Medicare Alternative I (low-cost) and Alternative III (high-cost) Projections

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Technical Review Panel on the Medicare Trustees Reports

August 31, 2016

Introduction

- Report focuses on current-law projections
- Emphasis is on the intermediate assumptions (best estimate)
- Alternative projections use different assumptions to model current law:
  - Low-cost, and
  - High-cost
- Alternative projections differ from the illustrative alternative in that the alternative projections are based on current law while the illustrative alternative reflects the intermediate projection but with assumed changes to current law
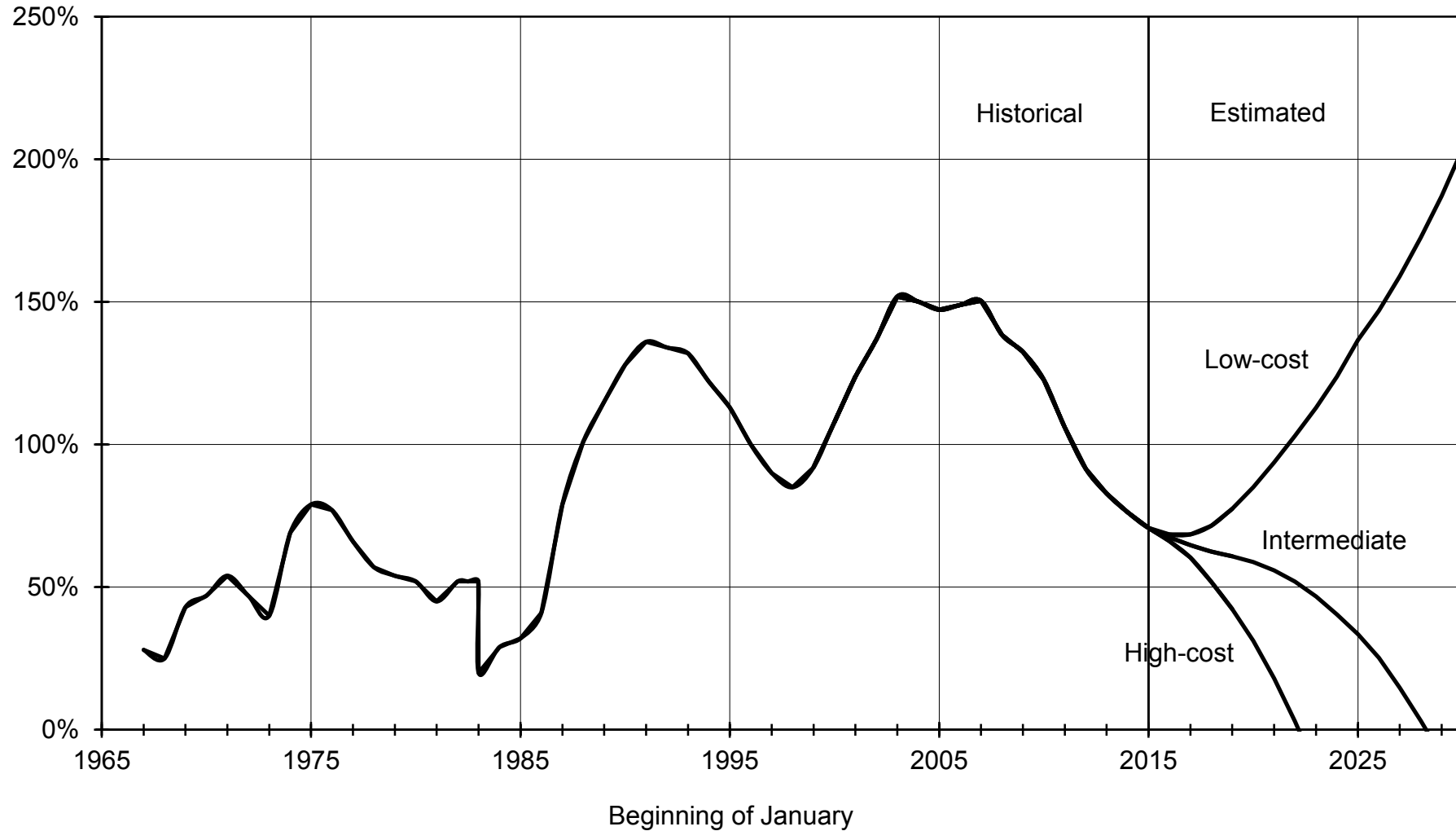
Current Approach for HI (Part A)

- For first 25 years, OACT assumes that HI costs increase, relative to taxable payroll increases, 2 percentage points less rapidly and 2 percentage points more rapidly under the low-cost and high-cost alternatives, respectively, than the results under the intermediate assumptions.

- The 2-percentage-point differential linearly decreases until the 50th year of the projection, when HI cost increases relative to taxable payroll are the same as under the intermediate assumptions.

- This results in cost rates that are 20 percent lower (higher) than the intermediate projection under the low (high)-cost alternative by 2025, and 40 percent lower and higher, respectively, by 2040 and level off at about 47 percent different during 2058-2090.

- Results: fund is depleted in 2028 under intermediate assumptions, is depleted in 2022 under high-cost assumptions, and is funded throughout 75-year period under low-cost assumptions.

HI (cont'd)

- The 2-percentage-point variation implicitly includes the variation in demographics, economic factors, and **health care spending by age as mortality improves or worsens.**
- Taxable payroll and income from tax on social security benefits are explicitly calculated using the Trustees' low-cost and high-cost assumptions.
- Cost projection differs from OASDI methodology where assumptions are explicitly built in.

HI Trust Fund Balance at the Beginning of the Year as a Percentage of Annual Expenditures

Estimated HI Cost and Income Rates as a Percentage of Taxable Payroll
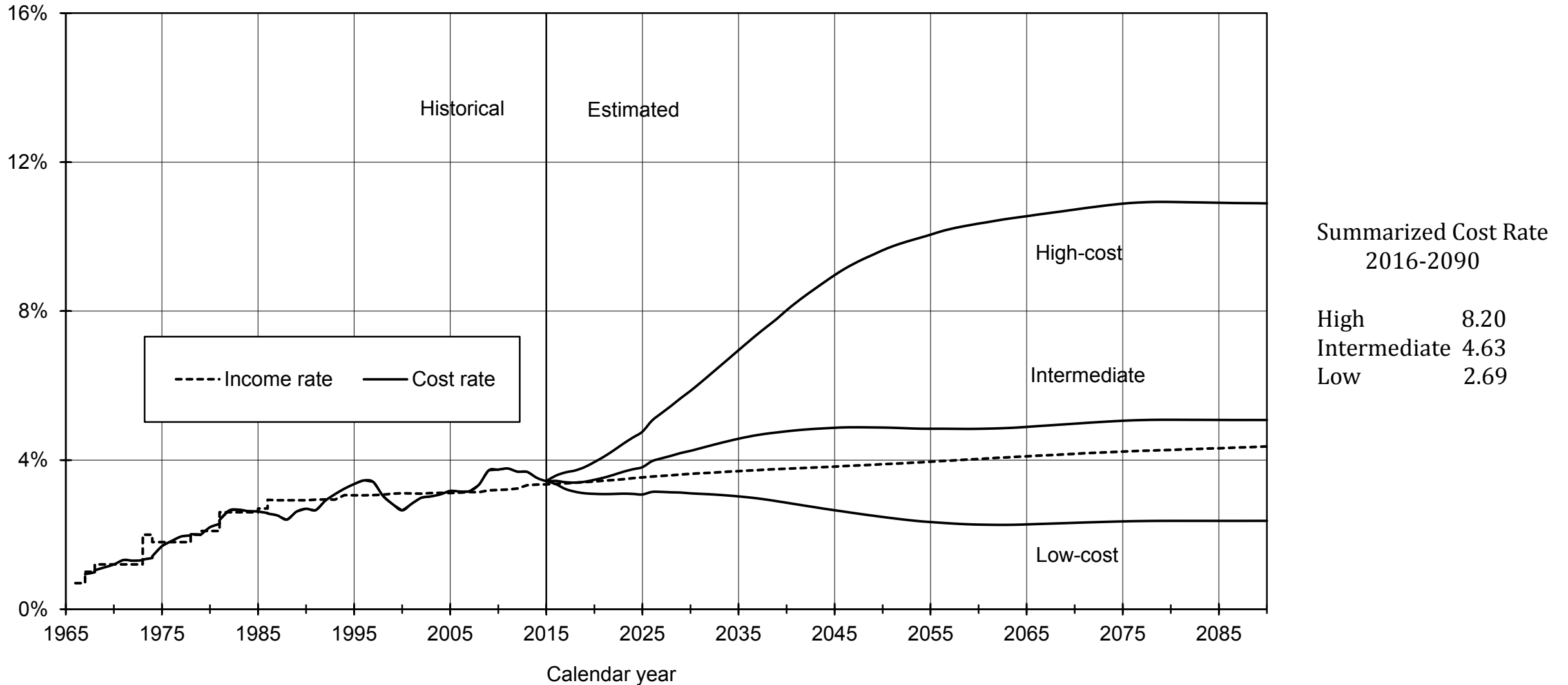

Note: Income rates are shown only for the intermediate projection.

Current Approach for SMI (Parts B and D)

- Income is not a function of taxable payroll for SMI, so it uses a different measure than HI.

- Benefits increase, relative to the Gross Domestic Product (GDP), 2 percent less rapidly and 2 percent more rapidly, respectively, than the results under the intermediate assumptions.

- Administrative expenses for the alternatives are projected on the basis of their respective wage series growth.

- Projections are prepared for 10 years only.

- Prior to 2009, 10-year stochastic projections were prepared for Part B, but they were eliminated due to a sustainable growth rate (SGR) issue: the large negative updates for physicians scheduled under current law were virtually certain to be legislatively avoided, making the current-law projection increasingly uninformative.

SMI Expenditures as a Percentage of GDP
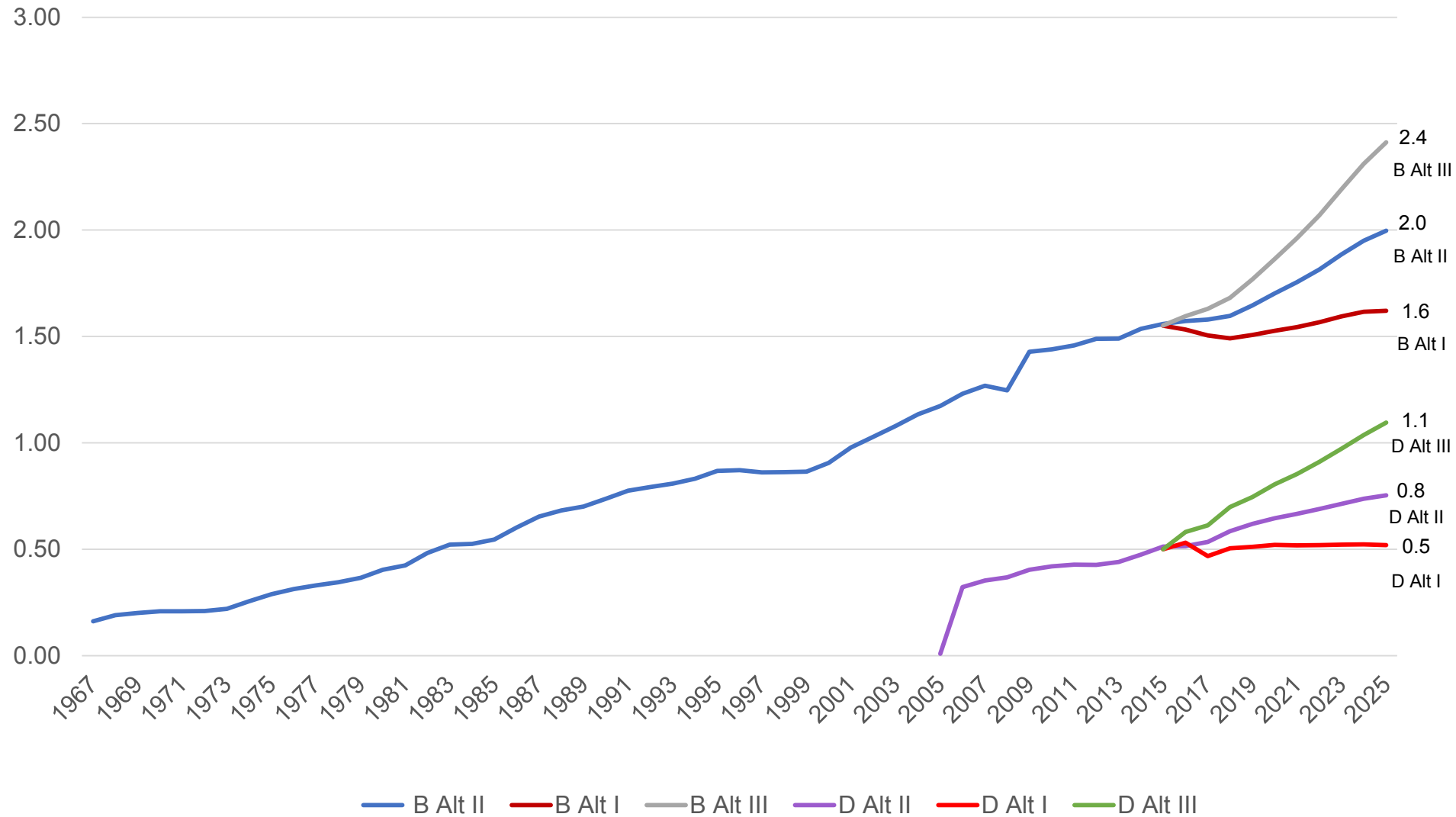
OASDI

- Most economic and demographic assumptions are varied to present a low-cost and high-cost actuarial balance.
- Not all of these assumptions are key determinants of the HI actuarial balance.

# Long-Range Values of Key OASDI Assumptions for the 75-Year Projection Period

Long-Range Assumptions	Intermediate	Low-cost	High-cost
Demographic:			
Total fertility rate for 2032 and later	2.0	2.2	1.8
Average annual percentage reduction in total age-sex adjusted death rates from 2015 to 2090	0.78	0.42	1.16
Average annual net immigration (in thousands) for 2016 to 2090	1,291	1,629	961
Economic:			
Average annual percentage change in:			
• Productivity (total U.S. economy) for 2026 and later	1.68	1.98	1.38
• Average wage in covered employment for 2026 to 2090	3.80	5.03	2.59
• Consumer Price Index (CPI-W) for 2019 and later	2.60	3.20	2.00
• Average annual real-wage differential (percent) for 2026 to 2090	1.20	1.83	0.59
• Unemployment rate (percent, age-sex adjusted) for 2022 and later	5.5	4.5	6.5
• Annual trust fund real interest rate (percent) for 2026 and later	2.7	3.2	2.2

Long-Range OASI and DI Annual Income Rates and Cost Rates
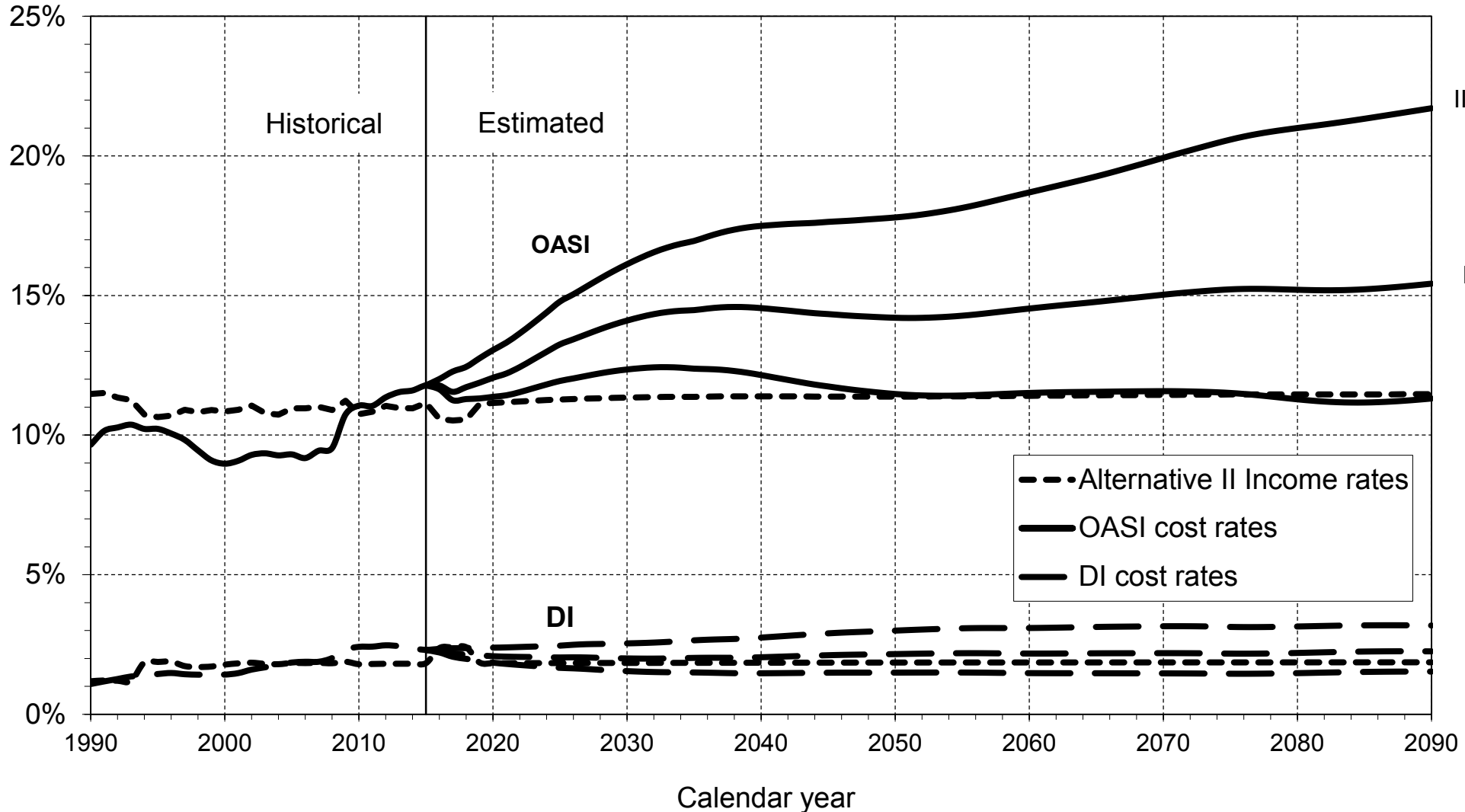
OASDI Stochastic Modeling

- Another approach to uncertainty is 5,000 independently generated stochastic simulations that reflect randomly assigned values for most of the key parameters.

Long-Range OASDI Trust Fund Ratios
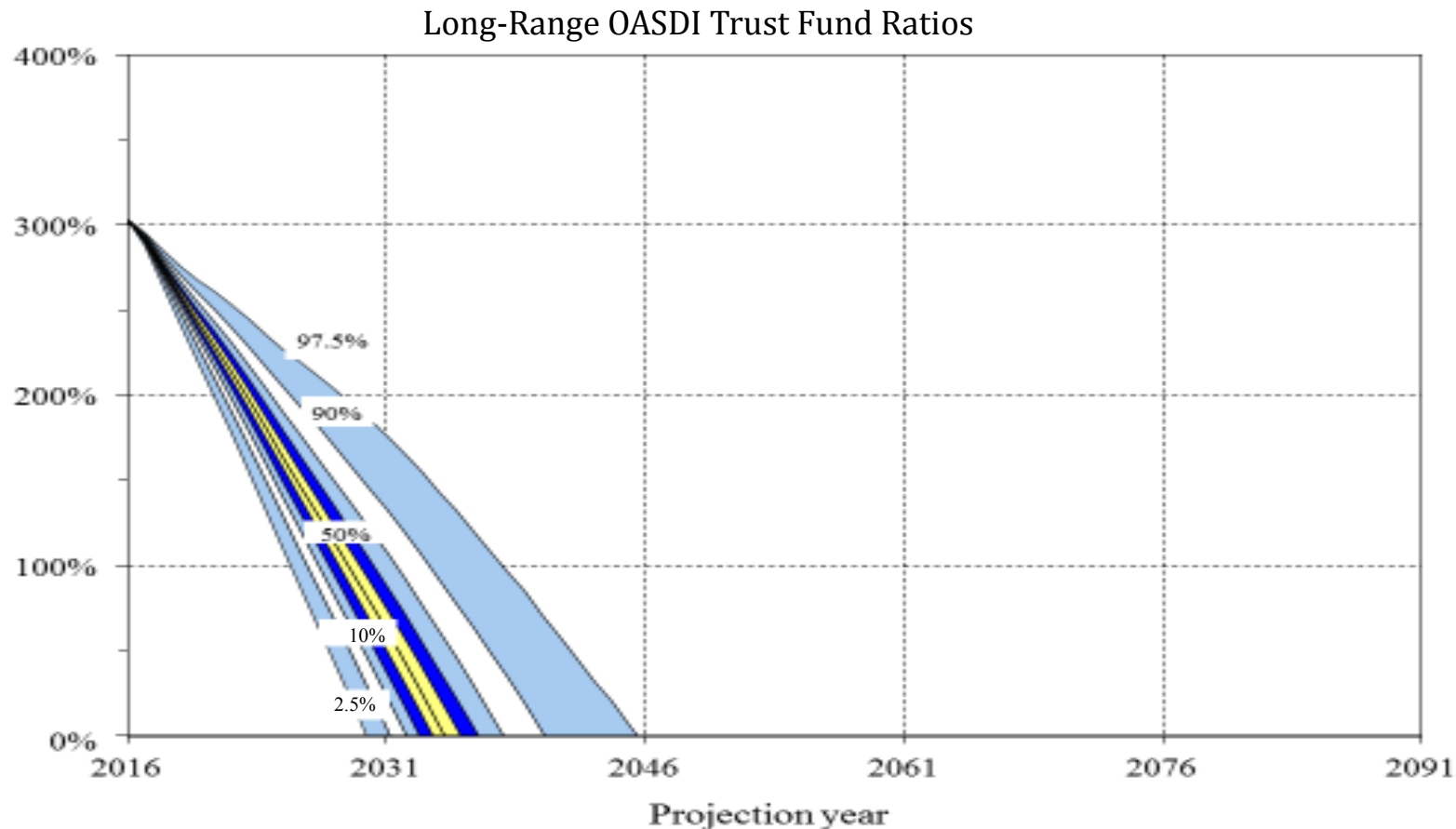
Prior Technical Panel Recommendations

1991
The next Health Technical Panel should include in its review the alternative I and alternative III assumptions.

2000
The stochastic model used for Part B should be further enhanced, and a stochastic model should be developed for HI.

The difference between health care cost trends of the low-cost and high-cost assumptions should be greater than the difference currently assumed in the short term, and it should decline for the remainder of the period to a level always different from zero percent.

2004
The low-cost and high-cost alternatives should incorporate the effects of reasonable alternative assumptions of key parameters relative to the intermediate assumptions, to better reflect uncertainty.

2010–2011
N/A

Trustees Working Group Proposal for Alternative Projections

- Trustees Working Group studied a new method for the long-range projections of low-cost and high-cost alternatives for HI:
  - Alternative projections would follow specific economic and demographic assumptions used in OASDI.
  - Health cost assumptions would vary based on excess cost growth rates.
  - Issue of how age-sex factors would vary for the low-cost and high-cost alternatives should be considered. Currently no assumption is made regarding relative average HI cost variation by age and gender despite the fact that life expectancy is increasing.

Modeling of TWG Proposed Alternative Projections

- Short-range alternative projections: the Trustees' low-cost and high-cost economic and demographic assumptions were incorporated, and specific alternative health care utilization assumptions were added.

- Long-range projections: the Trustees' economic and demographic assumptions were built into alternative versions of the "factors contributing to growth" model. (The transition from the short-range projections to the long-range projections is similar to that used in the intermediate scenario.)

- No assumptions were made regarding relative HI cost changes by age and gender as life expectancy changes.

- Use of Trustees' assumptions for price updates, which are based on wages, affects the alternative projections in a way that is counter to what would be expected:
    - Low-cost projections have higher price updates, and
    - High-cost projections have lower price updates.

- To counterbalance this effect, utilization assumptions required additional variance.

Real HI Expenditures
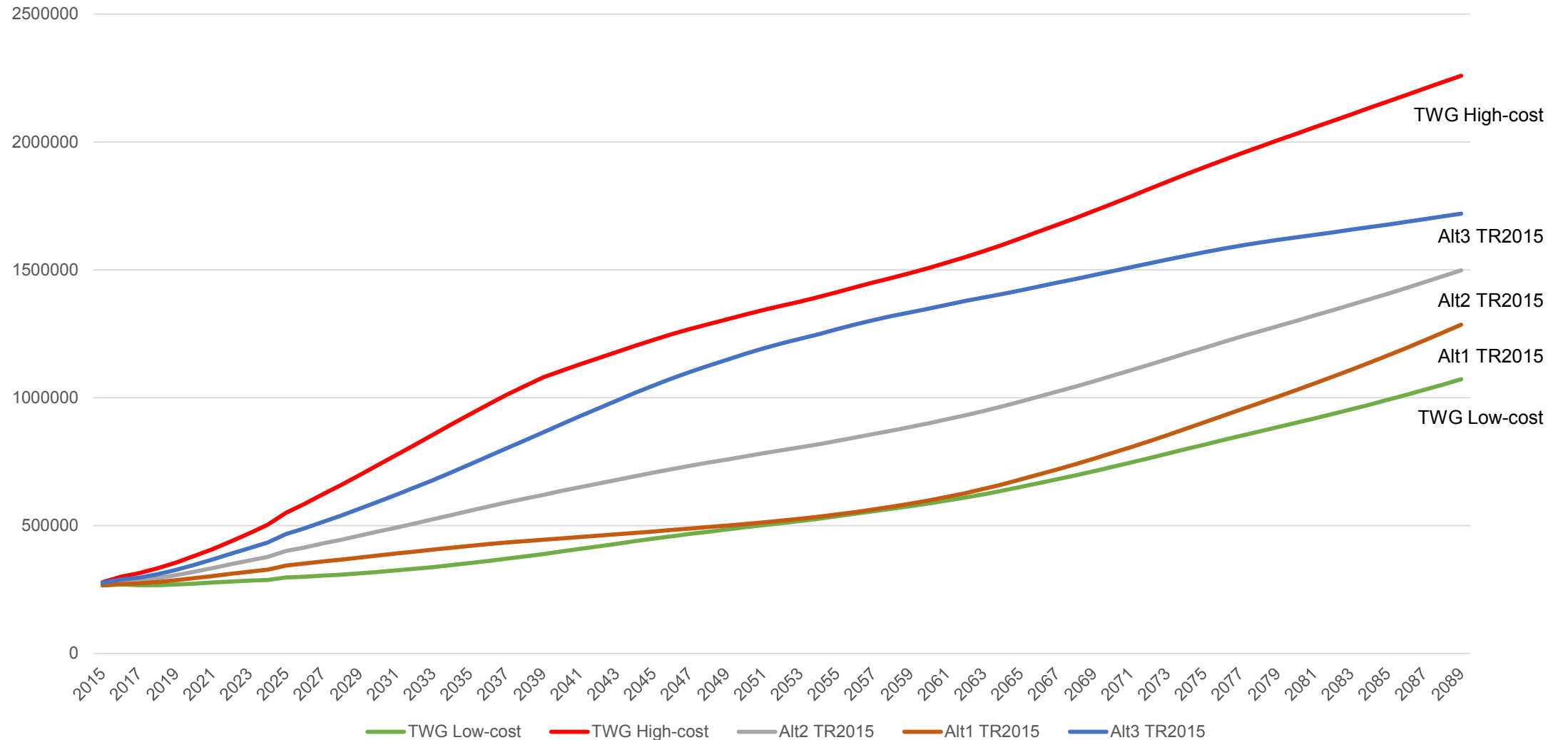
Nominal HI Expenditures
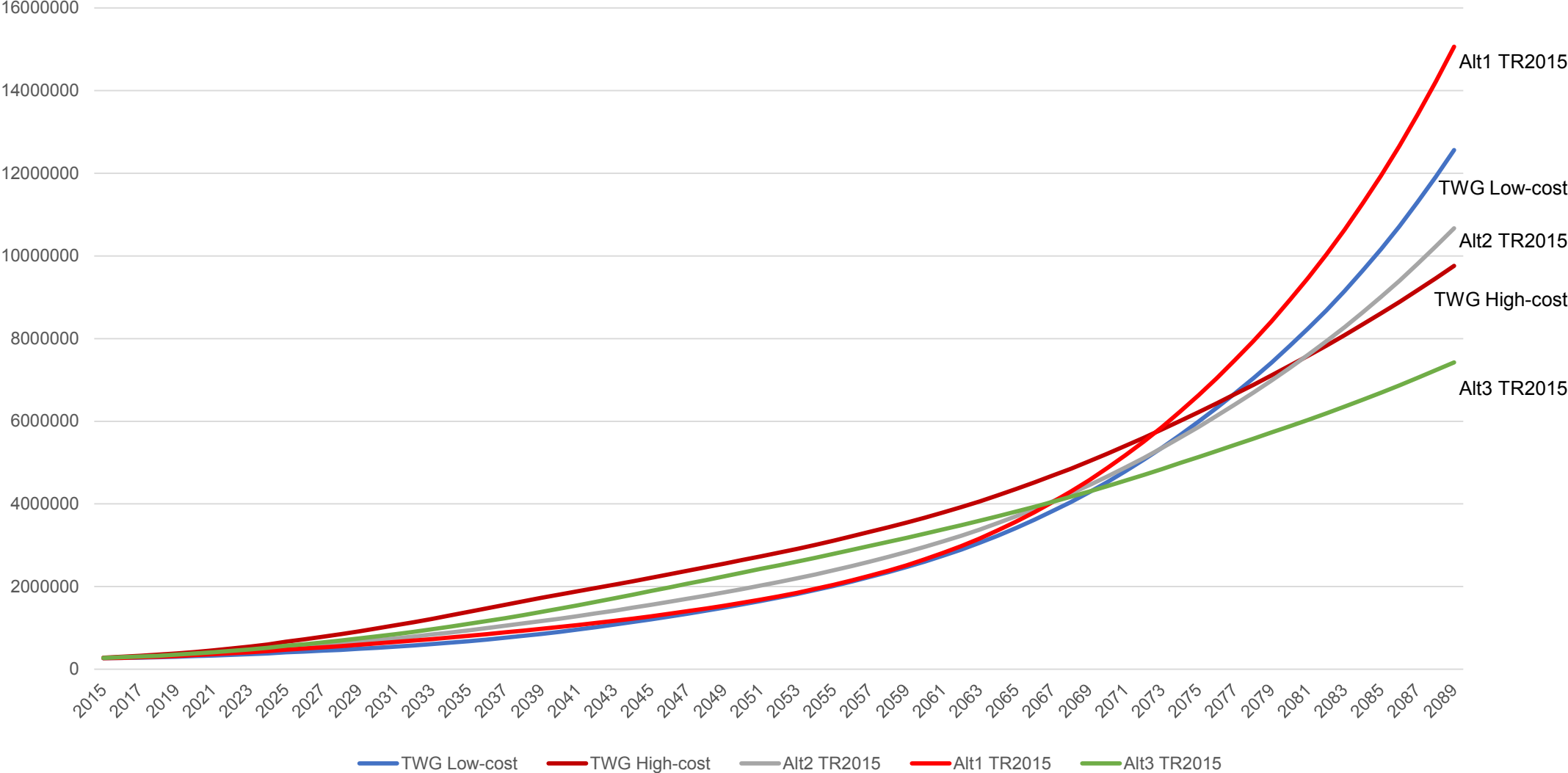
Pros/Cons of the TWG Proposal

Pros

- Results in more variation in projected spending between the alternatives in the short range.
- All Trustees' assumptions are directly incorporated.
- Long-range excess cost growth rates converge to the intermediate projection more slowly than under the current method.

Cons

- Utilization assumptions that are required to obtain plausible variation between the alternatives may not be considered reasonable:
  - High price updates and very low utilization of services for the low-cost alternative, and
  - Low price and high utilization for the high-cost alternative.
- In the long range, nominal Medicare spending is higher under the low-cost alternative and lower under the high-cost alternative as compared to the intermediate projection. (This is also true for the current method.)
- An assumption is required about how health care costs change by age and sex as life expectancy changes.

Considerations

- Low-cost and high-cost assumptions are chosen by the Trustees based on their impact on the OASDI projections.

- Using these same sets of assumptions for Medicare costs results in a narrower range in nominal dollars between the alternatives than is optimal.

- The 10-year stochastic modeling for Part B was eliminated but could be revived.

- The +/− 2 percent was chosen because we don't know the impact on health care spending as mortality changes. Therefore, we do not incorporate the alternative I and alternative III populations into the Medicare low-cost and high-cost projections.