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NATIONAL ACADEMY OF SOCIAL INSURANCE

The Role of the Chief Actuary of Social Security

*By Robert Rosenblatt and Larry DeWitt**

Summary

The work done by the Office of the Chief Actuary is at the core of understanding the Social Security system and helps shape policy decisions that can have an impact on the country's taxpayers and beneficiaries for many years. The actuaries track the income and outgo for the system and make projections of its finances 75 years into the future. From the passage of the Social Security law in 1935 actuaries have been central to the management of the program and its policy planning. Regardless of who controls the White House and Congress, the actuaries have been able to demonstrate their credibility. Actuaries bring to the table mathematical rigor, humility, a strong degree of credibility and integrity, and political independence.

Each year the Social Security system handles a cash flow larger than the total domestic incomes of all but eight nations. For many years, Social Security has been the largest single item in the U.S. budget, accounting for nearly one-quarter of all federal government expenditures, an annual amount exceeding $400 billion. More than 47 million people receive payments from the system each month and 156 million pay taxes each payday to support it. Some people are on both ends of the cash pipeline, paying taxes as they work and also collecting benefits in the same month.

"Actuaries are trained to make long range projections based on hundreds of assumptions,"
—A. Haeworth Robertson

At the heart of this vast economic system is the work of Social Security's actuaries, who set the objective parameters for policy debates; who track the tax income and benefit outflow in the system; and who offer expert projections of the finances of Social Security 75 years into the future.

The 52 men and women who work in the Office of the Chief Actuary are the guardians of the integrity of the numbers, the analysts of financial solvency or weakness, and the experts on whose estimates Presidents and Congresses must rely when they ponder the future of Social Security.

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How Projections are Made

Actuaries play the role of financial forecasters in our complex society. (Being modest and precise, however, a typical actuary would probably reject the term "forecaster." But it captures what they do in the popular imagination.) In ancient days, seers made predictions based on the entrails of animals, the toss of some dice, the turning over of cards in a deck: But the actuary uses numbers. The numbers are of things known and recorded. When assembled in computerized models, they point to future possibilities.

"You have to make some assumptions, but they have to be reasonable and have some basis in present fact, rather than fantasy or wishful thinking."
—Robert J. Myers

The actuary's profession deals with the quantification of risk and the estimates of future happenings based on the knowledge of past events. How many people will be working (the labor force and the unemployment rates)? How many will be born (the birthrate), and how many new workers will enter the United States (the immigration rate)? How much will the economy expand (the growth of the gross domestic product)? How fast will prices rise (the inflation rate)? How much will each worker be able to contribute to national output (the productivity rate)? How long will people live to collect their benefits (the longevity and mortality rates)?

"Actuaries are trained to make long range projections based on hundreds of assumptions," said A. Haeworth Robertson, former chief actuary at Social Security.

It is a vital task to bring a strong degree of credibility and integrity to projections of the future. The federal government got into the business of actuarial projections in 1881 when the Treasury Department hired one actuary for the entire government—and made due with this single expert until World War I, when the temporary War Risk Insurance program for dependents of servicemen required the hiring of additional actuarial consultants. However, none of these early efforts had anything remotely like the impact that Social Security would bring when it arrived on the scene.

Actuaries were There at the Beginning

Actuarial projections for Social Security began even before there was a Social Security program. As part of President Franklin Roosevelt's planning for Social Security, his Committee on Economic Security hired three actuaries in the summer of 1934, including a young Actuarial Assistant by the name of Robert J. Myers. The actuarial estimates developed by Bob Myers and his colleagues played a significant role in reassuring Congress that this unprecedented federal involvement in the nation's economic system was something sensible and practical.

In his book, "Within the System," Myers refers to actuarial work as "future gazing," a noble profession.

"The kind of future gazing I'm talking about involves considering the possibility of declines in mortality rates, advances in medical science, changes in human behavior, improvements in sanitation, increases in the standard of living, improved education, and so forth," Myers wrote. "In other words, you have to make some assumptions, but they have to be reasonable and have some basis in present fact, rather than fantasy or wishful thinking."

The predictive record of actuaries can be impressive. Myers notes that in 1930 the group of people age 65 and over accounted for 5.4 percent of the US population. In 1934 he and his colleagues offered a projection that the age-65 group would be 12.65 percent of the US population in the year 1990. The actual figure was 12.49 percent. "That is pretty good shooting," Myers wrote. In 1935 they offered an estimate of future Social Security costs as 9.65 percent of taxable payroll in the year 1980. The actual figure was 9.36 percent. "Not bad," Myers wrote.

From the beginning the role of the actuaries has been central to both the management of the Social Security program and to its policy planning and legislative development. Reliable actuarial estimates were central to the dramatic program expansion that began in the 1950s, and to every major policy adopted since. During that simpler time, the Congress had relatively small staffs and Social Security Administration actuaries often served as de facto staff almost as much for the congress as for the Social Security Administration itself. In fact, during the 1950s, Bob Myers was actually listed by the House Ways and Means Committee as "Actuary to the Committee" on several of their reports.

The independent role of the actuaries at SSA continues in the same tradition established decades ago.

Relationship with the White House and Congress

The Senate Finance Committee, in its 1994 report on the Social Security Independence Act, emphasized the value of non-partisan, unbiased expertise furnished by actuaries. "The Office of the Actuary has a unique role within the agency in that it serves both the Administration and the Congress," the committee said. "While the Committee expects that the Chief Actuary will report to the Commissioner, this office often must work with the committees of jurisdiction in the development of legislation."

Ever since the first chief actuary was appointed in 1936, the committee noted, "the tradition was for a close and confidential working relationship between the individual who held that office and the committees of jurisdiction in the Congress, a relationship which the Committee values highly. It is important to emphasize that the Committee relies on its ability to seek estimates on a confidential basis from the Chief Actuary, especially when developing new legislation. Thus, the independence of the Office of the Actuary with respect to providing assistance to the Congress is vital in maintaining a trusting and useful relationship."

It would be unthinkable to propose any serious policy changes to the Social Security program without having them "costed-out" by SSA's actuaries. The experts in the Office of the Actuary are the "honest brokers" whom all parties can turn to for objective assessments of policy choices.

"You have a free-flowing discussion and sometimes a heated discussion."
—Dwight K. Bartlett III

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The actuaries turn out many reports, but the best-known product to which they contribute is the annual trustees report on the financial and actuarial status of the Social Security system. The actuaries do much of the heavy lifting, developing and running the computer models, pouring over endless tables of figures, and then preparing the best estimates they can. This range includes the pessimistic projection, the optimistic view, and the intermediate outlook.

Actuaries Talk to Trustees about Report

After turning out their figures based on detailed work with complex models, the actuaries meet with the trustees, who include the Secretary of the Treasury, the Secretary of Labor, the Secretary of Health and Human Services, the Commissioner of Social Security and two public trustees, for the approval and signing of the report.

The trustees, who are political appointees, are responsible for issuing the report each year and for selecting the basic economic and demographic assumptions used in the report's projections about the financial future of Social Security. The actuaries work closely with the Trustees and their staff members in this process of developing the assumptions. The actuaries have always sought to keep the assumptions reasonably consistent over time, avoiding wide swings that are often popular, reflecting very recent trends. The actuaries then use these assumptions to produce the projections—about the economy, the work force, the collection of taxes and the payment of benefits.

"Actuaries are highly skilled professionals with decades of experience and their work is received with a high degree of credibility."
—Dwight K. Bartlett III

The actuaries and the staff working for the trustees talk about the numbers and what should go into the final report. Discussions are professional, thorough, and sometimes a little heated. "The budget assumptions of any administration are often overly optimistic," said former chief actuary Harry Ballantyne. The political leaders, whether Democrat or Republican, believe that their economic and fiscal policies will produce positive results in the short term. They would like the trustees' report to reflect their optimism.

Chief Actuaries of the Social Security System

William R. Williamson	1936–1947
Robert J. Myers	1947–1970
Charles Trowbridge	1971–1973
3 Deputies as "Acting"	1973–1975
A. Haeworth Robertson	1975–1978
Dwight K. Bartlett III	1979–1981
Harry Ballantyne	1982–2000
Stephen C. Goss	2001–present

"Many times there are some differences," between the actuaries and the political staff members, said Ballantyne. The cabinet staff people would say "why can't we assume this? We go back and forth and sometimes changes are made." Former chief actuary Dwight K. Bartlett III describes the process this way: "You have a free-flowing discussion and sometimes a heated discussion."

But regardless of who controls the White House and Congress, the actuaries have been able to demonstrate their credibility and to build up reserves of respect and good will. "Actuaries are highly skilled professionals with decades of experience and their work is received with a high degree of credibility," Bartlett noted.

As they make projections, actuaries must bring a combination of mathematical rigor and humility to the vital task of anticipating the unknowable changes of the future.

Buttressed by their expertise, their autonomy as civil servants, and their traditions of independence, the actuaries stand their ground in these technical and political discussions, and they usually are persuasive.

The actuaries have to insist on independence because they must provide a foundation of reliable data, which is used by researchers and policymakers for an almost limitless variety of purposes.

At the end of the massive trustees' report, usually more than 200 pages, is a statement of actuarial opinion. This is a seal of approval, saying the report's projections of the future of Social Security have been prepared following standard actuarial techniques. This tells the public that the report makes honest use of the numbers prepared by the actuaries, and that the assumptions in the report are reasonable ones. This is a statement that the numbers and estimates in the report have not been distorted to serve a political objective. The chief actuary, by law, has the responsibility of certifying the report, assuring its credibility. Stephen C. Goss, the current chief actuary, is the man whose signature makes the trustees report a "blue ribbon" document.

In dealing with trustees' staff and other political appointees, "you have to be firm but polite," Myers said. "An actuary is a person with high integrity. He says what he means and that's it."

As they make projections, actuaries must bring a combination of mathematical rigor and humility to the vital task of anticipating the unknowable changes of the future. "These are highly sophisticated projections, but they are after all projections of what the future will be, not absolute predictions," said Bartlett.

For Further Reading

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