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The Economics of Social Security

Full Length Text — Part: 6 Chapter: 3
Micro Only Text — Part: 4 Chapter: 3
Macro Only Text — Part: 5 Chapter: 3

To Accompany "Economics: Private and Public Choice 12th ed."
James Gwartney, Richard Stroup, Russell Sobel, & David Macpherson
Slides authored and animated by:
James Gwartney, David Macpherson, & Charles Skipton

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Introduction to the Social Security Program in the United States

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Social Security in the United States

- The Social Security program in the U.S.:
 - Offers protection against the loss of income that usually accompanies old age or the death of a breadwinner.
 - Is a **pay-you-go** system. It is not based on the saving-and-investment model.
 - Is an **intergenerational income-transfer program** – most taxes collected from the present generation of workers are used to finance current benefits.
- Because of the **pay-as-you-go** nature of the U.S. Social Security program, it is greatly influenced by changing demographics.

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Workers Per Social Security Beneficiary

1950 2004 2030

- In 1950, there were 16.5 workers per social security recipient.
- By 2004, the figure had fallen to only 3.3.
- By 2030, there will be only 2.2 workers per retiree.
- As the worker / beneficiary ratio falls, a *pay-as-you-go* system becomes less viable.

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Why is Social Security Heading for Problems?

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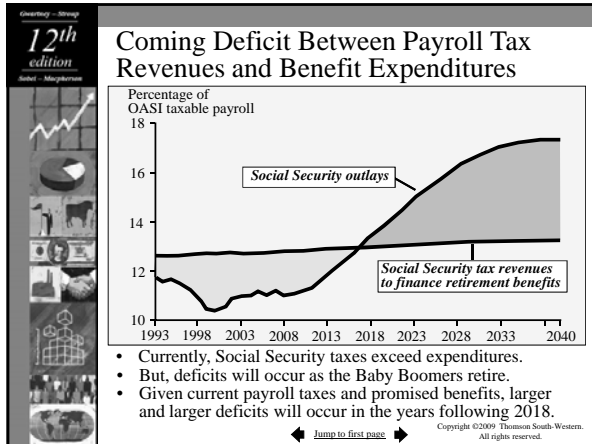
The U.S. Population 65 and over: 1980–2006 and Projections to 2030

U.S. Population Age 65 and Over (millions)

Year	Population (millions)
1980	25
1970	28
2000	35
2010	40
2020	55
2030	70

- The growth rate of the elderly population will accelerate as the baby boomers move into the retirement phase of life during the years following 2010.
- This will place strong pressure on both the Social Security and Medicare programs.

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Will the Trust Fund Lighten the Future Tax Burden?


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The Trust Fund

- Current revenues exceed expenditures on benefits by about \$70 billion per year.
- The *surplus* is put into a trust fund that is "invested" in government bonds.
 - Because the federal government both pays and receives the interest on these bonds, they are not like the bonds, stocks, and physical assets held by a private insurance company.
 - **Social Security Trust Fund (SSTF)** bonds are an IOU from the Treasury to the Social Security Administration. Thus, their net asset value to the federal government is zero.
 - Higher taxes or revenue from other sources will be required to redeem the bonds.

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The Real Problem of the Current System

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The Social Security Problem

- Once the baby boomers begin retiring, the revenues flowing into the system will be insufficient to finance the promised benefits.
 - Beginning around 2018, payroll tax revenues will fall short of the promised benefits.
 - Under current law, revenues will be sufficient to pay only about three-quarters of promised benefits by 2030, and less in later years.
- There are only 4 ways to cover the shortfalls:
 - cut benefits,
 - increase taxes,
 - cut spending in other areas, or
 - borrow.

-- none of these options are attractive.

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Who is Helped and Who is Hurt by Social Security?

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Social Security and the Poor

- Social Security is financed using a flat tax rate applied up to the income cut-off limit, but the formula used to calculate benefits disproportionately favors workers with low lifetime earnings.
- While the benefit formula is favorable to the poor, other aspects of the system are not.
 - Because low income (*and poorly educated*) workers have higher mortality rates (*and a shorter life expectancy*), they are more likely to pay into the system for many years and die before drawing benefits. (See accompanying slide.)

(continued)

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Social Security and the Poor

- While the benefit formula is favorable to the poor, other aspects of the system are not.
 - Low-wage workers generally begin full-time work at a younger age and therefore pay more into the system earlier (*and forego more interest*).
 - Couples with a high-wage worker are more likely to gain from Social Security’s spousal benefit provision, which provides the non-working spouse with benefits equal to 50 percent those of the working spouse.
- Social Security may actually transfer income modestly away from the poor.

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Mortality Rates by Level of Education

Highest Grade Completed	Age-adjusted mortality rate
0-4 Elementary	+8%
5-7 Elementary	+10%
8 Elementary	+9%
1-3 High School	+9%
4 High School	-4%
1-3 College	-8%
4 College	-21%
Graduate School	-32%

U.S. Average

Source: Center for Data Analysis, Heritage Foundation.

- As shown here, the age-adjusted mortality rate is inversely related to education (*and income*). So too is life expectancy.

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The Impact of Social Security on Minorities and Working Women

- Because of their shorter life expectancy, blacks derive a lower rate of return from Social Security than whites, and a substantially lower return than Hispanics. *(See following slide.)*
- Many married women in the labor force are eligible for benefits *(based on the earnings of their spouse)* that are approximately equal to, or in some cases greater than, benefits based on their own earnings. Thus, they derive few, if any, benefits from the taxes they pay into the system.

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Mortality Rates by Ethnicity

Real Annual Projected Rate of Return on Social Security Contributions (%)

Group	Blacks	Whites	Hispanics
Male (single)	-1.3%	0.2%	1.6%
Female (single)	1.8%	2.3%	3.0%
Married (2-earner family)	0.5%	1.2%	2.3%

- Whites derive a higher real rate of return from Social Security contributions than blacks, but Hispanics derive a return that is even higher than whites.
- Can you explain why?

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Is the Structure of Social Security Suitable for the Twenty First Century?

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The Future of Social Security

- When the number of retirees is growing more rapidly than the number of workers, a pay-as-you-go system does not work well.
- Because of changing demographics, the Social Security and Medicare systems now confront huge unfunded liabilities -- shortfalls between promised future benefits and revenues expected at current tax rates.
- According to Social Security and Medicare Trustees, the unfunded liabilities are:
 - \$7 trillion for Social Security, and,
 - \$34 trillion for Medicare.
- The shortfalls in the systems (\$41 trillion) are approximately three times the size of the current U.S. economy.

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Personal Retirement Accounts

- The outdated structure of Social Security and size of the unfunded liability may force congress to consider modifications.
- The most viable solution would be some form of personal retirement accounts that would incorporate personal ownership and the saving - investment principle.
 - Several countries have moved in this direction (Chile, United Kingdom, Sweden, Germany, & the Netherlands are examples).
 - With personal ownership, the disincentive effect of payments into a retirement account would be substantially less than the taxes of the current system.

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Questions for Thought:

1. Are the following statements *true or false*?

- a. The Social Security benefit formula works to the advantage of low-wage workers.
- b. Compared to those with higher earnings, on average, low-wage workers are more likely to pay thousands of dollars in Social Security taxes and then die before, or soon after, becoming eligible for retirement benefits.
- c. Social Security works to the disadvantage of groups with below average life expectancy.

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Questions for Thought:

2. When the Social Security system begins running a deficit during the years following 2018, the bonds in the trust fund will be drawn down. In order to redeem these bonds, the federal government will have to

- a. raise taxes, reduce spending on other programs, or increase its borrowing.
- b. draw down Social Security bank deposits that have been set aside to pay future benefits.
- c. sell private equity investments that the government has been purchasing with Social Security contributions.

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Questions for Thought:

3. Are the following statements true or false?

- a. Only about 90% of the current revenues flowing into the Social Security system are needed for benefit payments to current retirees.
- b. Since 1980 most of the social security surplus was used to reduce the national debt.
- c. Current demographic conditions are favorable to the Social Security system because the birth rate was low during 1930-1945.

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Questions for Thought:

4. Will the funds currently being built up in the Social Security Trust Fund help keep federal taxes low when the baby boom generation retires? Why or why not?

5. How does the Social Security system influence the economic status of blacks? How does it influence the economic status of Hispanics?

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