

## ***Financial Innovation, Complexity, and Agency Theory***

On February 17, 2012, the Initiative for Responsible Investment, a project of the Hauser Center for Nonprofit Organizations, hosted a convening at the Harvard Kennedy School to examine the questions surrounding financial innovation and complexity and how they relate to agency problems between trustees and their service providers and consultants.

Some 25 participants drawn from the money management, academic, nongovernmental, financial consulting and think tank worlds attended. This short paper reports on the discussion at the meeting, which covered topics such as agency theory, complexity of financial products, financial innovation, and their collective implications for pension fund trustees.

### **First Discussion: Agency Theory and Investment**

The convening began with a discussion of the agency problems that arise between trustees serving in a fiduciary capacity for pension funds and endowments and their service providers and consultants. These problems arise in part because of the disparity between broad, fund-level decision making fiduciaries are charged with and more specific individual investment-level decision making that their consultants, money managers and staff are making. In particular, information asymmetries can exist between these two groups, potentially resulting in agency problems.

Arthur Applbaum, professor of ethics at the Harvard Kennedy School, opened with a discussion and review of the problems presented by principal-agent relationships. In general, these are characterized by the difficulty of aligning the incentives and behaviors of agents, who have superior information, with the interests of principals, on whose behalf the agents are supposed to be acting. Professor Applbaum offered several examples of how misalignments can take place, and concluded using game theory that no simple way exists to create a perfectly efficient agreement between principals and agents. Risk has to be managed and apportioned between the parties. If viewed as a simple problem of maximizing rational self-interest, something has to be sacrificed. Arthur offered two potential solutions: an information-based solution, wherein principles are offered more information to monitor agents' behaviors, or outcomes based solution wherein an alignment of results would allow agents to share in the benefits accrued to the principals.

Viewed through an ethical lens, a sense of professional or fiduciary duty could diminish the gap between principals and agents if, for example, agents believed that they were bound by an ethical requirement to forego immediate returns to themselves as a means to serve the interests of their principals. The difficulty with this position is that principals and agents are often either unclear about the degree to which ethical and fiduciary duty apply to their relationship, or they invest in that

relationship with different degrees of meaning and duty. This problem can be reduced if there are certain communitarian values operating to align interests, but this is not always the case.

Participants discussed complications that can arise when trustees find themselves in a dual relationship—as both principals in relationship to pension consultants and asset managers, and as agents in a fiduciary relationship with fund beneficiaries. In addition, cognitive biases can create an overly optimistic outlook and reliance on the skill of the agent. In other words, if outcomes turn out well, it is attributed to the agent, and if poorly, it is attributed to unpredictable bad luck. Other factors can also induce agents to take higher levels of risk. For example, if performance of a fund has been poor, agents are more likely to recommend, and principals to accept, riskier behavior in the hopes of making up their losses.

Trustees increasingly feel under pressure to seek superior returns, lest defined benefit plans be abandoned wholesale. On the other hand, risk aversion and potential legal liability in the face of failure can produce indecisiveness by trustees, who then defer to internal investment staff and consultants. Participants also noted unreasonable actuarial projections of pension funds returns as a main driver of overly aggressive investment decisions by trustees.

The frequency of performance measurements similarly creates a greater awareness and fear of volatility. In theory, intermediaries such as rating agencies can enforce certain forms of truth-telling to increase predictability and lower volatility, but confidence in them has been shaken over the past few years.

The group discussed the various complexities of human perceptions about self-awareness and behavior and how these perceptions can lead to failures and short sightedness in the decision making process. Individuals tend to view themselves as better than they truly are, justifying mistakes and poor outcomes as consequences beyond their control as a means to exonerate oneself. This skewed perception often negates the utility of performance reviews as they are not viewed with the necessary self-criticism to allow for better decision making in the future.

The creation of inappropriate incentive structures has made it more difficult for parties throughout the system—from corporate executives to fund trustees—to make decisions for the long-term. The choice of benchmarks can prompt unhelpful behavior. As one author recently noted, rewarding CEOs for stock performance is like rewarding quarterbacks for beating the point spread; it is a hyper complex form of trying to game expectations. What often gets lost is any awareness of the implications for these behaviors on the system as a whole or in relation to the wider obligations of community.

Another influential factor in the agent-principal relationship is the political and cultural environment in which trustees operate. In the Netherlands, for example, trustees function in a much more politicized setting in which agents, trustees, and principals are more keenly aware, and influenced by social and environmental considerations. Pension funds more are subject to public scrutiny over controversial social and environmental issues. For example, companies involved in cluster bombs and land-grabs in Africa receive considerable attention and exposure from the press

and social media outlets. Increased transparency and visibility create a culture of accountability in the Netherlands that necessitates greater trustee involvement and education in investment decisions for their funds.

Much attention has been paid recently to **corporate** governance as opposed to **fund** governance despite evidence that suggests institutional funds with superior governance have superior returns. The issue then lies in ensuring this above-average governance within funds. Participants discussed the potential utility of a common database on fund governance via a social media platform. This network would allow individuals to share opinions and experiences as a means to spur informed discussion among trustees.

## **Second Discussion: Review of Particular Complex Instruments**

One fundamental struggle in the markets is the **complexity** of many financial instruments, which create information asymmetries. An ideal solution is transparency, to "look under the hood" of transactions by disaggregating their terms into understandable equivalents in order to compare the details and the outcomes, however this disaggregation is not always accessible or possible. For example, in customized swap products, what is usually hidden from the investor is the cost of money embedded in the transaction. Regulators do require customized swaps to disclose the cost of all their component elements except for the cost of money, which is how vendors profit. Without this data, investors cannot easily tell how "expensive" the swap actually is.

What are the implications of such complex financial products? Complicated financial instruments may not be focused on the creation of capital or investment in the real economy. Trustees should ask themselves what problems these complex instruments are really trying to solve. Why should these strategies be pursued if there isn't a baseline of comparison and disclosure that allows participants to understand what is happening?

This problem is related to how trustees understand **innovation** within the financial industry. Successful innovation evolves through trial and error and an increasing focus on new and innovative products implies that funds are turning to particularly unknown outcomes and uncertain futures. Simulations can help in such circumstances, but there is no prophylactic analysis of such innovation. A fiduciary should understand:

1. How innovative financial instruments are most likely to work in practice
2. The fine print of the contracts underlying these products
3. The implications of these contract for other investors and the public at large

The fact of the matter is that financial innovation and complexity inherently create asymmetrical relationships between fiduciaries and their agents. One participant suggested fiduciaries adopt a general rule of thumb that if a potential investment instrument cannot be explained in five minutes, it probably is dangerously complex and will not provide the desired outcomes. Moreover, swaps and other counter-party arrangements arose in a culture of one-on-one contracts, where both parties were expected to be well informed as a means to limit the consequences of a poor outcome

strictly to the pair. Now, however, the proliferation of these complex contracts can lead to broad and unforeseen systemic consequences.

Complexity has made the entire financial system uncontrollable to a certain extent. For example, investments in commodity indexes have raised food and energy prices. High frequency trading, which has inherent dangers, is being sold to pension funds as an investment strategy. Financial instruments have become disconnected from their social utility, as in the case of multi-layered securitization of mortgages, parsed into even more rarefied tranches and then “insured” with derivatives. The rapid expansion of institutions into too-big-to-fail entities has created the need for countervailing structures such as the Consumer Finance Protection Bureau for individuals and TARP.

There was wide agreement amongst participants that a core piece of the problem was a disconnect between investments and the real economy. Pension funds are now being sold concepts like “diversified beta” and “global macro-strategies.” A vital question that needs to be brought into the boardroom is how to assess these complexities and allocate capital so that investments positively impact the real economy and create stronger, healthier long-term returns. Perhaps an indicator to measure, even approximately, is how close a particular instrument is to putting capital into the real economy and if this instrument would be of use. In all of these deliberations, trustees must not lose sight of how well the assets they acquire match the ultimate actuarial needs of their beneficiaries over time.

If the difficulty is placing reliable data in the hands of investors regarding effects on the real economy, perhaps one solution is the creation of an “FDA” for financial instruments. This entity could review financial products before they were marketed to evaluate whether they implied intrinsic risk or harm not only to the investing party but to the wider community. Externalities that are currently borne by the community and taxpayers could be identified before they imposed their costs. This would also enhance the capacity of trustees to “just say no” to bad ideas and eliminate certain products entirely from the markets, necessitating full review before new financial products could be put into the marketplace. Perhaps more realistically, fiduciaries, rather than all investors, could simply be limited in their investment opportunities to certain products deemed safe.

One difficulty with this approach is that the regulators aren't as sophisticated and knowledgeable as they need to be. Currently, most instrument consultants defer to asset managers because even they fail to fully understand what is being proposed. This creates a real problem in distinguishing or allocating ownership in the decision-making process: who is making the decisions in these problematic areas—the trustees, the pension consultants, the internal investment staff, or the external asset managers?

A particular individual who was not able to attend forwarded some observations for the group. This individual suggested that trustees should be asking:

1. What are the fund’s investment goals? If they are maximizing risk-adjusted rates of return, then seeking out financial engineering and innovation become logical outcomes of the investment process.

2. Does this investment operate in isolation? Trustees should consider what would happen if some, the majority, or all funds were invested in this same product.
3. Do the trustees understand the financial products? This can be daunting question to raise, but if the answer is “no”, in whom should the trustee place his or her trust? Staff? Consultants? If so, what agency problems need to be examined?

### Third Discussion: The Investor's Dilemma

In a departure from the usual format of these convenings, the participants focused the remainder of their time on a group exercise known as the Circle Chart in which a particular question is systematically examined under the category of "problems and symptoms", "reasons and analysis", "approaches and strategy", and "tactics and actions." The specific question addressed was: ***What are the challenges facing fund trustees when confronted with complex financial instruments?***

The following chart depicts the group’s responses to this question, and offers some concrete solutions and next steps.

Reason & Analysis	Approaches & Strategy
<ul style="list-style-type: none"> <li>• Lack of trustee training</li> <li>• Inadequate selection and evaluation of trustees</li> <li>• Group think–strong culture</li> <li>• Inadequate funding</li> <li>• Prior history</li> <li>• Discount rate</li> <li>• Earnings assumptions</li> <li>• Asset and liability mismatch</li> <li>• Danger of extinction of fund (political risk)</li> <li>• Professional culture of trustees</li> <li>• Fear of litigation</li> <li>• Trustees from wrong ‘pool’</li> <li>• Cognitive bias</li> <li>• Entrenched interest in profit</li> <li>• Time pressures</li> <li>• Lack of internal resources/investment expertise</li> <li>• Low cost for failure (low accountability)</li> <li>• Cons and scams</li> <li>• Distributed agency duties</li> <li>• Obscured conflicts of interest (agency opacity)</li> <li>• Excessive focus on risk adjusted returns (versus asset liability)</li> <li>• Lack of alternatives (to Modern Portfolio Theory)</li> <li>• Price taking v. market shaping</li> <li>• Regulatory arbitrage</li> </ul>	<ul style="list-style-type: none"> <li>• Create a culture of inquiry</li> <li>• Outlet for Trustee training</li> <li>• Decision making group and ‘red team’- sole purpose to act as adversary to encourage critical debate</li> <li>• Rethink metrics, including longer term goals</li> <li>• Persistence and patience with new ideas</li> <li>• Creating safety zone for trustees</li> <li>• Make space for deeper discussion</li> <li>• Focus on the things that matter in the meetings (the future of the fund, not just past returns)</li> <li>• Restructuring meetings to rank priorities</li> <li>• Investment belief statements</li> <li>• Governance culture that allows for debate</li> <li>• Engage policy</li> <li>• Reinterpret ERISA</li> <li>• Real economy score</li> <li>• Professional trustee selection with mix of qualities</li> <li>• Clear division between trustees who actually focus on policies and those that focus on execution</li> <li>• Plain language beneficiary transparency</li> <li>• Conflicts of interest highlighted</li> <li>• Disaggregation of costs of investments as routine</li> <li>• Bringing education and ‘real world’ speakers into the board room</li> <li>• Make evident externalized costs</li> </ul>

Problems & Symptoms	Specific Actions & Tasks
<ul style="list-style-type: none"> <li>• Complexity (too much information or data)</li> <li>• Capacity of staff and trustees</li> <li>• Time constraints (not enough time in meeting)</li> <li>• Opacity of instruments</li> <li>• Difficulty speaking up</li> <li>• Need for returns</li> <li>• Skill deficiencies conflicting interest and motivations</li> <li>• Empty solution set</li> <li>• No "devil's advocate" or "red team" advocacy</li> <li>• Not part of due diligence</li> <li>• Fast turnover of participants equaling low institutional knowledge</li> <li>• Not aware of problem</li> <li>• Sophisticated marketing and sales teams</li> <li>• Lack of goal clarity</li> <li>• Lack of context to fund and to industry</li> <li>• Lack of knowledge (metrics)</li> <li>• Deference/cult of expertise (aura of superior knowledge among fund managers, consultants)</li> <li>• Narrow fiduciary interpretation</li> <li>• Staff conflicts</li> <li>• Importance of image (political difficulties/risk)</li> <li>• Protecting self from future blame</li> <li>• Protocol/relationship between consultants, asset managers, trustees, and staff</li> </ul>	<ul style="list-style-type: none"> <li>• Set of guidelines (meeting structure, disaggregation, hard questions/red team), litigation under ERISA, eliminate mandatory arbitration, change incentives for providers, full disclosure of conflict of interest, skeptical rules of thumb (negative presumptions)</li> <li>• Gift/influence policy for trustees and staff</li> <li>• Disclose how governments create beneficiary accounts</li> <li>• Creation of experiential learning, potential for technology to make space for anonymous 'stupid questions'</li> <li>• Dashboard (include metrics about social impact)</li> <li>• Beneficiary training/explanation ('Story of your pension, 'Story of your Retirement')</li> <li>• Outlining best practice questions (asset class specific)</li> <li>• Trustee consultant relationship</li> <li>• Clarification of different components of P/A role</li> <li>• Standards boards for consultants</li> <li>• Model consultant contract (include exposure political/conflicts of interest)</li> <li>• Public list and information on consultants</li> <li>• RFPs include Q on proprietary trading</li> </ul>

#### **Fourth Discussion: Concluding Remarks and Action Steps**

After completing the circle chart exercise, a general discussion ensued on how to implement the action steps that had been identified. Several people pointed to the ongoing disconnect between trustee behavior and beneficiary intentions. Beneficiaries should be consulted more carefully about the investment guidelines and values under which trustees were acting. One person expressed concerns that more trustees were not at this particular discussion to represent their views and their presence at future events could help to mend this disconnect.

There was considerable emphasis on the need to ask more basic questions in the course of regular meetings, or to set aside meetings in which such questions could be asked. For example, what exactly are the investment goals? What are the specific roles and responsibilities of the consultants? How can RFPs be improved? The participants offered various examples in which timely questions had changed the behavior of trustees; for example, introducing ESG requirements into RFPs and seeing these criteria gradually come back in the answers to new proposals; or limiting a very large initial investment in commodities to a smaller trial balloon when significant questions were raised. Union pension funds have been wrestling with the question of whether private equity is an appropriate asset class to be putting billions of dollars into when such strong needs and opportunities exist in the infrastructure arena.

There is some progress in the recognition of the need to address these problems. The International Corporate Governance Network is about to release a "model mandate" that describes questions that should be asked when bringing on board consultants, an initiative that is ready for immediate use. The Long Term Investing Council of the World Economic Forum has released a paper on complexity and governance within funds. The Interfaith Center on Corporate Responsibility would like to raise these issues more systematically within its membership. Ceres is moving forward with an RFQ for a project on pension consultants. The Middleton Foundation, the Global Union global education survey, and an upcoming gathering of the Pension Right Center on "reimagining pensions" were all examples of new activity that should be brought together to create positive change.