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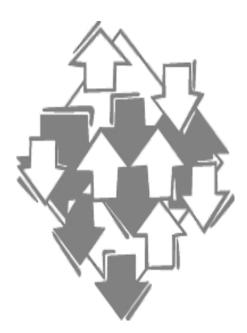
# Actuary

## What's the impact? The upsides, downsides to individual Social Security accounts

rivatization as an element of the U.S. Social Security system is still being debated. To contribute to the discussion, the Society of Actuaries cosponsored a symposium on privatization's potential impact, featuring U.S. and international experts on social security and pensions. In the public debate, the concept of privatization has a number of different connotations, including use of individual accounts, investing funds in equities, or both. This symposium's primary focus was on the use of individual accounts.

The symposium, "Impact of Social Security Privatization on Retirement Income," was held May 13 at the University of Michigan. The SOA joined in this effort with the Mathematics Department and the Business School of University of Michigan, the Michigan Retirement Research Center, and the American Academy of Actuaries. (The retirement research center is one of two such centers with major funding from the Social Security Administration.)

The public debate around privatization is clouded by comparisons based on inconsistent actuarial assumptions and misunderstandings of how current and different systems work. The symposium's goals were to elicit a high-level, interdisciplinary discussion of the issues, to contribute to the debate, and to help actuaries participate in the debate on an ongoing basis.



The discussion relies on many actuarial concepts, and small changes in assumptions can alter perspectives on both the problems and the options. This article focuses on areas of the discussion that can help actuaries participate in the debate. Four main topics were addressed:

Overview of Social Security reform

- Overview of social security feld Pros and cons of privatization
- Impact of privatization
- Impact of privatization
  Practical issues of privatization

• Practical issues of privatization **Overview of reform proposals** 

An overview was presented by three speakers:

• Eugene Steuerle, senior fellow, The Urban Institute, discussing the broad Social Security debate

- Stephen Goss, deputy chief actuary, U.S. Social Security Administration, outlining recent proposals by U.S. President Clinton and by Reps. Bill Archer (R-Texas) and E. Clay Shaw (R-Fla.)
- Ron Gebhardtsbauer, senior fellow, pensions, American Academy of Actuaries, focusing on proposals by the 1994-1996 Social Security Advisory Council, the Cato Institute, Sens. Daniel Patrick Moynihan (D-N.Y.) and Bob Kerrey (D-Neb.), and the National Commission on Retirement Policy. Steuerle began by noting that in this century, more and more U.S. budget

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#### What's the impact? (continued from page 1)

allocation decisions are preordained by the actions of past voters and legislators, citing a decrease in the entitlement budget's discretionary portion from two-thirds in 1962 to one-third in 1996. As "ownership" becomes more removed from the current public, the younger generations become increasingly skeptical of entitlement programs such as Social Security.

Turning to old age programs, Steuerle cited four primary factors affecting their growth:

- Continuous real growth in annual pension benefits for each cohort of retirees (because the pension benefits replace the same percentage of preretirement income over time)
- 2. Longer retirement span (due to early retirement and longer lifespan)
- 3. Increasing aged dependency ratio

(the ratio of elderly to working-age people)

4. Open-ended subsidies for healthcare benefits

Steuerle's perspective is that the solution to Social Security's funding problems hinges on budgeting future resources to meet all future needs, not just pension needs. One of the major controversies in the debate is whether privatization creates growth in the economy and improved rates of return. Steuerle argued that it does not.

Goss, in his presentation, explained that recent proposals, starting with those of the 1994-96 Advisory Council on Social Security, have tended toward more advance funding and investment in higher yielding, but riskier, private securities, especially stocks. More recently, proposals have suggested meeting a portion of advance funding's transition cost by using General Fund transfers, facilitated by the expected federal government budget surplus. Goss provided detailed actuarial estimates on several of the proposals.

Gebhardtsbauer began his presentation by noting that all social security reform proposals must cut benefits or increase income through higher taxes or investment returns. Options for decreasing benefits include raising the retirement age, reducing cost of living adjustments, reducing the benefit accrual rate, subjecting retirement income to means testing, and increasing the number of years during which a worker must contribute to receive full benefits. Increasing tax options include raising the tax rate, raising the taxable wage base, taxing social security benefits, and expanding the coverage of social security to state and local

## Paygo vs. individual accounts: two views

good overview of the pros and cons of individual accounts and the paygo system was offered by two speakers at the symposium, "Impact of Social Security Privatization on Retirement Income."

Advocating privatization was Peter Ferrara, general counsel and chief economist of Americans for Tax Reform and senior fellow at the Cato Institute. Speaking for paygo was Robert L. Brown, professor of actuarial science and director of the Institute of Insurance and Pension Research at the University of Waterloo.

## For private accounts and investment

Ferrara argued that a revolution in opinion and policy regarding social security is sweeping the world. Eight Latin American countries have adopted reforms letting workers choose personal investment and insurance accounts as an alternative to traditional, government-run social security systems. Similar reforms have been adopted by five European and Eastern European countries, and even Communist China is implementing personal accounts rather than a traditional system.

Ferrara noted several reasons behind this shift. First is the financial crisis faced by traditional social security systems worldwide, which, he said, was inevitable in a mature paygo system. But a far bigger reason is that private investments through personal accounts will earn far higher returns and benefits than a mature paygo system. Such investments help produce new income and wealth, which finances a return on investment that averages the full, real, before-tax return to capital. Even if tax revenues grew over time with growth in real wages and the number of workers, a mature paygo system, which is a tax and redistribution scheme, would never pay a return even remotely approaching the pre-tax, real rate of return to capital earned through private accounts.

He also argued that national economic growth would increase because of the savings and investment through personal accounts. Ferrara quoted Harvard Professor Martin Feldstein, president of the National Bureau of Economic Research, as estimating the present value of the net economic benefits from such reform to be between \$10 and \$20 trillion. Such expected benefits have led the World Bank to promote the shift to personal accounts around the world, Ferrara said. government workers. Options for increasing investment returns include investing social security assets in the private sector and introducing private accounts.

#### Privatization's pros, cons

A spirited debate spotlighted two very different views of the effects of privatized defined-contribution (DC) accounts on the Social Security system. One view was presented by a luminary from Americans for Tax Reform and the Cato Institute, the other by a professor of actuarial science. (See sidebar, "Paygo vs. individual accounts: two views," page 4.)

#### Impact of privatization

Three presenters discussed the impact of various reform proposals from different perspectives.

 Sylvester J. Schieber, vice president, Watson Wyatt, and a member of the Social Security Advisory Board, discussed the risks involved in different approaches. (He also compared the current social insurance programs in various countries and various reform proposals for the U.S. Social Security system along two dimensions — paygo vs. full funding and DB vs. DC. (See story, page 8.)

- Anna Rappaport, principal, William M. Mercer, considered the potential impact on women.
- Chris Bone, chief actuary, Actuarial Sciences Associates, Inc., summarized the potential impact on private pension plans.

Schieber identified the obvious Social Security reform risks to participants as being forced either to receive lower benefits than promised or contribute more dollars than anticipated. Major risks to the U.S. Social Security system include financial market risk, risks associated with changing the system's redistributive nature, and the risk of possible reductions in disability benefits. Some of the major risks in the current system, he observed, are those

associated with undiversified investments. Schieber noted the reasons for funding any retirement plan, including Social Security, as lower contribution costs over time, enhancing the ability of workers to meet consumption needs after retirement, and the importance of increasing national savings. He summarized reasons for moving to a DC approach as allowing a more dynamic adjustment of the system, the perception by workers that benefits are more secure, allowing more flexibility in raising contribution rates, and the possibility that it may be the only road to reform.

Schieber's conclusions were: there is tremendous risk in the current system, the current risks to retirement income security are not randomly distributed, using budget surplus will not eliminate current benefit risks, and diversification and plan design can reduce many of the risks.

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Social equity would be enhanced as well, he argued, as poor and moderateincome workers are able to participate in private markets for the first time, producing better benefits for them. This is far preferable to reforms that would cut benefits or increase taxes, Ferrara stated.

## Applauding the paygo system

Brown, in his presentation, focused on establishing criteria that would ultimately provide "security for social security."

Brown began by comparing privatization with the advantages of a paygo defined benefit system, citing paygo advantages such as universality, vesting, and portability; indexing of benefit amounts; and low administrative costs.

Brown summarized research showing that prefunded systems have natural cost advantages over paygo financing under some economic assumptions but not others. He cited a study by the Canadian Institute of

Actuaries on the financing of Canadian social security systems. Using 1960s assumptions about demographic and economic events (including a 2% real rate of return on assets and a 2% real wage increase), the study found a significant advantage to the paygo method — finding that paygo would be less expensive than prefunding by 5.5% of payroll. However, based on 1990s assumptions (including a 4% rate of return on assets and only a 1% increase in real wages), paygo has a cost disadvantage of more than 7% of payroll. Brown questioned whether changes should be based primarily on different views of the future economy, particularly views that expect high rates of return and relatively low wage growth. Brown stressed the importance of using consistent assumptions when comparing systems, saying the recent U.S. debate has seen advocates of private accounts assuming higher rates of return on investments than used by

the government, placing the individual account concept in an apparently favorable light.

The historical effects of prefunding do not necessarily support a conclusion that prefunding social security benefits will increase gross national savings, Brown argued. He cited one study that found a decrease in the Chilean gross national savings rate from 21% when the Chilean system was adopted to under 19% in 1991. Another study found higher gross Chilean savings but attributed the result to factors other than prefunding of social security.

Finally, Brown questioned whether the additional funds generated by greater savings would lead to higher productivity or would instead be used in less-than-optimally productive pursuits. **Peter Ferrara and Rob Brown can be reached by e-mail at, respectively,** *kmeerstein@atr-dc.org* **and** *rlbrown @pythagoras.math.uwaterloo.ca.* 

### What's the impact? (continued from page 5)

Rappaport pointed out that currently 60% of Social Security beneficiaries are women, and also that life patterns other than "life-long wage earner" exist today. Thus, those analyzing the impact of reform proposals must consider the impact on women and use statuses beyond low-, medium- and high-wage earners.

Rappaport highlighted the diversity of life patterns, including part-time work, caregiving, and moving in and out of full-time work. Among the

general trends she identified are: more elderly, with many females living alone; increased life expectancies; and increasing health care costs. She identified Social Security's successes

as contributing to a major decrease in poverty — noting that 40% of elderly receive more than 80% of their income from Social Security — and providing a decent retirement income. Failures include potential future financial problems, concerns about equity, some continued poverty, and a lack of confidence in Social Security on the part of the general public.

She also highlighted the discrepancy in widow's benefits resulting from the distribution of income between husband and wife, regardless of total income level. If the wife earns half of the income, the widow's benefit is significantly less than if the husband earns all the income. For example, the widow's benefit to a family retiring at age 65, earning \$34,200 in 1998, and in which the husband dies immediately after retiring is about \$1,075 per month for the single-earning family and \$675 per month for a family where earnings were split 50/50. She summarized concerns regarding women and Social Security as a decline in economic status during widowhood and decreased benefits after divorce. The challenges in reform are to use limited resources effectively, to define retirement and set retirement ages, to better define "family" and design family benefits effectively, and to meet postretirement needs, especially for widows and divorced persons.

Rappaport said Social Security policy as it relates to women should incorporate consideration of the importance of a strong private pension system, diverse family needs, and long-term care. Rappaport emphasized that pensions should not be used to fix labor force problems, and that public education is essential, especially on retirement implications of decisions about pension assets,

savings, and investments.

In closing, Rappaport identified the following concerns about individual accounts in Social Security reform:

- Individual accounts could increase the number of women in poverty or near poverty, especially those with lower pay, relatively short periods in the workforce, and/or conservative investment strategies.
- Social Security could become less of a safety net if death or disability benefits are inadequate or if participants who make poor investment choices aren't protected.
- High administrative costs present risk to lower-income beneficiaries.
- Women's situations, particularly in widowhood and divorce, are getting inadequate attention in the reform debate.

Bone explored the effects of some possible changes on pension plans and sponsors:

- Investing assets in private (domestic) equities
- Privatization through IRA-like accounts
- Increasing the retirement age
- Reducing the cost of living adjustment
- Increasing the FICA tax rates

• Increasing the FICA tax wage base Bone noted that Social Security works in partnership with private plans, and changes in Social Security could have a major impact on private plans and their operation. Any IRA-like private accounts might have an adverse effect on 401 (k) plans, reduce private savings, and create major challenges for DC plans. Effects on private employers' plans could impact both the design and administration of plans.

Bone concluded by highlighting the potential new retirement savings environment, including:

- A heterogeneous retirement savings system in which disparities may widen because of differences in the nature of work and the capacity to save
- Increased anxiety over retirement, resulting in the positive result of greater interest in retirement programs from employees, plan sponsors, and Congress

#### Practical issues

The last segment of the symposium focused on issues surrounding the management and administration of individual accounts. The speakers were:

- Andrew B. Abel, professor, The Wharton School, University of Pennsylvania, and member, Technical Advisory Panel to the Social Security Advisory Board
- Gail Kellogg, partner (retired), Hewitt Associates
- Dallas Salisbury, president and CEO, Employee Benefit Research Institute



The discussion touched on a wide range of issues and topics related to administration of individual accounts.

Investments in equities have a higher expected return but are much riskier than fixed-income securities. The risk premium accounts for both bad and good times in the future, and when a bad period comes, it can have a major impact on near-term retirees.

With investment markets fluctuating, failure to invest contributions promptly can be a major problem.

Participant satisfaction is closely linked to plan administration. Participants expect timely and perfect administration. The standard for DC plans today is often daily valuation and instant transaction processing.

The administrative process has numerous elements, including setting up records, receiving contributions, answering questions, permitting changes in investment elections, balancing accounts to the penny, and more. Much of the process is commonly automated today, with call centers for inquiries that can't be handled solely on an automated basis.

It is unclear whether individual accounts for everyone can be adminis-

tered at reasonable cost, particularly with the large number of small businesses and self-employed individuals lacking automated payrolls. Also, nearly 20% of workers covered by Social Security have annual earnings of less than \$5,000; since most proposals call for a 2% contribution, these workers would

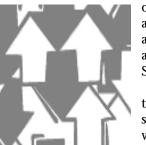
contribute \$100 or less annually, while administrative costs per account could be as high as \$50.

Processing errors are much easier to correct in a traditional system than in a DC system, where they may lead to lost investment earnings and where liability issues are involved. A big question is who would pay for such losses. Administrative costs are important in returns, particularly for small accounts.

Some of the data put together on administrative costs appears to be overly optimistic. The discussion focused on data published by the Cato Institute for administrative costs. These were much lower than cost estimates published by State Street Bank, Boston, and presented at a Cato conference.

In response to questions, it was indicated that Hewitt has one person in DC administration for every 2,000-3,000 participants. This is in contrast to one in 250,000 assumed in some of the cost estimates for the cost of managing individual Social Security accounts, figures used by some advocates of private accounts. It was noted that while large private plans offer a high level of service, they can do this because of their automated payrolls and submission of data. One of the biggest administrative headaches for a Social Security individual account plan would be dealing with great volumes of contributions from small businesses lacking automated payrolls.

Dallas Salisbury reported on research with small businesses, EBRI



work on administrative costs, and a survey that asked small businesses about individual account proposals for Social Security.

Fifty-nine percent of the small businesses surveyed said they would oppose any individual account system if

they had to participate in administering the accounts.

The Social Security debate will continue to be a matter of vital importance to Americans. Major changes in the system can influence economic growth, securities, markets, employer retirement programs, and the wellbeing of a growing segment of our population. The public debate on individual accounts is often based on poorly informed discussion. Even if these accounts were viewed as theoretically desirable in the U.S. Social Security system, the practical issues surrounding administration are a substantial barrier and would require significant planning and time before implementation.

Actuaries can be major contributors to the debate. Some areas where actuarial participation is particularly needed is in consistency and careful selection of assumptions. This is especially so when outside studies show much better results than official projections. Results may be projected under differing economic scenarios, treatment of risks, and understanding of how different options produce very different results for various segments of the population. This story was compiled from reports of several individuals involved in the symposium: Christopher M. Bone, chief actuary, Actuarial Sciences Associates; Warren R. Luckner, director of academic initiatives, Society of Actuaries; Anna Rappaport, principal, William M. Mercer; and Michael M.C. Sze, the symposium's chief organizer, Sze Associates, Willowdale, Ontario.

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