AMERICAN ACADEMY of ACTUARIES

Issue Brief

COVID-19 Pandemic and the Impact on Social Security

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Each year, the Office of the Chief Actuary at the Social Security Administration (OCACT) performs a projection of the finances of the Social Security system as overseen by the Social Security Board of Trustees. The projection is included in the Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds (Trustees Report). This issue brief provides a focused examination of COVID-19 implications reflected in the annual Trustees Reports from 2020 and 2021.

Impact on 2020 Trustees Report

The 2020 Trustees Report¹ was issued in April of last year. Potential effects of the COVID-19 pandemic and the resulting recession on the Social Security program were not reflected in the Trustees Report, as it was not possible to make accurate estimates of the impact at that time. In November 2020, OCACT issued an unprecedented update to the 2020 Trustees Report in the form of a memorandum² to the commissioner and deputy commissioner of Social Security. This update reflected OCACT's best estimates at that time of the effects of the pandemic and recession and was used as an interim baseline for evaluating the effects of legislative proposals to change the Social Security program. The memorandum illustrated that OCACT then estimated that the combined trust fund reserves were projected to be depleted in 2034, instead of 2035, as previously reported in the 2020 Trustees Report.



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¹ $\underline{\textit{The 2020 OASDI Trustees Report}};$ Social Security Administration; April 2020.

^{2 &}quot;Updated Baseline for Actuarial Status of the OASI and DI Trust Funds, Reflecting Pandemic and Recession Effects—Memorandum"; Social Security Administration; Nov. 24, 2020.

Impact on 2021 Trustees Report

In August 2021, the 2021 Trustees Report³ was issued. Similar to the memorandum issued in November 2020, OCACT estimated that the combined trust fund reserves are projected to be depleted in 2034. In the 2021 Trustees Report, the Old-Age and Survivors Insurance (OASI) program is separately projected to be depleted in 2033, and the Disability Insurance (DI) program is separately projected to be depleted in 2057.

Reflected in these projections are the decline in employment, earnings, interest rates, Gross Domestic Product (GDP), and worker productivity experienced in the United States in 2020, due to the pandemic and resulting recession. The 2021 Trustees Report reflects an assumption that the economy will recover by 2023, with the GDP assumed to be lowered on a permanent cumulative basis by 1%.

While the long-term impact is still uncertain, the 2021 Trustees Report is based on the assumption that "the pandemic will have no net effect on the individual long-range ultimate assumptions." Therefore, adjustments were not made to assumptions that are applicable after the first 10 years; only assumptions in the first 10-year period were modified. The most significant demographic assumption changes that are reflected in the first 10-year period have been modified as summarized below.

Fertility

The projected fertility rate is expected to decrease for 2021 and 2022, and then projected to increase in the years 2024 to 2026, essentially assuming delayed births to those years. In the years 2027 and after, birth rates are assumed to return to the levels projected prior to the pandemic.

Mortality

Adjustments were made to projected death rates for the years 2020 to 2023 to reflect the impact of the pandemic. OCACT reviewed death experience during the pandemic to date. It was noted that death rates for under age 15 have been lower, while death rates for ages 15 and older increased. The projected death rates for the years 2020 to 2023 were therefore decreased for under age 15 and increased for ages 15 and older. For ages 15 and over, where the vast majority of deaths occur, death rates were increased significantly for 2020 and 2021, and to a lesser extent for 2022 and 2023, to account for the elevated deaths during the pandemic period. For years after 2023, projected death rates return to the levels projected prior to the pandemic "under the assumption that increased deaths from the residual effects of living through the pandemic (both physiological and psychological) will be roughly offset by decreased deaths that instead happened sooner (during the pandemic)."

Members of the Social Security Committee, which authored this issue brief, include Amy Kemp, MAAA, ASA, EA—Chairperson; Janet Barr, MAAA, ASA; Gordon Enderle, MAAA, FSA; Margot Kaplan, MAAA, ASA, FCA; Eric Klieber, MAAA, FSA; Alexander Landsman, MAAA, FSA, EA; Leslie Lohmann, MAAA, FSA, FCA, FCIA, EA; Mahrukh Mavalvala, MAAA, FSA, EA; Gerard Mingione, MAAA, FSA, EA; and Brian Murphy, MAAA, FSA, FCA, EA.

³ The 2021 OASDI Trustees Report; Social Security Administration; August 2021.

Immigration

Immigration assumptions are divided into the following categories: Net lawful permanent resident (LPR) immigration and emigration, and net other-than-LPR immigration and emigration. Further, there is an assumption regarding the number of immigrants who change status from other-than-LPR to LPR. In the 2021 Trustees Report, it was assumed that the pandemic will impact both LPR and other-than-LPR immigration in the years 2020 to 2025, with decreases in 2020 and 2021, and increases in 2023 through 2025, offsetting the lower levels in 2020 and 2021. Emigration assumptions were not explicitly changed but are assumed to be dependent on the levels of immigration.

Summary

The 2021 Trustees Report indicates these economic and demographic changes in 2020, and changes in assumptions to reflect expected changes in the first 10 years of the projection to reflect the COVID-19 pandemic and ensuing recession, caused the projected combined trust fund reserve depletion date to be 2034, one year earlier than that projected in the 2020 Trustees Report.

Further developments in the COVID-19 pandemic and the resulting impact on the economy may require additional modifications to the assumptions utilized in the development of future Trustees Reports.

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