

## SOCIETY OF ACTUARIES

Article from:

# Pension Section News

September 2001 – Issue No. 47

Cash Balance Papers

by Thomas B. Lowman

Editor's Note: The Society of Actuaries made a call for papers on the topic of Cash Balance plans. This call resulted in eight papers on different aspects of cash balance plans. These papers were presented at the Dallas Spring meeting of the SOA. The following is a summary of each of the papers with some of my own comments. You can obtain copies of the papers by contacting the Society of Actuaries.

### *Economic Design of Cash Balance Pension Plans* by Jeremy Gold

This paper "challenges common sense, actuarial intuition, and current practice." It proposes that it is best to invest all plan assets in fixed income securities and to tie participants' cash balance interest credits to equity indexes. The rational for this has to do with the tax benefits to the shareholders of the plan sponsor. The author admits that there are "economic frictions" such as regulatory constraints that limit the application of this model. However, it provides actuaries with an alternative view that is worth understanding. For his effort, Jeremy Gold was awarded first prize in the call for papers.

#### Emergence of Hybrid Pensions and Their Implications for Retirement Income Security in the Twenty-First Century, by Robert L. Clark and Sylvester J. Schieber

This paper covered a wide range of issues related to the conversion from traditional plans to hybrid plans. Issues covered range from (1) why employers make the change to (2) the wear away problem and (3) defining winners and losers in the conversion process. One of the most impressive parts of the paper is the extensive amount of data on actual plan conversions. The authors were awarded an honorable mention prize for their paper.

#### *The Guaranteed Investment Defined Contribution Plan*, by Carl L. Frammolino

The concept presented was the creation of a floor offset arrangement using a cash

balance plan and a money purchase plan. The Money Purchase plan's contribution rate would match the Cash Balance plan's pay credit. The paper has an extensive amount of detail on the compliance issues related to this design. While many commented on an employer's reluctance to adopt such a design, the value to employees was clear. The author was awarded an honorable mention prize for his paper.

### *The Cash Balance Funding Method,* by Raymond Murphy

This paper examined the idea of setting the Normal Cost equal to adjusted Pay Credits and the Actuarial Liability equal to the Account Balance. This more conservative funding method essentially said that investment gains should not be anticipated. This theme existed in some form in a few other papers. The author was awarded an honorable mention prize for his paper.

#### Saving Social Security with a Cash Balance Plan, by Jonathan Barry Forman

An overview of the problems with the current Social Security system is presented along with a discussion of the need for reform. This is followed by a discussion of the use of a Cash Balance design to reform the system and how such designs have been actually used in other countries. The main criticism of the article was simply a need to hear more including a more specific proposal and more detail of how well Cash Balance works or does not work in the Social Security systems of other countries.

#### The Role of Cash Balance and Traditional Defined Benefit Plans in Managing Retirement Risks, by Karen Nowiejski

Utility theory has been part of the SOA syllabus for several years. This paper defines a utility function to compare three types of plans: defined contribution plans, traditional defined benefit plans and cash balance plans. It covers the various types of risks faced by participants in each of these three types of plans. This paper was a brave attempt



Here the 1st prize winner receives his award for his story on the Cash Balance Call for Papers at a recent conference held by the Pension Section.

at a new concept that needs further development.

#### *Cash Balance Plans in a Traditional Benefit World*, by Daniel R. McMonagle

This paper compares Cash Balance plans to Traditional plans in both their design and compliance aspects. It covers the controversial issue of age discrimination in Cash Balance plans and probably contains more opinions than any other paper. Also covered was a discussion of how current liability is determined, for which an alternative view was presented by a commentator at the seminar.

#### Who Carries What Risk For Cash Balance Pension Plans, by Thornton Parker

This paper focused on the problem of depending on stock values with the coming retirement of the baby boomers. This relates to the future supply and demand for stocks. In a cash balance environment the author questions the use of leverage (assuming high investment returns based on past equity markets vs. lower interest credits). While many of the recommendations made by the author are worth considering, they relate more to defined benefit plans in general than to Cash Balance plans specifically.

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