



From the Pension Section Council Chairperson Pension Training Software

by Colin England

Help! We recently completed Phase I of our Pension Training Course. We've been working on this for several years. We are trying to develop material to teach a new analyst the things they need to know to do their job. We don't expect to supplant on-the-job training, but to help you in training your new analysts. Phase I is a modest beginning, primarily focused on an overview of the pension world, with limited instruction in pension plan documents, benefit calculations, and the steps in a pension valuation.

We need your comments on:

- How useful are the current materials?
- How can we make them more useful?
- What are the most critical additional areas for additional training?

(continued on page 3, column 1)

Excerpts from the PBGC Actuarial Valuation Report—1999 Fiscal Year

Editor's Note: The 1999 Annual Report of the PBGC and the complete 1999 Actuarial Valuation Report, including additional actuarial data tables, are available from Loretta Berg at the PBGC, (202) 326-4040, upon request.

The 1999 Annual Report of the Pension Benefit Guaranty Corporation (PBGC) contains a summary of the results of the September 30, 1999, actuarial valuation. The purpose of this separate Actuarial Valuation Report is to provide greater detail concerning the valuation of future benefits than is presented in PBGC's Annual Report.

Overview

The PBGC calculated and validated the present value of future benefits (PVFB) for both the single-employer and multi-employer programs and of non-recoverable financial assistance under the multi-employer program. For the single-employer program, the liability as of September 30, 1999, consisted of:

- \$10.06 billion for the 2,775 plans that have terminated
- \$2.85 billion for 25 probable terminations

Liabilities for "probable terminations" reflected reasonable estimates of the losses for plans that are likely to terminate in a future year. These estimated losses were based on conditions that existed as of PBGC's fiscal year-end. It is likely that one or more events subsequent to PBGC's fiscal year-end will occur, confirming the fact of the loss. In addition, the liability for reasonably possible terminations has been calculated and is discussed in Note 8 to the financial statements on page 37-38 of PBGC's 1999 Annual Report. A discussion of PBGC's potential claims and net financial condition over the next ten years is presented on pages 15-17 of that report.

For the multi-employer program, the liability as of September 30, 1999, consisted of:

(continued on page 4, column 1)

In This Issue

page		page		page
	Excerpts from the PBGC Actuarial Valuation Report —1999 Fiscal Year		Data Quality — Whose Job Is It?	
	by Joan M. Weiss.....1		by Janice P. Bricker.....6	
	Chairperson's Corner		Help Wanted.....7	
	by Colin England1		Study Note Corner8	
	Retirement Needs Framework3		Record Sessions for Pension Specialty Track on the Web9	
			The Simple Logic of Health Care Inflation	
			by Gerry G. Smedinghoff10	
			Continuing Education Update	
			by Barb Choyke12	
			Joint Board of the Enrollment of Actuaries News Release.....12	

PENSION SECTION NEWS

Issue Number 43, June 2000

Published quarterly by the Pension Section
of the Society of Actuaries
475 N. Martingale Road, Suite 800
Schaumburg, IL 60173
Phone: 847-706-3500
Fax: 847-706-3599
World Wide Web: <http://www.soa.org>

This newsletter is free to Section members.
A subscription is \$15.00 for nonmembers.
Current-year issues are available from the
Communications Department and are on the
SOA Web site (www.soa.org).
Back issues of Section newsletters have been
placed in the Society library.
Photocopies of back issues may be requested
for a nominal fee.

Dan Arnold, FSA

Pension Section News Editor
Hooker & Holcombe
65 LaSalle Road
West Hartford, CT 06107
860-521-8400
860-521-3742 (Fax)
E-mail: darnold@hhconsultants.com

Associate Editors

J. Bruce MacDonald, FCIA, FSA
Canadian Topics

Ho Kuen Ng, FSA, Academic Topics
and *ARCH*

Karen Steffen, FSA, Public Plan Topics
Fernando J. Troncoso, ASA, Mexican Topics

Pension Section Council

Colin England, Chairperson
Bruce A. Cadenhead, Vice-Chairperson
John F. Wade, Secretary
Lindsay J. Malkiewich, Treasurer
Paul Angelo, Council Member
Adrien R. LaBombarde, Council Member
Thomas B. Lowman, Council Member
Sylvia Pozezanac, Council Member
Lee J. Trad, Council Member

SOA Staff

Joe Adduci, DTP Coordinator
(jadduci@soa.org)
Lois Chinnock, Section Coordinator
(lchinnock@soa.org)
Cecilia Green, Director of Integrated
Communications (cgreen@soa.org)

Facts and opinions contained in these pages
are the responsibility of the persons who
express them and should not be attributed to
the Society of Actuaries, its Committees, the
Pension Section, or the employers of the
authors. Errors in fact, if brought to our
attention, will be promptly corrected.

Copyright © 2000 Society of Actuaries.
All rights reserved.
Printed in the United States of America.

Articles Needed for the News

Your help and participation are needed and welcomed. All articles will include a byline to give you full credit for your effort. *News* is pleased to publish articles in a second language if a translation is provided by the author. For those of you interested in working on the *News*, several associate editors are needed to handle various specialty areas such as meetings, seminars, symposia, continuing education meetings, teleconferences, and cassettes (audio and video) for Enrolled Actuaries, new pension study notes, new research and studies by Society committees, and so on. If you would like to submit an article or be an associate editor, please call Dan Arnold, editor, at (860) 521-8400.

As in the past, full papers will be published in *The Pension Forum* format, but now only on an ad hoc basis.

News is published quarterly as follows:

Publication Date	Submission Deadline
February	January 10
June	May 10
September	August 10
December	November 10

Preferred Format

In order to efficiently handle articles, please use the following format when submitting articles.

Mail both a diskette and a hard copy of your article. We are able to convert most PC-compatible software packages. Headlines are typed upper and lower case. Carriage returns are put in only at the end of paragraphs. The right-hand margin is not justified.

If this is not clear or you must submit in another manner, please call Joe Adduci, 847-706-3548, at the Society of Actuaries for help.

Please send original hard of article and diskette to:

Joe Adduci
Society of Actuaries
475 N. Martingale Road
Suite # 800
Schaumburg, IL 60173-2226
e-mail: jadduci@soa.org



Please send a copy of article (hard copy only) to:

Daniel M. Arnold, FSA
Hooker & Holcombe, Inc.
65 LaSalle Road
West Hartford, CT 06107
Phone: 860-521-8400; Fax: 860-521-3742
E-mail: darnold@hhconsultants.com

Thank you for your help.

Chairperson's Column

continued from page 1

This software will be available on the Society of Actuaries web site (www.soa.org). Initially, your (or your analysts') use will be without charge. At some point in the future, we must charge for its use, so as to support further development and maintenance. We're wrestling with the alternatives of a per use charge or a per person charge.

Please take a look, and let us know what you think. You can email me at colin_England@palmercay.com or Judy Anderson at janderson@soa.org.

Section Council elections

Our candidates will be running for section council shortly. However, we're concerned that we've only considered people known to at least one member of the council. We want to change that for next year, by asking you if you want to participate. The Section Council meets four times a year (with more frequent meetings by conference call), and is primarily involved in funding research, arranging publications (such as this newsletter), organizing seminars and organizing the spring SOA pension meeting. If you're interested, please email me,

Judy or the Vice Chair — Bruce Cadenhead (bruce_cadenhead@mercer.com).

Colin England, FSA, is a principal at Slabaugh Morgan White & Associates in Reston, VA. He can be reached at colin.england@palmercay.com.



Colin England

Retirement Needs Framework

The rapid aging of our society may create one of the more dramatic shifts in important issues for actuaries. The period beginning with retirement will be getting more attention. *Retirement Needs Framework*, a new monograph from the Society of Actuaries, contains 13 papers focusing on the needs and risks that arise during the post-retirement period. The papers study issues including:

- the retirement decision and new approaches such as bridge jobs and phased retirement
- the effects of public policy and plan design on retirement
- the frail elderly and their special needs
- the contrast between benefit provisions and the needs of widows
- investment strategies, annuitization, and asset utilization during the post-retirement period
- modeling approaches and data needs for studying this somewhat overlooked period

These papers were presented at a Society of Actuaries' symposium held in December, 1998. Symposium attendees included actuaries, economists, lawyers and other professionals, offering a chance for diverse backgrounds to work together and exchange ideas. In addition to presented papers, the monograph includes a digest of points raised during the symposium discussion as well as ideas for future work.

With the increasing focus today on change in both government and corporate retirement programs, the insights gained from this symposium are crucial for addressing new challenges facing the actuarial profession.

To order a copy of the *Retirement Needs Framework*, SOA Monograph M-RS00-1, please contact:

Beverly Haynes
Society of Actuaries
Book and Publications Department
phone: 847-706-3526 **fax:** 847-706-3599
email: bhaynes@soa.org

Excerpts from the PBGC Actuarial Valuation Report — 1999 Fiscal Year

continued from page 1

- \$5 million for 10 pension plans that terminated before passage of the Multi-Employer Pension Plan Amendments Act (MPPAA) and of which the PBGC is trustee.
- \$480 million for probable and estimable post-MPPAA losses due to financial assistance to 46 multi-employer pension plans that were, or were expected to become, insolvent.

Actuarial Assumptions, Methods, and Procedures

The PBGC continues to review the actuarial assumptions used in the valuation to ensure that they remain consistent with current market conditions in the insurance industry and with PBGC's experience. The actuarial assumptions that are used in both the single-employer and multi-employer valuations are presented in the table (on page 5). Assumptions concerning data that were not available are discussed in the data section of this report.

As in previous valuations, the select and ultimate interest rates used to value PBGC liabilities were derived by using an assumed underlying mortality basis and current annuity purchase prices. The interest rates so determined for the 1999 valuation were 7.00% for the first 25 years after the valuation date and 6.50% thereafter. For the 1998 valuation, the interest rates were 5.70% the first 25 years and 5.75% thereafter. These interest rates are dependent upon PBGC's mortality assumption which changed from FY 1998 to FY 1999 (see below).

Beginning with the FY 1997 valuation, the mortality assumptions were updated by adopting the recommendations from a study by an independent consulting firm. This study recommended that, when conducting valuations for its financial statements, the PBGC use the male and female 1994 Group Annuity Mortality Static Tables (with margins), set forward two years, for healthy males and females. The study also recommended that continuing mortality improvements be taken

into account by using Projection Scale AA, also set forward two years, to project these tables a fixed number of years. At each valuation date, the fixed number of years will be determined as the sum of the elapsed time from the date of the table (1994) to the valuation date, plus the period of time from the valuation date to the average date of payment of future benefits (the duration). This is an approximation to a fully projected table. Thus, the mortality table used for healthy lives in the 1999 valuation is the 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 14 years to 2008 using Scale AA. The 14 years recognizes the five years from 1994 to 1999 plus the nine-year duration of the 9/30/98 liabilities. The 1998 assumption incorporated a 12-year projection, determined as the sum of the four years from 1994 to 1998, and the eight-year duration of the 9/30/97 liabilities.

The model used to determine the reserve for future administrative expenses was changed in FY 1997 based on a study by an independent consultant. Additional data were collected in both FY 1998 and FY 1999 and the model reviewed. Since the results of incorporating the new data into the model would not yield significantly different overall results, the formula remained unchanged for the FY 1999 valuation.

There was no change in the assumptions for retirement ages.

The Small Plan Average Recovery Ratio (SPARR) assumptions as shown in the table on page 5 were updated to reflect the actual SPARRs calculated for FY 1996 (7.90%) and for FY 1997 (5.98%). The SPARRs for subsequent years are assumed to equal the FY 1997 SPARR.

The change in the method of obtaining seriatim data was the principal improvement in valuation processing for 1999. We now obtain data directly from the official Genesis database, rather than through a transitional system that mimicked the structure of the prior

PAY3000 database. This change enables us to capture a more complete data set and to utilize more fully the unique features of Genesis. Among the associated improvements in calculation are better error detection and analysis, explicit valuation of payments to be recouped by PBGC, and more accurate valuation of future lump sums.

We continued our ongoing efforts to improve the quality of the seriatim data and, as in other years, made various changes to improve the accuracy, speed and auditability of the calculations and to integrate with the evolving PBGC computer environment. We also continued to perform intensive Year 2000 testing.

Statement of Actuarial Opinion

This valuation has been prepared in accordance with generally accepted actuarial principles and practices and to the best of my knowledge, fairly reflects the actuarial present value of the corporation's liabilities for the single-employer and multi-employer plan insurance programs as of September 30, 1999.

In preparing this valuation, I have relied upon information provided to me regarding plan provisions, plan participants, plan assets, and other matters.

In my opinion, (1) the techniques and methodology used for valuing these liabilities are generally accepted within the actuarial profession; (2) the assumptions used are appropriate for the purposes of this statement and are individually my best estimate of expected future experience discounted using current settlement rates from insurance companies; and (3) the resulting total liability represents my best estimate of anticipated experience under these programs.

Joan M. Weiss, FSA, is chief valuation actuary at Pension Benefit Guaranty Corporation, Washington, D.C.

ACTUARIAL ASSUMPTIONS

	Previous Valuation as of 9/30/98	Current Valuation as of 9/30/99
Interest Rate	Select and Ultimate <ul style="list-style-type: none"> • 5.7% for 25 years • 5.75% thereafter 	Select and Ultimate <ul style="list-style-type: none"> • 7.00% for 25 years • 6.50% thereafter
Mortality <ul style="list-style-type: none"> • Healthy Lives • Disabled Lives Not Receiving Social Security • Disabled Lives Receiving Social Security 	<ul style="list-style-type: none"> • 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 12 years to 2006 using Scale AA • Healthy Lives Table set forward three years • Social Security disability table as described in subpart B of PBGC regulations on Allocation of Assets in Single-Employer Plans for persons up to age 64, adjusted to parallel the table for disabled lives not receiving Social Security benefits for ages above 64. 	1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 14 years to 2008 using Scale AA. Same Same
SPARR	Actual SPARR for fiscal years for which it has been calculated. The most recent actual SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1995 = 7.22%).	Actual SPARR for fiscal years for which it has been calculated. The most recent actual SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1997 = 5.98%).
Retirement Ages	(a) Earliest possible for shutdown companies. (b) Expected retirement age (XRA) tables from 29 CFR 4044 for ongoing companies (c) Participants past XRA are assumed to be in pay status. (d) Unlocated participants past normal retirement age (NRA) are phased out over three years to reflect lower likelihood of payment.	Same
Expenses	All terminated plans and single-employer probable terminations: 1.30% of the liability for benefits plus additional reserves for cases where plan asset determinations, participant database audits, and actuarial valuations were not complete.	Same

Data Quality — Whose Job Is It?

by Janice Bricker

Of course, we would all agree that data quality is important. The concept is akin to world peace. Who could make a good case against it? At the same time, this issue may not be a high priority in our day-to-day actuarial worlds. Although the quality of data impacts the results of any actuarial exercise, and actuaries can attest to their frustration with bad data, it is not a hot button. Often the responsibility of data quality is delegated to other third parties such as pension plan sponsors, with some editing or scrubbing occurring in the actuarial consultant's shop. Of course, qualifiers and disclaimers also accompany any actuarial report. But is that enough?

The specific type of calculation we are performing very often drives our level of interest in the quality of the underlying data. For instance, calculating a final pension benefit for a retiree demands a level of attention to the accuracy of the census data that perhaps an actuarial valuation does not. At the same time, actuaries are continuing to explore traditionally nonactuarial fields, such as benefits outsourcing, where data quality takes on an entirely new meaning.

In the benefits outsourcing industry, data quality is a critical component. The outsourcing vendor's highly automated systems environment relies upon it. These systems receive regular (often daily) feeds from a variety of sources, including client Human Resource Information System (HRIS) and payroll systems. The vendor is charged with delivering accurate and timely information to plan participants about benefits eligibility and amount. In the absence of high-quality data, manual validation is often the outcome, and this can be a very expensive proposition.

Obviously the business challenge is making sure the data is of the highest quality. That implies that data elements

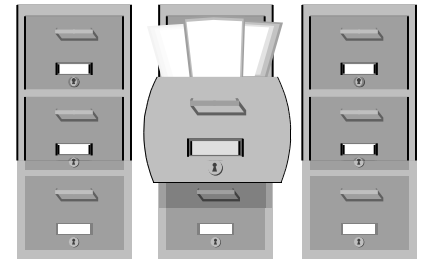
are internally consistent with each other and do not violate the application-driven business logic. As companies migrate to the Internet (intranet or extranet) to deliver benefit information "real time," it becomes critical that the systems environment incorporate an efficient mechanism for diagnosing and correcting data problems quickly. Otherwise, these errors spread like a virus, infecting multiple systems down the line and posing the risk of employee miscommunication.

What Does Actuarial Standard of Practice No. 23 Say?

ASOP No. 23, effective December 31, 1993, provides guidance on selecting, reviewing, and making proper disclosures with respect to any data that is the basis for an actuarial work product. It defines data as "numerical, census, or classification information and not... general or qualitative information." It continues, "assumptions are not data *per se* but data are commonly used in the development of actuarial assumptions."

Although the Standard suggests that "data which are completely accurate, appropriate, and comprehensive are seldom, if ever, available," it recommends that actuaries comment on "material data limitations" despite the fact that "a review of data may not always reveal imperfections." In particular, the Standard requires that the actuarial report include the following disclosures:

- Sources of data
- Material biases due to imperfect data
- Adjustments made to correct for imperfect data
- Extent of reliance on the data supplied by others
- Impact upon the work product of insufficient review of the data
- Unresolved data quality concerns, which materially impact the work product



Of course, any deviation from the Standard must be justified. Although ASOP No. 23 suggests that actuaries need not audit the quality of the data they receive, the process of creating such a standard validates the importance of this issue for the profession.

How My Firm Ensures Data Quality

At my firm, we believe that the lack of data quality significantly impacts the business community. In the pension area alone, billions of dollars are wasted annually by U.S. corporations due to poor quality employee benefits data. We also understand that without the proper tools to allow in-depth analysis, it is virtually impossible to make a data quality assessment. To address that need, we offer a comprehensive solution for information integration and information quality assurance.

Our methodology is based upon the premise that the majority of data errors are caused by a systematic process, such as a new program written to extract data from a system, and not by some random event, such as keypunch errors.

Therefore, the process is one of analyzing the data to discover clues to these error patterns and developing algorithms for automating the error correction process.

In our work with benefits outsourcing vendors we collect all pertinent data from source systems (HRIS, payroll, outsourcing vendor, data warehouse), consolidate and cleanse the historic benefits data and migrate all required data elements in the vendor's specified format to the destination system. Our solution:

- Supports interfaces with multiple disparate data sources
- Facilitates data analysis to address consistency with complex, application-driven business rules
- Includes a powerful, proactive mechanism for correcting bad data and auditing all changes made to any data element for future reference
- Allows retroactive corrections to erroneous data that has entered the destination system

In our experience in the benefits industry, data is in error about 50% of

the time. This means that every second pension calculation is based upon faulty data. With our solution, we are able to reduce that error rate to under 5%, which outsourcing vendors consider very manageable in a highly automated environment.

Why Is Data Quality Important for Actuaries to Address?

The number one reason is ASOP No. 23. Let's consider another. In an effort to expand its horizons, the actuarial community is trying "pitch a big tent." In fact, this is the theme of the May/June issue of *Contingencies* magazine published by the American Academy of Actuaries. I believe this initiative is very important for the continued growth of our profession and, of course, deserves our undivided attention. Keep in mind that a key component to our ultimate success in

pursuing alternative career paths is the discipline that has sustained the profession over time. This same actuarial discipline requires that we re-examine our current standards in light of these new environments.

ASOP No. 23 may not have been on everyone's radar screen, but it deserves a second look. Individually as practitioners and collectively as a profession, our credibility relies upon attention to actuarial standards. And, our clients deserve the best work product we can generate.

Janice P. Bricker, FSA, FCIA, is vice president of Marketing and Public Relations at Arkidata Corporation in Downers Grove, IL. She can be reached at janiceb@arkidata.com.

HELP WANTED

Speakers are needed for the retirement systems sessions at the year 2000 annual meeting. The meeting is scheduled in Chicago on October 15-18.

The retirement systems sessions are:

Monday, October 16

- 10:30-12:00 Session 12IF, The Latest on Mortality Projection
- 2:00-3:30 Session 29PD, Lump Sum Topics

Tuesday, October 17

- 8:30-10:00 Session 56IF, Recent Trends in Retirement Benefits Design
- 10:30-12:00 Session 74TS, Communicating Retirement Plan Concepts
- 2:30-4:00 Session 84PD, New Developments in Cash Balance Plans

Wednesday, October 18

- 8:00-9:30 Session 131PD, Testimony - Is That Your Final Answer?
- 10:00-11:30 Session 122TS, Current Issues in Social Security
- 10:00-11:30 Session 140TS, Soft Computing Applications in Insurance
- 12:00-1:30 Session 149IF, Retirement Systems Research and Education Activities

Please volunteer to speak at a session by sending an email to: ParmenterN@aol.com

Thanks much for your consideration.

Study Note Corner

With the year 2000 redesign of the Society of Actuaries education and examination syllabus and preparations for the first administration of Course 8 - Retirement Benefits, a variety of new study notes have been produced. New titles include:

- Innovations in Canadian Pension Plan Design
- Design and Funding of other Post-Employment Benefits
- Pension Plan Financial Statements: CICA 4100 and FAS 35
- FAS 106 and FAS 112
- Pension Accounting: International, U.S. and Canadian Standards
- Multiemployer Plans
- Introduction and Overview of Retirement Plan Investments
- Pension Issues for Insurance Companies - GICs and Asset/Liability Matching
- Statement of Investment Policy for Defined Benefit and Defined Contribution Pension Plans

In this study note corner, we will feature two of these study notes. Future corners will give a more in-depth treatment of the remaining notes and other new study notes as they are published.

Study notes can be purchased individually from the Society of Actuaries Study Note Coordinator, Aleshia Zionce, at (847) 706-3525, or email at azionce@soa.org. All study notes will be listed in the Fall 2000 Basic Education Catalog.

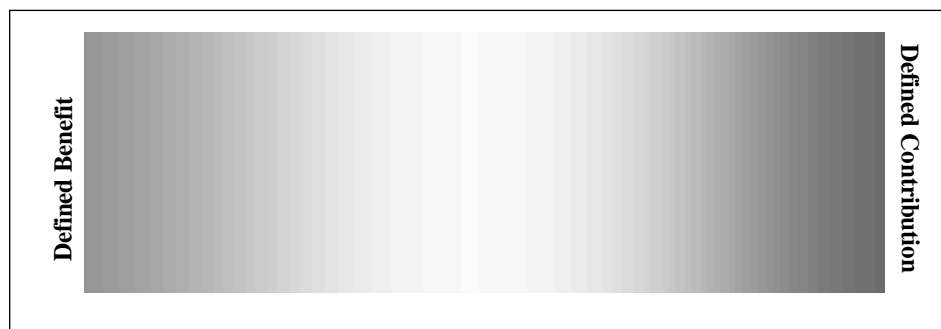
Innovations in Canadian Pension Plan Design

by *Laura Samaroo & Perry Teperson*

Only a few years ago, the traditional textbook on pension plan design would have focused primarily on two types of plan: defined benefit and defined contribution. Both types have their advantages and disadvantages and may be appropriate for different situations. However, today, the

spectrum of pension plan designs is far more diverse, including plans with innovative combinations of defined benefit and defined contribution features.

Over the last decade, the trend has been to move along the plan design spectrum from defined benefit toward defined contribution. However, this trend is not as cut and dry as it may seem. It is important to note that:



- In many cases, new defined contribution plans have been added by defined benefit plan sponsors as a supplement to or additional feature of the total retirement benefits package;
- Of the defined benefit plans that have been shut down, many of them have been where only very small groups of employees were covered under that arrangement.

Membership in defined benefit plans has remained very stable and the proportion of assets represented by defined benefit plans in Canada has remained fairly high. However, many plan sponsors are introducing new plan designs with both defined benefit and defined contribution features, recognizing that a blend of the two approaches is a better fit for their particular needs.

(The study note goes on to review the background of the Canadian tax system, flexible pension plans, cash value plans, offset plans and combination plans.)

Design and Funding of other Post-employment Benefits

by *Dale Yamamoto*

Retiree life and medical benefits were introduced to employee benefit programs

about 30 years ago. The medical plans were first designed to supplement the Medicare program and were viewed as a “no cost” benefit. At the time, the benefits were very low cost because medical costs were relatively low and there were few retirees. Life insurance benefits for retirees were often added as a natural expansion of retiree benefits.

In recent years, some employers have expanded their post-employment offerings

to include long-term care insurance and continuing-care retirement communities. These benefits are usually offered to employees at their own cost (i.e., employee-pay-all). Other benefits offered to employees after employment include severance, dental, vision and hearing benefits.

In many respects, these benefits are similar to pension benefits. They are provided to employees after they have contributed their services to their employer. Many times, the benefits are continued for the retirees' lifetime. Like pension plans, some plan designs even vary the benefits based on service.

This note provides an overview of plan design, accounting, and funding of these post-employment benefits. Although many references in this note focus on the U.S. medical system (i.e., no national health plan until age 65), the principles are applicable to other countries.

Record Sessions for Pension Specialty Track on the Web Seattle June Meeting, 1999

The following sessions are available for downloading at the Society's Web site: (<http://www.soa.org/pubs/record.html>).

- Session 34PD **Legal and Actuarial Considerations in Modifying a Retirement Program**
The panel provides an analysis of legal and actuarial issues that must be considered when modifying an existing retirement program. They focus on nontraditional plan designs, including application of accrual and lump sum rules, proper application of actuarial cost methods and legal considerations in Canada.
- Section 57PD **Plan Design Issues: the Employer Perspective**
Panelists discuss the issues considered by corporate sponsors in designing or redesigning retirement programs, including corporate goals, costs and risks in various plans, competitive concerns and effect of corporate transactions.
- Section 70PD **Plan Design Issues, the Employee Perspective**
Panelists discuss retirement needs of today's workforce and how the various sources of retirement income combine to meet those needs. They cover issues associated with communicating various types of designs and change to employees, as well as the risks assumed by employees.
- Session 100PD **Standards, Standards, and More Standards**
Panelists are members of the pension committee of the Actuarial Standards Board. They discuss two recently released standards, the Domestic Relations Standards and the Demographic Assumptions Standards, and others in progress, including issues addressed by the committee in preparing these standards.
- Session 101PD **Managing Pension Surplus (or the Lack Thereof)**
This session covers techniques for managing defined-benefit pension plans' surplus assets and some tax-advantaged ways of tapping that surplus. It also focuses on techniques for minimizing and controlling damage caused by market forces.
- Session 112PD **Maximum Benefit Limitations**
This session helps figure out how much to pay from a qualified pension plan, considering the complex Section 415 rules. It gives background concepts, defined benefit and defined contribution plans Section 415 rules, coordinating DB and DC limitations and sanctions for violations of Section 415.

San Francisco October Annual Meeting, 1999

- Session 107PD **Multi-employer Pension Plan Topics**
Panelists focus on the basic structure of multi-employer plans, including the interface of the collective bargaining environment and the operations of the plan and trust under the Taft-Hartley Act.

The Simple Logic of Health Care Inflation

by Gerry G. Smedinghoff

Editor's Note: The following article is reprinted with permission. It ran in the April 2000 issue of Health Section News.

Health care inflation is picking up again. The persistent preoccupation among actuaries, economists, policy wonks, and politicians is the perplexing problem of why health care inflation has consistently exceeded the Consumer Price Index (CPI) for several decades. Counting the number of angels that can dance on the head of a pin is a no-brainer compared to the divine mystery of health care inflation. Actually, the answer to the health care inflation puzzle is a simple matter of doing the math.

Consider the decision facing a growing company of how to distribute the fruits of its incremental success. Does it give each employee a \$5,000 raise, or should it buy health care benefits for them? If it increases salaries by \$5,000:

- 15%, or \$750, will go to pay Social Security and Medicare taxes.
- 28%, or \$1,400, will go to pay federal income tax.
- 7%, or \$350 (and often more), will go to pay state and local income taxes.

This leaves employees with an after-tax raise of \$2,500, or half the initial amount.

But, if the employer decides to buy health care benefits instead, none of these taxes has to be paid. Essentially, the employer has two options: (1) allocate profits in cash as salary, half of which will be taxed away, or (2) allocate profits as employer-sponsored health care benefits, and the employees get to keep it all.

The choice between 50 cents in cash after taxes or an entire dollar in tax-exempt health care is one of those offers that most people can't refuse. The ultimate effect of this economic perversion is that "health care dollars" are nominally worth twice as much as "taxable income dollars." But, since there are artificially

twice as many health care dollars, they're worth half as much.

To see why, imagine this scenario: tonight the IRS seizes the assets of an insolvent shopping mall. The IRS reopens the mall tomorrow morning as the "IRS Mall" with two new rules that separate it from all the other malls and stores.

The first rule states that the IRS will double the amount of money in the wallets of shoppers entering the mall. If you show up at the mall tomorrow morning with \$500, the IRS will give you \$500 more. So you now have \$1,000. The second rule states that the IRS will confiscate half of the cash left in your wallet as you leave the mall. So if you buy \$900 worth of goods, the IRS confiscates \$50 of the \$100 you have left, leaving you with \$900 worth of goods and \$50 in cash. The net result of your shopping trip is that you are able to buy \$900 worth of goods for only \$450 of the money you left home with.

Sounds like a great deal, doesn't it? If this actually happened, wouldn't you like to shop at the IRS Mall? Do you think some other people wouldn't also like to shop there? As the trickle of new customers turns into a torrent, and then a flood — as the IRS pumps mountains of cash into its new mall — what do you think will happen to the prices of the goods at this mall? If you owned a business, wouldn't you like to set up shop there? So what do you think will happen to the cost of retail space at the mall and the cost of doing business at the mall?

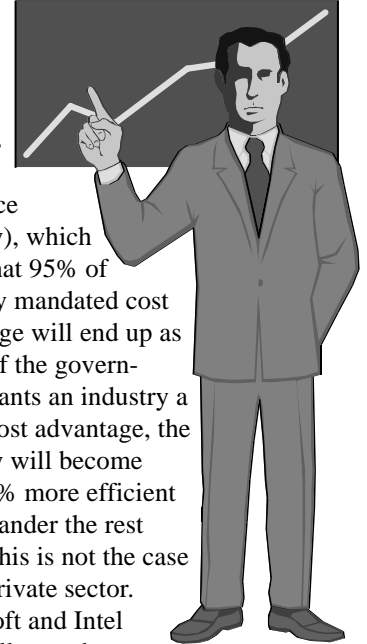
Before you jump to the answers to these questions, here's a hint. What does health care have in common with single-family homes and higher education? Just like the goods at the new IRS Mall, all three are subsidized via the Internal Revenue Code (IRC); all three have experienced inflation far in excess of the CPI.

This inflationary subsidy is what I refer to as "Gold's Law" (named in honor of Jeremy Gold, an actuary, to

explain the gross inefficiencies of the insurance industry), which states that 95% of a legally mandated cost advantage will end up as waste. If the government grants an industry a 100% cost advantage, the industry will become about 5% more efficient and squander the rest (Note: this is not the case in the private sector. Microsoft and Intel drastically cut the prices of their products and pass on efficiencies to their customers before competitive pressures force them to do so). In other words, by doubling health care spending with the 100% IRS subsidy, insured employees get about 5% more health care at greatly inflated prices, with the uninsured foregoing significantly more, resulting in a net loss of total health care overall.

Gold's Law is the reason why, on average, single-family homes appreciate in value far in excess of the CPI — caused by the additional money pumped into the housing market due to the mortgage interest deduction. It's also the reason why parents have to take out a second mortgage on their home just to put their kids through college — caused by all the tax-subsidized school loans and government scholarships. And it's why we have a "health care crisis" and an "education crisis," but not a "furniture crisis" or a "clothing crisis."

In essence, the IRS Mall is the "Health Care Shopping Mall" (HCSM). You pick up your paycheck — without having to pay any taxes — in the HCSM.



And you can spend as much of your paycheck in the mall as you please. The problem is, the only thing you can buy is health care. As you try to exit the mall to buy what you really want (food, clothing and housing) the IRS lightens your load

care services (typically costing \$5,000 a year or more for family coverage) with the benefit of the tax subsidy, or they buy none at all. Given these two options, most who might represent a \$50,000 expense to an employer, prefer to receive a \$45,000

gives the wealthy an unnatural third advantage over the poor. It prices the poor out of the health care market in a two-step process. First, it raises the ante by reducing the tax-exempt purchase of health care to an "all-or-nothing" option with a price tag of \$5,000. Then it penalizes the poor locked-out of the employer-sponsored health care market by effectively charging them twice as much when they attempt to purchase health care on an after-tax incremental basis in the HCSM.

So relax. Health care inflation can be explained by the laws of economics as easily as falling apples can be explained by the laws of gravity. The real problem is not inflation, but the fact that tax exemptions for health care, housing and education have the opposite effect from the original intention. They only take resources from one group (generally poorer) and redistribute it to another (generally wealthier), resulting in less health care, housing and education for everyone.

Gerry G. Smedinghoff, ASA, MAAA, is an actuary and IT consultant with Symtec, Inc. in Wheaton, IL, and an adjunct board member of the Health Care Policy Reform Group of the Cato Institute located in Washington, DC. He can be reached at ggs@symteinc.com.

"The real problem is not inflation, but the fact that tax exemptions for health care, housing, and education have the opposite effect from the original intention."

by half. The only way to avoid the IRS is to buy as much health care as you can — even if it's much more than you want or need. By doubling your money when you enter the HCSM, the IRC fuels health care inflation. And by confiscating half of your income when you exit the HCSM, the IRC promotes unnecessary use of health care among those insured through their employer.

If you work for a company with health benefits, the 5% net subsidy of the HCSM dictated by Gold's Law is hardly worth the bother. But if you don't, if you're one of the uninsured and on your own in the HCSM, without the 100% IRS nominal subsidy, it doubles the cost of buying health care. The unintended effect of Section 105 of the IRC is to create a "Jim Crow" market for health care, with a privileged class that has access to the tax subsidy and a disenfranchised class which does not. Those in the disenfranchised class are allowed to shop in the HCSM, but the IRS will not double their money when they enter. Hence they must effectively pay twice as much for health care.

The privileged class is generally composed of higher income, with employment stability, salaried, skilled, professional and unionized labor. They purchase health care through their employer on an all-or-nothing basis. Either they buy the full array of health

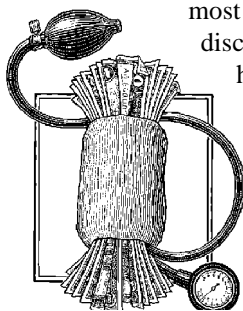
taxable salary with \$5,000 in tax-exempt health benefits.

The disenfranchised class, on the other hand, is mostly composed of lower income, hourly, variable, unskilled, manual labor and the unemployed. They cannot purchase health care through their employer because to be eligible for the employer subsidy, health care must be purchased on an all-or-nothing basis. And the price of the full array of health care services does not change to accommodate their lower incomes. They are faced with the choice of, say, a \$17,000 salary, or \$12,000 in taxable income and \$5,000 in tax-free health benefits. Since most of these people have very little discretionary income, they prefer to

have as much of their pay in cash and are forced to take their chances with their future health care needs. But their individual preferences are ignored anyway, because their employer makes this *fait accompli* decision for them.

In any economic market, wealthy people have two immutable advantages over poor people. First, because they have more money, they are able to buy more than the poor, and in select cases, outbid them for scarce items. Second, because a greater share of their income is discretionary, they have greater negotiating leverage in the marketplace. They can get a lower price via volume discounts. And they have better access to information about the best price available.

The IRC Section 105 tax-exemption



Continuing Education Update

by Barb Choyke

The Las Vegas Meeting had over 1,000 attendees, a few hundred of whom were members of the Pension Section. What we don't know is what the average win/lose gambling results were, but we can tell you the sessions were full and the networking successful.

The next large meeting opportunity will be the annual meeting in Chicago, October 15-18, 2000. The annual meeting will offer the following pension-related sessions:

Monday, Oct. 16, 10:30 a.m. - 12:00 noon,

Session #12 IF, *The Latest on Mortality Projection*

Core Credit: 90 minutes

Monday, Oct. 16, 2:00 p.m. - 3:30 p.m.,

Session #29 PD, *Lump Sum Topics*

Core Credit: 90 minutes

Tuesday, Oct. 17, 8:30 a.m. - 10:00 a.m.,

Session #56 IF, *Recent Trends in Retirement Benefits Design*

Noncore Credit: 90 minutes

Tuesday, Oct. 17, 10:30 a.m. - 12:00 noon,

Session #74 TS, *Communicating Retirement Plan Concepts*

Noncore Credit: 90 minutes

Tuesday, Oct. 17, 2:30 p.m. - 4:00 p.m.,

Session #84 PD, *New Developments in Cash Balance Plan,*

Noncore Credit: 90 minutes

Tuesday, Oct. 17, 2:30 p.m. - 4:00 p.m.,

Session #86 PD, *Savings and Retirement Plans in Developing Countries*

Wednesday, Oct. 18, 8:00 a.m. - 9:30 a.m.,

Session #122 TS, *Testimony - Is That Your Final Answer?*

Noncore Credit: 90 minutes

Wednesday, Oct. 18, 10:00 a.m. - 11:30 a.m.,

Session #131 PD, *Current Issues in Social Security*

Noncore Credit: 90 minutes

Wednesday, Oct. 18, 10:00 a.m. - 11:30 a.m.,

Session #140 TS, *Soft Computing Applications in Insurance*

Wednesday, Oct. 18, 12:00 noon - 1:30 p.m.,

Session #149 IF, *Retirement Systems Research and Education Activities*

Noncore Credit: 90 minutes

The following pension-related Seminars are under development for year 2000:

- Pension Accounting Lab
- Small Employer & Top Heavy Issues
- Public Employee Plans US/CAN
- Cash Balance Plans- Trends & Innovations
- Experience Analysis & Actuarial Assumptions US/CAN

The SOA is stepping up its activity on the Actuarial Virtual Campus. Hybrid Plans has been added to the course selections and the Pension Basic Training course developed by the Pension Section should be available shortly. We are hoping to add an additional 2-3 programs over the next several months.

As in the past, you can obtain Enrolled Actuaries (EA) credit from audio tapes and questionnaires. You may purchase audio tapes from AVEN (phone: 1-800-888-TAPE). Twenty-four sessions from the Las Vegas and Chicago meetings will be available by requesting a corresponding questionnaire from the SOA's CE Department and, upon successful completion, receive up to 90 minutes of core or noncore credit per tape.

For a complete listing of available meeting sessions, please see the SOA Web site at www.soa.org under Meetings/Seminars.

This is the second year of the enrollment cycle for Enrolled Actuaries. Remember to keep a folder of your activity. We've tried to offer a variety of formats from meeting sessions, teleconferences, audio tapes with questionnaires to virtual programs on-line so obtaining those 36 hours should be easier than ever. If you have suggestions for meeting session or seminar topics, please drop us a line. If you would be interested in speaking at an educational program, let either Sandy Kronos (skronos@soa.org) or me know (bchoyke@soa.org).

Joint Board of the Enrollment of Actuaries News Release: re the Advisory Committee on Joint Board Examinations

From the Department of the Treasury

Internal Revenue Service

Washington, D.C. 20224

June 2, 2000

The Joint Board wishes to remind all enrolled actuaries that the current term of members of the Advisory Committee will expire in a few months' time, and appointment of the Advisory Committee will expire in a few months' time, and appointment of the Advisory Committee for the next two years will be made in the course of the coming summer.

Any enrolled actuary interested in applying should do so no later than July 31. Details on the nature of the work on the Advisory Committee and the procedure for applying can be found in the write-up by Carl Shalit entitled, "JBEA Advisory Committee Seeks Applicants" that was published in the May 1998 issue of the ASPA's "Pension Actuary" and also in the May/June 1998 issue of the Academy's "Enrolled Actuaries Report" (note, however, that the place to which to address applications is now in my office, at the address noted above).

Patrick W. McDonough
Executive Director