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IN THE PUBLIC INTEREST

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PENSIONS DURING THE CRISIS: IMPACT ON RETIREMENT-INCOME SYSTEMS AND POLICY RESPONSES

By Anna Cristina D'Addio and Edward Whitehouse[1,2]

The financial and economic crisis has never been far from the headlines for the last 18 months and rarely have other stories pushed its impact on people off the front pages. The crisis has had a particularly profound effect on pension systems and retirement incomes, the two areas explored in this paper.

The *financial* part of the crisis has dealt a heavy blow to private pension funds: in the calendar year 2008, their investments lost 23 percent of their real value on aggregate in OECD countries. This is the equivalent of a heady U.S. $5.4 trillion. It means that many people have lost a substantial amount of their retirement savings, from pension plans and other assets.

However, the financial crisis is growing into an *economic* crisis. The OECD's recent economic forecast for its 30 member countries predicts a fall in gross domestic product

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[2] Rafal Chomik, on secondment to the OECD from the Department of Work and Pensions in the United Kingdom, provided valuable research assistance. The contribution to the analysis of other colleagues at the OECD is also gratefully acknowledged: Pablo Antolín, Martine Durand, John P. Martin, Mark Pearson, Monika Queisser, Andrew Reilly, Fiona Stewart and Juan Yermo. The views expressed are those of the authors alone and do not necessarily reflect the official stance of the OECD or of the governments of its member countries.

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FROM THE ASSOCIATE EDITOR

By Doug Andrews

It is exciting to be the Associate Editor of this newsletter at a time when the United States has just passed legislation that will move it substantially closer to providing universal health care. This may prove to be the most significant legislation of the 21st century. The legislation was passed as we went to press. Mark Litow states certain actuarial principles, which he thinks should be observed in health reform implementation. Subsequent issues of this newsletter will contain more discussion and analysis.

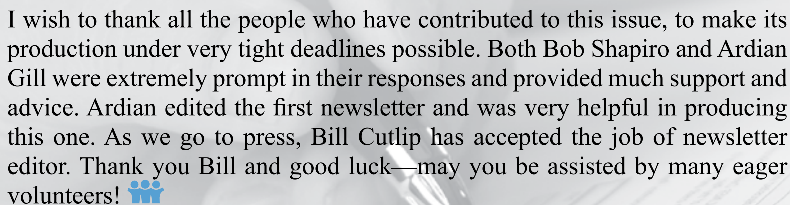
When I accepted the job of Associate Editor, it was agreed that I would attempt to gather material from outside the United States in order to ensure that the newsletter is international. I will need help in this regard. I appeal to you to write an article on a social insurance topic with implications beyond the United States. If you don't wish to write but have ideas for topics, please share them with me.

The International Congress of Actuaries was held in Cape Town in March. Over 1500 delegates attended and the Actuarial Society of South Africa did an excellent job of hosting the event. Papers and presentations on social insurance topics are identified in this newsletter. The next Congress will be held in Washington, D.C. in 2014. I encourage all North American actuaries to start planning to attend that event, to host the international community in style and to make that Congress the biggest yet.

Due to ill health, Edward Whitehouse was unable to reach Cape Town to present his paper regarding the international impact of the financial crisis on retirement systems. An abridged version of the paper, co-authored with Anna D'Addio, is presented in this issue.

This newsletter also contains letters to the editor, an update on the Section's activities, an article on the Singapore Provident Fund, a description of sessions on social security modelling planned for the annual meeting in October, and links to various papers and sites that may be of interest to Section members. Please note that the Society of Actuaries, the editors and the section council members do not necessarily agree with or endorse the opinions expressed in the letters, articles or links. The content is provided to inform the membership.

I wish to thank all the people who have contributed to this issue, to make its production under very tight deadlines possible. Both Bob Shapiro and Ardian Gill were extremely prompt in their responses and provided much support and advice. Ardian edited the first newsletter and was very helpful in producing this one. As we go to press, Bill Cutlip has accepted the job of newsletter editor. Thank you Bill and good luck—may you be assisted by many eager volunteers!



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LETTERS TO THE EDITORS

We received the following correspondence concerning our first issue

Thank you for being editor of this new journal, my only Section. I'm retired.

I fear that actuarial consultants have a blind spot with respect to health care reform. They cannot separate their thinking from their client's interests. This happened before, although with life insurance company actuaries when Social Security commenced with the consequent TSA paper (required reading for all summer actuarial students at New York Life) "Misconceptions and Missing Perceptions of Social Security."

If we are to have universal health coverage, there is no legitimate role for insurance company skills: underwriting, pricing and claim administration. This was opined in the New Yorker. President Obama gave the industry a huge gift when he announced that we are not going to start from scratch—we're going to tweak what we have. There is a possible financial role for insurance companies in bidding on flat costs: The government would offer a contract for, say, diagnostic services in Westchester County for $x million per month. The winning bidder has to do all the diagnosing for one year and is penalized for every diagnosis done in Bronx county by a Westchester resident.

Thanks,

Tim Giles
L. Timothy Giles, FSA

I read with interest Ken Buffin's article on the U.S. Social Security System. He describes several concerns economists and policymakers have with raising the system's minimum retirement age. An alternative approach could be to alter the benefit formula, raising the number of working years needed to obtain a full benefit from 35, e.g., to 40 or 45. Individuals who entered the workforce at an early age would see little change to their benefit amount. But for workers who entered the workforce at later ages, e.g., after college and/or attainment of advanced degrees, their effective retirement age for receiving a full benefit would be delayed. Compared with a uniform increase to the minimum retirement age, this might achieve a more socially desirable result for lower income or blue collar versus white collar workers.

Mr. Buffin also points out the growing proportion of dual-income families who subsidize a system designed around a single-earner household. When considering an increase to the payroll tax or taxable earnings limit to close the funding gap, perhaps we could consider an offsetting tax credit for dual income couples.

Greg Kissel

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Congratulations on an excellent first issue of the newsletter. The breadth and depth of the articles was truly astounding.

Perhaps unavoidably, given space and time constraints, the articles consisted almost entirely of assertions with very few facts. It will be both highly instructive and useful if, in future issues and future research, we can examine the facts that back up the assertions.

For example, Bob Shapiro contends that experience under public programs will not compare with experience under well-managed private sector programs. What is the evidence that public programs are more expensive? If so, how much more expensive are they and why (longer length of stay, more procedures, higher fees or drug prices, etc.)? Are there better performers among the various public plans and what are their characteristics?

As another example, Dwight Bartlett ascribes our "higher cost/worse outcomes" situation mainly to our fee-for-service system. Do any of the other countries that have better outcomes for less cost utilize a fee-for-service structure? If so, how do they produce the better results? With the passage of health care reform legislation, emphasis should shift from plan design to proper monitoring and control as discussed by Mark Litow and Bob Shapiro. How are health programs monitored and controlled in other countries which produce better results?

Congratulations again on your excellent start! Keep up the good work!

Dan Gross

Congratulations on publishing the first issue of "In the public interest."

Unfortunately, I have to say that I was disappointed that the content was almost totally United States related. I hope that this will be corrected in future issues.

Best wishes,

Charles McLeod

(GDP) in 2009 of 4.4 percent and stable output in 2010. Unemployment in the OECD reached a low point of 5.6 percent in 2007, increasing to 6.0 percent in 2008, with further rises to 8.4 percent in 2009 and 9.9 percent in 2010.

This means that public pension schemes are also affected. Unemployment and lower earnings will reduce the contribution revenue of pay-as-you-go pension systems, making it more difficult for these systems to deliver pension benefits. Some public pension reserve funds have also suffered major losses on their investments.

No country and no pension scheme is therefore immune from the impact of the financial and economic crisis. This brief survey begins by analyzing which countries are most affected.[3]

1. Impact on pension systems

With respect to the real investment returns in 2008 for countries with significant pension funds, there is considerable variation around the aggregate loss of 23 percent for the OECD as a whole. The United States, which accounts for around one-half of all private-pension assets in OECD countries, showed the third largest decline: around 26 percent. Only Ireland and Australia, with losses of 38 percent and 27 percent, showed a worse investment performance. In another five countries—Belgium, Canada, Hungary, Iceland and Japan—real investments fell by more than 20 percent. At the other end of the scale, losses were only around 10 percent in Germany, the Slovak Republic, Norway, Spain and Switzerland. They were smaller still in the Czech Republic and Mexico.

The explanation for these differences is relatively straightforward. In 2008 as a whole, world stockmarkets (as measured by the MSCI index) fell by nearly one-half while the world government-bond index (Citigroup) increased by around 7 percent. Property markets in many OECD economies weakened, in some cases dramatically. These assets, along with corporate bonds and deposits, account for nearly all pension funds' investments. However, pension funds' portfolios differ significantly between countries and it is this variation that accounts for different performance. In fact, the data suggest a clear and strong relationship between the proportionate share of equities and the investment loss.

The scale of the impact of the crisis on individuals' incomes in old age depends on the role that private pensions play in providing retirement incomes. There are five countries where the private pensions including other savings provide 40- to 50-percent of retirement incomes: Canada, the Netherlands, the United States, Australia and the United Kingdom.

The financial part of the crisis has therefore had most impact in countries where private pensions already play a major part in providing old-age incomes and where private-pension assets are invested heavily in equities.

But private pensions are a significant part of current workers' retirement provision in many other OECD countries. A number now have mandatory private pensions. For today's younger workers, private pensions are expected to provide around one-third of retirement incomes in Hungary, one-half in Poland, 60 percent in the Slovak Republic and three-quarters in Mexico. Although the impact of the current crisis in these countries will be relatively minor, it highlights the need for resilience to a future crisis.

2. Impact on individuals

The most important determinant in the degree of impact of the crisis on pensions is the age of the individual.

[3] The chapter on "Pension systems during the financial and economic crisis" in OECD, (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD Countries*, (OECD, Paris), provides a more comprehensive treatment of this issue.

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Younger and prime age workers

Most younger workers are little affected by the financial crisis because their accumulations of retirement savings are small. In the United States, for example, 25 – 34 year-olds' balances in their private pension plans increased by nearly 5 percent on average in 2008, according to the Employee Benefit Research Institute. This is because their new contributions outweighed investment losses. Although they may suffer from the effects of the economic crisis on the labor market, they have 30 years or more in which to recoup losses and offset gaps in contributions.

Similar arguments apply to prime-age workers, though the effect on their private retirement savings (in pensions and other assets) is greater. In the United States, account balances for 35 – 44 year-olds (with the same five to nine years' tenure in the plan as the 25 – 34 year-olds) fell by nearly 15 percent. The decline for 45 – 54 year-olds was nearly 18 percent. Nevertheless, prime-age workers still have time for asset values to recover. Also, their jobs tend to be safer in downturns than those of younger or older workers.

Pensioners

Those already retired will, in general, be unaffected by the crisis. The impact of the economic crisis on labor markets is of no direct significance to them. Most are also protected against the losses affecting private pensions even where these are a significant source of retirement income because occupational plans and annuity providers hold assets to back promises to pay a certain pension. There are two exceptions.

The first affects people in defined-contribution pensions. These schemes provide retirement support by the accumulation of pension contributions and investment returns. The issue is how people use the money during retirement. Many retirees are protected from the crisis because they bought an *annuity* on retirement, locking in earlier investment gains and benefitting from life-long pension payments. But many did not buy an annuity or deferred doing so. Some, particularly in Australia and the United States, had a lot of equities in their portfolios and so their losses have been large. Similarly, people who held assets, including houses, outside of pension plans might have lost substantial amounts.

The second exception, where retirees *are* affected by the crisis, is in countries where pensions in payment are subject to automatic adjustments linked to pension-scheme finances.

Workers nearing retirement

Older workers—those close to retirement—are the group most acutely affected by both the economic and the financial crisis. They are often among the first to lose their jobs during a downturn and among the most vulnerable to long-term unemployment. Unemployment or early retirement can permanently reduce their old-age incomes due to an incomplete contribution history. People in this age group do not have much time to wait for markets to recover and losses to be recouped. Even postponing retirement may only allow them to offset part of their losses.

As with retirees, the impact of the financial crisis on retirement incomes depends on how assets were invested. Some older workers moved their investments towards less risky assets as retirement approached. But most did not. In the United States, for example, nearly 45 percent of 55 – 65 year olds held more than 70 percent of their private pension assets in equities, according to the Employee Benefit Research Institute. This is only a little below the 50 percent with such a portfolio under the age of 55. In Australia, more than 60 percent of people stick with the default investment option of their private plan and equities typically make up around 60 percent of this portfolio.

The financial crisis has a direct impact on retirement incomes for people with defined-

contribution plans. In Canada, Ireland, Sweden, the United Kingdom and the United States, private pensions were traditionally defined benefit. There has been a shift towards defined-contribution plans in all these countries. Still, many or most older workers in these countries will get all or most of their pensions from defined-benefit schemes.

In theory, pensions in these schemes should be paid regardless of pension-fund investment performance. However, investment losses have hit these funds hard. The yardstick is the funding ratio: the assets of the scheme relative to its liabilities to pay current and future liabilities. In Ireland, the United Kingdom and the United States, funding ratios for defined-benefit plans have fallen from 110- to 120-percent to around 75 percent. Ratios have also declined in Belgium, Finland and Switzerland, but remain above 100 percent.

The crisis is accelerating the shift from defined-benefit to defined-contribution plans. For example, some schemes in the United Kingdom and the United States, already closed to new members, are stopping additional accruals for existing members. Also, defined-contribution provision is being wound back as a series of employers have announced temporary suspension of their contributions.

Effect of automatic stabilizers

Most public retirement-income programs pay the same benefit regardless of the outcome of private pensions, but some do not. In Australia and Denmark, most of today's retirees (65 percent and 75 percent, respectively) receive resource-tested benefits. These entitlements increase if private pensions deliver lower retirement incomes. In Australia a dollar less of private income means 60 cents more public pension. A large share of older people—20- to 35-percent—receives means-tested benefits in Canada, Ireland and the United Kingdom as well. These act as automatic stabilizers so that some or most retirees do not bear the full brunt of the financial crisis.

Tax also works as an automatic stabilizer: as private pensions and other savings deliver a smaller income, less tax is due so the decline in net pensions is smaller than the fall in asset values. Of the countries where private retirement savings are an important source of old-age income, taxes act as a significant automatic stabilizer in Denmark, Norway and Sweden. In contrast, only a minority of retirees pay taxes in Australia, Canada, Ireland, the United Kingdom and the United States, so the stabilizing effect is limited to richer retirees.

3. Policy responses

The crisis has prompted a range of changes to pension systems. Some of these were designed to tackle structural problems with retirement-income provision that were highlighted and exacerbated by the crisis. Some were more immediate measures, such as one-off payments to older people as part of economic-stimulus packages. These range from U.S. $140 to $180 in Greece to over U.S. $1,000 in Australia. The United Kingdom and the United States have also made one-off payments.

Stronger old-age safety nets

These and other countries have also made longer-term improvements in old-age benefits, which, like one-off payments, are targeted on the elderly poor.

There are other countries where old-age safety-nets are a concern. Full-career workers with low earnings (half the average) would have a retirement income of around 25 percent or less of average earnings in Germany, Japan and the United States. Once a period of early retirement or long-term unemployment (as a result of the economic crisis) is factored in, low-paid people are at significant risk of very low incomes in their old age.

Early access to retirement savings

Another set of measures aims to stimulate the economy through the pension system. Individuals in Denmark and Iceland, for

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example, will be allowed early access to their pension savings. The risk is that these people will be left short of money when they retire. In both these countries that is unlikely: access is limited to accumulations well above that needed to provide a comfortable retirement.

Australia lets people use pension savings in cases of severe hardship: to avoid foreclosure on their homes, for example. And workers in the United States have long taken advantage of loans from their private pensions, which are mostly repaid, with interest, to avoid tax penalties.

The effectiveness of these policies is limited because people with higher retirement savings are less likely to get into financial difficulties. Care is needed to ensure that people do not unduly threaten their retirement incomes, but early access to pension savings should not be off the menu.

Bailing-out pension accounts

Defined-benefit schemes are already covered in the United Kingdom and the United States by programs that are financed by levies on occupational plans, but the government acts as an implicit guarantor. With defined-contribution plans, the case for intervention rests on the design of the pension system. It is weaker where public provision is sizeable and where people have investment choices. In contrast, governments may have a duty to help where defined-contribution pensions are mandatory rather than voluntary, and where annuitization is obligatory.

A direct bail-out—paying money into pension accounts—could be very costly. There is also a risk of moral hazard: encouraging people to invest more riskily. For these reasons, *ad-hoc* guarantees of investment returns or compensation for losses should be avoided.

A bail-out would make most sense for those close to pension age. But this may discriminate against those younger than the cut-off age and retirees who annuitized only recently. The only example of a direct bail-out is in Israel. However, this scheme is very limited in scope (covering only any losses since November 2008) and costs are spread over 13 years.

Governments should rely on public retirement-income schemes to ensure against old-age poverty for a generation of retirees. Paying compensation as a public benefit spreads the cost across the retirement of the individuals involved, reduces political tensions and reduces moral hazard.

Investments and risks

Pensions are long-term investments and it would be short-sighted to base decisions on last year alone, when stock-markets lost nearly half their value but government bonds showed positive returns.

Based on a quarter century's data on performance of equities and bonds, the OECD has simulated real investment returns over the 45-year horizon of retirement savings.[4] The results show a range of portfolios across the horizontal axis: from pure bonds at the left to pure equities at the right. The white line shows median returns: half the time returns will be above this level, and half the time below. For a balanced portfolio—half each in equities and bonds—the median return is 7.3 percent above inflation. It is higher for a portfolio of equities (8.9 percent) and lower for bonds (5.2 percent). With a balanced portfolio, real returns are expected to be 5.5 percent a year or less 10 percent of the time. Equally, they are projected to exceed 9.0 percent a year also 10 percent of the time. Equities clearly give a higher return at the price of greater risk.

For all but the most risk-averse, equities should remain part of people's retirement savings. But there is one strategy that can reduce risk without undue sacrifice of returns. 'Lifecycle' investing involves a move from riskier assets to

less risky assets. Governments should at least encourage people to choose this strategy, but it may be necessary to go further, and make lifecycle investment the default. This would put investments for most people on automatic pilot while preserving choice for the minority who wish to manage their investments actively.

4. Further challenges: pension systems in the crisis and beyond

The projected rise in unemployment in OECD countries—from less than 6 percent of the workforce to 10 percent in 2010—will hit older workers hard. In past recessions, many governments have relaxed the rules or policing of early retirement and disability benefits. The aims were to protect incomes of older workers losing their jobs and limit increases in official unemployment. Whatever the short-term benefits, the medium- and long-term impact on labor markets was negative. After the early-1980s recession, unemployment (especially long-term unemployment) persisted well after economies had recovered and these policies were difficult to unwind.

This time, there is little evidence yet of governments repeating these mistakes. But unemployment tends to lag changes in economic output and so is expected to continue growing for some time. The word 'yet' is the operative one: vigilance is required to ensure that the danger of using early retirement and disability benefits to disguise unemployment is averted.

Backtracking on pension reforms

More worrying is evidence of reversal of pension reforms. The Slovak Republic has encouraged people to opt back into the state pension scheme rather than diverting part of their contributions to private, defined-contribution plans. When this was first offered, only 6 percent of members of the private plans chose to switch back. However, it is no longer compulsory for labor-market entrants to join the private funds and the public scheme is the default option. This is an irreversible, once-in-a-lifetime decision which will have long-term effects on the retirement incomes of new labor market entrants.

The motivation for this change is short-term fiscal problems. Some 60 percent of workers actively chose to join the new private pensions at the time of reform. This was many more than expected, and the diversion of contributions from the public to the private scheme has left a hole in the governments' finances. A more sensible way of alleviating short-term fiscal problems is temporarily to reduce the contribution going into private pensions. Although no OECD country has adopted this strategy, it is likely to be used in Estonia, Latvia and Lithuania, for example.

Automatic benefit adjustments

Some OECD countries—Canada, Germany and Sweden—have automatic adjustments to pension entitlements to reflect the state of the schemes' finances. These work in a similar way to adjustments in occupational plans in the Netherlands.

The sustainability adjustment in Germany links pensions to the dependency ratio: pensioners relative to contributors. But the government has over-ridden the adjustment for two years running, increasing entitlements above what would have resulted from the sustainability factor, affecting both pensions in payment and the accrued rights of current workers.

The balance mechanism in Sweden compares the assets of the fund (investments plus future contributions) with the liabilities (current and

[4] See OECD (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD countries.* See also D'Addio, A.C., E. Whitehouse and J. Seisdedos (2009), "Investment Risk and Pensions: Measuring Uncertainty in Returns," Social Employment and Migration Working Paper, n. 70, OECD, Paris.

[5] See OECD, (2009), *Pensions at a Glance 2009: Retirement-Income Systems in OECD Countries,* (OECD, Paris).

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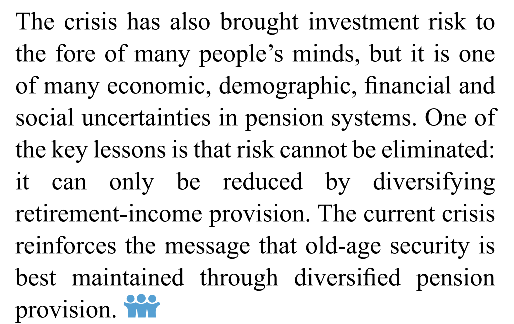
future pensions). The ratio between the two has fallen to 96.7 percent, the first time it has been under 100 percent. Under the rules, pensions in payment and accrued rights should be cut next year to restore the balance. In practice, it is likely that cuts will be postponed.

Automatic-adjustment mechanisms were introduced as a way of ensuring long-term financial sustainability of pension systems in the face of population aging. Recent experience suggests that their design needs a re-think. It does not seem sensible to reduce benefits in a pro-cyclical way, taking money out of the economy when it is weak. However, cuts needed to restore financial health must not be cancelled rather than merely postponed or need to be clawed-back when economies recover.

5. Conclusion

The financial and economic crisis means that the short-term pressures on governments to act are huge. Nevertheless, the long-term challenges for pension systems—from demographic change and population aging—have not gone away. If anything, they have been underlined and exacerbated by the financial and economic crisis. The impact of the economic and financial crisis on retirement incomes will be painful for many, in both public and private pension schemes. But in terms of pension policy, the effects of the crisis are dwarfed by the challenge of aging.

The crisis has also brought investment risk to the fore of many people's minds, but it is one of many economic, demographic, financial and social uncertainties in pension systems. One of the key lessons is that risk cannot be eliminated: it can only be reduced by diversifying retirement-income provision. The current crisis reinforces the message that old-age security is best maintained through diversified pension provision.



PRINCIPLES OF ACTUARIAL SCIENCE AND THE NEW HEALTH CARE REFORM LAW

By Mark Litow

In late March of 2010, Congress passed and the President signed a massive health care reform bill that if fully implemented, will change the way in which health care is financed and delivered in the United States. The most salient features of the bill include an individual mandate to purchase coverage, underwriting and rating restraints, expansion of Medicaid eligibility and commercial benefits, increases in certain taxes and cuts in Medicare spending. Many perspectives have been offered on this bill as to the types of results it will deliver, but few if any of these have examined whether the law satisfies actuarial principles or not.

This paper focuses on some of the most debated aspects of the bill related to the actuarial principles of a Financial Security System. The issues and principles examined are:

- Whether the individual mandate to purchase coverage, in combination with the restraints on underwriting and rating, will comply with risk classification and anti-selection principles;
- Whether the expansion of Medicaid eligibility and commercial benefits required, plus the subsidies in the bill, will increase moral hazard; and
- Whether the scoring of the reform, which shows a net savings of more than $100 billion over 10 years, and limitations on loss ratios and rate increases, are reasonable, or conforms to principles of an actuarially sound estimate.

The actuarial principles in this paper were first drafted in 1991 by the Society of Actuaries Committee on Actuarial Principles and accepted by the Board of Governors. Since then these principles have been exposed and discussed throughout the profession. In fact, the Actuarial Standards Board has published standards corresponding to the various principles and numerous educational pieces have been developed or continue to be in development related to specific topics. These principles are available in a paper on the SOA website and are summarized as part of a panel discussion from June 13, 2007 (session 22).

That paper presents four categories of actuarial principles, and all of these relate to health care reform to some degree. The last category in particular is paramount to this discussion and is the focus of the analysis below. The four categories are:

1. Statistical Framework,
2. Economic and Behavioral Framework,
3. Principles Underlying Risk Management and Actuarial Modeling, and
4. Principles Underlying Financial Security Systems.

The principles underlying Financial Security Systems are divided into: i) Risk Classification, ii) Risk Classification Refinement, iii) Anti-selection, iv) Moral Hazard and v) Actuarial Soundness. The questions to be addressed in this paper are linked with the principles underlying the Financial Security System as follows:

a. Risk Classification, both before and with refinement, and anti-selection are assessed as part of the issues related to the individual mandate.
b. Moral hazard is assessed as part of the issues related to expansion of Medicaid eligibility and commercial benefits.

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The questions to be addressed in this paper are linked with the principles underlying the Financial Security System. …

c. Actuarial soundness is assessed relative to the scoring of the health care reform bill and the ability of insurers to satisfy loss ratio requirements and maintain solvency through adequate premiums.

As part of assessing each of the principles, the analysis also considers principles from the other categories to a limited degree, which is necessary due to the blend of commercial and governmental programs that are intertwined in many ways as part of the U.S. health care system.

The analysis undertaken in this paper is intended to present the primary issues and questions one should undertake to evaluate this reform, rather than to explicitly provide an answer. However, the complexity of the health care system and these reforms is such that a comprehensive and detailed analysis using substantial modeling of an actuarial nature should be employed, including statistical analysis of a stochastic nature with economic and behavioral factors/assumptions appropriate to the reforms in question. Such detailed modeling has not been undertaken in writing this paper. The discussion does rely on past observations and modeling experiences in health care with which the author is familiar. Everyone should think about the issues raised and evaluate whether the reform satisfies the relevant principles. Hereafter, the focus is on specific principles as relevant to Financial Security Systems on an ultimate basis, after all provisions are implemented.

INDIVIDUAL MANDATE WITH RESTRICTIONS ON ELIGIBILITY AND RATING AND CONSISTENCY WITH PRINCIPLES OF RISK CLASSIFICATION, RISK CLASSIFICATION REFINEMENT AND ANTI-SELECTION

The health care reform law includes an individual mandate supported by subsidies for those with low incomes and penalties to prevent people from jumping in and out of the system.
The mandate is necessary because without it, the law does not allow sufficient latitude in regard to risk classification in commercial markets where individuals or employees are paying premiums. For instance, it does not allow health status as a risk characteristic in writing initial coverage or in setting premiums. The required risk classification system also has limits on rating by age as well as some other limits. Without the mandate, serious anti-selection would occur, as has clearly been observed in numerous states and countries using such limitations, particularly in individual markets.

But imposing an individual mandate is not a sufficient condition to avoid serious anti-selection, as two additional conditions must be satisfied. First, the mandate must achieve substantial and nearly continuous participation of the population and this requirement must be enforced. Second, the mandate must significantly restrict choice of benefits or other options so that lower cost individuals do not select very lean coverage while higher cost individuals choose very rich coverage. If either of these additional requirements is not satisfied, significant anti-selection will occur; and the greater the violation of these requirements, the greater the anti-selection.

So how strong is the mandate, what are the choices available, and what will be the enforcement of the rules? These questions are still unanswerable because rules supporting the law are not yet developed and these will influence how strong the mandate is. Also, the Health and Human Services Secretary has discretion to modify provisions to some degree, so this can make a difference. But we do know that open enrollment periods or the ability to change coverage will at most be 12 months. Experience has shown this length of time to be much better than a few months but not sufficient to remove virtually all anti-selection. The benefit choices available range from 60 percent of total costs to nearly 100 percent; although we do not know how the market will look or what the distribution of coverage will be. Still, such a range is likely to lead to some anti-selection.

Therefore, the likelihood is that there will be some significant anti-selection present, but the magnitude of that anti-selection is clearly in doubt. The amount will depend on the rules and their implementation. Provisions in the law include a risk adjustment process that is intended to normalize for risk selection. However, this

risk adjustment occurs after the fact. Therefore, it will not reduce the aggregate impact of anti-selection on the system; but it will redistribute anti-selection across the system to some degree.

EXPANSION OF MEDICAID ELIGIBILITY AND COMMERCIAL BENEFITS AND CONSISTENCY WITH MORAL HAZARD

The law includes an expansion to Medicaid to cover individuals up to 133 percent of the Federal Poverty Level. The law also provides subsidies for people with incomes up to 300 percent of the poverty level in most cases, with subsidies decreasing as incomes increase. Further, the law mandates no lifetime limits, requires coverage for certain services and requires that a plan qualified under the mandate have an actuarial value of at least 60 percent of total costs. All of these provisions increase benefits or decrease the level of cost sharing available to individuals.

These changes mean people or groups who wish to buy less than a 60 percent benefit or do not wish to insure certain services in the commercial market cannot do so. The changes also mean that some people who may desire coverage for less than 100 percent of benefits will now have Medicaid benefits offered (these have essentially no cost sharing). But if people decline to enroll in Medicaid, they will be required to meet the 60 percent minimum benefit or pay a penalty.

As a result, the level of insurance under the law, if implemented, will almost certainly increase, unless compliance is poor. With compliance, an increase in moral hazard will almost certainly occur. How much? That can only be answered with modeling, and the results would likely be quite different by market and according to other risk characteristics.

SCORING OF REFORM AND CONSISTENCY WITH ACTUARIAL SOUNDNESS

The law is estimated by the Congressional Budget Office to produce a total reduction in National Health Care Expenditures over 10 years of more than $100 billion. Costs reflect the expansion of benefits and eligibility, while offsets include increased taxes and cuts in Medicare costs. The questions to ask are: Do these estimates conform to realistic assumptions, or to required assumptions that may not be realistic, and are the estimates actuarially sound?

The question of realistic versus required assumptions can be partially addressed by focusing on scoring of Medicare reimbursements assumed within the analysis by the CBO. By law, Congress is supposed to implement a series of cuts in Medicare physician payments that increase over time and are slated to be 21 percent or so in the next fiscal year. But this type of change has been required at lower levels in more recent years, and Congress has not followed the prescribed level but changed reimbursement to levels reflecting very low increases or decreases or no change. As such, the assumption that the CBO was required to make for Medicare physician reimbursement is not realistic and therefore the score does not seem realistic. Estimates of the value of changing this assumption to roughly no change in reimbursement amount to hundreds of billions of dollars of additional cost, which in itself, changes the result from a savings to a cost.

Another assumption that should be questioned is the basis for scoring. Scoring is required over a 10-year period only and does not reflect differences in the timing of revenue and benefit changes; this basis for scoring is established by Congress. Because many benefits are delayed for four years and some taxes kick-in almost immediately in this legislation, revenue changes receive more weight than expenditures in the scoring in the limited time period. A present value calculation of benefits and revenues to the effective date of reforms would seem a much fairer way to judge the soundness of the reform from a cost perspective. Some very limited tests were apparently made after the 10-year period, but these did not examine the sensitivity of results to critical assumptions, nor has there been any serious discussion about a framework for risk management of results.

In recent scoring by the Center for Medicare and Medicaid Services (CMS), the realism of certain assumptions and the scoring process

CONTINUED ON PAGE 14

Another assumption that should be questioned is the basis for scoring.

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has been brought into question through cost estimates considerably above that of the CBO. Further, CBO has now stated their score needs to be increased by $115 billion, only two months after passage of the bill. Certainly, changes can occur after passage of any bill, but the information used in these assessments existed prior to passage. Is this consistent with how the actuarial control cycle is supposed to operate within the issue of actuarial soundness?

The reasonableness of other assumptions is also a question. For instance, scoring of the Class Act (Long-Term Care) raises some serious issues, which include significant concerns about anti-selection, moral hazard and actuarial soundness. The CLASS Act is a voluntary program with guaranteed issue for those that meet an actively at work requirement. A voluntary program with guaranteed issue is a recipe for anti-selection, as those who are less healthy are likely to enroll. A workgroup from the American Academy of Actuaries examined the provisions of the CLASS Act and expressed serious concerns over the long-term viability of the program. In addition, CBO scoring rules only looked at a 10-year period in examining the CLASS Act. This is very misleading due to the nature of Long-Term Care insurance and because the design of the CLASS Act includes a five-year waiting period where premiums will be collected, but no claims will be paid.

The result of these concerns is that the scoring supporting the bill in aggregate does not appear to reflect a realistic estimate of the potential cost ramifications of the bill. This suggests that scoring should be presented on both a required and realistic basis with sensitivities of assumptions explored. Other factors exist that are not considered in the analysis above and these could somewhat, if not totally, offset or increase concerns about the aggregate results. Realistic scoring requires consideration of the long-term consequences of the reform on a present value basis. It also requires close monitoring of the results relative to expectations, or following the actuarial control cycle, so that corrective action consistent with the objectives of the financial security system is applied as necessary. Uncertainty about assumptions will always exist, and in a complex system with a complex set of reforms, that uncertainty is great.

The analysis above does not prove that scoring is inconsistent with actuarial soundness in total, as such an analysis has not been performed including all parts of the reform and corresponding assumptions. What it does mean is that some assumptions do not appear realistic or in line with actuarial principles.

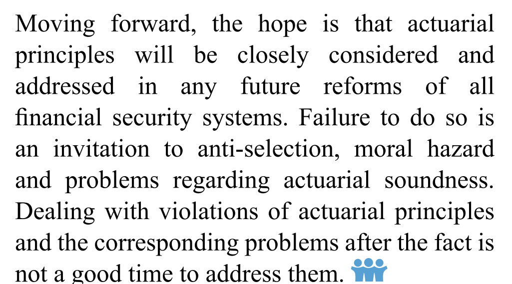
In addition, other issues exist within the bill as passed relating to actuarial soundness. For instance, provisions regarding loss ratio minimums and rate increase approvals could make achieving adequate premiums difficult, even if anti-selection and moral hazard concerns as discussed above are mitigated. Rules and regulations on these topics are still in development, but failure to allow an environment where premiums can be adequate in the long term with prudent management will increase the probability of insolvency and be inconsistent with actuarial soundness.

CONCLUSION

Of critical importance in designing a financial security system, such as health care in the United States, is following actuarial principles. Based on the analysis above, the law is very likely to increase anti-selection and moral hazard and therefore appears to violate actuarial principles in regard to the issues examined. Further, the scoring approach used does not appear to produce a reasonable basis for examining actuarial soundness as some of the assumptions do not appear realistic.

Whether the reforms underlying the recently passed health care reforms satisfy actuarial principles in aggregate is not easy to assess without actuarial modeling of the entire system, as perhaps some other provisions could partially or fully mitigate the violations found. But the analysis above raises serious concerns that should be addressed.

Moving forward, the hope is that actuarial principles will be closely considered and addressed in any future reforms of all financial security systems. Failure to do so is an invitation to anti-selection, moral hazard and problems regarding actuarial soundness. Dealing with violations of actuarial principles and the corresponding problems after the fact is not a good time to address them.



CAPE TOWN 2010

By Doug Andrews

The 29th Congress of the International Actuarial Association was held in Cape Town from March 7 – 12. Over 1,500 delegates representing over 100 countries participated. Many interesting papers and presentations were produced. It is worth visiting the website of the Congress at *www.ica2010.com.*

To assist our members, listed below are the papers and presentations concerning social insurance. Section members may also be interested in other papers in the Pension, Benefits and Social Security folder, especially those concerning whether public sector pension plans should be funded and if so, how and to what extent.

No.	Author(s)	Title	Presentation	Paper
6	Robert L. Brown	Criteria for the Optimal Design of a Social Security Retirement System	X	X
11	Rodrigo Silva	BRAIF: An Actuarial Model for Social Security Valuation	X	X
20	Doug Andrews	Are Automatic Balancing Mechanisms Appropriate for Private Sector Defined Benefit Pension Plans?	X	X
28	Bernard Yen	Pension reform – Lessons from a small African country?	X	X
55	Carlos Vidal-Melia and Maria del Car-men Boada-Penas	Notes on Using the Hidden Asset or Contribution Asset to Compile the Actuarial Balance for Pay-As-You-Go Pension Systems	X	X
104	Ignacio del Barco Martinez	Economic Cycles and Pension Plans	X	X
112	Iene Muliati	Indonesian Pension System Overview: Issues and Challenges	X	
152	Anthony Asher	Innovation and Imperatives in Financial Security Systems	X	X
202	Hernan R. Perez Raffo	Flexible Social Security Systems as an Economic Policy Tool in Emerging Countries	X	
208	Colin Dutkiewicz	Retirement and Social Security Reform in South Africa	X	
215	Robert L. Brown	IAA Comments on the Proposed International Public Sector Accounting Standard on Social Benefits	X	X
216	Erna Swart	Reporting on the Long-Term Sustain-ability of the Public Finances	X	
217	D.B. Mikula	Ten years/Sixteen after the Swedish Pension Reform	X	
236	Office of the Chief Actuary	Technical Aspects of the Financing of the Canada Pension Plan	by Yves Guerard	X
240	Edward Whitehouse	Pensions During The Crisis: Impact on Retirement-Income Systems and Policy Responses		X
301	Fred Kilbourne	Social Security Accounting	x	

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THE SINGAPORE CENTRAL PROVIDENT FUND

By Ken Buffin

(Reproduced from the January 2010 edition of Commentary by permission of the publisher, Buffin Partners, Inc.)

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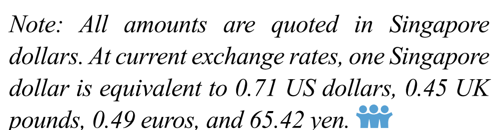
Singapore became an independent nation in 1965 following a six-year period as a self-governing parliamentary democracy within the British Commonwealth and a prior 13-year period as a British colony following World War Two. It has a population of 4.84 million, maintains a stable government and has experienced economic growth and a high standard of living, with a current gross domestic product of S$257 billion and per capita income of S$53,000. Lee Kuan Yew served as prime minister of Singapore from its independence in 1965 until 1990. Under his leadership, Singapore developed its economic and social programs and institutions to become one of the "Asian Tiger" economies and to merit the classification as one of the world's leading "high-income economies" by the World Bank and as an "advanced economy" by the International Monetary Fund. Singapore also ranks among the world's top nations according to the *Economist Intelligence Unit*'s "Quality of Life Index" with ratings above those for Canada, France, Germany, Japan, the United Kingdom and the United States. This Quality of Life Index is based on a composite measure of nine factors: material wellbeing, health, political stability and security, family life, community life, climate and geography, job security, political freedom, and gender equality. Singapore is a major port in the South-East Asia region and its economy is diversified with major activities in financial services, high technology, manufacturing, communications, petroleum refining, and oil drilling equipment.

A prominent feature of Singapore's social and economic development is the Central Provident Fund (CPF). The CPF is supported jointly by employees, employers and the Singapore government; it operates as a national savings and investment fund for the population providing a broad range of social and economic security benefits. The CPF operates four types of individual accounts; an ordinary account to finance the purchase of a house, education, approved investments, and CPF insurance coverage; a second account is principally for old-age provisions; a third Medisave account is to pay for hospital treatment, medical benefits, and supplemental medical insurance; and a fourth retirement account that operates from age 55 provides income support from age 60 to 65. The CPF has assets of S$164 billion that is mostly invested in special issues of Singapore government securities. These securities are floating rate bonds issued specifically to meet obligations of the CPF including interest payments. They do not have quoted market values and are not traded in the market. Under an arrangement with the Singapore government, the carrying amounts recorded in the CPF financial statements do not vary significantly from the expected proceeds on maturity. Interest rates on these special issue bonds are pegged to the rates at which the CPF Board pays interest to the members of CPF. Contributions to the CPF are based on monthly salaries up to a limit of S$4500; employees under age 55 contribute 20 percent of salary and employers contribute 14.5 percent of salary; employees over age 55 contribute at lower rates. Members receive

a market-related interest rate (based on the 12-month fixed deposit and month-end savings rates of the major local banks) on their ordinary account savings. The interest rate for savings in the Medisave and the retirement accounts is pegged to the 12-month average yield of the 10-year Singapore Government Securities plus an additional interest rate of 1 percent. The first S$60,000 in a CPF member's combined accounts, including up to S$20,000 from the ordinary account, will also earn an extra 1 percent interest. The Central Provident Fund Board guarantees a minimum interest rate of 2.5 percent per year. Interest is computed monthly and compounded and credited annually.

The Singapore Central Provident Fund is widely regarded as a successful model for achieving social cohesion and a strong sense of national identity by involving government, employers and employees in a cooperative partnership for mandatory savings and investment to achieve the primary lifetime goals of home ownership, medical care and retirement provision. The large investment fund and flow of contributions have been directed to economic and social development in Singapore assisting the nation to become among the world's most affluent in a relatively short period. The economic strategy that is followed by the nation is successful in providing it with steady real growth. Singapore's recovery from the effects of the recent global financial and economic crisis has been aided by a sound economic strategy, a highly skilled workforce, excellent infrastructure and the role of government-linked corporations that regulate a major part of the services industries. In recent years the Singapore government has invested heavily in diversifying the economy, leading to growth in the pharmaceutical industry, biotechnology, medical technology, financial services, retail, leisure and tourism.

Note: All amounts are quoted in Singapore dollars. At current exchange rates, one Singapore dollar is equivalent to 0.71 US dollars, 0.45 UK pounds, 0.49 euros, and 65.42 yen.



The Singapore Central Provident Fund is widely regarded as a successful model for achieving social cohesion and a strong sense of national identity. …

SOCIETY OF ACTUARIES ANNUAL MEETING FEATURES SOCIAL INSURANCE MODELLING MINI-SEMINAR

By Sam Gutterman

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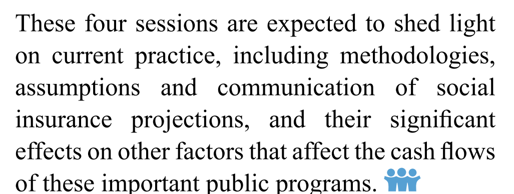
Embedded in the Society of Actuaries' Annual Meeting this coming October will be a full-day of panel discussions on the projection of cash flows for social insurance programs. Four panels will be held on Wednesday, October 27 in New York City, the last day of the Annual Meeting. This mini-seminar has been organized by the SOA's Committee on Social Security and co-sponsored by the Social Insurance and Public Finance Section.

Social insurance program projections cover periods longer than most typical actuarial projections. In addition, they cover a wider spread of risks than the populations that most actuaries deal with. The overall demographics and economics of the entire country directly affect the experience of the program. Since the taxation and benefits of these programs affect everyone in one way or another, these projections need to be prepared in an objective and unbiased manner, with results and limitations clearly communicated so that decision makers, and indeed the population, can grasp their implications.

The four sessions will cover the three following topics:
General approaches to modelling. Chief actuaries from the U.S. Social Security Administration (SSA) and the Canada Pension Plan (CPP), Steve Goss and Jean-Claude Menard, respectively, and Richard Hinz from the World Bank, will discuss approaches that their respective organizations take. The World Bank's models have been used to provide advice to many countries around the world.

A significant degree of uncertainty is involved in any long-range forecast. Social insurance projections are no exception, and given the importance and wide dissemination of forecast results, it is important to provide users of these forecasts meaningful information regarding these forecasts. The second panel will address the effective communication of the uncertainty in these projections. The primary approach used historically has been through the use of alternative scenarios, with stochastic modelling being increasingly used, especially in North America. Limitations and concerns with these approaches will also be highlighted.

The last two panels will deal with one important demographic element that is significant in these forecasts, the level, mix and impact of migration. Although not a significant factor in most areas of actuarial practice, the migration assumption is important in dynamic population modelling as used in social insurance projections. The first panel will discuss the drivers and implications of migration to social insurance. This will be followed up in the second, with representatives of the SSA, CPP and the U.S. Census Bureau, who will present currently-used population projection methodologies and thoughts regarding possible future practice.



These four sessions are expected to shed light on current practice, including methodologies, assumptions and communication of social insurance projections, and their significant effects on other factors that affect the cash flows of these important public programs.

UPDATE ON SECTION ACTIVITIES

By Bob Shapiro

Thanks to the strong interest and high energy of many of our Section members, we have had a very productive first year. The Society of Actuaries board accepted our petition to form the new Section in March of 2009, and by June we had the 200 members we needed to become effective. For the reminder of 2009, we concentrated on four areas:

1. Organizing and tasking the first Section Council. The council was elected in summer of 2009, organized its activities in several subsequent conference calls, and met face-to-face for the first time at the SOA's annual meeting last October.
2. Organizing a successful panel discussion at the 2009 Boston annual meeting with the title "Forgive Us Our Debts."
3. Putting together our first Section newsletter, under the guidance of editor Ardian Gill with help from the very talented SOA staff.
4. Continuing to expand the breadth and quantity of our members. As of March 2010, we had 565 Section members.

In addition to these major tasks, the new Section also has been working actively to (1) coordinate with other Society Sections, (2) define specific areas where the Section can sponsor critical research and education initiatives in the areas of social insurance and public finance, (3) tighten relationships with other targeted organizations … for example, Section members attended and reported on the recent National Association of Social Insurance (NASI) and the International Congress of Actuaries (ICA) annual meetings, (4) identify interested volunteers, both actuaries and non-actuaries, and (5) began to frame our longer-term strategy.

The Section Council holds conference call meetings every month. As of the last call before this issue went to press, the following 2010 efforts were initiated:

1. Developing this issue of our newsletter. In this connection, we are fortunate to have Doug Andrews as Associate Editor. He is primarily responsible for this issue. Bill Cutlip has agreed to become the Editor of the newsletter and will take responsibility for the next issue.
2. Developing and prioritizing ideas for SIPF research and education, specifically for 2010 but also starting to flesh out longer-term Section priorities.
3. Organizing a webcast on the liabilities of Federal, State and local governments and the sustainability of current budgets. This webcast will provide continuing education

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on a timely topic of significant interest and concern, as well as introduce potential areas of needed research.

4. Continuing our effort to expand Section membership … our goal is to continue to attract actuaries (and non-actuaries) from around the world.
5. Targeting potential non-actuary SIPF members who could be significant contributors to our education and research activities.
6. Strengthening our Section communication plan to inform members, and also to create broader awareness of the SIPF work.
7. Strengthening the SIPF website to better reflect its unique role within the Society of Actuaries and the importance of its topics to all actuaries (and to many non-actuaries).

As you can see, the Social Insurance and Public Finance Section is moving forward actively. There are many things we think we should do, but we are limited in what we can do by the resources of our members. If, as you read this newsletter, you have suggestions or see an area in which you'd like to help, please write me and I will get back to you quickly.

In particular, we need a volunteer to coordinate our website with SOA Staff.

REMEMBERING BOB MYERS

By Warren R. Luckner

Robert J. Myers passed away at age 97 on Feb. 13, 2010. He is probably best known in the actuarial profession as one of the architects of the Old Age Survivors and Disability Insurance Program (OASDI), commonly referred to as Social Security, and for his lifelong dedication to OASDI. His accomplishments are legendary and well-documented. As noted in the obituary posted on the Society of Actuaries website *(http://www.soa.org/about/membership/2010-deceased-myers.aspx),* "Nearly every FSA alive today learned about Social Security by reading study notes and other material prepared by Myers."

A few other highlights of Bob's contributions as noted in the SOA obituary:

1. Involved with the U.S. Social Security Program for 75 years.
2. Authored more than 900 articles and several books on the Social Security program.
3. Founding member of the National Academy of Social Insurance.
4. Served as President of both the SOA and the American Academy of Actuaries simultaneously during 1971 – 72.

The rest of this article shares my personal perspective on Bob's life and contributions. My experience interacting with Bob is but one example of his commitment to the actuarial profession, to society, and to his family, and of Bob's influence on individual lives.

I first met Bob Myers in 1972 when he was serving a term on the Board of Aid Association for Lutherans (AAL), which was then the largest fraternal life insurance company. I was a new actuarial student at AAL and was introduced to Bob because I was to take on a project evaluating the impact of Social Security on the need for life insurance. Bob was, as usual, very generous with his time and wisdom. The project eventually led to a financial planning tool called Family Security Analysis (or F.S.A.)—pretty clever for a young actuarial student!

I again met Bob, through his writings, when I studied for the actuarial exam covering social insurance. This experience contributed significantly to my "philosophy" of actuarial work. He described the concepts of individual equity and social adequacy. I believe considering the appropriate balance between these concepts is particularly important to the actuarial profession in order to fulfill its responsibility to best serve the public interest.

I came to know Bob on a more personal level when I had the opportunity to work with him directly as he updated his classic textbook "Social Security" to a second edition early in the 1980s. Bob always focused on making sure the content was accurate, but he also welcomed suggestions for improving the readability of the text.

Later, Bob provided a thorough discussion of my paper "OASDI Earnings Test" published in *Transactions of Society of Actuaries*, Volume 34, 1982. Typical of Bob, his discussion was gracious, thorough and helpful in providing

CONTINUED ON PAGE 22

"Nearly every FSA alive today learned about Social Security by reading study notes and other material prepared by Myers."

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additional thinking on the pros and cons of the Earnings Test.

During my time as an SOA staff member I had many opportunities to see Bob at Society of Actuaries meetings. The last time I had the opportunity to visit with Bob in person was in 2001 when I was serving as a visiting faculty member at the University of Iowa and Bob was on campus as one of the recipients of the Alumni Fellow designation from the University of Iowa. Bob's financial generosity is evident at the University of Iowa as his contributions enabled the establishment of a computer lab for the Statistics and Actuarial Science Department. Perhaps the greatest professional tribute to Bob and his contributions occurred in 1994 when the American Academy of Actuaries established the Robert J. Myers Public Service Award in recognition of his extraordinary lifelong public service. His professional life was truly "In the public interest."

On a personal level, he and his wife Rudy, who often accompanied him to professional meetings, modeled for all of us a loving relationship that lasted for 57 years.

I, along with countless others, am honored to have known Bob and to have benefited from his wisdom. His was truly a well-lived life of service to others.

WORTH A LOOK

1. THE EFFECT OF HEALTH INSURANCE COVERAGE ON THE USE OF MEDICAL SERVICES

by Michael Anderson, Carlos Dobkin, Tal Gross - #15823 (CH HC HE)

Abstract:
Substantial uncertainty exists regarding the causal effect of health insurance on the utilization of care. Most studies cannot determine whether the large differences in health care utilization between the insured and the uninsured are due to insurance status or to other unobserved differences between the two groups. In this paper, we exploit a sharp change in insurance coverage rates that results from young adults aging-out of their parents' insurance plans to estimate the effect of insurance coverage on the utilization of emergency department (ED) and inpatient services. Using the National Health Interview Survey (NHIS) and a census of emergency department records and hospital discharge records from seven states, we find that aging-out results in an abrupt five to eight percentage point reduction in the probability of having health insurance. We find that not having insurance leads to a 40 percent reduction in ED visits and a 61 percent reduction in inpatient hospital admissions. The drop in ED visits and inpatient admissions is due entirely to reductions in the care provided by privately owned hospitals, with particularly large reductions at for-profit hospitals. The results imply that expanding health insurance coverage would result in a substantial increase in care provided to currently uninsured individuals.

http://papers.nber.org/papers/W15823

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2. GRADUATE STUDENTS AT STANFORD UNIVERSITY REVALUED CALIFORNIA'S THREE LARGEST PUBLIC PENSION PLANS USING RECOMMENDATIONS BY ECONOMISTS AT NORTHWESTERN UNIVERSITY AND THE UNIVERSITY OF CHICAGO.

Basically, the economists argue that public pensions are "constitutionally guaranteed" and that a risk-free rate of return should replace the 7.5- to 8-percent currently used. Substituting a 10-year treasury rate of 4.14 percent, the shortfall ballooned from a reported $55 billion to $425 billion.

The report is available at *http://SIEPR.STANFORD.edu/publicationsprofile/2123*

Observant readers will note that this is the mirror image of a Worth A Look abstract in the January issue, where a risk rate of return was applied to Social Security, reducing the value of accrued benefits by 20 percent - Ed.

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3. CONTRIBUTIONS OR TAXES? TWO SOCIAL SECURITY FUNDING PARADIGMS

By Benjamin Veghte, Income Security Research Associate, NASI

In discussions of Social Security, many disagreements stem from the fact that we view its funding from within different paradigms, namely some of us see these payments as insurance contributions, others as just another form of income tax.

http://www.nasi.org/discuss/2010/04/contributions-taxes-two-social-security-funding-paradigms

SOCIETY OF ACTUARIES

Social Insurance &
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IN THE PUBLIC INTEREST

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