Social Security Actuarial Status

Recent Experience and Prospects for the Future

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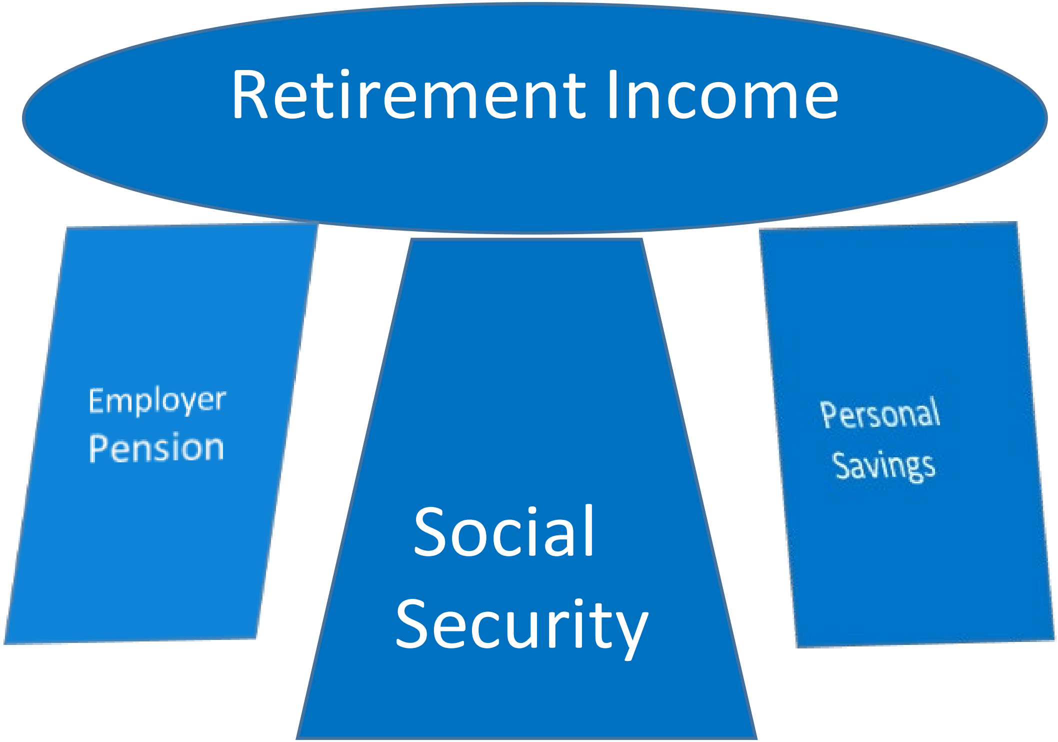
Association of Government Accountants

Baltimore Chapter

April 27, 2022

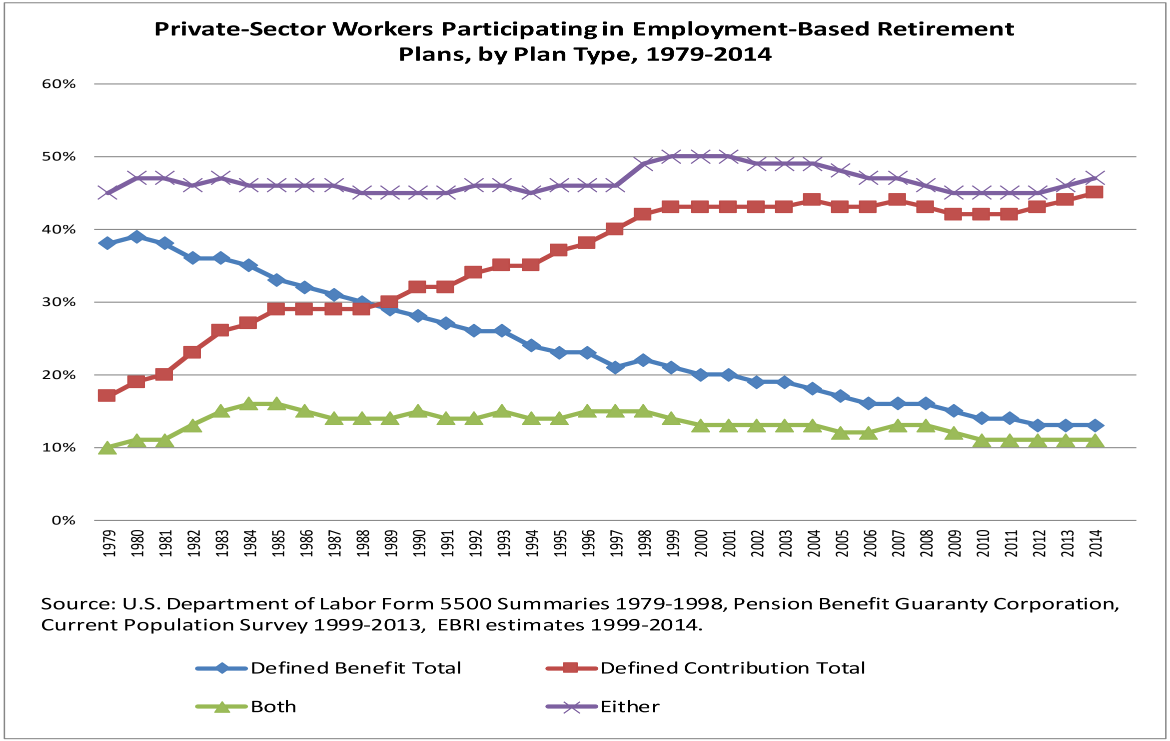
Three-Legged Stool: Basis for Retirement Planning

Common Wisdom: Aim for 75-80 Percent Replacement Rate



Defined Benefit Plans Replaced by DC Plans

And Lump Sum Options Increasing for DB Plans



Social Security: What Does It Provide?

- Retirement and survivor monthly benefits started in 1940
  - ***Never missed a payment!***
- Eligible age lowered from 65 to 62 in 1957 for women, 1962 for men
- Full retirement age rises from 65 to 67 by 2022
- Disability benefits started in 1957
- **Benefits rise with average wage *across generations*, but with just with CPI after eligibility**
- Payroll taxes are roughly pay-as-you go
  - Rose from 2% to 12.4% as system matured

Social Security Financing

- Basically “Pay-As-You-Go”
  - Current workers provide for current beneficiaries
  - Trust Funds are a “contingency reserve” because **cannot** borrow
  - Total spending to date cannot exceed income to date
- Current OASDI reserves (excess income) are $2.9 trillion
  - Available to augment tax income as needed
- Reserves projected to deplete in 2034 under current law
  - But 78 percent of scheduled benefits will still then be payable
- **Expect Congress to act—as it always has**

What We Do—Office of the Chief Actuary

- Baseline projections of OASDI cost and revenue under current law
  - For the Trustees Reports
  - For the President’s Budget (including SSI as well)
  - SSA and Governmentwide Financial Statements
- Estimates for proposals to change law, regulations, and policy
  - For Congress, the Administration, and others
- Actuarial notes and studies

What We Do—Annual Trustees Reports

- Trust Fund operations of the past year and the next five years
- Actuarial status of the trust funds
  - This means the ability to meet the cost of scheduled benefits with scheduled revenue and trust fund reserves
    - The extent to which scheduled revenue will fall short, forcing cuts or delays in benefits in the absence of legislative change
    - And the magnitude of legislative changes needed
- Results used for Statement of Social Insurance (SOSI) in Financial Statements

Full Scope Audit of the 75-year Projections

- Statement of Social Insurance (SOSI) and Statement of Changes in Social Insurance Amounts (SCSIA), in the Agency Financial Report and in the consolidated Financial Statement of the U.S. Government
- Mandated by the FASAB
  - For the 2021 audit, GT and GAO actuaries, economists AND accountants!
  - We received a clean opinion—again! CEAR award 24!
- Audit starts after Trustees Report release through October
  - Huge learning experience for all

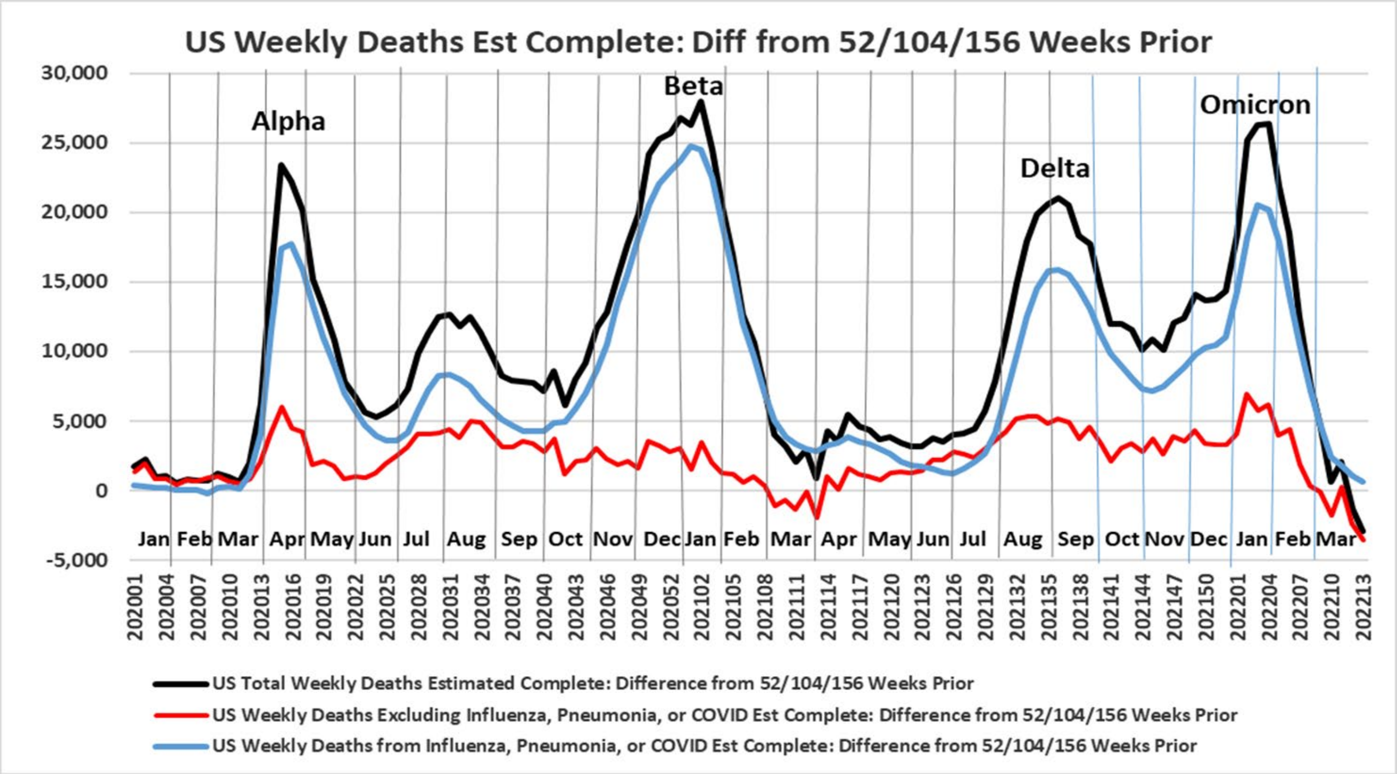
Full Scope Audit of the 75-year Projections

- Audit covers all aspects of the financial statement
- We review all assumptions and methods, and all changes
- Auditors review more than replicate due to complexities
- Extensive review of internal controls
- Reasonableness of assumptions—as per attestation of the Chief Actuary
- Sensitivity analysis
- ***Subsequent events—where applicable—as in 2020***

COVID-19 Current and Long-Term Implications

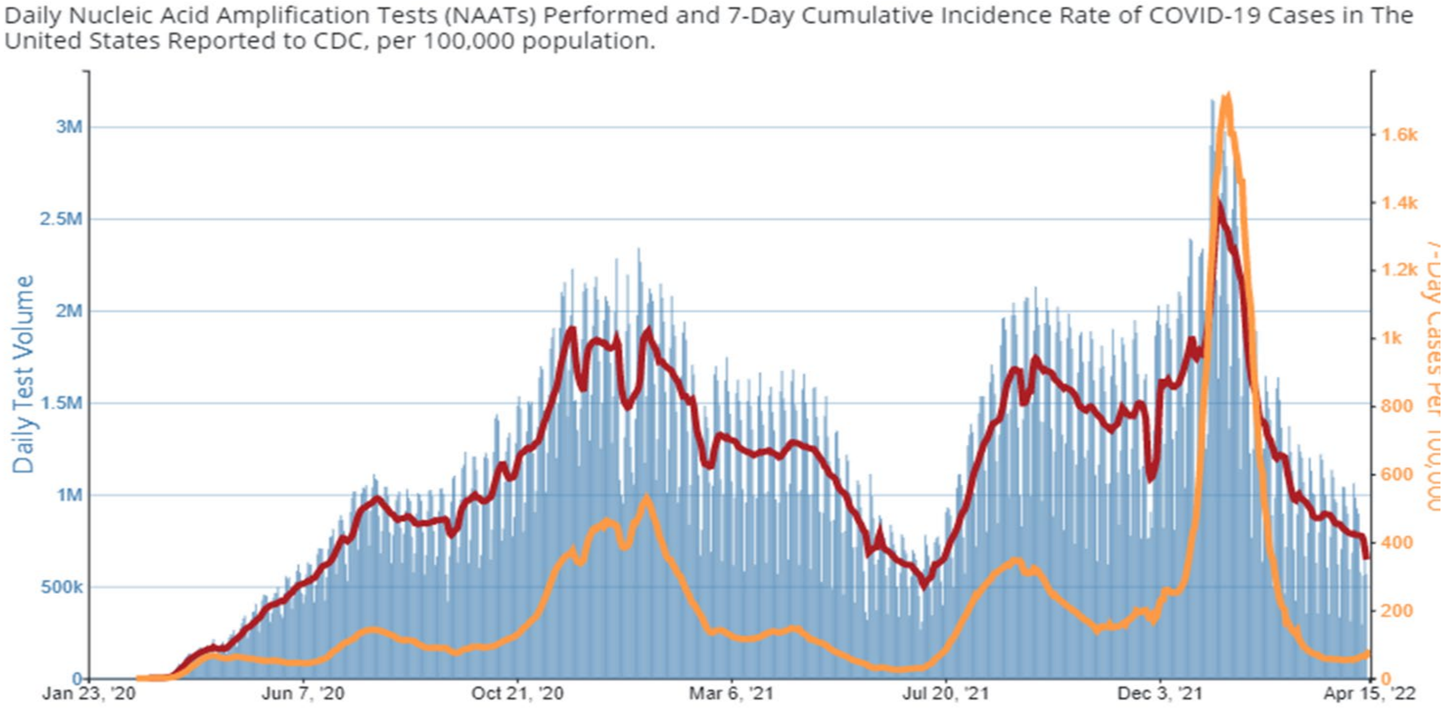
- Raised death rates in US roughly 16% in 2020 and 18% in 2021
- Reduced life expectancy for affected cohorts
  - Many died earlier, disproportionately those with other conditions
  - Most survived infection, but will carry some residual compromise
  - Thus, possibly no net implication for “trend rate” in mortality
- However, this is the second coronavirus in 20 years
  - Expect periodically in a now mobile world population?
- If deaths are raised by 16% in 2 of every 20 years:
  - Average level of mortality will be 1.6% above “trend”

Excess Weekly Deaths for US—Estimated Complete



Will There Be More Waves?

Trends in reported tests and new cases through April 15, 2022



Polling Question #1

What do you expect the future to hold for COVID-19?

a) It's over

b) It will be endemic at a low level

c) There will be continuing significant waves into 2023

Current Actuarial Status

- Projections from the 2021 Trustees Report
- Fully reflecting expectations for COVID-19 and the economic recession/recovery

Changes in 2021 TR Due to Pandemic/Recession

The projections in the 2021 Trustees Report include the Trustees' best estimates of the effects of the COVID-19 pandemic and ensuing recession, which were not reflected in the 2020 report.

1. Lower employment and earnings in the near term, through 2023
   Projected average wage index increase of 2.7% for 2020; actual was 2.8%
2. Increased deaths in 2020 through 2023
3. Delays in births and immigration
4. Lower applications for benefits, particularly disability
5. A permanent loss in the level of worker productivity, as in other recessions

Polling Question #2

What do you expect the future to hold for “Long COVID” (post-COVID conditions?

a) A significant increase in disability incidence
b) A significant increase in old-age mortality later
c) Both
d) Neither

Primary Changes in the 2021 TR: Longer Term

1. Birth rates: change to projecting by "cohort" rather than by year
   a) Reflects the continuing trend for women having children at older ages
   b) Lower annual birth rates through 2036, reaching ultimate 2.0 in 2056
2. Employment: updated labor force model to include latest economic cycle
   a) Lower labor force and unemployment rate with little net effect
3. Death rates: added dementia as a category and reduced rates of improvement for cardiovascular disease
4. Lower revenue from taxation of benefits per recent experience (Treasury Office of Tax Analysis)
5. Methods changes, primarily for average benefit levels
6. Note: Change in Actuarial Balance since 1983:

   62% Valuation period, 33% Economic experience/assumptions, 5% all other

   https://www.ssa.gov/oact/NOTES/ran8/an2021-8.pdf

Comparison of Effects for the 2021 TR: Including OCACT Update After the 2020 TR

On November 24, 2020, we published a memo with our preliminary estimates of the effects of the COVID-19 pandemic and ensuing recession. See https://www.ssa.gov/OACT/solvency/UpdatedBaseline_20201124.pdf.

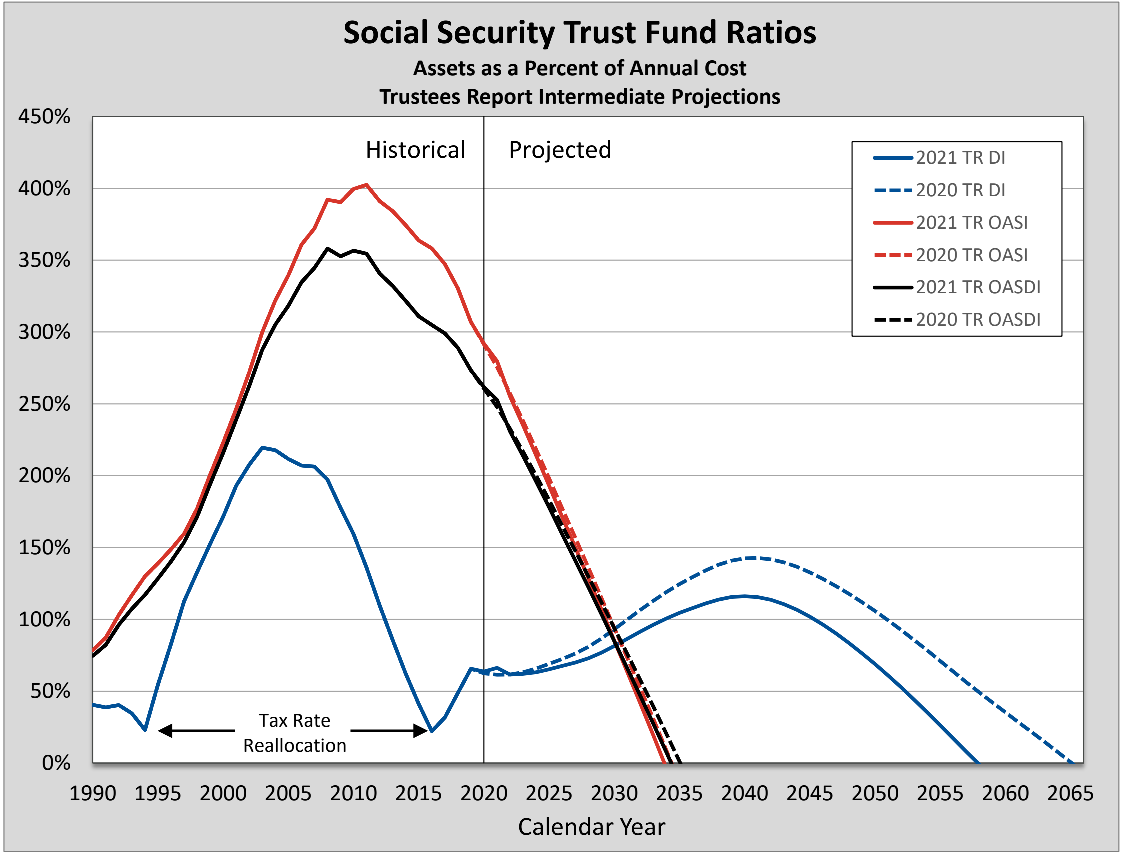
	2020 Report	11/24/2020 OCACT Update	**2021 Report**
Actuarial status of the trust funds over the next 75 years			
Year of projected trust fund reserve depletion			
OASI and DI, combined	2035	2034	**2034**
OASI	2034	2033	**2033**
DI	2065	2059	**2057**
OASDI actuarial balance (percentage of taxable payroll)	-3.21%	-3.28%	**-3.54%**
Income rate	13.85%	13.85%	**13.78%**
Cost rate	17.06%	17.13%	**17.31%**
Percent of annual cost payable after reserve depletion			
OASI and DI, combined			
For year of reserve depletion	79%	79%	**78%**
For 75th projection year	73%	73%	**74%**

Solvency: OASI+DI Trust Fund Reserve Depletion in 2034

(one year earlier than last year)

Reserve depletion date varied from 2029 to 2042 in reports over the past 30 years (1992-2021).

DI Trust Fund: reserve depletion in 2057, eight years earlier than last year. Very sensitive to changes in cash flow.

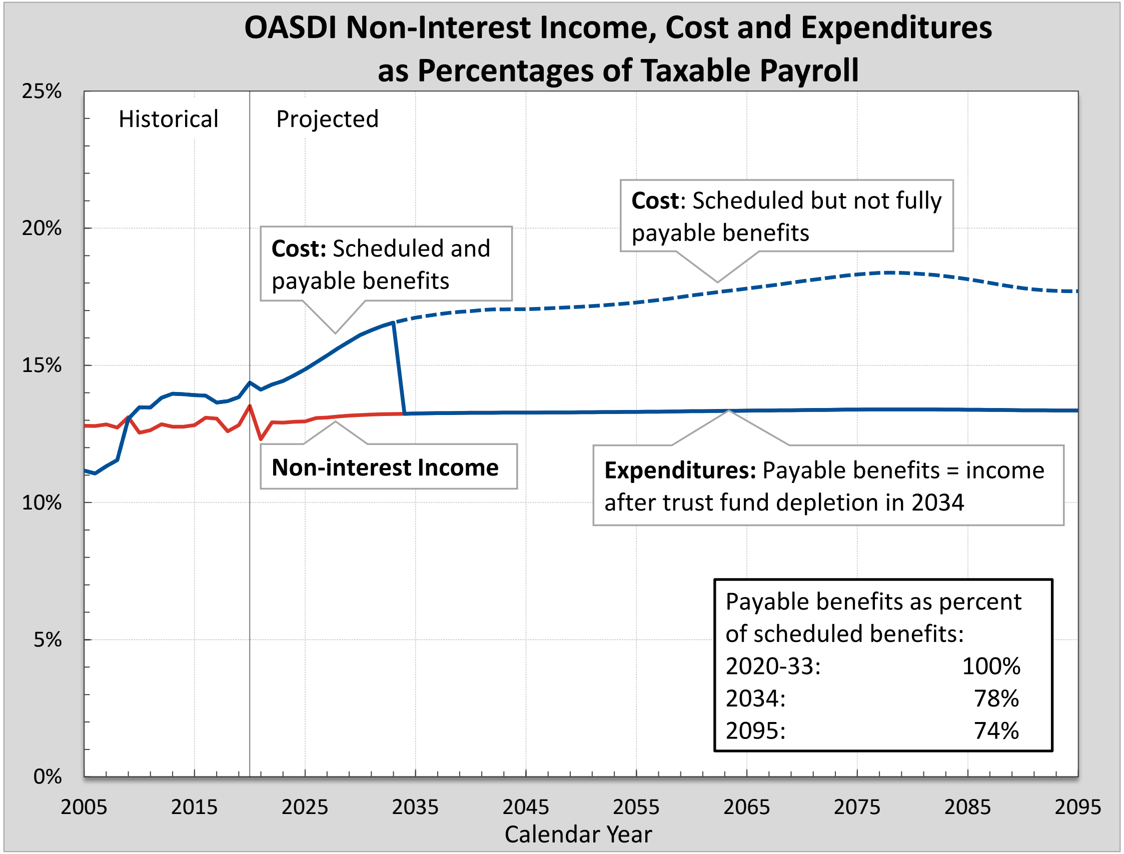


OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent negative annual cash-flow balance starting in 2010.

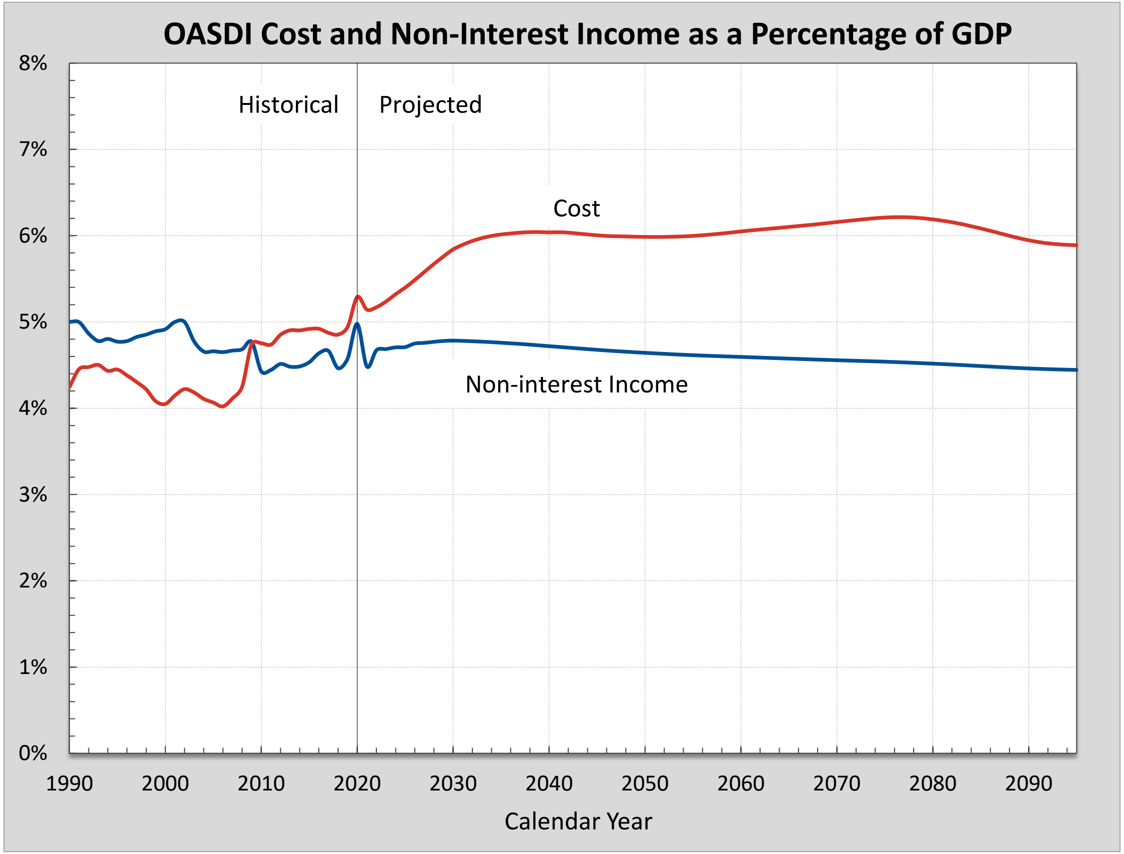
78 percent of scheduled benefits still payable at trust fund reserve depletion.

Annual deficit in 2095: 4.34 percent of payroll: 0.21 percent smaller than last year.



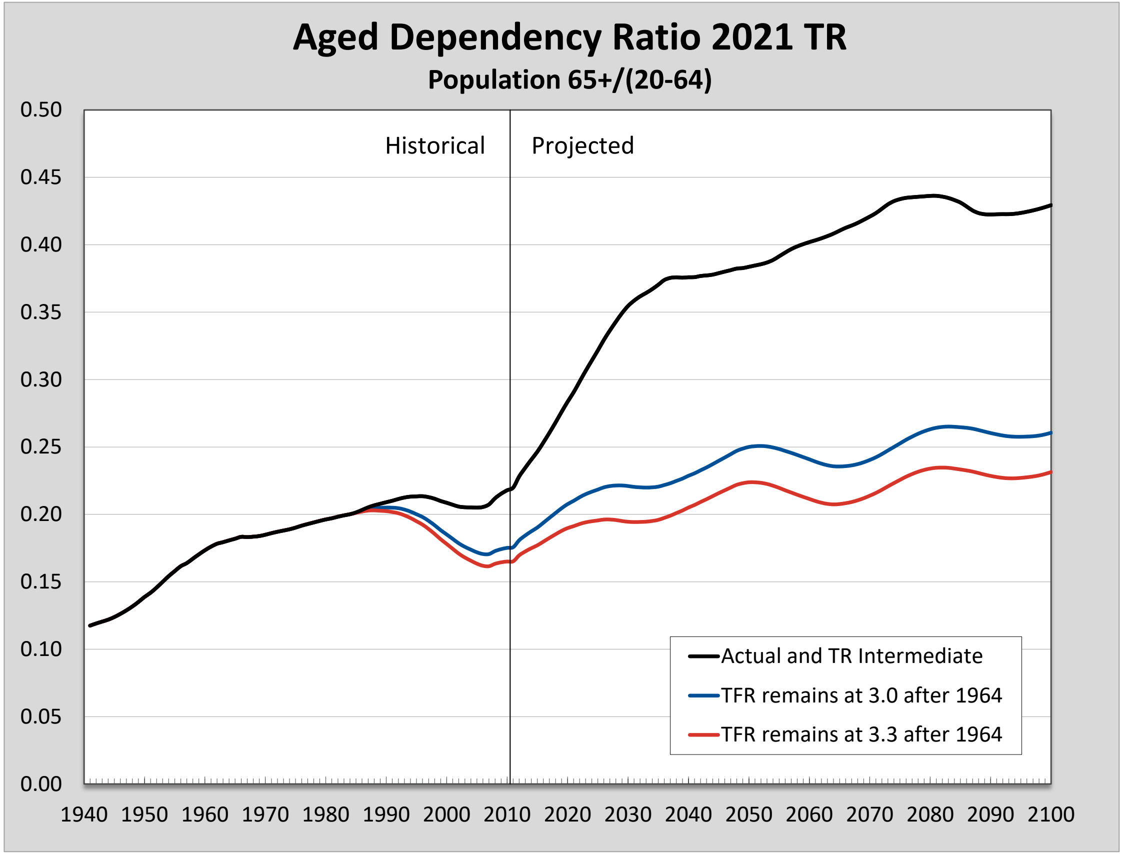
SUSTAINABILITY: Cost and Income as Percent of GDP

Rises from a 4.2 percent average in 1990-2008, to a peak of about 6.2 percent for 2077, and then declines to 5.9 percent by 2095.

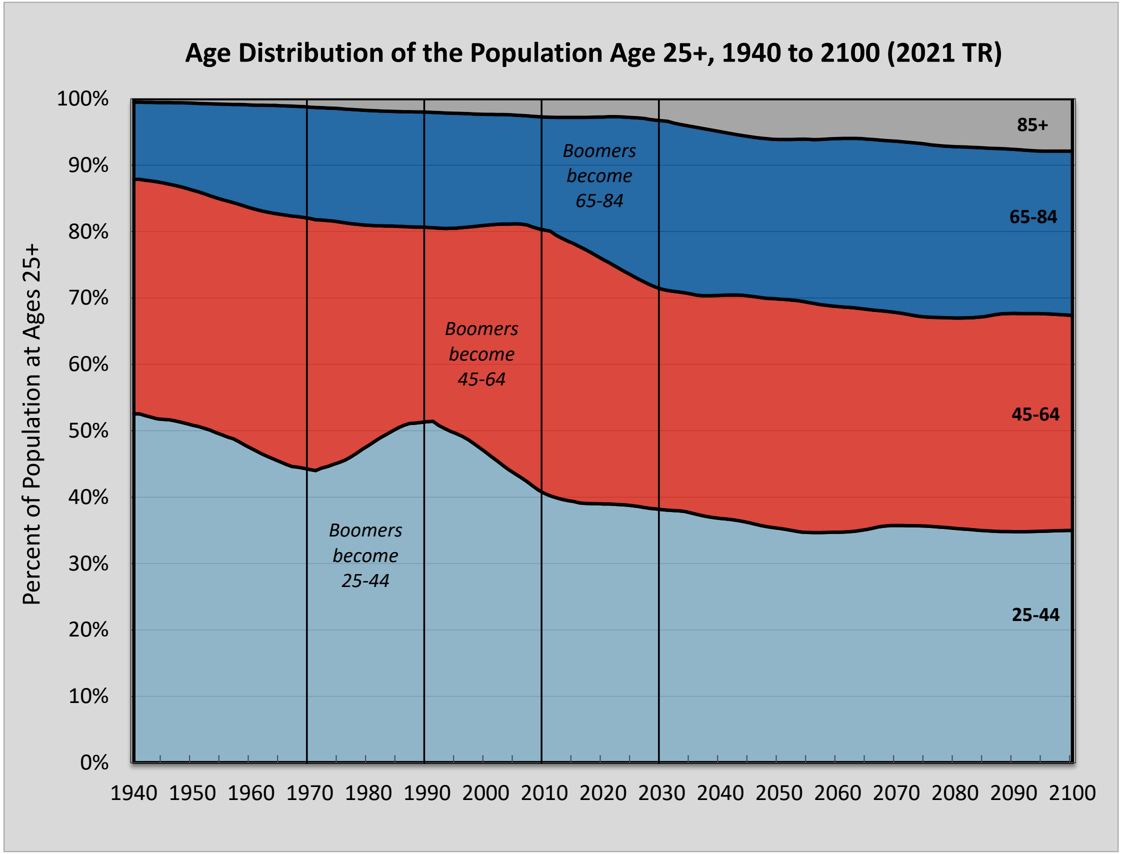


Why Does Cost Rise Between 2008 and 2035 as Percent of Payroll and GDP? Aging: Change in Age Distribution

Mainly due to drop in birth rates.



The Changing Age Distribution as the Baby Boomers Age and Are Replaced by Lower-Birth-Rate Generations: *Macro Aging*



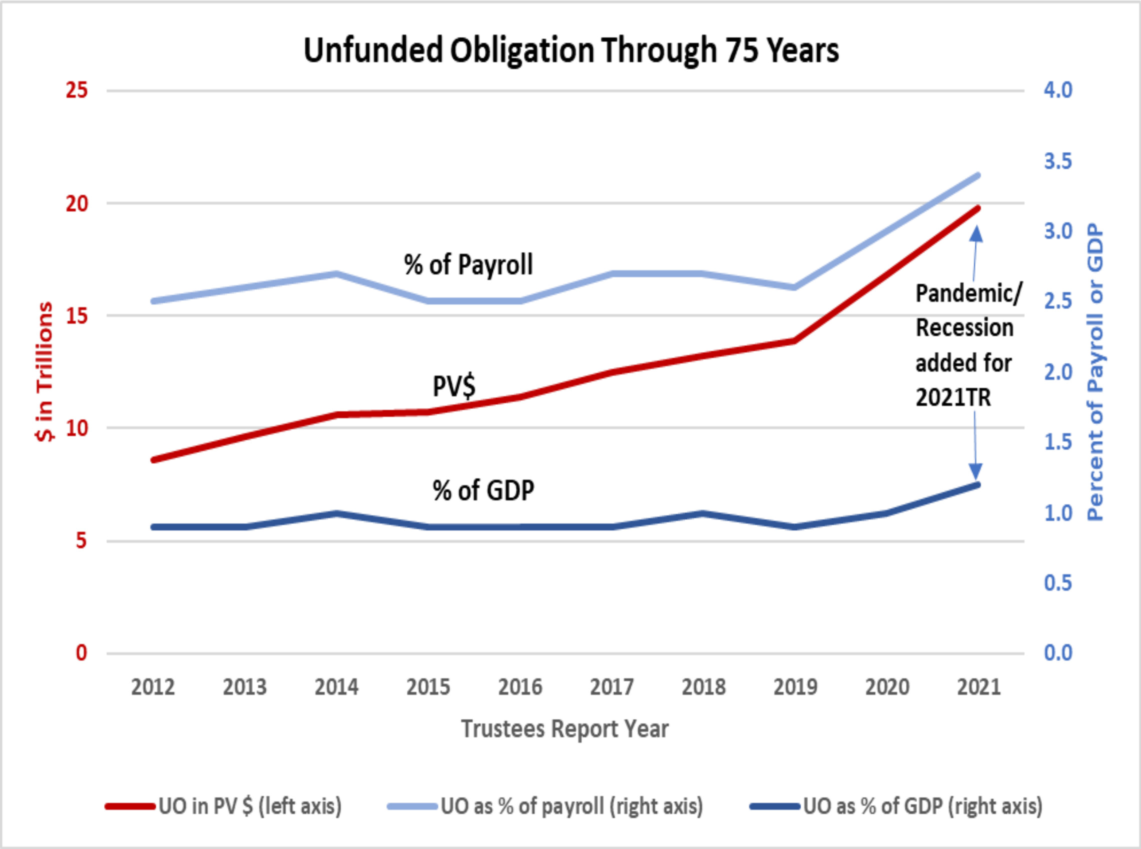
Open Group Unfunded Obligation Through the 75-Year Projection Period

As provided in SOSI

2020 Report	Change valuation date only	2021 Report
$16.8 trillion PV	$17.5 trillion PV	$19.8 trillion PV
1.04% of GDP	1.06% of GDP	1.17% of GDP

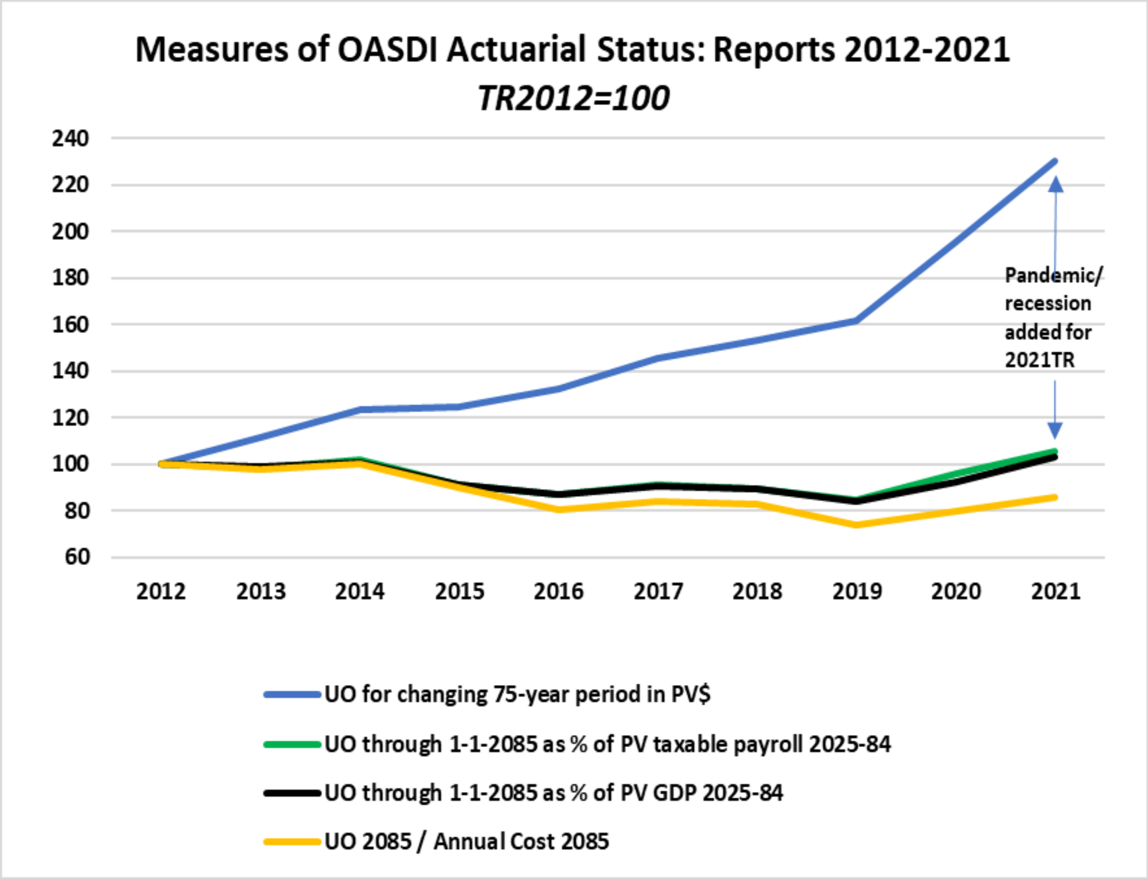
Is the Unfunded Obligation in Present Value Dollars (PV$) the Best Measure?

PV level increases by nominal interest rate each year.



What If We Focus on Shortfall Over a Fixed Period?

Changes needed to maintain adequate financing until at least 2085, as shares of GDP and taxable payroll over the 60 years 2025-84, have not increased over the last 10 Trustees Reports.



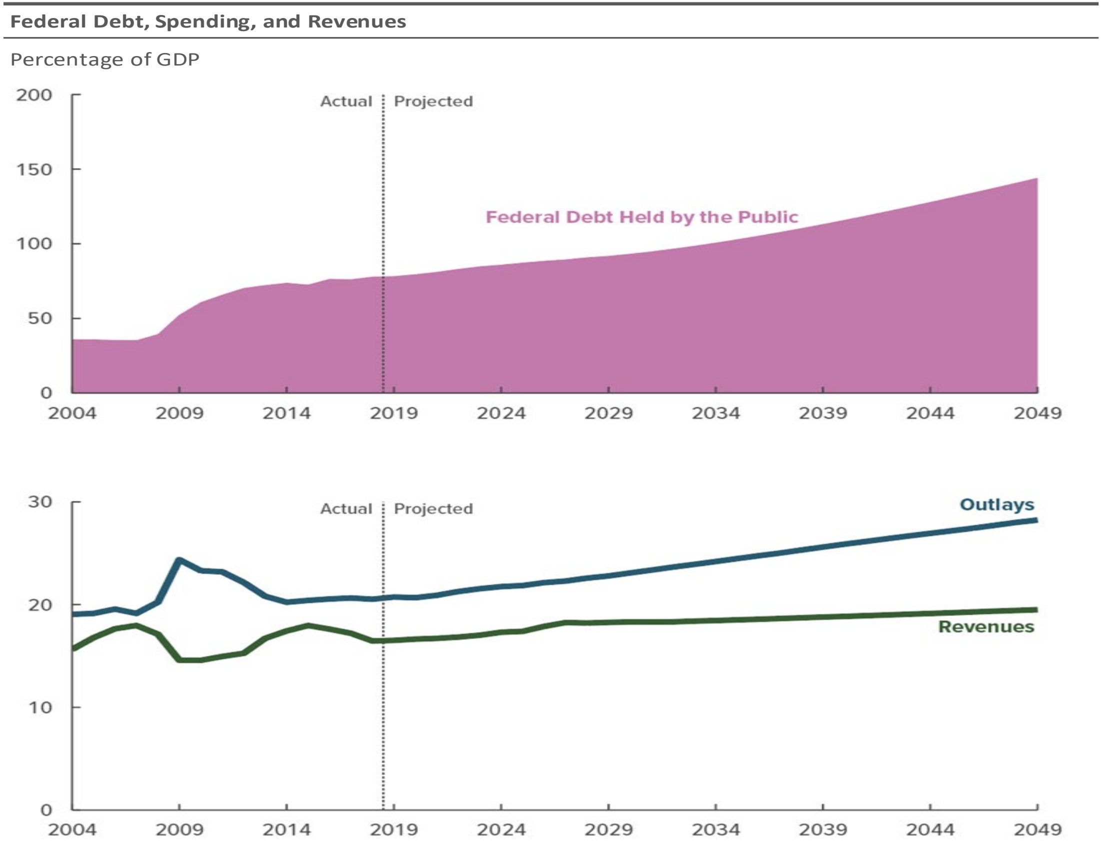
Polling Question #3

What is the best way to convey the unfunded obligation?

a) In present value dollars
b) As a percent of taxable payroll
c) As a percent of GDP

But, Wait – How About Budget Scoring?

Don't entitlements just keep borrowing after reserve depletion?



Source: Congressional Budget Office, June 2019

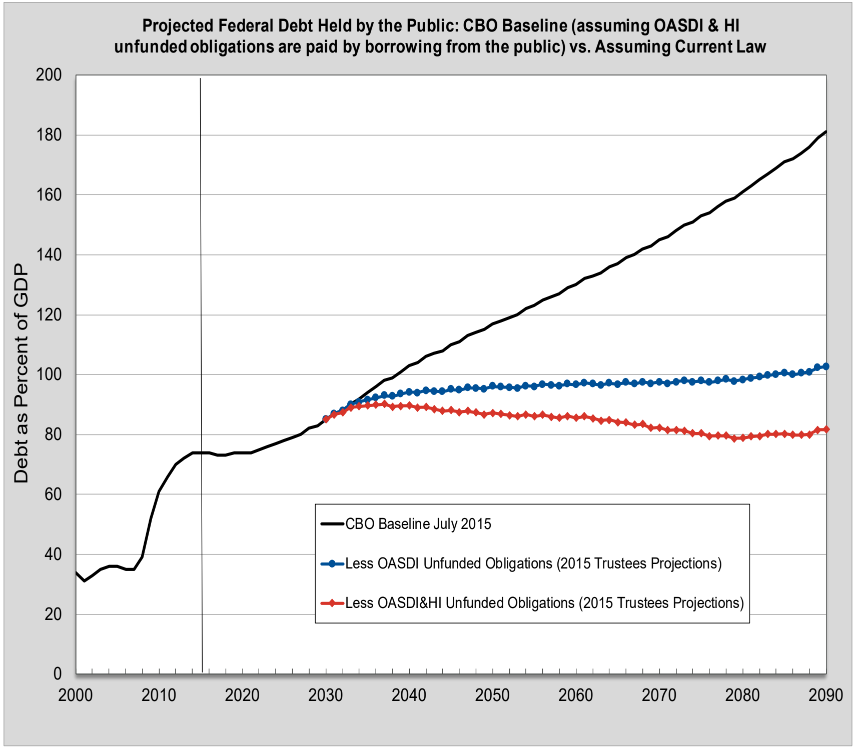
Actually, No. Budget Scoring Is Inconsistent With the Law, and All Past Experience.

See Actuarial Opinion in the 2020 TR *(also 2014-2019 TRs)*

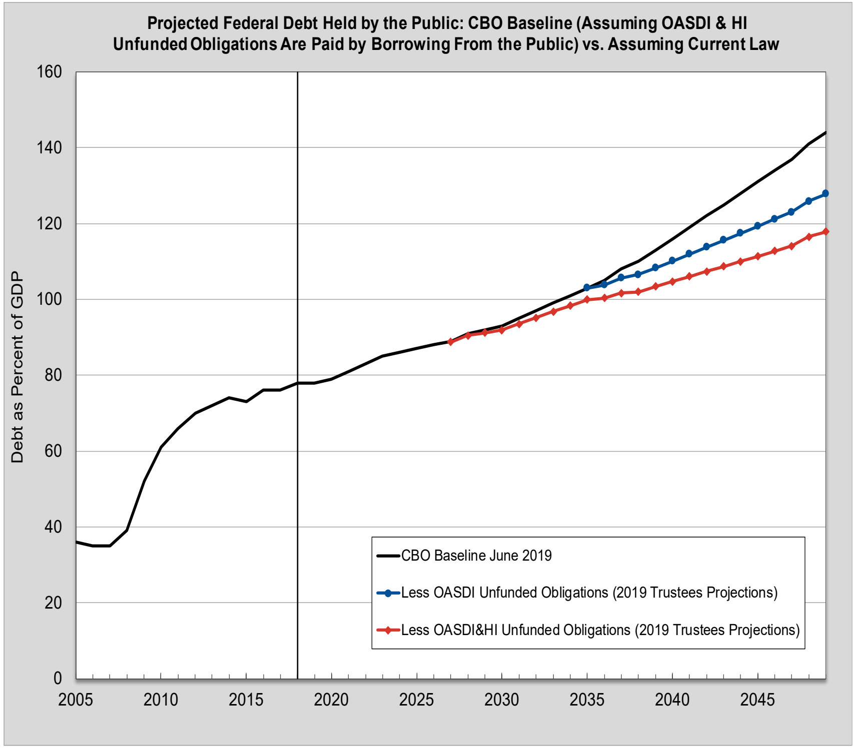
1) After reserves deplete, $19.8 trillion unfunded obligation through 2095 cannot be paid under the law
   - ***Budget deems these "expenditures" creating publicly held debt***
2) Reserve redemptions spend excess "earmarked" revenues invested in an earlier year
   - ***Budget deems these "a draw on other Federal resources"***
3) Trust Fund operations have NO direct effect on total Federal debt subject to ceiling in any year—and no *net* effect on publicly held debt
   - ***Budget says redemptions increase Federal debt held by the public and often gives no credit for reserve accumulation***

What If We Project Federal Debt Consistent With the Law?

CBO Projections through 2090 in 2015



CBO Projections through 2049 in 2019



Polling Question #4

Federal budget scoring should reflect which of the following (GF = general fund of the Treasury)?

a) Current law
b) An unstated assumption that GF will cover shortfalls
c) A clearly stated assumption that GF will cover shortfalls
d) Both a) and c)

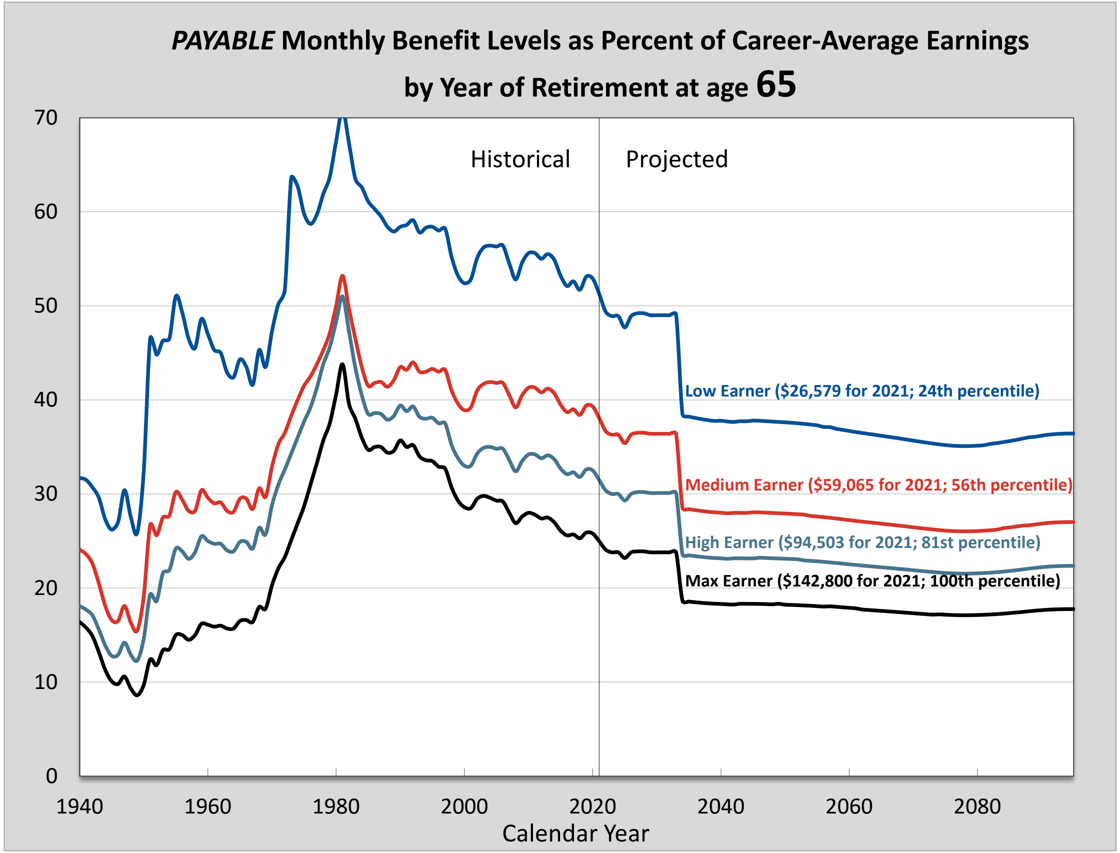
The Bottom Line

- Long-term projections provide information to assess solvency and changes needed to eliminate shortfalls
- If trust fund reserves were to become depleted:
  - Full benefits could not be paid timely
  - NO pressure on the Budget or Federal Debt
  - So Congress must act, as it always has
- Straightforward solutions:
  - Add revenue and/or lower cost for OASDI
    - Comprehensive changes ***implemented*** by 2034

Some Ways to Lower Cost

- Lower benefits for retirees – not disabled?
  - Increase normal retirement age (lowers OASDI cost, but increases DI cost)
  - Can exempt long-career low earners (Simpson Bowles 2010)
- Lower benefits mainly for high earners?
  - Reduce PIA above some level
  - Noting that higher earners generally live longer
- Lower benefits mainly for the oldest old?
  - Reduce the COLA
  - Others say increase it with the CPI-E (based on purchases of consumers over age 62)

Payable Benefits Under the Law, After Trust Fund Reserves Are Depleted, Are Effectively Lowered in the Absence of a Change in Law



Source: Annual Recurring Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html

Some Ways to Increase Revenue

- Raise the 12.4 percent OASDI payroll tax rate?
- Raise tax on highest earners?
  - Increase taxable maximum amount
  - Some tax on all earnings above the maximum
  - Provide additional benefit credit?
- Tax employer group health insurance premiums?
  - Affects only middle class if taxable maximum remains
- Tax investment income?
  - Or potentially a wealth tax?

Finally, Timing for Changes

- Historically, Congress has waited until reserve depletion is imminent
  - Given uncertainties, difficult to lower benefits or raise taxes until necessary
- Enacting “sooner” allows more options, more gradual phase in, and more advance notice
  - Best example: 17-year delay in implementing NRA increase in 1983 amendments
- OASDI reserve depletion now projected for 2034
  - One year sooner in update due to COVID-19
  - The date has varied between 2029 and 2042 over the past 30 years

Polling Question #5

When do you think the next major improvements to OASDI actuarial status will be enacted?

a) In the next 5 years
b) Between 2027 and 2033
c) After 2033

For More Information: http://www.ssa.gov/oact/

There you will find:

- Current and all prior OASDI Trustees Reports
- Detailed single-year tables for recent reports
- Our estimates for comprehensive proposals
- Actuarial notes; including replacement rates
- Actuarial studies; including stochastic
- Extensive databases
- Congressional testimonies
- Presentations by OCACT employees