Office of the Chief Actuary
Perspective on the Report of the Technical Panel on Labor Supply to Inform the Trustees’ Projections

June 30, 2017
Technical Panel Reports

• Highly valuable additional advice
• But rationale for recommendations is paramount
• The opportunity to discuss views and the potential range of possibilities with panel experts is highly important

• This panel recommends lower LFPR
  • The 2011 and 2015 panels recommended higher ultimate LFPR
Long-Term Implications of Near-Term Changes

• Perspective on long-term projections
  • Incremental changes
  • Requires an understanding of a “permanent” change
  • Example: mortality 2000-2009, and more recently

• “Permanence” of recent recession effect
  • Recovery has been slow, but not necessarily over
  • We have assumed permanent effects on productivity
    • But labor force participation and employment are different
    • We do not yet have a convincing rationale for permanent lower employment
Labor Force Participation Rates, Age-Sex-Adjusted to 2011 Population

2011 Social Security Advisory Board
Technical Panel Recommendation: 2015 Panel also recommended higher

68.2%

66.8%

Note: CBO values are high early as they are "full-employment" rates. Actual rates would be lower.
Drivers of Past Trends and Future Projections

• Must understand the drivers of past changes and make assumptions about their persistence
• Male LFPR has declined for several decades, and female increased
• Female LFPR has moved much closer to male
Figure 2: Labor Force participation rate by sex, ages 16 and over: Historical and Trustees' projected (2016-2089) based on 2016 intermediate assumptions
OCACT Model Explains Decline in Male LFPRs

• OCACT has examined factors influencing pre-recession LFPR trends

• For males ages 25-54, two factors are the primary drivers:
  • Marital status: increase in single never married has reduced LFPRs
  • Disability prevalence: increase in disability prevalence has reduced LFPRs
  • OCACT does not expect these two trends to continue in the future

• Panel’s Figure 6 shows OCACT model a good fit for males
  • Focus on 2000-2007 period
  • Discrepancies are small for each age group and are offsetting in total
<table>
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<td></td>
<td></td>
<td>Marital Status</td>
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<tr>
<td></td>
<td>Change</td>
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<td>25 to 54</td>
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Figure 6: Changes in male labor force participation rates 2000-2007: BLS Estimate and OCACT projected, by age group

[Diagram showing percentage point difference for various age groups, comparing BLS Actual and OCACT projected data.]

- Percentage point difference is plotted on the y-axis, ranging from -14% to 8%.
- Age groups from 16+ to 70+ are shown on the x-axis.
- Blue bars represent BLS Actual data, while red bars represent OCACT projected data.
Education Effect

• We must do more
• But caution is required in interpreting trends
• Distribution by educational attainment has been changing and has undoubtedly affected the trends by category
  • Consideration by percentile of educational attainment is better
Figure 7: Prime age (25-54) male labor force participation rates by educational attainment, 1964-2015
Bottom Line

• Some good suggestions from this panel
  • Education, employment rates rather than LFPR

• But we believe it is too early to assume recovery in LFPR is over
  • The recent recession was extreme and so recovery might be slower
  • Frequent swings in projections are not desirable (75 year horizon)
  • Might be too early for model re-estimation due to incomplete business cycle

• If LFPR and employment are permanently lowered, what basis?
  • Is economy permanently restructured? Less demand for labor?
  • Will workers/population decline in the face of population aging?
  • While this is possible, no firm basis for justifying change at this point