The *Ambachtsheer* Letter

Research and Commentary on Pension Governance, Finance and Investments

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TURNING RETIREMENT SAVINGS INTO PENSIONS:

SHOULD WE LET 'THE MARKET' SORT IT OUT?

"When transaction costs or behavioral patterns produce large departures from the predictions of the ideal neoclassical equilibrium for a given institutional structure, new institutions tend to develop…In the longer run, after institutional structures have had time to fully develop, the predictions of the neo-classical model will be approximately valid for asset prices and resource allocations…."

From "The Design of Financial Sytems"
Robert Merton and Zvi Bodie, 2004

"Informational asymmetry and misaligned interests with regard to the global for-profit financial services industry drive a material wedge between workers and their retirement money. The result is that many workers pay too much for retirement-related services in relation to their true economic value….This wedge is a material impediment to achieving workers' retirement goals…."

From "Pension Revolution"
Keith Ambachtsheer, 2007

The Society of Actuaries (SOA) is to be commended for its leadership role in examining how society-at-large might strengthen pension arrangements for today's and tomorrow's workers. The inaugural 2006 event of its *Retirement 20/20* project was titled "Building the Foundations for New Retirement Systems", from which six key themes emerged, including: *"Retirement systems should be better aligned with markets."* A follow-up SOA event was organized last month to explore the implications of these themes in greater detail. Professor Zvi Bodie of Boston University and this author were asked to stage a debate on the role markets should play in turning retirement savings into pensions. This *Letter* briefly summarizes the essence of the debate and elaborates on its key conclusions…at least from the perspective of this debater. (Feedback from forum participants ranked the debate high in both content and entertainment value).

The quotes above came from the Merton-Bodie paper "The Design of Financial Systems: A Synthesis of Function and Structure" (Harvard Business School Working Paper No. 02-074, 2004), and from our new book *Pension Revolution: A Solution to the Pensions Crisis* (Wiley, 2007). They fairly summarize the starting positions of the two debaters. Bodie believes that markets will eventually sort things out, and offer workers the savings and annuity products they need to engineer smooth financial transitions from work to retirement. Further, markets will perform these services at 'fair value' prices. Ambachtsheer, on the other hand, is not so sanguine about markets eventually sorting things out. The current situation where many workers are not making adequate, effective retirement provision, and are often paying too much for the provisions they have made, will persist even into that nebulous period economists are fond of calling 'the longer run'. In our view, only pro-active third party intervention will change the current state of dysfunctional disequilibrium in the retirement provision 'industry'.

What It Takes for Merton-Bodie to Be Right

The conditions necessary for the hopeful predictions of the Merton-Bodie neoclassical model to prevail in the retirement provision arena are well-known, and include the following four:

1. Informational symmetry between buyers and sellers
2. Rational, risk-averse behavior by both buyers and sellers

3. Symmetrical bargaining power between buyers and sellers
4. Complete hedging markets for all relevant risks

Unfortunately, none of these four necessary conditions hold in the real world:

1. Informational symmetry: it is hard to think of an industry where information is more asymmetric than in retirement provision. Survey after survey confirms that individual buyers of investment and other retirement-related services know very little about financial markets, investment strategies, or the importance of controlling costs over 30-40 year accumulation periods, and subsequent 20-year decumulation periods. Even worse, most of the buyers don't know what they don't know. For-profit services suppliers, on the other hand, do know what the buyers don't know. The result is an industry where profit margins are generally high, and where price competition is virtually non-existent.

2. Rational, risk-adverse behavior: a long list of experimental findings from studies of human behavior when making decisions involving money and risk indicate this behavior often doesn't fit the 'rational, risk-averse' mode. Instead, adjectives like inconsistent, impulsive, overconfident, decision-avoidant, and loss-averse turn out to be better descriptors of reality. Once again, research indicates this type of behavior can have a severe negative impact on long term investment returns (2% per annum in a recent study). When this behavioral dysfunction is piled on top of the information asymmetry realities already mentioned, market failure on a grand scale is virtually assured.

3. Symmetrical bargaining power: creating symmetrical bargaining power in the pension provision field requires expert, strong buyer co-ops that can bargain with expert, powerful services providers on equal terms. Such co-ops (i.e., expert pension delivery organizations with aligned interests and scale) do in fact exist, but only for certain select groups of workers. The rest are left to fend for themselves. A recent study sponsored by the Rotman International Centre for Pension Management confirmed that pension funds with these attributes do indeed deliver materially higher average net returns than retail mutual funds. The return gap (1%-3%, depending on the sample) was large enough that for a given working-life contribution rate and reasonable return assumptions, the pension fund savings accumulation route produces materially larger (e.g., two-times) post-work pensions than the mutual fund route.

4. Complete hedging markets: a perfect world permits rational, risk-averse people to hedge all important risks they do not want to be exposed to. Future inflation, investment returns, and life-expectancy are three such risks. The advent of inflation-indexed, default risk-free, long-term bonds in a number of countries (e.g., Australia, Canada, UK, USA) represents a major step forward in hedging inflation, credit, and reinvestment risk in these countries. Ironically, these instruments are seldom used for these purposes by individual savers. Optimal risky investment strategies and optimal longevity-hedging strategies also continue to lie outside the reach of most individuals, even if they are of 'rational, risk-averse' persuasion. So once again, it falls to 'expert pension delivery organizations with aligned interests and scale' to help meet the hedging needs of their members. Unfortunately, as already noted above, these organizations currently only serve a select subset of the workforce. The rest are left to fend for themselves.

Will these necessary conditions for the neoclassical model to produce its 'equilibrium' nirvana of the right institutional structure with the right pricing and resource allocations ever fall into place? In 'the longer run', if not the shorter run? We would not bet a lot of money on it. The vested interests in maintaining the status quo are simply too powerful.

The Case for Intervention

The case for intervention goes to the heart of capitalism itself. There is more to creating and sustaining a 'greatest good for the greatest number of people' society than simply applying the rule of law and maintaining unfettered free markets in goods, services, capital and labor. In a recent essay on this topic, Woody Brock reminds us that this is not what Adam Smith had in mind when he wrote *The Wealth of Nations* in 1776. Seven years earlier, Smith had penned *A Theory of Moral Sentiments*, where he emphasized the importance of such moral concepts as privacy, stability, efficiency, distributional equity, and 'the public good'. As we have already noted above, unfettered capitalism can only yield these virtues in an environment of symmetric distribution of information, perfect competition, complete markets, consistent rational decision-making, and no 'externalities'. Such a world only exists in theory, not in practice.

In his essay, Brock goes on to apply Smith's original concept of 'moral' capitalism to the issues of the global energy crisis, the China trade surplus crisis, the sub-prime mortgage crisis, and the increasingly unequal distribution crisis of wealth and income both within and across nations. In each of the four cases, he concludes that 'unfettered free markets' cannot be relied on to solve the deep structural problems behind these crises. Intelligent intervention is required. He reminds us what history teaches about failures to do this: "Pathological status quos become embedded in the culture, as do those entrenched groups of players who end up benefiting from their continuance. This prolongs and exacerbates the underlying problems so that, when the day of reckoning arrives, it is too late." (Strategic Economic Decisions Inc., September 2007).

This *Letter* adds a fifth issue to Brock's list of issues that need to be addressed through intelligent intervention if Adam Smith's 'moral' form of capitalism is to prevail. That fifth issue is the design and implementation of systems that reliably provide an adequate level of retirement income to today's and tomorrow's working population.

Retirement System Design

Effective intervention requires a prior retirement income system vision of what could, and should be. This vision was not a matter of contention in the Bodie-Ambachtsheer debate. It should be grounded in the life-cycle model of personal finance, which envisions individuals progressing though the life-phases of human capital accumulation (i.e., the education phase), income generation split between current consumption and financial capital accumulation (i.e., the work phase), and financial capital decumulation (i.e., the post-work phase). In the context of this model, an effective retirement income provision system supports people in the accumulation and decumulation of sufficient financial capital to provide smooth life-time consumption.

Through Pillar #1 arrangements (e.g., Social Security in the USA), governments provide a floor-level of income support for the entire population. Pillar #2 arrangements constitute a variety of workplace-based pension arrangements (e.g., DC, DB, or some hybrid of the two), while Pillar #3 arrangements add an individual element to retirement income system design (e.g., IRAs). The primary focus of this *Letter* is the design of optimal Pillar #2 arrangements. Ideally, these arrangements are designed to integrate seamlessly with a country's Pillar #1 structure. The life-cycle model of personal finance offers powerful guidance to the optimal design of Pillar #2 arrangements for the workforce:

- The need to establish post-work income replacement targets (and what proportion of the target will be met through the Pillar #1 arrangement).
- The need for assumptions about working life length.
- The need for return assumptions on retirement savings accumulations.
- The need for investment return guarantees and longevity insurance guarantees as workers begin to approach and enter the post-work phase of their lives.

Behavioral finance research has taught us that it is usually not helpful to ask individuals to answer these four life-cycle model implementation questions directly. A more constructive approach is to suggest sensible answers, and ask people to intervene only if they disagree with those answers. A series of 'auto pilot' decision rules results. Institutional structure research findings add a further critical element to effective Pillar #2 design. We have already noted that bargaining power symmetry requires that individuals are not left to their own devices, but are represented by expert pension delivery organizations of sufficient scale and aligned interests in achieving their post-work income goals.

In our recent book *Pension Revolution,* we called the integration of the life-cycle model, adapted to deal with known human behavioral foibles and insurance needs, implemented by expert delivery organizations of sufficient scale and aligned interests TOPS: The Optimal Pension System.

Intervention Strategies

There are three logical levels at which to contemplate intervention through the implementation of TOPS-based retirement income provision systems:

1. The single employer level: employers are potentially well-placed to play a positive intervention role in creating cost-effective pension arrangements. They know the demographic make-up of their workforce, and have a direct interest in its welfare. They already keep employee records, and have professional HR and Finance functions. What has often been missing is the understanding that cost-effective pension delivery requires an organization structure capable of achieving it. To create such a structure as an arms-length corporate subsidiary requires considerable scale (e.g., minimum of 50,000 members/$10B in assets). We note that a number of major corporations are now taking this route. Without such scale, an outsourcing strategy should be devised. Historically, outsourcing strategies have been sub-optimal because most employers have not taken the time to think through what the characteristics of a cost-effective pension provision arrangement are. Hence they have not understood the strong negotiation and oversight roles they must play if a quality TOPS-type employee retirement system is to result through outsourcing.

2. The industry/labor union multi-employer level: many single employers have neither the scale nor the inclination to play a pro-active role in the creation of TOPS-type retirement systems. However, the required combination of scale and inclination could be achievable through a collaborative effort at either the industry association or labor union level. As in the single employer context, if there is sufficient scale, the association or union could create its own dedicated arms-length pension delivery organization (e.g., the Australian and Dutch Pillar #2 systems have taken this route). Alternatively, an appropriate outsourcing strategy could be devised, with the association or union playing strong negotiation and oversight roles.

3. The regional or national level: even with initiatives by single employers and industry associations or labor unions creating TOPS-type pension arrangements, a considerable proportion of the workforce will still be left behind. This where government initiative will be required to fill the void. For example, the US Social Security system replaces about 40% of earnings up to the average wage level. Research suggests that a 60% income replacement minimum target is a more appropriate target for most average wage earners, which under a TOPS-type arrangement, should be achievable with a 7% of pay contribution rate for work life earnings. The simplest collection method for this 7% of pay would be through the Social Security System. New arms-length, expert pension delivery agencies would have to be created to manage these retirement savings flows. Such agencies already exist, with Denmark's ATP System possibly the best example. Such systems still need to be created in countries such as Canada, the UK, and the USA.

'Moral' Capitalism

Even over 200 years ago Adam Smith knew that fostering 'the public good' would require more than just applying the rule of law and maintaining unfettered free markets in goods, services, capital, and labor. Sometimes intelligent intervention is required. The time has come to apply this moral sentiment to the design and implementation of systems that can reliably provide an adequate level of retirement income to today's and tomorrow's working populations.

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