

The Ambachtsheer Letter

Research and Commentary on Pension Governance, Finance and Investments

Letter # 283

August 2009

TURNING LIFE-CYCLE FINANCE THEORY ON ITS HEAD:

SHOULD OLDER WORKERS HAVE HIGH EQUITY ALLOCATIONS?

“While many experts are calling for a more conservative approach for target-date funds, an Australian academic is arguing that in many cases equity allocations should be increased from current levels...”

Pensions & Investments
July 13, 2009

Something Wrong with this Picture

Flipping through the Spring 2009 issue of *The Journal of Portfolio Management* last month, we came across a study by Anup Basu and Michael Drew entitled “Portfolio Size Effect in Retirement Accounts: What Does It Imply for Lifecycle Asset Allocation Funds?” The study seemed to reach a strange conclusion: the personal pension accounts of most older workers should be loaded up with equities as they approach retirement. A corollary of this conclusion is that the various forms of life-cycle funds that systematically decrease equity exposure as workers age have got it wrong. Given that in the real world, there are hundreds of billions of dollars invested in life-cycle funds on behalf of millions of workers, this is a pretty serious matter. With these thoughts in mind, we placed the study in the ‘possible future *Letter* material’ file, and moved on to more immediate matters.

Then last week, the Basu-Drew study was prominently featured in a *Pensions & Investments* article under the headline banner “Academic: More Equities Near Retirement”. Apparently, the Basu-Drew message is causing quite a stir in the United States, with Professor Michael Drew of Griffith University in Brisbane testifying in Washington “that asset allocation should be based on the size of the participant’s account, not on his or her age.” With this new development, the Basu-Drew study moved from future to current *Letter* status. A more careful reading of the study confirmed our

initial suspicion that there was something wrong with both its framing and its methodology. This *Letter* explains what is wrong, and why the life-cycle theory of personal finance continues to be a valuable framework for designing age-based capital accumulation-decumulation default ‘glide paths’ in DC-based pension plans.

The Basu-Drew Study: Findings and Conclusions

The Basu-Drew study in the *Journal of Portfolio Management* described the following experiment:

- Assume a plan participant with a starting salary of \$25,000 who works for 41 years. Annual salary growth is 4%. Annual plan contribution rate is 9% of salary.
- Construct four life-cycle investment strategies, all of which invest in a 100% equities portfolio initially, but start switching into a 50-50 bond-cash portfolio after 20, 25, 30, and 35 years respectively. All assets are in the bond-cash portfolio at the end of the switch period.
- Construct four ‘contrarian’ strategies which do the exact opposite from the four life-cycle strategies (i.e., invest 100% in the bond-cash portfolio first and end up 100% in equities).
- Compute 10,000 40-year return paths by randomly drawing 1-year U.S. equity-bond-cash return combinations from actual 1900-2004 experience and string them together.