Investment Strategies Conference

On November 30 and December 1, 2011, the Los Angeles Trustees Network and the Trustee Leadership Forum for Retirement Security (a project of the Initiative for Responsible Investment [IRI] at Harvard University) jointly hosted a meeting of labor-affiliated pension fund trustees at the LA Trade and Technical College in downtown Los Angeles. Over 30 trustees representing a dozen funds attended the meeting, in addition to a handful of stakeholders from the legal, consultant, labor, and academic communities.

The meeting focused on the role that trustees play in defining, enacting, and evaluating investment strategies that meet the long-term needs of beneficiaries – and how trustees confront these duties in the current context of financial market turmoil and political challenges. In particular, the meeting focused on:

- **How trustees set agendas**, and ask hard questions, about strategic direction and asset allocation issues
- **The role of explicit investment beliefs statements** in guiding trustee action; and
- A closer look at **the emerging asset class of infrastructure investment**, and the ways in which funds can collaboratively promote infrastructure needs that promote long-term sustainable wealth generation for their beneficiaries and the public interest.

This brief note relates key points from the discussion at this meeting, and also serves as an introduction to an extended dialogue on the subject of investment beliefs conducted at the meeting by Steve Lydenberg and Jay Youngdahl, fellows at the IRI.

Setting Agendas and Asking Hard Questions

The meeting began on the evening of November 30th with an open discussion on the role that trustees play in setting agendas, and managing strategy development and fund performance, in their work on pension fund boards. Trustees were asked to reflect both on the key challenges they face in their work, and on the types of tools that help them meet those challenges.

The litany of challenges facing boards in the current environment is long and well known, ranging from the funding of pensions and the management of portfolios to communicating with beneficiaries and managing political crises in the context of fund volatility. **Trustees framed these problems around the need to get beyond the "number" –** the target rate of return of the fund as a whole – to examine the assumptions beneath risk/return calculations that drive a fund's target return, unpeel the layers of complexity and promised returns that surround potential investments, and to delve into the relationships among trustees, staff, consultants, legal counsel, fund managers, and other stakeholders. **Transparency and clarity** were key words in the discussion.

If a single issue stood out, it was the **challenge of asking hard questions of staff and service providers in the context of a transformed marketplace.** Attendees agreed that the financial crisis had played a role in shaking conventional understandings of how funds could be managed for the long term. Multiple times, people brought up the cultural conventions that worked against contrarian questions or demands for clear explanations of complex investment products and strategies – even as the need for such questioning has grown ever more apparent in recent years.

What tools help trustees deal with the challenges they face today?

- Regular forums like the one in which this conversation took place were praised for offering **safe spaces for trustees to share their experiences**, and to wrestle with difficult questions that crowded board agendas do not always leave time to explore.
- **Shared information platforms**, both on technical issues and on general topics of interest, were mentioned as useful tools.
- On the topic of information sharing, the need for **clear, short approaches to key topics** – for instance, lists of questions to ask about a particular asset class or issue area, with a set of readings that help explain how that list came about – were of particular interest.

All of these challenges and tools responded to the need for trustees to **sort out hype from value,** solid investments in the real economy from overly complex fee machines, wealth creation from unidirectional bets or unsound business practices. And it bears repeating that, from the trustees perspective, the conversation about investment strategy cannot be divorced from the macroeconomic conditions that affect beneficiaries, the funding of their pensions, and the political climates in which such decisions are made.

The Role of Explicit Investment Beliefs

The morning of December 1st began with an extended conversation between Steve Lydenberg and Jay Youngdahl on the role that an explicit statement on investment beliefs – the assumptions that undergird how funds understand investment markets -- can play in shaping how trustees make decisions about strategy and monitor performance on an ongoing basis. Attached to this note is a written version of that conversation.

The ensuing discussions of investment beliefs covered a series of related issues. In the first place, attendees agreed that relatively little time is devoted to the topic of investment beliefs, and that **such beliefs weren't always central to trustees' concerns** as they managed affairs from board meeting to board meeting. If this was true of investment beliefs around market performance, or the relationship between risk and return, it was even more true of issues that may sit outside conventional evaluations of financial performance: those mentioned included Environmental, Social, and Governance issues generally; labor relations and treatment of workers specifically; and the role that ethical considerations might play in guiding fundamental board policies.

Many of the tables **focused their discussion about investment beliefs on the topic of risk**, including questions such as:

- How does a trustee or fund measure and manage systemic risk?
- What happens when we doubt that risk and return are necessarily correlated?
- How can complex instruments be assessed for risk?

These questions led to intrinsically interesting discussion about risk, and also revealed a great deal about the implicit assumptions that undergird conventional investment beliefs that drive modern portfolio theory.

Finally, attendees emphasized the **potential for common goals, and coordinated action, to be integrated into investment beliefs**. Portfolio strategies have tended to deal with investors as if they had no impact on the market, mitigating against collective action. Funds might include in their belief systems an understanding of how they can shape product offerings, fee structures, or desired impacts on the real economy, to better serve their beneficiaries. To the extent that investment beliefs reinforce the primacy of relative performance rather than the meeting of obligations to beneficiaries, they may make it harder for collaboration that improves systemic market performance.

Investing in Infrastructure

The last topic addressed at the meeting turned to private investment in infrastructure, and the role that pension funds might play in developing such a market in the United States. This conversation took place in the context of recent efforts by CalPERS and CalSTRS to invest in infrastructure, and, more generally, of interest from funds in long-term sustainable investments that support job creation and economic development. At least in theory, **infrastructure investment is an important arena where funds can discuss how collaborative action, and intentional market development, can lead to favorable outcomes for long-term investment returns**, and for society and the economy as a whole.

Attendees from or who have worked with CalPERS and CalSTRS began the discussion by laying out the potential need for private infrastructure investment, the relative (under)development of that market in the US, and the different types of vehicles through which funds might achieve their long term goals. Special attention was paid to the relationship of private infrastructure investment and the traditional vehicle of municipal bonds.

Presenters highlighted examples from Canada, in which funds have developed in-house expertise, and Australia, where funds have joined together to build their own infrastructure investment management company. These examples came up in relation to what have been seen as less successful efforts at private infrastructure investment in the US – investments that created high fees, or encouraged poor public policies, or that provided returns at the expense of the public good. Indeed, much of the discussion around infrastructure investment at this meeting and elsewhere has centered on the topic of **how to generate a pipeline of deals that meet both public and investor needs**.

The discussion around infrastructure returned to two key topics:

- How can good deals be put into the pipeline?
- How can funds work together to generate shared platforms for investing in those deals?

The **potential of infrastructure investment as a vehicle that marries long-term stable returns to productive investments in the real economy** was apparent. Attendees agree that, in this moment, pension funds have the ability to shape the market towards the creation of good ends. The realities of an underdeveloped pipeline of deals, the need for staff capacity to evaluate options, and mismatch of investment vehicles with fund goals were also integral to the discussion.

Conclusion

The meeting concluded with a brief reflection on the **need for collaborative action among funds** and the **sharing of resources and experiences among trustees**, as fundamental to rebuilding investment strategies in the wake of the financial crisis.

Trustee networks have the potential to support, and to develop, the kinds of critical analysis and innovative thinking that can lead to both big picture reorientation of fund strategies via tools such as investment beliefs, and the practical application of those beliefs to emerging fields such as infrastructure investment.

The meeting also resulted in the following "wish list" for potential next steps for both specific tools for trustees and for further research or action:

Research and Information Provision

1. Develop a reading list.
2. Backgrounder on "assumed rate of return"—particularly how it affects asset allocation.
3. Backgrounder on how to measure social and environmental risk and reward, how to articulate and give examples of "contributions to the economy."
4. Backgrounder on how trustees can communicate effectively with beneficiaries, how to broaden beneficiaries' understanding of investment issues, and to bridge a growing divide between the issues trustees and beneficiaries face every day.
5. Backgrounder on how trustees who find themselves in a minority on pension fund board can start conversations and raise the idea of alternative investment beliefs.
6. Backgrounder on infrastructure with good examples of infrastructure investment opportunities.
7. Backgrounder with success stories on alternative approaches to investment that do more to support the economy/environment/labor—e.g., Ullico on energy efficiency in Oregon.
8. Write a simplified one- to three-pager on discussion of problems with MPT and alternative investment beliefs statements.
9. Development of "another language" than MPT that can be used to talk about alternative approaches to investment. What does "do no harm" mean, if it isn't financial risk?
10. Plan for how to keep various alternative approaches to investment simple and not add complexity and more work to trustees tasks.

11. Create a research tool that would allow trustees or staff to make the connection between portfolio-level risk and systemic risk. A similar research tool that would allow trustees or staff to make the connection between downside risk in one asset class and another.
12. Tool for calculation of total fees spent on private equity and other asset classes during the course of a year and a list of alternative suggestions on how those fees could be better spent in the interests of the beneficiaries of the fund.
13. Create a template for trustees to give to outside managers on what issues they want reported on in their quarterly reports—e.g., support for economy, job creation, community economic development, do no harm, etc.

Training and Collaborative Action

14. Create a Business College to help train labor staff as trustees and staff at pension funds.
15. Create a program that would facilitate better sharing of information and knowledge gained among various funds, especially to share knowledge from larger funds such as CalPERS and CalSTRS with smaller funds that have limited staff or resources.
16. Create an independent Ethics Committee a la the Norwegian Pension Fund to make recommendations to various pension fund boards.
17. Create labor-friendly pooled funds, captive managers, or in-house managers. Plan for collective action on investment policies or practices.
18. Encourage regional cross-fund trustee support groups along the LA model.
19. Create a program for mentoring new labor trustees who aren't familiar with issues that will come up for them on boards.
20. Develop a strategy for demonstrating the mutual interest of public pension funds and Taft-Hartley funds.

Investment Beliefs Dialogue
12/1/11

Introduction (Jay Youngdahl) Five minute condensed recitation of the points made in the piece on investment beliefs published in *Responsible Investor*.

Questions (Jay Youngdahl) and Answers (Steve Lydenberg)

Why have investment beliefs?

It's somewhat stating the obvious, but beliefs are the basis of the decisions you make. You wouldn't do something unless you believed in it for one reason or another. They are a guide to your decision-making. They can be helpful in a variety of ways, but particularly 1) help assure that the decisions you make are consistent; and 2) when things go wrong they can help you analyze the situation and decide if they went wrong because your beliefs were wrong or because the way you went about implementing them was flawed, and the beliefs themselves were fine.

What is an Implicit Investment Belief and what are some examples?

Investment Beliefs used to be much simpler: just don't invest in any individual security that looks particularly risky. That resulted in very conservative policies, and restricted lists, that limited fiduciaries to quality bonds and a handful of blue chip stocks. That persisted up until the 1970s. But then clearly change was necessary. A new way of looking at investment evolved, so-called Modern Portfolio Theory emerged and a new view of fiduciary duty was based on it. These were new theories of what made for smart and prudent investment emerged, and things got a lot more complicated for fiduciaries.

For investors these days, investment can be a complicated process with lots of decisions, but they are essentially driven by a limited number of beliefs. The two most important related to price and risk.

- **Price.** A belief that markets are efficient, today's price is the best price, and you can't beat the market. Results in decision to allocate to index funds.
- **Price.** A belief that there are, at least at certain times, inefficiencies in the market, pricing mistakes, that you can take advantage of-results in decision to hire an active manager.
- **Risk.** A belief that risk can be controlled at a portfolio level, that non-systematic risk can be diversified away. Ways of controlling portfolio-level risk are 1) diversification (countercyclical) 2) hedging and "insurance" and 3) securitization. Results in a stress on the importance of diversification in risk control.
- **Risk.** A belief that risk is rewarded and that higher levels of risk produce comparably higher levels of reward, without increasing risk to the overall portfolio, asset class or financial system. Results in decisions to go into high-risk asset classes.

Other beliefs include:

- **Past can predict the future.** A belief that asset classes will perform in relatively predictable ways, that their future performance will bear reasonably predictable correlation to their past performance. Results in placing primary importance on asset allocation as the primary driver of returns.
- **Real world transactional effects need to be accounted for.** A belief that transaction costs are important in the marketplace, that it's important to consider real-life aspects of investments, not just theoretical returns. Results in a focus on controlling fees and other transaction costs.
- **Complexity and innovation pay.** A belief that experts add value, that your own knowledge needs to be supplemented by that of specialists and that experts can identify new products where you have an edge. Results in decisions to go into innovative products and to rely on consultants.

Have Implicit Investment Belief's really hurt our Fund and beneficiaries? If so, how?

Some of the catastrophes that are out there today remind us that today's generally accepted investment beliefs have led to specific practices that don't match up with reality in certain ways. That's not to say that they aren't helpful. These advances are substantial. 1) They have opened up many asset classes that weren't previously available to fiduciaries. 2) They stress the need for professional expertise and knowledge. 3) They help eliminate personal conflicts of interest.

But there is a growing sense that there is something wrong, or at the least that these beliefs haven't kept a lot of things from going wrong. On one of the days prepping for this, I picked up *New York Times* business section, on the front page (November 18, 2011) and came across the following. It's hard not to believe things are out of kilter where this is one day's news:

- Olympus—Hiroko Tabuchi "Billions Lost by Olympus May Be Tied to Criminals" $4.9 billion unaccounted for. Some may have gone to yakuza. Reminds you that there are outright criminals in the financial and corporate worlds. MPT doesn't have a lot to say about criminals and outright fraud. This reminds one of the story in Taleb's *The Black Swan* about the professor who is asked what the chances are of a coin that has come up heads 99 times in a row will come up head again on the 100th flip. He says 50% chance. Fat Louis on the street is asked the same question and he says it's practically certain because it is clear that the coin is rigged.
- MF Global—Azam Ahmed and Ben Protess "Inquiry Is Said to Discover MF Global Tapped Clients" MF used clients cash improperly (as much as $1.2 billion) and it is still missing. It reminds you that the financial world is full of cowboys and they can screw up big time. Some of them have credentials that make them look very "expert." As Charles Morris observed in *The Trillion Dollar Meltdown*, "As a general rule, only the very smartest people can make truly catastrophic mistakes." (page 49)
- Bank of America Commercial CDOs—Floyd Norris "Loans Lose All Value, And More" Because BoA originated and then at the same time serviced securitizations of commercial mortgages, losses are actually more than 100%. Reminds you of the dangers of complexity of financial products.

- Euro Bonds. Landon Thomas, Jr. "Rise of a Euro Doomsayer: Once scorned, a Skeptical Analyst Gains Admirers," for more than a decade, Bernard Connolly has been predicting disaster for Eurozone countries that fall on hard times. This reminds you of the unpredictability of political complexities on the financial system. Uncertainty is not quantifiable, it's not like risk.
- Bill Miller—Diana B. Henriques "Legg Mason Luminary Shifts Role," investment guru Bill Miller retires after his fund which had outperformed for 15 straight years through 2006 and grown to $20 billion in assets under management that year, then underperformed for 5 straight years and now only has $2.8 billion in AUM. A value investor, his reversion to the mean discipline stopped working and investors have now fled. This reminds me of the Keynes quotation: "Markets can remain irrational for longer than you can remain solvent."

Criminals, cowboys, complexities, and uncertainties. In a certain sense we've always had these problems, this just comes with the territory and is partly the way progress is made in the financial community. That may be true, but you can say two things about the current situation: MPT certainly hasn't stopped these things from happening, and it may be making things worse. A lot of the things that MPT drives institutional investors to do may work well when only a few investors are doing them and only some of the time. But when everyone is doing them at once and doing them all the time, they start looking more dangerous and get us into stranger and more problematic situations. Particularly when you come to increasing risk at the portfolio level, you are likely to make the whole system more risky. There is a saying that if you open up 10,000 doors, eventually a tiger will jump out.

What do your examples say about the Investment Beliefs of the current financial system?

It shows that it fails to deal with certain realities of contemporary finance, and may even cause some of the problems we see today. For example,

- The emphasis on risk control at the portfolio level tends to externalize risks onto the system and creates a riskier system. It creates a riskier system in three ways: 1) More risky products become eligible for investment in portfolios across the spectrum of institutional investors, so more and increasingly risky products are generally out there in the system. 2) Risky products are frequently offset by derivatives, hedging and "insurance" products that have unpredictable risks of their own; and 3) Risk is dispersed around the world through securitization that looks like it is spreading risk out, but as you have more and more investors pursuing risk control through securitized products, you get globally inter-related risks that were, for example, at the heart of the 2007-2008 crises that came from collateralized debt obligations. These various risk control devices lead to highly unstable conditions in the overall markets, particularly in times of crisis. Examples: for derivatives and "insurance—starting in the 1980s with portfolio insurance in the 1987 crash—can lead to liquidity problems in times of crisis. Or Credit Default Swaps that led to the downfall of AIG and the realization that what is often billed as "insurance" is only as good as the counterparty is strong, which is a risky bet in itself. Or Collateralized Debt Obligations on securitization side, which leads to the spreading out

of risk throughout the system and means that risks can cascade and travel through contagion throughout the financial system more easily.

- A cult of expertise where faith in someone like John Corzine or even worse Bernard Madoff leads to tens of billions of dollars of investments by some of the most sophisticated investors in the world to products that are mismanaged or even fraudulent. More seriously, it has led to reliance on credit rating agencies, which as was shown with regard to the CDOs built from mortgages, can't really be trusted, for a variety of reasons.
- The same faith in expertise leads to willingness to buy overly complex products that Wall Street is expert in concocting, or not to appreciate the complex ways in which service providers can take advantage of their role as experts. Examples of overly complex products that didn't function as advertised include auction rate securities and structured investment vehicles. Now we should be careful about what's coming down the line with ETFs, which are becoming increasingly complex. Examples of service providers taking advantage include questionable practices foreign exchange rates provided by certain providers and securities lending for their own accounts (eg, lending shares to hedge funds to short the stocks that are in the clients' portfolios).
- A belief that prices are adequately reflected in the markets leads to herding and increases in bubbles and bursts. If prices are accurate, then everyone does the same thing at the same time. We can see that in role of index funds in driving the high tech bubble of 1998-2000. Keynes says that if markets aren't efficient, then the next best thing is diversity of opinion. If you don't have diversity of opinion and markets aren't efficient, they you are in trouble. It also leads to poor understanding of uncertainties, particularly political uncertainties. One example of uncertainty is the willingness of European banks to invest in bonds of Greece, Portugal, Ireland, Spain and Italy, without fully appreciating political and practical complications raised by European Union structure.

But isn't our Investment Policy Statement all we need?

An Investment Policy Statement is crucial, but an Investment Beliefs Statement will help make sure that the different parts of an IPS are consistent with each other and will serve as a guide when new situations not covered in the IPS arise—new products, new pitches, the new, new thing.

An Investment Belief Statement is important for, among other things, 1) consistency in decision making; 2) communications with service providers and beneficiaries; and 3) figuring out what works and what doesn't, what went wrong or right and why.

How can a process of discussing Investment Beliefs help our Fund? Is the discussion (and revisiting it on a regular basis) important? If so, why?

Discussions these days tend to focus on beating benchmarks, hitting return goals, and getting out of the red zone. That's understandable and important. But it's important to see the forest too, and not get lost in the trees. Big picture questions (like should you stick with an indexing strategy when the market is wildly over- or under-valued, or will various products that are billed as insurance work if everyone tries to use them at the same time) are also important and can

keep you from making big mistakes. Financial markets change all the time. The practical implications of your beliefs will change as the markets change. Some beliefs will have more relevance in certain market conditions than others. So having these discussions regularly is important.

Let's talk about a few possible Investment Beliefs. What do you think about the following as an Investment Belief? "In each investment, we should know where returns come from?" Why is that important?

Essentially for any investment your returns can come from three different places. 1) Cutting fees, saving on transaction costs. 2) Taking advantage of mispricing in the marketplace (selling high, buying low, reversion to the mean). 3) Creating value in the economy (investing in new technologies, in a company that has discovered new productivity gains, in companies that have figured out how to pay a living wage while still being competitive and profitable, thereby creating active consumers).

Your ideal investment will do all three at that same time. But not every investment or investment strategy will do all three. You should be aware of which of these three sources of return your investment strategies are emphasizing. Because if you, or even worse everyone, only focuses on fees, you (and everyone else) will miss opportunities to take advantage of mispricing and to create value in the economy. If you (and everyone else) are only chasing alpha you may well overpay on fees and invest in opportunities that hurt, rather than help, the economy. Your overall portfolio will be strengthened if you make explicit where your returns are coming from for each investment and then you can stand back and see what kind of an overall balance you have achieved and how close you are to taking advantage of all three sources of return.

You talk about investments that create value in the economy, but what are some examples of that and how can you measure the value that they create?

A good example of investments that can produce and create broad benefit to all in the economy would be revenue-generating infrastructure projects or companies that are producing vaccines or alternative energy sources. You could also invest in companies that have as a specific business model cost-reductions in health care or energy efficiency products. You want to be careful though not to confuse all projects that have economic or societal benefits with projects that are appropriate for investment. One might argue that investments in for-profit prisons or for-profit primary school education help the economy, but that would be a mistake in my opinion. These are not projects that lend themselves to efficiency and maximization of profits considerations. Rather they are projects that should remain in the non-profit and governmental spheres.

On measurement, that is a challenge we're addressing now, but have a ways to go. One thing you can be sure of, though, is that the measurements of success will generally be indicators of economic health and social well-being and not precisely quantifiable financially related metrics.

How about, "Protecting and promoting the interests of the beneficiaries is my job, not just hitting a relative benchmark."

There are two ways of thinking about your ability to help beneficiaries. 1) You can manage investments so as to hit projected return goals and beat benchmarks. 2) You can ask whether the investment choices you made actually made beneficiaries' lives better or worse. Did your investment choices or practices help control their health care costs or increase opportunities to live a healthy life? Help create a stable and healthy environment? Help create a vibrant economy that provides living-wage jobs? Examples would be investments in 1) infrastructure, 2) health care cost reduction, 3) environmental stability, 4) poverty reduction, affordable housing, community economic development, and 5) creating good jobs.

Ideally you would like to be able to say that your investments did both. If you just concentrate on returns and benchmarks, you may make investments that actually hurt your own beneficiaries or are no more than part of a zero sum game where your beneficiaries may come out better, but other beneficiaries of other plans may come out worse.

How about, "The cult of expertise, and the conflict of interests between the Fund that those experts, is the source of many of our problems."

You need experts more and more in this increasingly complicated world. This is true of finance as well as other professions. In many professional relationships there is an asymmetry of information and knowledge between the customer and the expert service provider. You always have to be aware of these asymmetries and proceed with caution.

What do you mean by information asymmetries?

When you take your car into the mechanic, you have to trust that he is honest and won't try to rip you off. When a doctor recommends major surgery, it's best practice to get a second opinion. As financial fiduciaries you have a special, even higher, obligation to be certain you understand as fully as possible all products and services your expert advisors recommend. There are limits to how much knowledge you can accumulate and how much due diligence you can do. And it's never pleasant to hold your service providers' feet to the fire, but it is something that comes with the territory. Unfortunately the financial industry is full of cowboys and crooks and you have to either work very hard or be very lucky to avoid them all.

There are things you can do in these situations. 1) Be aware of the dynamics operating between you and your service providers, who has the power and who is exercising it how. 2) Have your own experts on hand that you can trust. 3) It's okay to rely on the old-fashioned "smell test"—if it doesn't feel right, there's probably something wrong. 4) In finance there are enough alternatives that you can simply say "I won't invest in something I can't fully understand. I won't take risks that I can't be fully aware of so that I can anticipate what an appropriate return would be." It's okay to walk away from uncertain opportunities.

Should a statement of Investment Belief be given to our investment professionals? If so, how should we ask them to react to it? How do we monitor their compliance with our beliefs? And, how can we make sure that our staff follows our beliefs?

Your job as a fiduciary will be a lot simpler, and you will save yourself from a lot of complicated situations and decisions, if you are working with investment professionals and staff that

understand and ideally share your investment beliefs. The simplest way to do that is to provide them with a clearly written statement of those beliefs that you believe are crucial to your investment practice and ask them to react to them. Their beliefs may not always correspond exactly with yours, but they should fully understand what your beliefs are and be willing to act on your behalf in ways that correspond with your beliefs. They should expect that you will monitor their practices—that you will clearly indicate to them what types of products and approaches to investment you will take, and expect that as part of their quarterly reporting to you, that they will report on those aspects of the investment process that correspond to those beliefs. Ongoing clear communication with managers and investment staff will be necessary to assure that the beliefs are continually reflected in actual investment practices.

What are some examples of actions taken by our Fund or our Board that might be different if we looked at areas by way of Explicit Investment Beliefs as opposed to Implicit Investment Beliefs?

If you have explicitly articulated a belief that certain kinds of high-risk investment strategies can create systemic financial risk, you might require disclosure of such risks from prospective hedge fund managers and factor their strategies into your decisions as to which hedge fund managers to invest in.

If you have articulated a belief that political uncertainties can affect investment outcomes and make them behave in ways that diverge significantly from their past performance (eg, Euorpean bonds), you may want to require from your staff a social and perhaps even environmental analysis of the implications of certain investment products or strategies that assess relevant political uncertainties.

Some say that Investment Beliefs are really just a cover to inject values of "responsible investment" into a Fund. Is that right?

Investment beliefs can, but don't necessary need to, inject values into the investment process. I believe it is a mistake not to have values of a certain sort in the investment process. If you're dealing with investments that look out to future generations and their needs, it's hard not to incorporate values about what will make for a just and sustainable society. By this I don't mean personal values or political positions, such as I value the well being of my brother-in-law, or I believe there should be a tax on carbon. But rather values that are widely held and broadly recognized workers' rights matter; the spread of nuclear weapons is a bad thing, global warming poses unpredictable risks.

This may affect your investments decisions or it may not, but instead affect your communications with companies and other purveyors of investment products.

<u>SUPPLEMENTAL QUESTIONS</u>

Some say that one of the IB's of pension funds should be, "Investing is not a 'hard' science like chemistry or physics, it is more like a social science." Do you think agree? Why or why not? And if this statement is true, what does it mean?

Finance, and indeed economics in general, is not a hard science, despite its aspirations to be so. The behavior of markets and of players in markets is affected by these actors, who are willfully unpredictable, and cannot be predicted in the same way that planetary motions or the rising of the sun can be predicted, nor as can actuarial assumptions, such as how many 65-year olds today are likely to live to 80. Financial markets are affected by the willful and unpredictable decisions of their participants. There is a substantial psychological element to them. The most profound implication of this is that judgment can't be removed from the investment process. Loans are made to individuals, case-by-case. Equity investments are made with trust placed in managers who differ dramatically from one another and in products that are wildly different. Certain aspects of investment are predictable—someone with a bad credit history is probably not a good credit risk; a company with overwhelming debt is probably not a good place to place equity. But those are general guidelines; they are not physical laws like the law of gravity. Some bad credit risks will not fail; some good credit risks will crash and burn. The law of large numbers does not always hold.

The implication of this is that you have to be constantly aware of when what is probable serves as a reliable guide, as sometimes it will, and when it won't. Relying on the past is not always a good predictor of the future. Scaling up and anonymous investment practices are ultimately dangerous and increasingly so as more and more adopt them.

We hear so much about financial risk. There is the "risk/return ratio," "portfolio risk," "systemic risk," and the belief that "more risk brings more rewards." Should we have IB's about risk? Or should these issues be discussed in an IPS?

Parts of the risk discussion belongs more to beliefs than practices—such as whether risk necessarily brings reward or whether certain types of risk mitigation can increase systemic risk. Others will be more likely to show up in an IPS—such as how one goes about measuring risk and what levels of risk one is likely to take. But the line here between Investment Belief Statements and IPS is not a clear cut one and these discussions can be channeled more to one or the other depending on the overall approach to these types of statements.

Should the following be in an IPS or an Investment Belief Statement? "Stable, honest and transparent financial markets make an important contribution to a healthy economy and a health economy is important to our ability to properly serve our beneficiaries?"

I'd say that's an investment belief. What types of specific investment policies one develops to make a link between one's investment decisions and the promotion of honest and transparent markets would be more likely to show up in the IPS.