

Innovative Models of Pension Fund Governance in the Context of the Global Financial Crisis

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Abstract. The global financial crisis has posed profound threats to pension welfare worldwide. This is particularly so in the UK with the closure of private defined benefit plans and the heavy losses experienced by many defined contribution pension plan participants. Meeting these challenges has placed a premium on plan governance, given its link to fund performance. The paper begins by considering the academic literature on institutional change including an analysis of the most common ways of responding to a changing environment. It is noted that the nature and scope of institutional response to a changing environment depends, in part, upon funds' governance budgets including time, expertise, and common commitment. Our research on UK governance suggests that incremental adaptation has been the operative strategy augmented, in some cases, by the adoption of UK corporate governance practices. Three types of innovation in the governance of UK pension plans are identified: the transformation of decision making, the pension buy-out, and fiduciary management along with an emerging 'new' model of pension fund governance. In the penultimate section of the paper, lessons from UK best practice are drawn for institutions that face unprecedented challenges in realising the pension promise. Thereafter, we suggest a possible approach for regulators to strengthen the pension fund sector, based on improved disclosure, independent board chairs, and the skills of board members.

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1. Introduction

The world of funded workplace pensions has been turned upside down. Having weathered the LTCM crisis and the bursting of the TMT bubble, pension institutions sought superior rates of return by embracing alternative investments, hedge funds and other more complex strategies. If the coming global credit crisis was sensed by some institutions with the implementation of defensive asset allocations, few pension funds were prepared for the collapse of market liquidity and the deepening recession. Most funds have felt constrained by the limits of their expertise. In particular, they have struggled to make effective judgements given the flux and flow of stressed financial markets; too often, pension funds have been bystanders to the passage of events.

Substantial falls in the value of defined benefit plans and marked deterioration in their solvency now threaten the integrity of the whole institution. At the same time, public confidence in the defined contribution system has been seriously undermined with increasing numbers of people facing the consequences of poor returns through hardship in retirement. Worldwide, the value of pension funds in 2008 amounted to \$22 trillion down from \$27 trillion the previous year (Watson Wyatt 2009). The results for 2009 are bound to be worse. The apparent inability of many pension funds to adequately respond to the credit crisis and global recession are significant failures of governance that could have ramifications for a generation.

Concern over the governance and performance of UK pension funds has been on the agenda since at least the Myners Report of 2001.¹ There have been a number of initiatives by government to enhance pension plan governance seeking a balance between stakeholder representation and effective investment management (Clark 2007). More recently, The Pensions Regulator (TPR) has encouraged pension plans to take seriously best-practice through the promulgation of a series of Codes of Practice covering a large range of topics including conflicts of interest. The government has also sought to underwrite the promised benefits of private pension plans, subject to greater transparency over funding and sponsor solvency in the context of Pension Protection Fund (PPF) benefit guarantees.

¹/. Arguably, the event that set-off government scrutiny of pension fund governance was the Maxwell affair and the subsequent inquiry led by Professor Roy Goode. Recommendations from the Inquiry were implemented in statute through the 1995 Pensions Act. See Blake (2003) and Clark (2004) on government initiatives.

Recognising the premium on institutional innovation, this paper has three objectives: first, we sketch a framework for understanding institutional change in the UK private pension fund sector; second, we outline the scope of innovation in the sector; and third, we identify the limits of current governance practices in the context of the global credit crisis. The paper is based upon interviews with UK pension funds that have sought, in one way or another, to make a difference to their governance practices. As in Clark and Urwin (2008a), funds were approached on the basis of promised anonymity. As such, we do not identify respondent funds in this paper and our analysis is intended to limit the possibility of identification. See the Appendix for a summary of our approach. While we concentrate on the private sector, our approach may be also appropriate to the public sector.

In section 2 we review the relevant academic work on governance including the notion of a governance budget before turning to innovation in institutional form and functions in section 3. We rely upon Arthur (2005), Beinhocker (2006), and Young (1998) amongst others to suggest that innovation is almost always responsive to the environment, and we distinguish between various strategies of response that are more or less 'novel' in their institutional form and functions. With Merton and Bodie (2005), we believe that the functional performance of institutions is important even if there are significant constraints on the realisation of idealised designs of institutional performance. This is followed in section 4 with a consideration of common models of pension fund change including adaptation and the adoption of the principles of UK corporate governance. Section 5 identifies three key types of institutional innovation and describes a select group of innovative funds, noting the advantages of various options. It is suggested that innovation has been rare and is obviously difficult to achieve given inherited constraints.

In section 6, we focus on the global financial crisis and emphasize the limits of incremental adaptation and the vulnerability of pension institutions that have a limited supply of time, expertise, and common commitment. Looking forward, we suggest ways in which regulators might respond to apparent deficiencies in UK DB fund governance.

2. Institutional Change—Governance

The governance budget of any organisation is defined as the capacity to create value from effective actions in the chain of institution-specific tasks and functions (Watson Wyatt 2004). This concept is based on four principles:

- Governance is a finite and measurable resource and the size of this resource – the governance budget - is associated with planned and expected performance.
- A fund's investment style and strategy should match its governance budget, wherein both investment strategy and governance are sensitive to the resources available for effective management (see Bekker and De Dreu 2009 on the significance of scale economies for fund management).
- A fund's risk budget should be closely related to its governance budget, the former being a crucial element in any institution's planned investment performance whereas the latter may be thought to determine the ambitions of an institution.
- The governance budget should be seen as an investment in the long-term performance of the institution and should not be subject to false economy (Clark and Urwin 2008a).

By this account, the key building blocks for understanding institutional investment management and performance are the governance budget and risk budget (Urwin 2001). Essentially, institutional investors use the risk budget to inform asset allocation and the governance budget to manage the investment process. The risk budget and the governance budget ought to be synchronised such that strategic asset allocation and manager choice are subject to a level of appraisal and management commensurate with institutional capacity.

The quality of governance is necessarily sensitive to the inherited form and functions of an institution, be it a pension plan, endowment, sovereign wealth fund or related investment institution. It could hardly be otherwise given that the form and functions of pension plans are set, more often than not, by covenants (UK) and collective agreements (Canada, the USA and the Netherlands), and are deeply entwined with countries' statute, trust law, and contract law. The legal framework of the UK pension system combines a heritage of trust law with 20th century legislative initiatives and is increasingly ill-suited to the dynamics and pace of innovation in

financial markets (see Merton 1995 on innovation in financial markets). In our experience, governance practices tend to evolve rather than change abruptly by revolution (compare Ambachtsheer 2007). The global financial crisis, however, is a profound challenge to incrementalism and idealism (compare Lerner et al. 2007).

Governance budgets are comprised of three resources (Clark and Urwin 2008b): time, expertise, and collective commitment. To illustrate, the time set-aside to assess fund performance against benchmarks and prospective market trends is crucial for the performance of any institution. Similarly, the time purchased from advisors, service providers, and independent experts may be vital in augmenting trustee deliberation. As for expertise, it is apparent that this is both expensive and in short supply in most institutions. Advisors may be crucial in linking limited internal resources with market agents and companies at the leading edge of financial management. Collective commitment relates to the organisational effectiveness of the governing body and the degree to which human resources are harnessed to execute agreed tasks. Here, leadership is a crucial mechanism for ensuring that trustee deliberation is more than the sum of its parts (Clark and Urwin 2008c).

In this study of UK pension fund governance, three major shortcomings were identified in the formal arrangement and regulation of governance. First, the increasing time-sensitive nature of investment has effectively sidelined many trustees from engagement with the investment process given the limited time set aside for deliberation. Second, the expertise of most trustees does not stretch to deep domain-specific knowledge of investment issues. Of note here is the ‘representation’ bias in selecting trustees; UK private pension funds are required to set-aside at least one third of board positions to member-nominated trustees. Third, the ideal of collegial decision making and responsibility is rarely realised given the co-existence of very different levels of trustee knowledge and understanding (Clark et al. 2007). While we do not object to representation *per se*, we do argue that those who are chosen to represent stakeholder interests ought to meet high levels of qualifications for appointment.²

². In fact, Clark (2008) argues that expertise without some test of commitment to the goals and objectives of the institution is not sufficient to engender a level of engagement with the tasks and functions of a pension plan (or any institution).

At another level, regulatory changes that require regular assessment of the robustness of the plan covenant (or covenants) and the solvency of the plan sponsor have meant that boards have had to become increasingly self-sufficient, replacing the un-priced close-at-hand resources of plan sponsors with formal service contracts that may or may not involve the plan sponsor. In some cases, this has introduced tensions between sponsors and boards, reducing the flow of what was often un-priced high-quality advice and services from the sponsor to boards while, at another level, forcing greater clarity about the proper roles and responsibilities of different types of board members. Perversely, especially in smaller funds, the expertise available to pension plans has been narrowed and the governance budget discounted according to the resources of the fund rather than the sponsor.

As shown below, time, expertise and collective commitment have become, in our exemplar institutions, resources that are deliberately fostered, managed, and incentivized. In a number of large funds, employer and employee-nominated trustees are now selected by nomination and remuneration sub-committees so as to enhance the expertise on boards; annual reviews of trustee performance and re-appointment procedures are used to promote individual and collective accountability; and, in some cases, trustees are paid in a manner commensurate with UK corporate boards of directors.³

3. Institutional Change—Environment

Understanding institutional innovation is best done through a variety of disciplines rather than a single discipline such as traditional economics. Lo (2005), for example, applied principles from socio-biology to financial organisations to argue that the future success of an institution is governed by its adaptive capacity not just the principles of competition and the logic of survival-of-the-fittest. Beinhocker (2006; ch. 4) has a more radical conception of economy and institutions, arguing the case for “complexity economics” compared to “traditional economics” wherein the former rejects static perfectionism in favour of a dynamic conception of agents, behaviour,

³/ There are other salient features of this governance model, noted below. It is significant that when referring to this mechanism of trustee selection and compensation, interviewees tended to compare their ‘professional’ approach to the standard representation model that dominates most trustee boards.

and endogenous institutional development. This approach has found favour in a number of disciplines, particularly as regards the role and responsibilities of financial decision makers (see Clark et al. 2007). Beinhocker used the term “fitness landscape” to describe the conditioning mechanisms of the environment in which an institution is located to explain agents’ actions and their effects.

The theory of evolution provides a basic model of institutional change. If we assume the co-existence of a set of institutions (Ys) that perform certain common tasks (Ω s), a signal-response model can represent the link between a change in the environment (δX) and the response by relevant institutions to those changes (Rachlin 2001). If we also assume that these institutions are qualitatively different in certain ways, principally with respect to governance (Zs), but nonetheless perform those same types of tasks (Ω s), it could be argued that the impact of the signal-response mechanism is mediated by the inherited form and structure of the relevant institutions. That is, institutional change is path dependent to some extent (scope unspecified for the moment). If we invoke competition amongst Ys for dominance in an industry or sector, then the response of institutions (Ys) to changes in the environment ($\delta+nX$) will determine the ‘winning’ type of institution.

Unexplained is how different types of institutions can co-exist in steady-state environments. One explanation may be that different types of institutions serve different constituencies and that by their location in time and space institutions have the advantages of incumbency sufficient to ward-off encroachment. If information is costly to acquire (Gabaix et al. 2006), if institutions are slow to respond due to internal coordination problems (Bowles and Gintis 2007), and if pay-offs to social learning are distributed far into the future (Young 2005), there may be little incentive to break with the past.⁴ Herein, incumbency is underwritten by the failure of competition; for instance, the lack of a market for switching between institutions whatever their ‘home’ domain may balkanize the steady-state environment into non-competing segments—institutions may stagnate by reason of the lack of external

⁴. See also Young (2007) on different models of innovation diffusion that rely on a series of arguments about the manner and mode of diffusion when there are heterogeneous agents and when pay-offs are distributed into the future.

incentives to change, reinforced by social systems that react to the prospect of change by invoking the virtues of the status quo.

Beinhocker argued that negative feedback loops may dominate positive feedback loops inhibiting institutional innovation. This may result in institutions' inherited forms and functions becoming more and more at odds with market developments so much so that only a crisis can expose the weaknesses of the whole system of related institutions. As applied to the pension fund sector, it is apparent that the UK has lacked effective change-levers—mechanisms for driving institutional development and evolution according to best practice and the most effective forms and functions. This problem is shared by many jurisdictions around the world: typically, there is a palpable lack of competition amongst different types of institutions that deliver occupational pensions (Clark 2006).⁵

This suggests that the challenge in fostering institutional innovation is to simultaneously account for the past *and* put aside the past so as to embrace novel arrangements that are more suited to the environment.⁶ Pension funds have tended to be much slower evolving institutions than the financial services industry (see Merton 1995; Merton and Bodie 2005). Pension funds often seem unable to deal with the institutional costs of change, are slow to adapt, adopt or innovate, and tend to rely on past practices notwithstanding the uncertainties of global financial markets. Inertia tends to dominate—individually and collectively (see Monk 2008). In the literature, inertia is explained by lock-in: past decisions expressed through implicit and explicit contracts dominate decision making and planning to such an extent that the 'optimal' decision or the 'proper' course of action is by-passed in favour of what is feasible. This may be the result of behavioural predisposition and/or the failure of collective action.

⁵/ The effects of competition are not always positive for organisational form and functions (Barnett 2008). The evidence from Australia as regards the effects of competition between rival pension funds offering similar types of products is that this regulatory regime has tended to exaggerate the significance of short-term investment returns over the underlying volatility of returns and the long-term adequacy of offered pension products.

⁶/ This argument is an informed observation about the facts-of-life of the sector underwritten by experience, and is an expression of academic research informed by the theoretical insights of North (1990) and Williamson (1985) amongst many others.

Research and case studies of institutional decision-making suggest that bounded rationality is a common feature of financial decision making whether because of people's inability to synthesize information or because of status and reward systems that tend to encourage herd behaviour (Shiller 2002).⁷ Equally, there is evidence that financial decision making is heavily influenced by past commitments and current relationships. Despite the fact that most investment managers are subject to at-will contracts, terminations may be difficult to realise when trustees are unable to judge the significance of past performance in relation to future commitments. Because of market uncertainty, the purchase of financial services tends to be bilateral and relational rather than discrete (*contra* expectations from economic theory; see Trebilcock 1993). The financial sector is dominated by reciprocal networks of interconnected people and institutions (Abolafia 1996; O'Barr and Conley 1991).

There is, then, a simple but profound explanation of institutional inertia: it is often difficult to distinguish between short-term and long-term volatility in financial markets; there may be significant but unexpected costs in an immediate response to the under-performance of an asset manager or service provider including the risk of penalising a successful long-term investment strategy. Because markets are prone to unanticipated shifts in underlying causal relationships, only time can resolve whether recent events are part of market volatility within expected parameters or whether recent events portend a shift in market parameters - often referred to as regime shifts (Clark 2008).⁸ We view the short-term – long-term dichotomy as the most difficult of four such issues referred to in Clark and Urwin (2008a). The four were: beneficiary vs. sponsor interests; agent vs. principal interests; signal vs. noise, and the risk components of performance. Given these points, we observe that pension fund

⁷/. Our reading of the relevant psychological research in the area suggests that rationality is a continuum, affected by both cognitive capacity and the environment such that the quality of decision making under risk and uncertainty is subject to systematic biases (Kahneman and Tversky 1979). See Hilton (2003) on financial agents and Clark et al. (2007) on pension fund trustees.

⁸/. Markets are constructed through shared expectations of cause and consequence. MacKenzie (2006) develops this argument with reference to the significance of financial theory in framing market agents' actions and expectations. Equally, these theories have limited lives as is apparent in the global credit crisis, arguably the result of the widespread application of mis-placed theory as much as practice. Witness Greenspan's *mea culpa*.

decision makers have an extremely difficult task in correctly identifying the meaning of signals from the data monitored.

Here, of course, expert judgement is crucial as is the collective capacity to process market information conceptually and empirically (see Wagner 2002 with Clark and Urwin 2008c). Institutions facing such dilemmas have a variety of coping strategies including 'sitting-out' events until market trends are resolved. There are clearly significant but often unknown costs in misjudging the significance of events, costs in acting too fast, and costs in 'sitting' out events until market volatility stabilizes.

4. Institutional Adaptation and Adoption

The terms adaptation, adoption and innovation are used throughout the social sciences to refer to the mechanisms of individual, institutional and social change in response to the environment. These terms are also meant to represent the nature and scope of change over time and space (the jurisdiction or regulatory context of the institution). The unit of analysis whether the individual, the institution, or society is deemed to be the 'active' agent whose response to the environment is naturally context-specific. That is, given the circumstances in which agents find themselves, and given the nature and scope of change in those situations, there are a variety of ways by which agents respond. These terms are derived from the theory of evolution and refer to complex processes that have their own logic and relationships with one-another.⁹

Beginning with adaptation, Eldredge (1995, 34) noted the response of biological organisms to a stable environment: "their behaviours, physiologies, and physical features...will be honed to fit their surroundings even better than they did before." Translating this notion into economic and social settings is straightforward. Following Antonelli (2000, 405-406), adaptation can be defined as *the incremental response of agents to a change in the environment, being subject to the constraints imposed by inherited institutions and modes of behaviour and the resources available to implement the changes deemed possible and appropriate*. By implication, the

⁹. Evolutionary theory has long been associated with economic and social theory. Darwin's Origin of the Species indicated awareness of the classical economists such as Adam Smith and his contemporaries such as Herbert Spencer. There remains a steady cross-over flow of related concepts and methods between the biological and social sciences (Nelson and Winter 1983).

scope of adaptation is set by the inherited formal and not so formal parameters that define the institution in relation to its immediate environment.

From theory to practice, we sought to map the prevalence of adaptation amongst leading UK pension funds. This involved two steps: first, the identification of change in the environment that may have prompted an adaptive response and; second, an assessment of the consequences of adaptation for the form and functions of UK pension funds. As for the first issue, it is widely recognised that the UK government has sought to promote best practice in pension fund governance through reports (such as the Myners Report of 2001 and its recent review), Codes of Practice (including Trustee Knowledge and Understanding), and requirements as regards the assessment of plan sponsor covenants and solvency. With less-than-expected rates of return registered at a time when the Pensions Regulator and the Pension Protection Fund (PPF) were assessing sponsors' capacities to underwrite commitments, the effectiveness of plan governance was clearly a significant issue for government and plan sponsors alike.

In discussion with our UK exemplars, we identified three types of adaptive responses to the changing environment.

- In smaller plans, fund administrators and managers have adapted governance procedures so as to comply with the 'advisory' Codes of Practice issued by the Regulator. Lacking the time and expertise to either develop their own procedures or challenge the relevance of the Regulator's Codes of Practice to their own circumstances, compliance has meant adapting to the formal requirements of Codes of Practice even if these are advisory according to the doctrine of 'comply-or-explain'.
- In larger plans, especially those at some distance from their sponsors because of past mergers and acquisitions and the like, compliance with PPF requirements to monitor sponsor solvency has become an opportunity to adapt the form and functions of plans so as to enhance the governance capacities of funds in relation to the 'distance' from the plan sponsor. Here, adaptation has taken the form of strengthening institutional decision making capacity including the purchase of independent advice.

- Note, however, the significance of a third adaptive response by plan sponsors: recognising increasing uncertainty as to financial and regulatory costs of defined benefit pension provision, sponsors have adapted by closing plans to new members and in some cases terminating the accrual of benefits of current members. Closure has been driven by the costs of meeting the changing environment amplified by the disputed benefits of DB plans for corporate human resource management (Clark and Monk 2008). This strategy has re-framed the nature and scope of pension fund responsibilities and decision making.

Adaptation can be a simple non-reflexive signal-and-response where inherited institutional form and resource constraints limit the nature and scope of response to a changing environment (as implied by Rachlin 2001). Equally, adaptation can be forward-thinking and fine-tuned in relation to intended outcomes (now and in the future) being a strategic response to the limits imposed by existing resources (Lo 2005). At the margin, adaptive agents can have as their long-term goal the accumulation of the resources needed to step outside of inherited institutional form and functions (Bowles 2004, 60).

A related type of response to a changing environment is the adoption of another type of institution's 'superior' operating procedures. By convention, adoption requires social learning, evaluation, and judgement especially as to the relevance of other forms and functions to the problems faced by incumbent managers and their capacity to respond to the available options. More formally, adoption is defined as *a process of learning from others, imitating their actions and/or their modes of organisation, while applying judgement as to the relevance and cost-effectiveness of those institutional features to be adopted* (Hurley 2008). As in adaptation, there may be limits to adoption especially if target institutional forms and functions are profoundly at odds with inherited roles and responsibilities. Adoption may be partial and incomplete even if of value to incumbent managers—some theorists believe that adoption is always incomplete given the fact that institutions are typically deeply embedded in social structure (Gertler 2001).

Research on UK pension fund governance identified two related types of ‘adoptive’ responses to changes in the environment.

- One response to the increasing separation between plan sponsors and pension funds has been to adopt market-based contracts to govern the delivery of pension fund administration and management. In a number of cases, funds have established wholly-owned companies that are either the hub for service contracts with external providers or the administrative units for the internal delivery of services. In doing so, exemplars have been identified including the wholly-owned service delivery companies of Dutch pension funds. In some cases, UK pension fund trustees have become company directors responsible for the oversight of service contracts. Respondents argued that these adopted responsibilities are consistent with the cost-effective delivery of services to the fund and ultimately the interests of plan beneficiaries.
- Another approach has been the adoption of protocols and procedures taken from the UK model of corporate governance. In doing so, fund trustees have been mindful of the pressing need to be both cost efficient and timely in terms of the management of investment performance so as to ‘neutralise’ the significance of plans for the sponsor. This is especially significant for large-cap publicly-traded companies subject to on-going scrutiny of their financial performance as reflected in quarterly financial reports and annual profit-loss accounts. Given the continuing interest of corporate boards of directors in their pension liabilities, it is not surprising that enterprising pension fund managers have sought to re-assure their corporate boards about their decision making competence.

Adoption of UK corporate governance practices has been justified, in part, by the reputation that the UK enjoys for its reform of company law over the past decade or so, and the attempts made to resolve apparent conflicts of interest on boards wherein the role of the Chair is separated from the CEO (compare with the USA).¹⁰ Our

¹⁰. The financial crisis has been a moment to reflect on their skills and knowledge as well as the role of regulation given the social costs of bank bailouts and the like. The CEO of the FSA has indicated that the government will likely require company non-executive board members to improve their technical skills and devote more time to their responsibilities (Sants 2009). If anything, the ‘gap’ between the skills and commitment of company board members and pension fund trustees will

respondents believe this model to be consistent with trustee duties and professional standards of management and responsibility. Adoption of this model provides a ready-rationale for the separate responsibilities of fund CEOs and CIOs in relation to Chairs of Boards. Similarly, the selection of board trustees goes beyond their representation function to adding skills and experience to the board in relation to needed expertise. Adopting standards of compensation consistent with UK corporate boards of directors is intended to signal to prospective trustees the expected level of involvement, responsibility and accountability of being a trustee. With a highly organised process of recruitment and selection, this model of pension fund governance seeks to affect the composition of boards and the competence of board decision making.

By this logic, the process of decision making can be seen as a resource for institutional response to changes in the environment. In the standard model of trustee decision making, meetings take issues in assigned order, assign responsibility for implementation, and review performance against expectations. In combination with the adoption of “dashboards” signalling the priority to be accorded board agenda items, a number of institutions have also put in place sub-committees to speed-up and better inform deliberation consistent with the pace of change in financial markets. The composition of sub-committees has also become a consideration including, in some cases, the co-option or appointment of independent experts from outside the institution to advise and inform deliberation. The priority attributed to an informed and timely process of deliberation is matched at the board level with a presumption in favour of sub-committee recommendations—a model of organisation normally associated with corporate boards of directors.

5. Models of Innovation

Adaptation, adoption and innovation are distinctive, albeit closely-related strategies. There is a hierarchical relationship between these three concepts such that adaptation is simpler than adoption which is simpler than innovation. There is, as a result, a premium on innovation. Beinhocker (2006) also made a distinction between

probably widen further as a consequence of the financial crisis. For an overview on the UK principles approach to corporate governance see Ford (2008) and Milhaupt and Pistor (2008); for an historical perspective in relation to the USA, see Roe (2002).

innovation in physical technology and social technology. Physical technologies are methods and designs for *transforming things from one state to another* in pursuit of stated goals. By contrast, social technologies are designs and methods for *organising people* in pursuit of well-defined goals (as in Clark and Urwin (2008a)). Beinhocker saw both as essential elements for progress, although the most important contributor to pension fund progress is obviously to be found in changes in social technologies. The key issues affecting the nature and scope of innovation are the costs of innovation and the prospects for realising the benefits of any investment in organisational transformation.

Innovation is defined by Ramsey et al. (2007, 395) as “*the process that generates in an individual (or an institution) a novel learned behaviour (or change in institutional form) that is not simply a consequence of social learning (imitation or emulation) or environmental induction (adaptation).*” There is a premium on novelty: something new and different compared to that which is produced by adaptation or that which is adopted from elsewhere through social learning. Put slightly differently, innovation is ‘novel’ because it can change inherited institutional form *and* functions. Of course, adaptation can produce by happenstance novelty just as adoption can be novel in the sense that the transfer of an idea, technique, or mode of organisation from one domain to another can be challenging to the status quo. Even so, by our assessment, innovation proper is simultaneously endogenous and transformative.

Our research on UK pension fund governance revealed few instances of fully-fledged institutional innovation as opposed to adaptation and adoption. Further, instances of innovation tended to be partial rather than systematic in relation to comprehensive changes to the inherited form and functions of pension funds. In part, this is because of the limits on innovation imposed by statute and government regulation. As well, we note that trustees themselves are often resistant to innovations that would, in some manner, discount the nature and scope of their assumed responsibilities. Nonetheless, below we identify three important ways in which innovation has proceeded with important implications for the UK sector.

Transformation of decision making. The adoption of rigorous trustee selection procedures with market-based compensation and close scrutiny of trustees’

performance is designed to enhance the professional competence of trustee boards. Recognising the constraints on the available time, expertise, and collective commitment associated with standard trustee models, this process of trustee selection enhances the governance budget. This model of trustee competence also allows for greater clarity about the respective roles and responsibilities of funds' CEOs and CIOs in relation to board chairmen and the boards themselves. Clarity of responsibilities, moreover, can allow for the introduction of performance-related contracts. This is still rare in the UK.

When associated with stronger discipline in the investment process, the effect can be genuinely transformative. We note that a number of funds have introduced decision protocols involving greater clarity of the fund's mission and strategic goals; an appropriate resource budget for each element in the investment process; the application of a priori beliefs; the discipline of a risk budget; and a fit-for-purpose line-up of managers with 'buy and sell' thresholds for appointment and retention. By this assessment, UK best practice funds have recognised the merits of matching their governance budgets with their risk budgets. This has been accomplished in a variety of ways, with rather different models of trustee responsibilities and the composition of boards. In a couple of cases, best practice has involved the use of a two-tier decision-making structure with a highly competent investment function headed by a CIO tasked with clearly specified responsibilities and accountable to the investment committee.

Buy-out funds. The insurance of pension funds liabilities was, until recently, a small market with only two or three providers. With the closure of many private DB plans, and the prospect of limits on the accrual of benefits, a number of financial companies have been formed whose purpose it is to 'buy-out' funds from plan sponsors. The goal has been to insure the future payment of accrued benefits against tests of solvency regulated by the Financial Services Authority (FSA) as opposed to the Pension Protection Fund. In effect, buy-out funds make a 'promise' to trustees and plan sponsors: a form of partial indemnity from future liability wherein trustee objectives are aligned with corporate objectives. While this approach faced initial opposition from the regulator, the 'buy-in' side of this business has offered funds an

opportunity to insure the market-priced components of future liabilities from investment and longevity risk and uncertainty.

Over the period 2007-2008, the market for buy-outs softened as both sides of the market came to grips with the increasing cost of capital. However, there are signs that the market is once again growing as the cost of capital has been seen to become more predictable and as plan sponsors come face-to-face with the ‘exploding’ liabilities of DB pensions. For plan sponsors, this sector has much to offer although the attractiveness of this option depends on risk-pricing and whether trustees are willing to invest their time and expertise in new ways of insuring risk and managing their responsibilities. For some, it represents an abrogation of their inherited obligations and responsibilities even if the effect may be to assure the realisation of the pension promise for some types of plan participants.

The innovativeness of this ‘solution’ to the burgeoning liabilities of many plans goes beyond the functions of buy-out firms. In a couple of cases, these companies have developed innovative mechanisms for governing the assumption of risk and the management of investment. Recognizing the cost of capital in relation to maintaining solvency as regulated by the FSA, investors in some buy-out funds have separated risk management from the investment process, bringing to the board separate assessments of market risk and uncertainty and the prospective returns of investment strategy. Few pension institutions have such a separation of risk from return due, no doubt, to the sensitivity of private investors to the issues and their apparent capacity to make informed decisions about the balance between risk and return.

Delegated fiduciaries. Both the UK corporate governance model and the buy-in/buy-out model seek to ‘solve’ in one form or another, problematic issues of competence deemed characteristic of the standard UK model of pension fund governance. Another approach to this problem is the delegation of fiduciary responsibility for investment management and risk management to an external agency or service provider. Here, little attempt has been made to affect board competence and decision making, leaving issues of board composition and representation to stakeholders. Buy-out funds manage assets and liabilities against FSA solvency tests using the skills and expertise of the insurance and investment industries. By contrast, the delegated

fiduciary model “centralizes responsibility” for investment management (van Nunen 2008, 1) through the purchase of advanced expertise on contract, sharing responsibility for the outcomes with the ‘service’ provider. As regards the motivating forces, in addition to the fee-for-service with some performance-related element there is the ‘reputation’ of the provider.

The critical function delegated in this model is the CIO function—but the fiduciary role is broader than just investment. It encompasses the following elements.

- An expert investment platform covering the management of asset classes and line-ups of investment managers over both long-term and shorter-term horizons
- Knowledge and experience with respect to the liabilities of the pension plan and the implications of the changing funding status of the plan for risk tolerance and investment goals
- Knowledge and experience of the plan sponsor’s covenant and an appreciation of its significance for risk tolerance and investment goals
- Excellence in managing the direct relationships with trustees along with wider stakeholder interests.

In many respects, the delegated fiduciary model goes beyond the investment platform; it is also a means of better accomplishing many of the tasks normally assumed by trustees. It seeks to integrate investment management with the underlying objectives of the plan sponsor either explicitly or implicitly thereby matching in effect the intentions underpinning the adoption of UK corporate governance practices. As well, the delegated fiduciary model acknowledges as significant stakeholder representation but provides a depth of commitment to advice and action often missing in conventional relationships between advisors and clients. By tying the reputation of the delegated fiduciary to the long-term performance of the institution, the intention is to align interests with trustees in a manner often missing in advisory relationships. Notice, though, to take-on this model of management may require considerable imagination and commitment of trustees and the plan sponsor.

These models of innovation could be regarded as partial—that is, they seek to solve aspects of the larger problems associated with pension fund governance. Nonetheless, there has been at least one attempt to design and implement a comprehensive novel solution to the governance of UK pension funds which we encountered in our best-practice research. This emerging ‘new’ model of pension fund governance has the following features consistent with the principles of best practice developed in Clark and Urwin (2008a).

- It seeks reconciliation of the tension between board representation and expertise through the appointment of a number of independent experts to the board
- Relevant performance standards are used to monitor and evaluate the effectiveness of strategic decision making *and* its implementation
- Wherein strategic decisions are the responsibility of the board while management are delegated tactical and implementation issues with a means of reporting through sub-committees to the board of time-sensitive issues
- It ensures that there is collective commitment to the well-defined roles and responsibilities of the board and the senior executives through, respectively, accepted standing orders and performance-based employment contracts
- It distinguishes between the nature and scope of risk management and investment performance, thereby enabling regular distinction between those risks that can be insured in the market and those that cannot
- It has sought a means of resolving ambiguity over the role of advisors in relation to the board and service providers, making advisors responsible to the board for the long-term performance of the fund through rolling performance-based fees.

This model of management is innovative because it seeks to resolve the apparent structural problems associated with pension fund governance. This model implies a step-change in the level of engagement demanded of trustees and senior management—implied is a relationship that recognises the respective responsibilities and qualities of each side of the equation. If synthetic in the sense of bringing together aspects of other responses to a changing environment, it promises a way forward that can be adopted by other funds facing similar types of problems. Even so,

we believe it is a viable model of governance for those funds that have the internal or external resources for assessment and implementation. By our assessment, small funds may be constrained by the lack of resources in implementing this model of governance.

6. Global Crisis and Innovation

The importance of innovation has been underlined by the global financial crisis. Of the many explanations of the causes of the crisis, Ambachtsheer (2008) provides a summary of the behavioural logic underpinning the sub-prime bubble and how institutions and their agents were caught-up in a “radical suspension of belief” (quoting Hyman Minsky). Watson Wyatt (2008) stresses the importance of systemic market problems which involved excess complexity and poor incentive structures. Equally, Shiller’s (2000, 2002, 2008) work on bubbles, herd behaviour, and the particular problems of pricing risk in property markets suggests that mis-pricing is an endogenous aspect of financial markets. Other explanations see the subprime financial crisis as a trigger for the reassessment of countries’ prospects given apparent global mis-matches in debt, saving and consumption (Eichengreen 2008).

If markets are not entirely rational and if market agents are often incapable of self-managing or deflecting temptation (instances of Ainslie’s 2001 ‘weakness-of-will’), pension institutions have nevertheless an obligation to beneficiaries to honour their long-term obligations. By this argument, the proper goal of pension fund governance is, as it always has been, the realization of long-term objectives in the face of short-term temptation. In effect, trustees are required to step-outside of those exigencies to make independent judgements of how and why recommended courses of action may affect their long-term obligations. Arguably, recent developments in pension fund governance are attempts to articulate the institutional mechanisms by which that goal may be achieved (Clark and Urwin 2008b).

Even so, our findings on the nature of UK pension funds’ responses to changes in the environment over the past decade would suggest that many funds do not have the governance capacity to distinguish between, let alone act upon, the differences between short-term issues and long-term commitments. While defined benefit pension funds with long-term obligations might appear to be well-positioned to exploit the

valuation anomalies that appear at times of financial crisis, the irony is that their governance is generally too weak to capitalise on these opportunities.

It is arguable that many smaller funds have only adapted to the environment in incremental ways by implementing the Pension Regulator's Codes of Practice. While no doubt important for funds that lack the time and expertise necessary to develop their own procedures, in many ways the Codes of Practice simply reinforce recognised procedures without challenging inherited institutional form and functions. If beneficial in relation to improving governance procedures, adaptation being the dominant strategy has meant that funds tend to follow the market assuming that market signals are adequate reference points for strategic asset allocation. In decline, funds have stayed too long with previous commitments. Lack of resources reinforces incremental adaptation when more systematic analysis is warranted.

Given the momentum of the global financial crisis, we have sought to identify the responses of best-practice pension plans to recent events. Here, there have been four key responses that deserve recognition:

- Intensification - a step-up in board attention and the mobilisation of additional resources to deal with exceptional circumstances¹¹
- Priority setting – using “dash-boards” to signal (green, amber, and red) the importance of issues and hence the time that should be devoted to those issues inside and outside of board meetings
- Risk management - quantitative discipline, qualitative overlay, and greater independence of risk assessment from the investment management process
- Expansion of the belief structure of the board and its management team – where more complex market conditions can only be coped with more complex (deeper) beliefs.

¹¹/ In a study of global currency trading, Clark and Thrift (2005) show that, in moments of crisis, risk management involves the intensification of assessment and evaluation in relation to market exposure. In these situations, where there is no obvious ‘destination’ for the market, risk management absorbs time, expertise and collective commitment in the hope of catching moments when market turmoil might take the institution into a spiral of decline.

Given the nature of the global credit crisis and the uncertainties associated with the diffusion and impact of the crisis within and between markets, a necessary condition for survival is a governance system that is very effective in its use of scarce resources: time, expertise, and collective commitment. Those pension funds that had adopted the protocols of UK corporate governance, and especially those funds that had established a ‘professional’ board with strong expectations as regards commitment, have had at least two advantages over funds ruled by the standard model of pension fund governance. Most importantly, they have been able to marshal the time and commitment of the board with the skills and expertise of professional staff. This has allowed for real-time investment management led by senior staff with the active engagement of relevant board members. Second, the compensation practices of these institutions have served to reinforce commitment at a time when those wary of such events might have otherwise sought a ‘safe haven’ in dis-engagement.

What about those institutions that have sought to innovate? Have they had any advantages over those funds that have simply adapted or adopted rather than innovated? Here, we can make a number of observations.

- First, where innovation has involved inserting a well-informed and preferably independent risk management function into the decision-making process, funds have been better placed to respond to the global financial crisis.
- Second, where innovation has involved segmenting and parcelling risk for placement with market agents, this strategy has effectively simplified the survival strategies of the institutions.
- Third, where innovation has involved, in part, creating institutional excellence through the formation of expert investment platforms, this type of response has played a vital role in enhancing the intensification of effort associated with responding to the crisis.
- Fourth, where innovation has transformed board deliberation through, for example, the use of “dashboards” to improve the allocation of responsibilities and the setting of priorities, this has enabled funds to be actively engaged with market volatility rather than simply holding a ‘watching-brief’ or assuming that ‘reversion to the mean’ will absolve funds of responsibility for formulating plans for worst-case scenarios.

7. Implications and Conclusions

It could be argued that the closure of many DB private plans over the past decade is evidence that plan sponsors realise that governance is so problematic that their interests are best served by limiting long-term liability. We have suggested that many plans have simply adapted to The Pensions Regulator's Codes of Practice rather than take the lead by either formulating their own governance procedures or by adopting other models that offer the prospect of consistently higher standards of performance. If necessary, according to recent assessments of the poor quality of UK pension fund governance, incremental adaptation is an unsatisfactory response to the global financial crisis.

In recounting our findings, it was noted that a number of larger funds have adopted a model of governance based upon UK corporate governance. This model is far more deliberate about the composition, expertise, and performance of trustee boards than the standard model of UK pension fund governance. It has a number of virtues in the present climate, notably its capacity to mobilise board and staff resources to face the crisis—it is consistent with the intensification of effort often observed as vital when financial institutions face market uncertainty. It is also consistent with attempts to better manage the conflicts of interest embedded in pension funds, especially between different classes of beneficiaries and between trustees with very different levels of commitment and expertise. This model will endure through the current crisis if only because it makes such strong claims on the collective commitment of those directly responsible for the performance of funds.

Of the attempts to fashion truly innovative models of UK pension fund governance, a number stand out as significant sign-posts for the future. If funds are able to resolve issues related to the size and composition of boards, the delegated fiduciary model may be a significant way forward. Like a number of similar models found in different parts of the world, the delegated fiduciary model segments the various roles of a board into its component parts, allocating investment functions to a platform that can focus on the investment management process. As a consequence, the delegated fiduciary model and the emerging 'new' model of pension fund governance may be better placed to manage risk directly in the context of a pension fund's mission. If

dependent upon resources, these models offer a chance for smaller funds to cooperate and take advantage of the economies of scale associated with large asset pools managed by skilled investment professionals.

For all the efforts to develop novel alternatives to the status quo, we believe that UK best practice has fallen short of global best practice. Nonetheless, their actions have prompted other pension funds to review their governance procedures in the face of the burgeoning crisis. We do wonder, though, whether the differences between UK and global exemplars are owed to UK expectations of trustee responsibilities and the related regulatory regime.

To illustrate, it is arguable that the global financial crisis is so remarkable that it does not pose a challenge to accepted modes of UK pension fund governance. The implication being that we simply have to ride-out the storm. The Pensions Regulator, in a communication directed to the sector, indicated that “the impact of both falling asset values and weakening covenants falls within the framework of the regulator’s scheme specific funding regime” and that this regime “remains fit for purpose” (October 2008, p. 1).¹² The Regulator also suggested that its Codes of Practice were sufficient guides to trustee actions and responsibilities. In our view, this guidance letter confuses the purpose of Codes of Practice for mitigating the plan-specific risks of poor governance practices with the systemic risks faced by the whole sector in holding to governance models that were not fit-for-purpose and are clearly at odds with the demands implied by the crisis.

While the frequency of economic disaster may appear low, it is higher than we might have expected especially if we were to take a close look at the frequency of near-disasters that have affected various economies since 1970. Barro (2006, 823) gives the probability of ‘economic disaster’ in the order of 1.5 to 2% per annum. Even if the frequency is believed low, the costs of disasters can be enormous (as will be the case in the current credit crisis). Further, economic disasters are endemic rather than ‘accidental’ (Allen and Gale 2007). While cycles of over- and under-optimism are no doubt important, booms and busts may amplify larger global forces at work that may

¹²/. “Statement to trustees about current financial pressures.” At www.thepensionsregulator.gov.uk

or may not originate at 'home' but which pose a significant threat to the very survival of funded pension schemes over the long-term (the life-span of beneficiaries who stand to benefit from such schemes). This is a more challenging and systematic conceptualisation of the 'governance' problem than that suggested by the Pensions Regulator's October 2008 missive.

In any event, ignorance of the probability and costs of disaster and the hope that the nation-state would act, in these circumstances, as the insurer of last resort fails to appreciate the size and significance of funded pensions in relation to the nation-state. In a number of western countries, funded pension plans are so important that they have become by default the 'lender' of last resort. The collective assets of leading nations amounts to around 60% of their annual GDP (Watson Wyatt 2009). The nationalization of Argentina's private pension assets in October 2008 and the Irish government's discounting of the value of public pensions in early 2009 are obvious instances of this political fact-of-life.

This raises the issue of how governments can contribute to the performance of the pension fund system and deal with the exigencies of the global financial crisis. There are three areas that we believe deserve consideration. First, greater public disclosure of pension fund characteristics and activities would allow stakeholders to bring pressure for change in governance activities (Piggott and Mitchell 2008). Second, mandating funds to have independent board chairs would serve to improve the impartial execution of fiduciary duty while adding to the depth of board skills. Third, going beyond the ethic of 'trustee knowledge and understanding', the regulator could mandate certain levels of trustee competence thereby enhancing board decision making capacity (as in the Netherlands). Pension funds will always involve a complex web of long-term inter-generational commitments between stakeholders; we believe the use of independent board chairs and the enhancement of board members skills have already demonstrated considerable value in this regard.

Appendix. Pension funds included in interviews

Following the research methodology developed in Clark and Urwin (2008a), in this project we interviewed 10 exemplars covering four types of UK pension funds. There was a group of large funds with significant internal and external investment

management resources. There was a group of multi-national firms that face significant problems in managing their diverse constituencies around the world. We interviewed closed funds whose sponsors are either quite small or have been so adversely affected by mergers and acquisitions that their sponsoring firms are remote from the surviving plan or plans. And finally, we sought out new kinds of institutions that have entered the UK market for pension investment and risk management. We used similar questions and a question-answer format that enabled comparison between funds on common themes. The authors can provide a more detailed description of the attributes of the surveyed funds upon request.

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