## 2017 SOA Annual Meeting & Exhibit

#### **KAREN GLENN**

Session 184, Future of Social Security (US & Canada)

October 18, 2017





## SOCIETY OF ACTUARIES Antitrust Compliance Guidelines

Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

- Do not discuss prices for services or products or anything else that might affect prices
- Do not discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- Do leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- Do alert SOA staff and/or legal counsel to any concerning discussions
- Do consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone's responsibility; however, please seek legal counsel if you have any questions or concerns.



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#### **Outline**

- 1) Background and results from the 2017 Trustees Report
- 2) Challenges and selected issues
  - Aging
  - Mortality
  - Disability
  - Earnings dispersion
  - Adequacy of benefits
- 3) Potential long-term solutions



## **Social Security Trust Funds**

- Two legally distinct trust funds:
  - OASI = Old-Age and Survivors Insurance
  - DI = Disability Insurance
- Financial operations are overseen by the Social Security Board of Trustees
- The two funds are often looked at on a theoretical combined basis and referred to as OASDI
  - As of December 31, 2016, the OASDI trust funds hold about \$2.85 trillion in asset reserves



## **How Is Social Security Financed (Income)?**

- Payroll taxes
  - Employees and employers each pay 6.2% of covered earnings
  - The self-employed pay 12.4% of covered earnings
  - On earnings up to \$127,200 in 2017
- Taxes on Social Security benefits
  - High-income beneficiaries pay federal income tax on their benefits
- Interest on trust fund reserves
  - Invested in interest-bearing securities of the US government



## Where Does the Money Go (Outgo)?

#### Benefit payments

- About 61 million people getting benefits as of December 2016:
  - 44 million retired workers and dependents of retired workers
  - 6 million survivors of deceased workers
  - 11 million disabled workers and dependents of disabled workers
- Benefits are:
  - Calculated using the highest 35 years of wage-indexed earnings
  - Calculated using a progressive benefit formula
  - Increased each year with COLA based on CPI-W
- Administrative expenses
  - Only about 0.7 percent of total expenditures in 2016



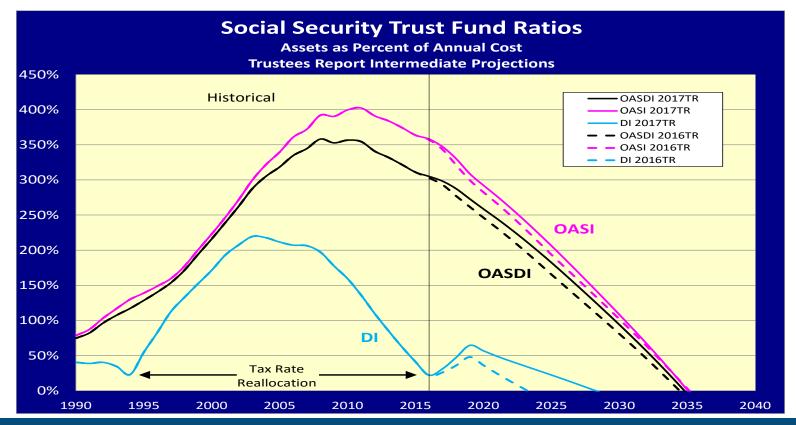
## What Is the Legislative Mandate for the Annual Social Security Trustees Report?

- 1) Trust Fund operations of the past year and the next five years
- 2) Actuarial status of the trust funds
  - This means the ability to meet the cost of scheduled benefits with scheduled revenue and trust fund reserves
  - And the extent to which scheduled revenue will fall short, forcing cuts or delays in benefits in the absence of legislative change



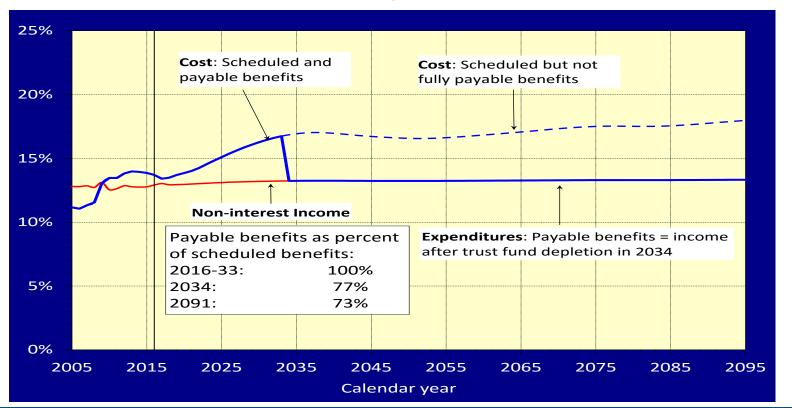
#### **SOLVENCY: OASDI Trust Fund Reserve Depletion in 2034**

(Same year as in last year's report)



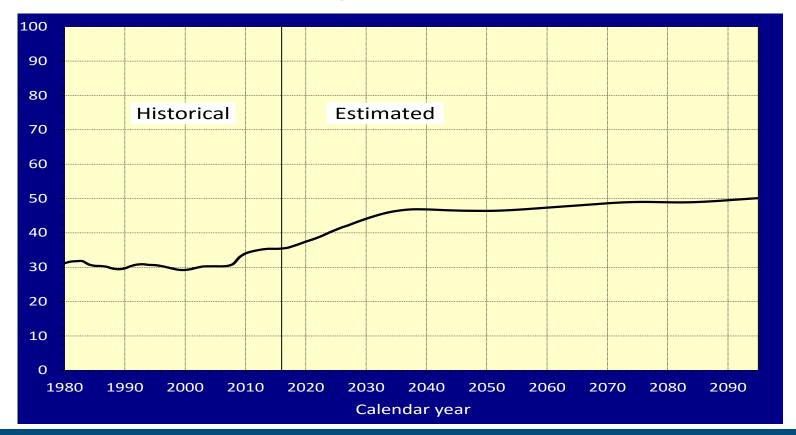


## OASDI Annual Cost and Non-Interest Income as a Percent of Taxable Payroll





## **OASDI Beneficiaries per 100 Workers**





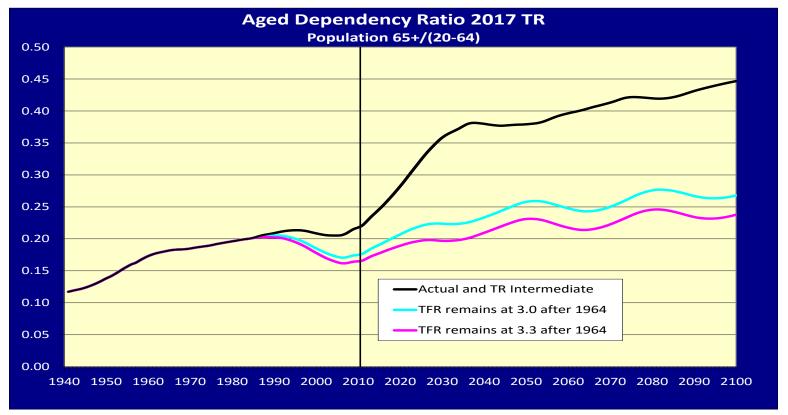
## Increasing Cost as Percent of Taxable Payroll and GDP due to Aging

- "Macro Aging"
  - Changing age distribution— getting older
  - Mainly from permanent drop in birth rates after 1965
- "Micro Aging"
  - People are living longer
  - Lower death rates
  - Higher life expectancy



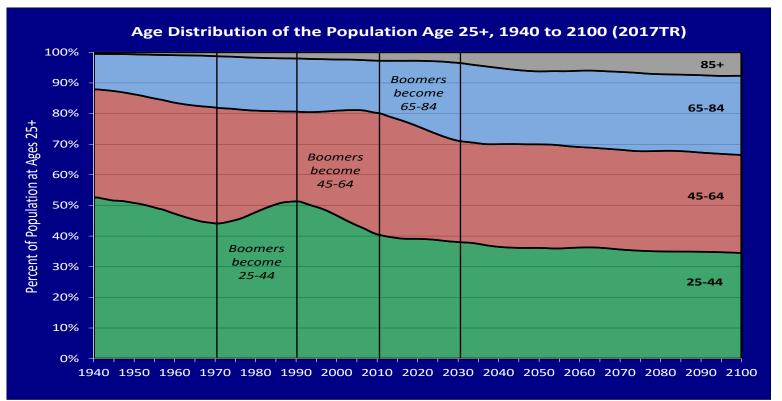
## Aging (change in age distribution)

Mainly due to drop in birth rates





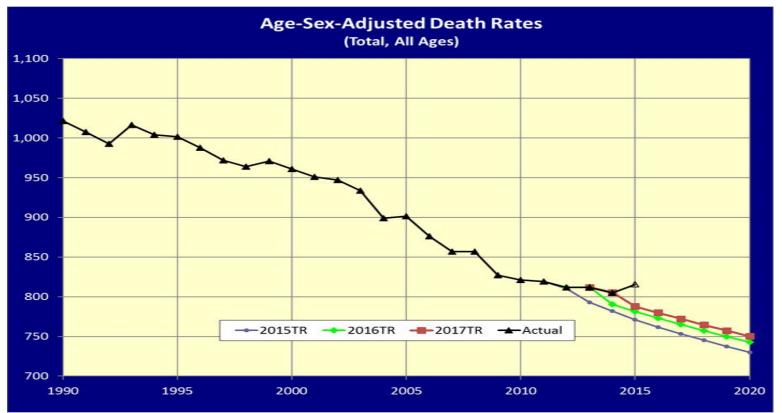
## Changing Age Distribution Over Last 20 and Next 20 Years Mainly Due to Population Aging





## **Mortality Experience: All Ages**

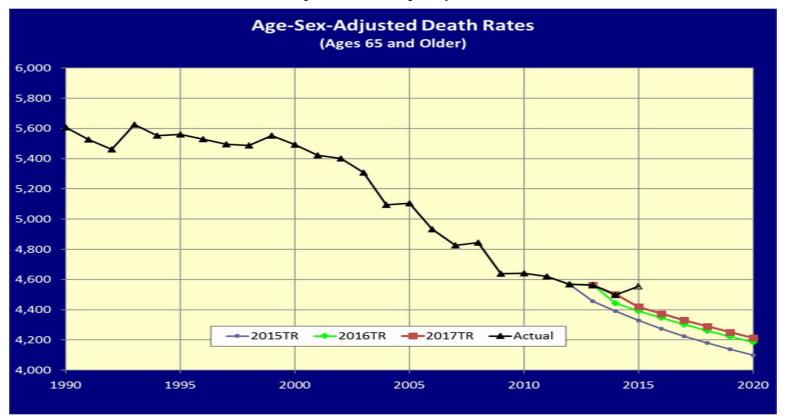
Reductions continue to fall short of expectations





## **Mortality Experience: Ages 65 and Older**

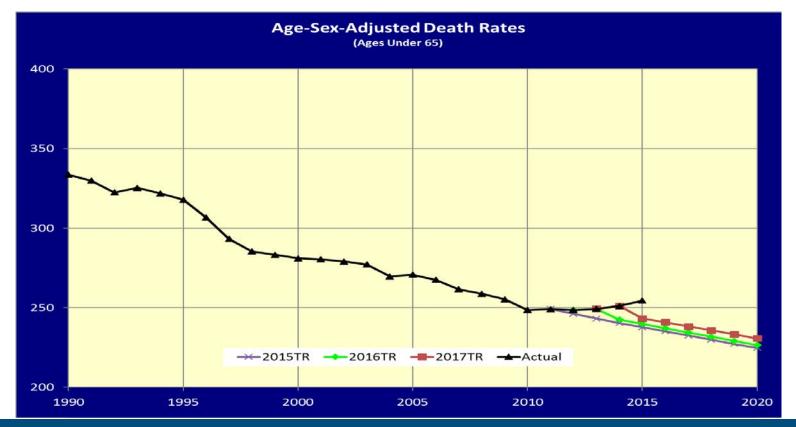
Reductions since 2009 continue to fall short of expectations





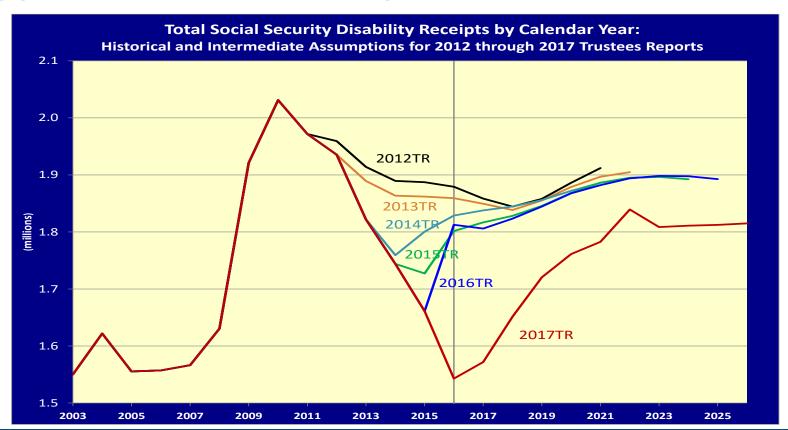
## **Mortality Experience: Ages Under 65**

Actual **increase** since 2010



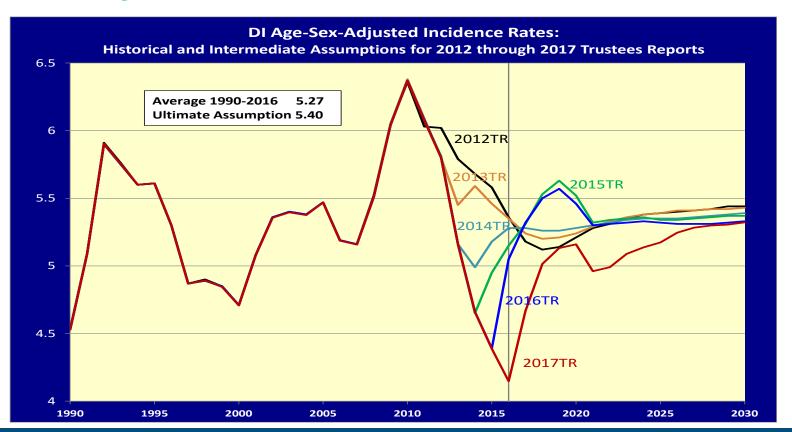


### **Applications for Disability Benefits Continue to Fall**





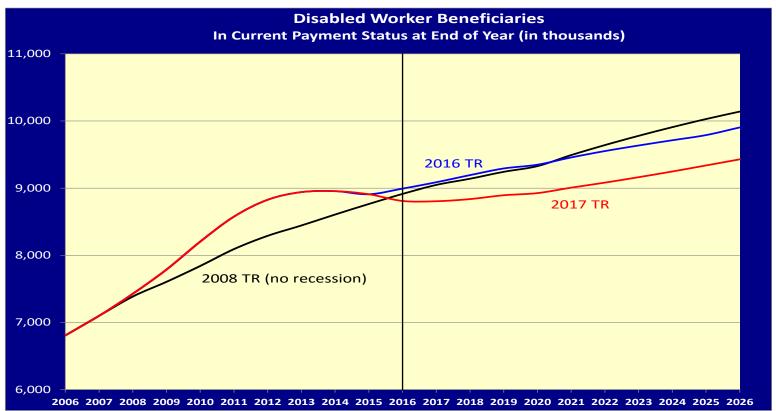
## **Disability Incidence Rate Falls to Historic Lows**





#### **Fewer Disabled Worker Beneficiaries**

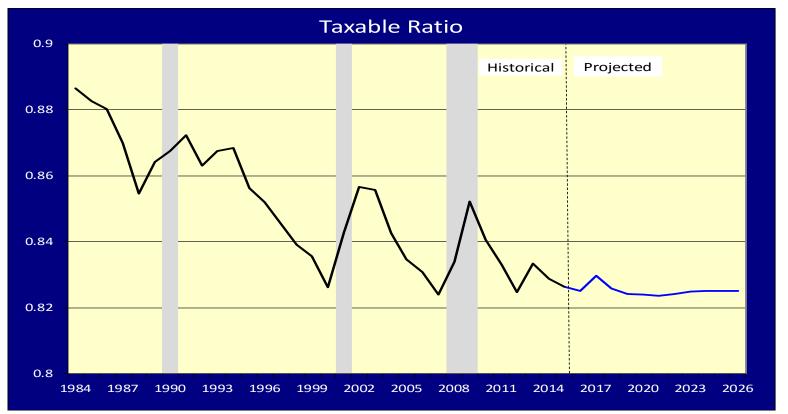
Fewer now and in near term based on recent applications and incidence rates





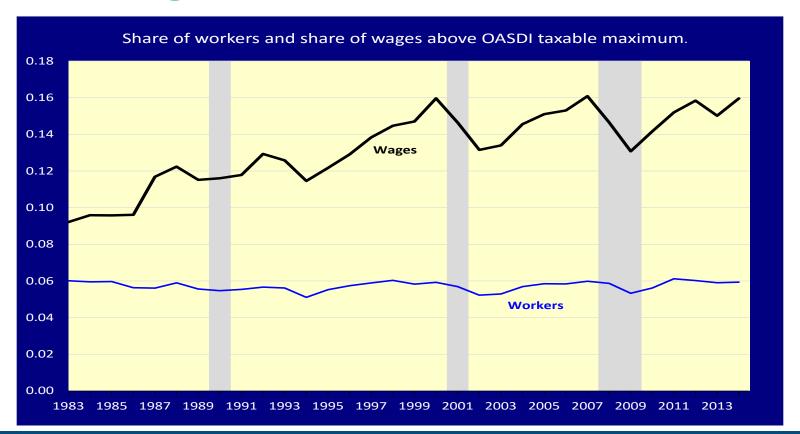
#### **Taxable Ratio**

Declined over time: concentration of earnings at the top of the income distribution





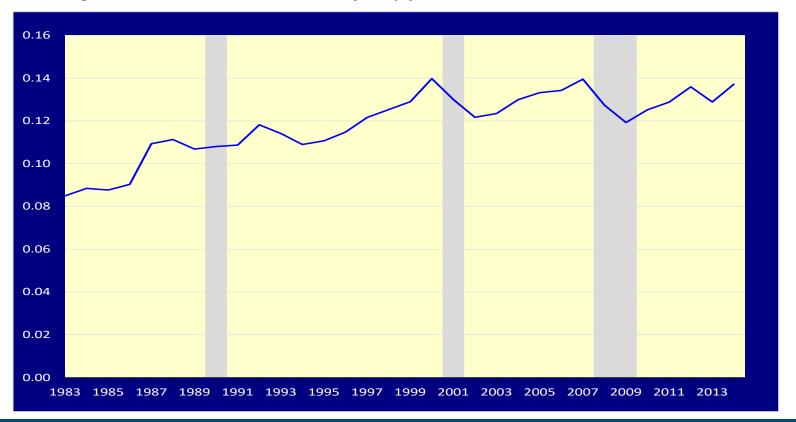
#### Trend in Wages in Excess of OASDI Taxable Maximum





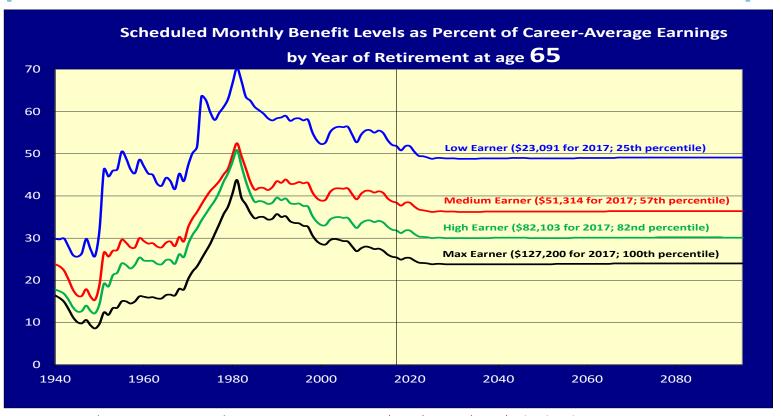
#### Share of Wages Earned by the Top 1% of Wage Earners

Rises throughout 1980s and 1990s, but fairly flat since 2000





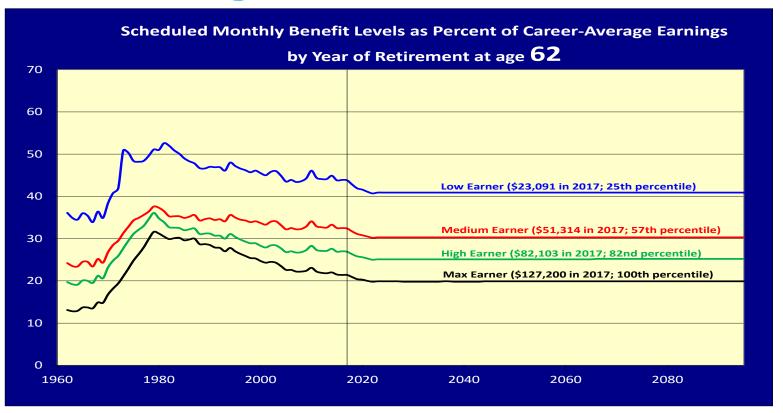
#### Replacement Rates Based on the 2017 Trustees Report



Source: Annual Recurring Actuarial Note #9 at <a href="https://www.ssa.gov/oact/NOTES/ran9/index.html">www.ssa.gov/oact/NOTES/ran9/index.html</a>



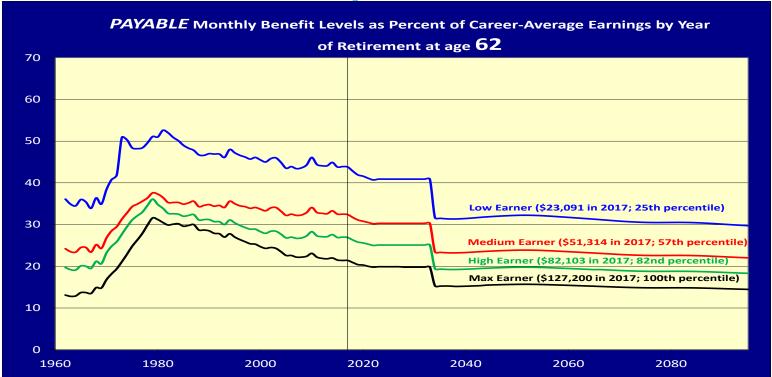
### How About at Age 62, When Most Start Benefits?



Source: Annual Recurring Actuarial Note #9 at <a href="https://www.ssa.gov/oact/NOTES/ran9/index.html">www.ssa.gov/oact/NOTES/ran9/index.html</a>



# Payable Benefits Under the Law, After Trust Fund Reserves Are Depleted, Are Even Lower



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



## **How to Fix Social Security Long-Term**

#### How can the financing shortfalls be covered?

- Lower cost (reduce benefits) by about 25%
- Increase revenues by about 33%
- Or some combination of approaches
- Also consider benefit adequacy?



## **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
- Lower benefits mainly for high earners
  - Reduce PIA above some level
  - Often combined with increasing PIA below some level, subject to work year requirements



## Ways to Lower Cost (continued)

- Lower benefits mainly for the oldest old
  - Reduce the COLA by using a chained version of the CPI
  - Some say instead raise the COLA by using the CPI-E (based on purchases of consumers over age 62)
- Increase the number of years used in calculation (currently 35)
  - Especially hurts those who haven't been in the workforce for more than 35 years



## **Ways to Increase Revenue**

- Raise tax rate on all earners
  - Increasing rate from current 12.4 percent to about 15.3 percent is projected to eliminate the long-range shortfall
- Raise tax on highest earners
  - Increase taxable maximum amount
  - Some tax on all earnings above the maximum



## Ways to Increase Revenue (continued)

- Tax employer group health insurance premiums
  - Affects only middle class if taxable maximum remains the same
- Tax certain investment income
  - Consistent with ACA approach?
- Maintain larger trust fund reserves
  - Could do this by investing some portion of reserves in equities
  - Added interest/yield can lower needed taxes



### Many comprehensive proposals scored

Example 1: Representative Sam Johnson (R-TX), December 2016

- Make PIA formula less generous but more "progressive" (shortfall ↓32%)
- Change to mini-PIA approach (↓13%)
- Raise the Normal Retirement Age gradually (↓32%)
- Lower the COLA (↓47%)
  - Based on chain-weighted CPI for most beneficiaries; 0.3pp lower on average
  - No COLA if prior year's MAGI is above certain thresholds
- Add a new minimum benefit (↑9%)
- Eliminate taxation of OASDI benefits in 2054 and later (↑15%)
- Would produce "sustainable solvency" (shortfall ↓ 100%)

Go to: <a href="https://www.ssa.gov/OACT/solvency/SJohnson">https://www.ssa.gov/OACT/solvency/SJohnson</a> 20161208.pdf



### Many comprehensive proposals scored

Example 2: Representative John Larson (D-CT), April 2017

- Make PIA formula slightly more generous, more "progressive" (shortfall ↑9%)
- Increase the COLA (↑15%)
  - Based on CPI-E for all beneficiaries; 0.2pp higher on average
  - Index designed to better reflect the purchases of the elderly
- Improve the minimum benefit (↑5%)
- Lower taxation of OASDI benefits slightly (↑7%)
- Tax earnings above \$400K (not indexed) with small benefit credit ( $\sqrt{71\%}$ )
- Increase payroll tax rate gradually from 12.4 percent to 14.8 percent ( $\sqrt{67\%}$ )
- Would produce "sustainable solvency" (shortfall ↓112%)

Go to: <a href="https://www.ssa.gov/OACT/solvency/JLarson">https://www.ssa.gov/OACT/solvency/JLarson</a> 20170405.pdf



## For More Information Go To http://www.ssa.gov/oact/

#### There you will find:

- The 2017 and all prior OASDI Trustees Reports, back to 1941
- Detailed single-year tables for recent reports
- Our estimates for comprehensive proposals
- Our estimates for the individual provisions
- Actuarial notes; including replacement rates
- Actuarial studies
- Extensive databases
- Congressional testimonies



## Questions?



