strategies adopted by present boards. The main area of difference could well be the time horizon. Corporations feel driven to meet the shorter term satisfaction of most investor appetites, while there is a strategy of longer term optimization of sustainable value that could be adopted.
- *Public policy:* can also be an opportunity for asset owners to exert their influence where boards are non-responsive to universal owner engagement.
- *Portfolio allocation:* can benefit from an informed view of ESG considerations. The considerable volatility in BP's share price reflected the uncertainties in externality assessment and appropriately the incorporation of these externalities both an investment opportunity and an investment process differentiator. There were several asset managers with strong ESG discipline and processes that positioned their portfolios successfully with respect to the BP case.

Table 2: British Petroleum (BP) - Gulf of Mexico - A Case Study in Externalities (2010)

Phase	Phase Characteristics	Externalities
Before April 2010 Run up to the accident	Safety practice at BP focused on certain areas but arguably did not give substantial attention to inter-connectedness in systems failure and the failure related to outsourced activities.	The BP business had the risk of producing significant externalities and internalized costs at some future date arising from potential operational accidents.
April 2010 Deepwater well blow-out	The accident produced loss of life, environmental damage, direct economic loss, plus concomitant damage to the property and livelihoods of many parties.	The accident produced very substantial externalities as well as high and fast-growing but uncertain internalized costs to BP.
April – October 2010 Immediate response sealing the well	The period of sealing the well was prolonged but ultimately completed with subsequent smaller scale actions to address problems.	The internalized costs to BP were at first highly uncertain, but the relative certainty of their amount became progressively more clear.
After October 2010 Ramifications and further BP response	Further ramifications included addressing issues at BP and elsewhere in the industry; litigation and compensation; public policy and regulatory change; and, societal sensitivity to this type of company.	Internalized costs continued growing; concomitant future costs to BP and other companies in the energy sector emerged from changed conditions; and, new externalities have since emerged.

Source: Author research

The BP case may represent something of a turning point in considering corporate externalities. Before the event, investors with an ESG edge may have had difficulties with the credibility and validation of their strategy. After the event, more attention has flowed to the sustainable investing area and alerted asset owners particularly, to the stock and sector allocation opportunities in the universal owner approach. This increased attention can produce an endogenous re-pricing of these factors further boosting the merits of the approach. This is an example of an investment belief reflexively affecting the investment strategy – a subject considered in the following section.

Universal Owner Behavior and Reflexivity

Universal owners integrate their thinking across both their mission and their strategy. They believe that their actions can produce material system-wide impact on the economy and the market, especially when like-minded investors work together to produce network effects. There are three routes to achieve influence:

- Bottom-up through individual holdings.
- Top-down through strategic allocations, particularly on sectors.
- Through influencing policy and regulation. An example is the recent investor statement in Cancun representing \$15 trillion of assets which calls for global agreement on climate measures.

Strategic asset allocation might variously target sectors such as energy efficiency, renewable energy, water, and other clean tech opportunities. These allocations address externalities systemically, by investing in technologies that help to mitigate global resource depletion and degradation challenges. Such investments can be

positioned as tail-risk hedging. There is an element of Pascal's wager about this: not being sure if this insurance is needed, but not wanting to find out through painful experience.

Table 3 compares the universal owner approach with normal investment methods. The example is related to public equity. A similar analysis could be undertaken for other asset classes. The greater granularity of the universal owner approach suggests this method carries the potential for improved explanatory power. While normal investors will derive some free-rider benefits from universal owner activities, the active management of externalities through asset, sector, and security selection provides universal owners with material comparative advantage opportunities. For example, the addition of the externality charge and the externality re-rating indicated in Table 3 add an edge to universal owner investment strategies.

There are examples of reflexivity, as explained by Soros (2008). Reflexivity occurs when investor beliefs change, impacting investor behavior, which in turn impact investment conditions, producing further iterations. Investor beliefs may change by recognizing the impact of externalities through the externality charge in the model discussed later in this article (a *cognitive* process in Soros' description). These beliefs affect investor buying behaviors and the cost of capital (a *manipulative* process in Soros' description), producing in turn changes in beliefs that follow these changes in buying behaviors. This then impacts the return in the model. This feedback loop in the process explains the *reflexive* descriptor used by Soros. An example is the BP case, where significant numbers of investors began to see matters in a new light.

Table 3: Comparison of Investor Beliefs and Models

	Normal Investor	Universal Owner Investor
Investment Goal	Performance in the short-term, allowing for risk.	Performance in the long-term allowing for risk.
Long-Term Return	Long-term return seen as the aggregation of the short term returns.	Long-term return allows for linkages between returns in different periods.
Investment Approach	 Focused on assessment of earnings ~ E Considers the chance and significance of accidents / other ESG risks but tends to apply big discount given these accidents seem remote Considers future changes in public policy (carbon pricing, etc.) and operating conditions as not relevant in the time horizons considered. 	 Focused on assessment of earnings ~ E Considers the chance and significance of accidents / other ESG risks as requiring risk assessment within the pricing model Considers future changes in public policy and operating conditions in the sector as having pricing relevance to be valued at company and sector level, including the reflexive elements in which other investors change their pricing models
Parameters Required to Model Return	 P – Initial price is observed E – Initial earnings are estimated 	 EC – Externality charge/premium to cover the insurance for any externality producing future internalized costs ER – Externality re-rating charge to cover the change in trading multiple applying after shifts in public policy and investor preference
Modeled Return	• E/P	 (E – EC – ER) / P ER is simplified, as the effect is re-pricing of P.
Risk	Risk assessment considers variability and visibility (uncertainty) in E.	Risk assessment considers variability and visibility in E, EC and ER.
Tail-Risk	No explicit tail-risk hedging.	Manages conditional tail shortfall through sustainability exposures.
Return on Wider Mission	No consideration of return on mission.	Return on mission contributes collateral benefit and to legitimate beneficiary interests.

Source: Author research

From Shareholder Model to Stakeholder Model for Corporations?

Most pension funds – particularly those with corporate sponsors – have missions that are dominated by financial considerations. However, funds could still take some interest in applying *do no harm* principles, or limiting reputational risks. The question is whether universal owners should include in their mission a goal to attain explicit benefits such as positive environmental or social outcomes, if developed in the context of fiduciary responsibility where financial goals come first. The reality is that corporations are evolving their ethos from a shareholder return framework to a stakeholder return framework in the context of corporate social responsibility (e.g., moving to the triple bottom line of profits, people, and planet).

When Milton Freedman (1982) described the overarching purpose of business as shareholder return, he captured the

business vogue of his time. Most CEOs since then have made shareholder value dominant with short-term profits providing the leading measure of progress. But there are a growing set of examples where a different stakeholder-led model is being promulgated. Marcus Agius of Barclays (FT.com, 2010) and 16 other financial services leaders expressed a commitment to the stakeholder model in preference to the shareholder model:

It is essential to restate and affirm the social purpose of financial institutions as well as affirming the personal vocation of those who work in the industry....Through work we all seek to realize ourselves as people, provide for our dependants, and make a contribution to the social good achieved through collective endeavor. The recovery of a stronger sense of service through reinforcement of a culture of professionalism will both benefit the financial services industry and those who work in it, as well as furthering the common good.

Another example is given by Indra Nooyi, CEO of PepsiCo, who promotes the idea of *corporate performance with purpose* and calculates profits after netting social costs. ⁶ She emphasizes how all companies earn their legitimacy through a license to operate from society; and as a result, have a duty of care for society and should not push their costs onto it.

Fostering Legitimacy

This is a new interpretation of *legitimacy*: a legitimate organization is perceived as pursuing socially acceptable goals in a socially acceptable manner. In some cases the social logic of values is linked to the economic logic of optimal resource allocation. So there is a win-win to both the company and society. But in many other cases there is a tension. Either a business produces a negative social or environmental externality where the corporation is a profits winner and society is a social cost loser, or the corporation gives up profits to society's gain.

This issue is sufficiently tangled to conclude that the invisible hand of unregulated/unguided markets may not work well, and may need a separate push, either by governments or by asset owners. Actions on this front have so far been small-scale. One example is the UK Stewardship Code (2006) using *comply or explain mechanisms* to institutionalize ownership best practice. The ethos is for asset owners to provide oversight and discipline over investee companies through responsible ownership that goes further than the current supine exercise of ownership rights.

Today's question is whether the balance of government and markets should tip more towards intervention in the aftermath of the market failures of corporate governance in the 2007-2009 global financial crisis. Regulatory response is often slow, but faster movement is possible if governments feel popular support behind them.

This thinking leads to a reconsideration of asset owner behaviors. The notion of fiduciary responsibility could be adapted to reflect a new meaning of *legitimacy*. Such movement could encourage a form of pension fund social responsibility analogous to corporate social responsibility. The linkage to institutional practice is evident. Governments, asset owners, and corporations may move together into a stronger partnership of mutual interests which are more congruent with the evolving post-global financial crisis model of capitalism.

This model of changing balance is described in Kaletsky (2010). He argues that both markets and governments can be catastrophically wrong and the world has become too complex and too unpredictable to be left to markets alone. The implication is that a better sweet spot should be sought

where governments improve the incentives of profit-seeking enterprises (both corporations and asset owners) in ways that produce better societal impacts.

Catalysts for Change

There are still roadblocks to sustainable investing in general, and the universal owner concept in particular, which relate back to asset owners' priorities. There is a pre-occupation with fiduciaries' agendas reflecting many current sources of stress. These problems are discussed in Clark and Urwin (2007). Most funds have limited *governance budgets*. The result is that fiduciary boards place sustainability issues too low down their agendas to give it adequate attention.

Asset owners tend to have a *finance first* stance irrespective of other issues on the table. This makes it critical to advance the universal ownership concept using investment beliefs and dispassionate economics. This suggests the necessity for *solid granite finance* arguments that may promote societal benefits as ancillary collateral outcomes. However, this finance orientation presents difficulties when empirical results have generally short histories. Furthermore, investors often require a quite high burden of proof to proceed.

However, there are some factors that suggest this situation is changing:

- There is emerging peer pressure from leading funds that are proselytizing the merits of these approaches.
- The spread of the Principles for Responsible Investment (PRI, 2010) where signatory numbers are rising rapidly is being taken as evidence of the legitimacy of responsible investing approaches.
- There are developments in universal owner methods and approaches being promulgated by some asset owners and some service providers.
- There is significant growth in supply of investment options through expanded opportunities in environmental and energy technologies.
- There is increased growth in applications outside quoted equity, such as private equity, real estate, infrastructure, and fixed income instruments.
- There are greater societal expectations for legitimacy in our investment institutions.

The impact of the last of these trends is perhaps the hardest to gauge. Is there an increased expectation that asset owners will care and do something about the doubtful behaviors of certain companies and industries (such as banks), and the environmental and social externalities of the corporate sector? Is this something that financial institutions will have to recognize more? Will their legitimacy – their *license to operate* – be

associated with their ability to adapt their behaviors to be congruent with societal pressure for fairer outcomes in a world in which resource depletion creates major disruption? Only time will tell.

It is not possible to be sure about the speed of change as there are too many uncertainties. It is likely that change will be spread out over multiple years. This reflects some of the practical issues confronting investors: limited measurement and tools, confusing conversations, and a rather narrow set of opportunities. However, the tools supporting decisions and the investment products in the sustainability area can and should expand.

Weaving It All Together

In closing, several strands need to be woven together:

- The world is a fast-changing inter-connected place.
 Recent conditions have produced less stability and equilibrium.
- Complexity adds an additional layer of unpredictability and increased moral hazard for investing institutions.
 At the same time, while market-based economies are adaptable, eco-systems are less adaptable.

- The importance of the market-based chain of intermediation from savings to investment, and on through technology to sustainable development, has become a dominant function in the economy. If there are market failures, this has implications for the political process and social evolution.
- In a world facing serious shortages in energy, rare earth elements, water, food, space, and land, corporations and the institutions that own them must operate in ways that are congruent with sustainable development. That requirement will flow voluntarily through their own actions, or via government incentives or regulations.
- Asset owner leadership to address these challenges will come from big funds, a select band of 300 institutions with well over \$10 billion in assets.⁷ Only a few of these funds presently claim to be universal owners, but many more could make the transition. Indeed, there are factors at work suggesting a number will make that leap in thinking and action. These asset owners are on their way to taking the concept of *legitimacy* to a new, higher level.

In short, in an investment arena where differentiation and comparative advantage are critical but hard-won, the universal owner concept cries out for increased attention. The opportunities for leadership by the big asset owners have never been greater.

Endnotes

- The author wishes to thank Jane Ambachtsheer and Jack Gray for significant guidance in their peer review as well as Emma Hunt, Jane Goodland, Remy Briand and Hewson Baltzell for brain storming.
 None of the above should be held responsible for any comments or opinions expressed herein, which is the sole responsibility of the author.
- 2. The universal owner concept has not become a settled part of financial theory and its definition could be debated. The universal owner concept could be applied simply to the state of being large, long-term and widely diversified in investment terms. We could then find around say 300 universal owner funds by this definition being the largest institutional long-term funds (with assets exceeding around \$10 billion). The author favors a definition that encompasses funds that recognize the endowment of their universal owner circumstances and tries to invest effectively by exploiting that endowment. The impact of this definition arguably reduces the number of true universal owner funds significantly. The author is grateful to Jane Ambachtsheer for bringing up this distinction.
- The definition of externalities is of spill-over effects of production or consumption that produce unpriced costs or benefits on other unrelated parties – that could be other companies or society more generally.

- New Zealand Superannuation Fund and PGGM provide belief statements related to sustainable investing.
- 5. The PRI/Trucost study estimated that listed companies incurred total environmental costs above 50% of corporate earnings, although this was based on all externalities and no assumption was made of the slippage from externality to internalized cost. The study estimated that on this model the cost of environmental damage caused by the world's 3,000 largest publicly-listed companies in 2008 was \$2.15 trillion.
- See Pepsico CEO Indra Nooyi interview on Bloomberg TV, February 1, 2010.
 Available at: http://findarticles.com/p/news-articles/analyst-wire/mi_8077/is_20100201/pepsico-ceo-indra-nooyi-interview/ai_n50816481/.
- 7. The top 50 institutional funds total \$7 trillion with assets each of at least \$50 billion, the top 300 funds total \$12 trillion with assets each of at least \$10 billion source IPE and Towers Watson.

References

Bernstein, A. (2010). The Case for Business in Developing Economies. Penguin.

Clark, G.L. and Urwin, R. (2007). Best Practice Investment Management. *Journal of Asset Management*, 9(1), pp.2-21.

Gjessing, O.P.K. and Syse, H. (2007). Norwegian Petroleum Wealth and Universal Ownership. *Corporate Governance: An International Review*, Vol. 15, No. 3. http://dx.doi.org/10.1111/j.1467-8683.2007.00576.x.

Global Top 1000. (2010). Investment & Pension Europe (2010), September.

Kaletsky, A. (2010). Capitalism 4.0: The Birth of a New Economy. Bloomsbury.

Monks, R.A.G. and Minow, N. (1995). *Corporate Governance*, Cambridge, Mass: Basil Blackwell.

Norwegian Ministry of Finance. (2010). Report No. 10 to the Storting on the Management of the Government Pension Fund in 2009.

PRI. (2010). Universal Ownership: Why Environmental Externalities Matter to Institutional Investors. PRI and Trucost, October.

Saint Mary's College of California. (2006). *Universal Ownership: Exploring Opportunities and Challenges: Conference Report.*

Soros, G. (2008). The New Paradigm for Financial Markets. Public Affairs

Thamotheram, R. and Wildsmith, H. (2007). Increasing Long-Term Market Returns: Realizing the Potential of Collective Pension Fund Action. *Corporate Governance: An International Review*, Vol. 15. http://dx.doi.org/10.1111/j.1467-8683.2007.00577.x.

Towers Watson. (2010). Global Pension Assets Study.

Urwin, R. (2010). Allocations to Sustainable Investing. *Towers Watson Technical Paper No. 165695*, PRI Academic Conference Copenhagen.

Williams, A. and Hawley, J. (2000). The Emergence of Universal Owners. *Challenge, The Magazine of Economic Affairs*.

About Rotman International Centre for Pension Management

The mission of the Rotman International Centre for Pension Management (Rotman ICPM) is to be a catalyst for improving the management of pensions around the world. Through its research funding and discussion forums, the Centre produces a steady stream of innovative insights into optimal pension system design and the effective management of pension delivery organizations. Using the vision of Tomorrow's Pension Fund as its guide, research and discussion topics focus on agency costs, governance and organization design, investment beliefs, risk measurement and management, and strategy implementation. The role of the *Journal* is to disseminate the new ideas and strategies that result from the activities of Rotman ICPM to a global audience. The Research Partners of the Centre believe that this broad dissemination is a win-win proposition for both professionals working in the global pension industry, and for its millions of beneficiaries.

Publisher and Editor

Keith Ambachtsheer

Associate Publisher and Editor

Ann Henhoeffer

Copy Editor

Sheryl Smolkin

Design

watermarkdesign.ca



151 Bloor Street West, Suite 702 Toronto, Ontario Canada M5S 1S4

Tel: 416.925.7525 Fax: 416.925.7377 icpm@rotman.utoronto.ca www.rotman.utoronto.ca/icpm



a new way to think | pension management

Editorial Advisory Board

Australia

Jack Gray - Sydney University of Technology Wilson Sy - Australian Prudential Regulation Authority

Canada

Leo de Bever - Alberta Investment Management Corporation Alexander Dyck - Rotman School of Management, University of Toronto Claude Lamoureux - Corporate Director

Denmark

Ole Beier Sørensen - Danish Labour Market Supplementary Pension (ATP)

Japan

Sadayuki Horie - Nomura Research Institute

Netherlands

Rob Bauer - Maastricht University Dirk Broeders - De Nederlandsche Bank Jean Frijns - Corporate Director

2011 / 2012 Research Partners

International

World Bank

Australia

Australia Future Fund Australian Prudential Regulation Authority Australian Super SunSuper UniSuper

Canada

Alberta Investment Management Corporation Alberta Local Authorities Pension Plan Caisse de dépôt et placement du Québec Canada Pension Plan Investment Board Healthcare of Ontario Pension Plan Ontario Municipal Employees Retirement System Ontario Teachers' Pension Plan

Denmark

Danish Labour Market Supplementary Pension (ATP)

Finland

Finland State Pension Fund



© 2011 Rotman International Journal of Pension Management is published by Rotman International Centre for Pension Management at the Rotman School of Management, University of Toronto, CANADA in partnership with Rotman/University Toronto Press.

Rotman International Journal of Pension Management is distributed at no charge as an electronic journal and can be accessed by visiting www.rotman.utoronto.ca/icpm. Print copies can be purchased at a cost of C\$50.00 per issue (includes tax and shipping). To order print copies please visit www.rotman.utoronto.ca/icpm.

New Zealand

Tim Mitchell - New Zealand Superannuation Fund

Norway

Knut Kjaer - Strategic Advisor

Sweden

Tomas Franzén - The Second Swedish Pension Fund (AP2)

United Kingdom

Gordon L. Clark - Oxford University **Roger Urwin** - Towers Watson and MCSI Barra

United States

Don Ezra - Russell Investments **Brett Hammond** - TIAA-CREF

Unsolicited articles can be submitted to **icpm@rotman.utoronto.ca** for consideration by the Editorial Advisory Board.

Japan

Nomura Research Institute

Netherlands

Algemene Pensioen Groep (APG)
De Nederlandsche Bank
PGGM
Stichting Philips Pensioenfonds
Syntrus Achmea Asset Management

New Zealand

New Zealand Superannuation Fund

United Kingdom

British Telecom Pension Scheme National Employment Savings Trust Universities Superannuation Scheme

United States

California Public Employees' Retirement System California State Teachers' Retirement System TIAA-CREF

Washington State Investment Board



This work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 2.5 Canada License. Under Creative Commons, authors retain ownership of the copyright for their article, but authors allow anyone to download, reuse, reprint, distribute, and / or copy articles from the journal, as long as the original author(s) and source are cited. No permission is required from the Author(s) or the Publisher. To view a copy of this license please visit www.rotman.utoronto.ca/icpm.

ISSN 1916-9833 (Print) – C\$50.00 ISSN 1916-9841 (Online) – no charge