# Methodologies in Fiscal, Economic, and Health Spending Projections American Enterprise Institute Panel

STEVE GOSS, CHIEF ACTUARY, SOCIAL SECURITY ADMINISTRATION
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## **Initial Concepts**

- There are no bad numbers—what matters is being entirely clear on what each number represents
- Projecting the future requires understanding the conditions and relationships underlying past experience, but then imagining how future conditions and relationships may change
- Change is the only constant, and a ruler is not a useful instrument for extrapolating into the future
- The choice of a model is itself an assumption

## **Model Specification: What Is Assumed**

- Projections under a "current-law" baseline to inform on the implications—need and timing for change
- What laws are assumed not to change?
  - For OASDI Trustees Reports—the Social Security Act
    - Other laws may be assumed to change by "constructive obligation"
  - For Budget projections—all Federal laws?
    - No, OASDI and HI are assumed to be fully financed as needed from GF
    - This is NOT current law and is unprecedented, and should be disclosed
    - How about indexing of income tax brackets?

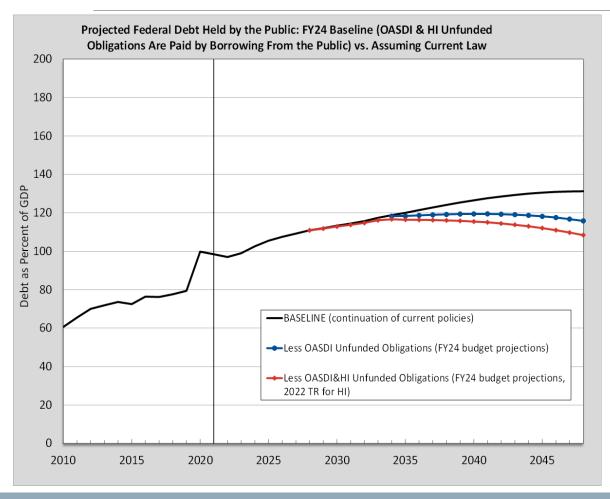
## **Social Security Long-Range Actuarial Projections**

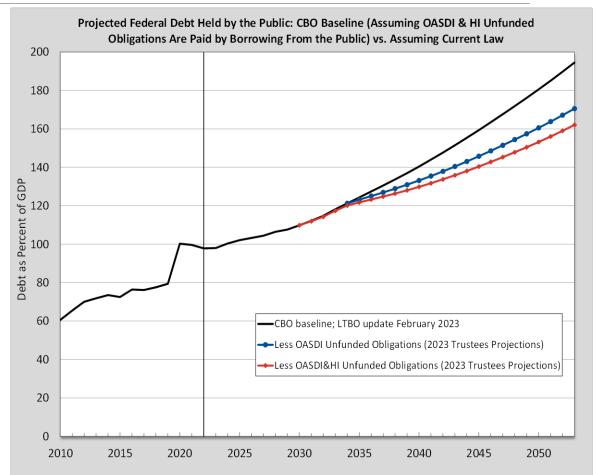
Started before 1935! Methods have adapted and evolved

- Example: Level Cost analysis by Bob Myers
  - Assumed NO future growth in average earnings or prices
  - This was before there were automatic adjustments in the law, as ad hoc adjustments were expected to continue, per "constructive obligation"
- Currently, we assume income tax brackets will be modified on ad hoc basis to avoid bracket creep—again by "constructive obligation"
  - But we cannot assume that currently scheduled benefits will be provided
  - For example, the 1977 and 1983 Amendments reduced scheduled benefits
  - Laws represent the intent of one Congress—NOT promises for the future

### **Budget Projections by the Administration and CBO**

Very different but both assume change in law to fully finance OASDHI; obviously, assumptions matter!





# Social Security Long-Range Actuarial Projections for the Annual Trustees Reports, Starting in 1941

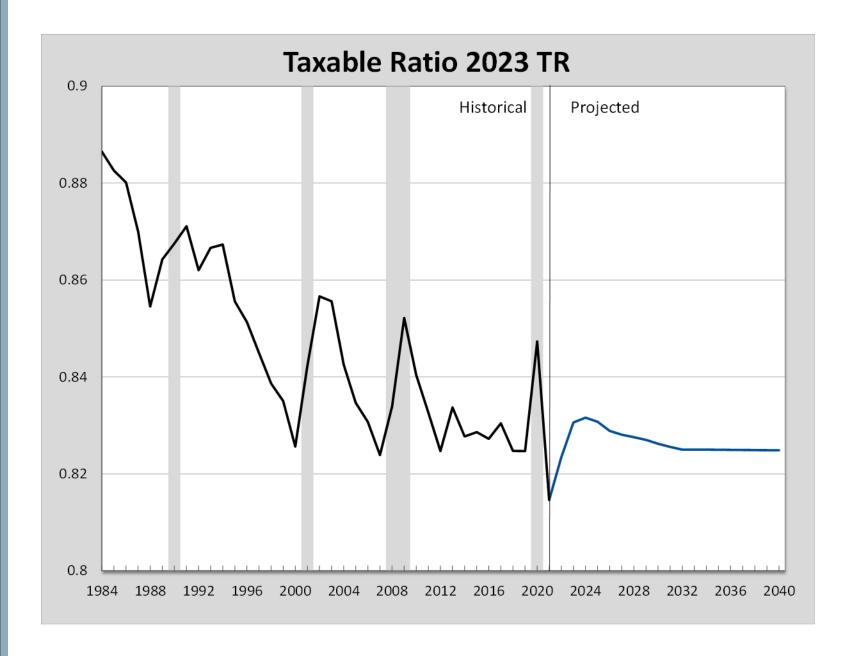
- Careful modeling of mortality by age, sex, and cause
- Fertility rates modeled by cohort
- Employment and labor force modeled considering economic cycles and life expectancy
- But assumptions for the long-term future are necessarily the main drivers

#### **How Accurate Have Trustees' Projections Been?**

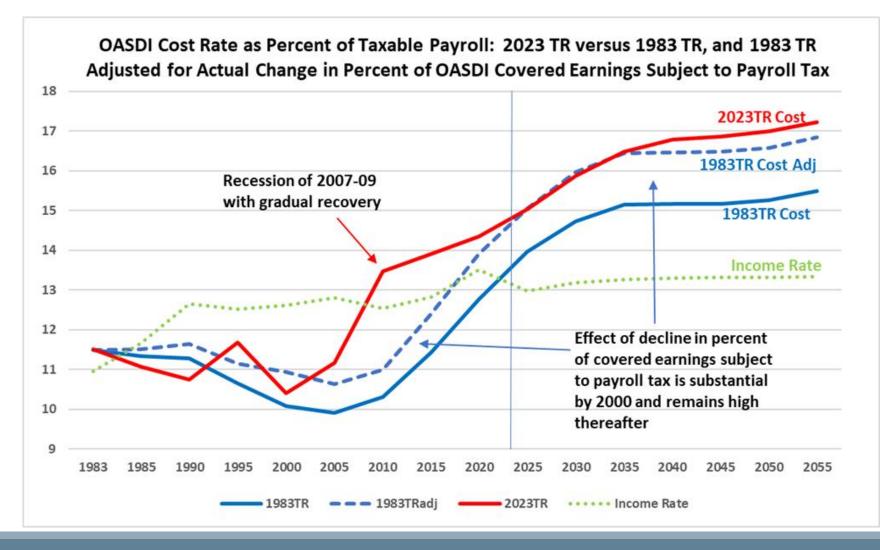
- The 1983 Trustees Report projected OASDI trust fund reserve depletion in the mid-2050's...
  - But mid-2030's for the last 12 reports!
- Lower birth rates were anticipated, and mortality projections were extremely accurate
- Over 80% of the worsening since 1983 was due to unanticipated economic experience

# Earnings "Dispersion" Between 1983 and 2000 Lowered the Percent of Earnings Taxable from 90% to 82.5%

- Overall, average earnings increased more than expected, but real growth was 62% for the top 6% of workers, while only 17% for lower 94% of workers
- Ratio has been stable since 2000 except for recession effects



## The Reduced Share of Earnings Subject to Payroll Tax Explains Most of the Increase in Cost as Percent of Payroll, Compared to the Projection in 1983



But the depth of the 2007-09 recession and slow recovery further reduced expected trust fund accumulation through 2019

## **Uncertainty about Assumptions (Methodology)**

Again, we must be clear and disclose what is assumed

- Future birth rates, disability prevalence, demand for employment, labor productivity, etc., are unclear
  - International factors, climate, behavioral responses matter
- A few examples:
  - Do increased taxes really depress GDP if they increase income for those with relatively high propensity to consume? As for Social Security...
  - Will tax brackets increase beyond CPI, to avoid compression?
  - Other changes in law, like providing GR to cover OASDHI shortfalls

## Thank You!!

## **Additional Detail**

### **Social Security Long-Range Actuarial Projections**

Demographic, Economic, Programmatic Factors

- How have we been doing since 1983, the last major legislation?
- Demographic factors have been on target:
  - Life expectancy at 65 of 19 years for 2015 was projected accurately in 1983
  - Low birth rates after 1965 were anticipated in 1983
  - Aged dependency ratio (65+/20-64) was projected at 26.1% for 2015, was 24.7%
- Economic factors are mixed:
  - Ratio of workers to SS beneficiaries was projected at 2.74 for 2015, was 2.82
  - But drop in taxable ratio by 2000 and impact of 2007-09 recession were not