Social Security Actuarial Status
The 2021 Annual Report of the Board of Trustees of the OASI and DI Trust Funds

Key Changes and Results Under Intermediate Assumptions

PREPARED BY THE OFFICE OF THE CHIEF ACTUARY, SSA
AUGUST 31, 2021
What is the Legislative Mandate for the Annual 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 would fall short under current law, indicating the size of legislative changes that will be needed
Changes This Year 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
   However, the average wage index increases by about 2.7% for 2020

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
Primary Changes This Year: 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 OTA)

5. Methods changes, primarily for average benefit levels
Changes in Timing of Trust Fund Reserve Depletion

Mainly from the pandemic/recession in the first 10 to 20 years

1. OASDI reserve depletion is 2034, one year earlier than last year’s report.

2. OASI reserve depletion is 2033, one year earlier than last year’s report.

3. DI reserve depletion is 2057, 8 years earlier than last year’s report.

   a) Change is larger because difference between cost and income is smaller and more similar in years after 2030
# Changes in OASDI Actuarial Balance in 2021 Report

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact</th>
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</thead>
<tbody>
<tr>
<td>Valuation Period</td>
<td>-0.06 percent</td>
</tr>
<tr>
<td>Legislation (restore and maintain the DACA program)</td>
<td>-0.01 percent</td>
</tr>
<tr>
<td>Demographic data, assumptions and methods</td>
<td>-0.01 percent</td>
</tr>
<tr>
<td>• New cohort fertility method and higher ultimate fertility rate (roughly offsetting cost effects)</td>
<td></td>
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<tr>
<td>• New dementia cause of death category</td>
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<tr>
<td>• Higher recent and projected near-term mortality due to COVID-19 pandemic</td>
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</tr>
<tr>
<td>Economic data, assumptions and methods</td>
<td>-0.09 percent</td>
</tr>
<tr>
<td>• Updated labor force projection model and lower ultimate unemployment rate</td>
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<tr>
<td>• Slightly faster real growth in average wage levels</td>
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<tr>
<td>• Lower near-term real interest rates</td>
<td></td>
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<tr>
<td>• Level of productivity and GDP permanently lowered by 1 percent due to recession</td>
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<tr>
<td>• Reduced level of revenue from taxation of benefits</td>
<td></td>
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<tr>
<td>Other new data and methods improvements</td>
<td>-0.16 percent</td>
</tr>
<tr>
<td><strong>Net Changes for All Reasons</strong></td>
<td>-0.32 percent</td>
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Comparison of Effects: Including OACT Update

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

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

Due largely to less revenue being projected for the DI program in the near-term. DI program continues to have low recent and near-term disability applications and awards.
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
Changes in OASDI Annual Balance

Annual income rate minus annual cost rate.

The trends in the very near term are due to the recession and recovery.

The increased annual deficits between 2025 and 2090 are mainly due to lower birth rates through 2036, reduced productivity, reduced revenue from taxation of benefits, and changes in benefit projection methods.

The reduction in annual deficits after 2080 is largely due attaining the ultimate fertility rate in 2056.
SUSTAINABILITY: Cost 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 decline to 5.9 percent by 2095.
Aging - Change in Age Distribution

Mainly due to drop in birth rates
Birth Rates by Cohort

Has been rising for women born since 1951.

Projected to dip below 2.0 for women born between 1990 and 2006, based on low rates since 2008.

Mortality Experience: All Ages

Increased mortality in the near-term to reflect the effects of the COVID-19 pandemic.
Ratio of Employment to Population

Expected to recover fully from the brief but steep recession.

Expected to rise to same overall level as in the 2020TR. Under the new labor force model, difference between men and women narrowed somewhat. Slightly lower LFPR is offset by lower expected average unemployment rate, consistent with recent experience.
Lower Potential GDP in 2021 TR Compared to 2020 TR

Potential GDP is roughly 1 percent lower than the level in the 2020 TR.

Reflects expectation of a permanent level shift due to effects of the recession on total economy labor productivity and size of the population ages 16+.
Disabled Worker Receipt Rates (at DDS) have Been Dropping Since 1990 at Older Ages, and at All Ages Lately
Applications for Disability Benefits Remain Historically Low

At the peak of the last economic cycle in 2007, applications were low, but increased rapidly in the 2008 recession from 1.5 million in 2007 to 1.9 million in 2010.

In 2016 through 2020, applications have dropped below the 2007 level.
Disability Incidence Rate Also Remains Historically Low

DI disabled worker incidence rate rose sharply in the 2008 recession, and has declined since the peak in 2010 to extraordinarily low levels in 2016 through 2020.
Fewer Disabled Worker Beneficiaries

Fewer now and in near term based on recent applications and incidence rates.
How to Eliminate the Social Security Long-Term Actuarial Deficit

Make choices addressing OASDI shortfall 2034-2095:

• Raise scheduled revenue after 2033 by about one-third
• Reduce scheduled benefits after 2033 by about one-fourth
• Or some combination of the two
For More Information Go to http://www.ssa.gov/oact/

• There you will find:
  • This and all prior OASDI Trustees Reports
  • Detailed single-year tables for recent reports
  • Our estimates for comprehensive proposals and individual provisions
  • Actuarial notes; including replacement rates
  • Actuarial studies; including stochastic
  • Extensive databases
  • Congressional testimonies
  • Presentations by OCACT employees