

Session 2-D-3

Social Security Funded Status and Future Alternatives to Save It

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Social Security Basics

Social Security Trust Funds

- Two legally distinct trust funds:
 - **OASI** = Old-Age and Survivors Insurance
 - **DI** = Disability Insurance
- The two funds are often looked at on a theoretical combined basis, and referred to as **OASDI**
 - As of December 31, 2020, the trust funds hold about **\$2.91 trillion** in reserves
- Financial operations are overseen by the Social Security Board of Trustees
- The Social Security Office of the Chief Actuary completes an annual valuation (the “Trustees Report”), working in conjunction with the Trustees and their representatives

How Is Social Security Financed (Income)?

- Payroll taxes
 - Employees and employers each pay **6.2%** of covered earnings
 - The self-employed pay **12.4%** of covered earnings
 - On earnings up to **\$142,800** in 2021
- Taxes on Social Security benefits
 - Higher-income beneficiaries pay federal income tax on their benefits
- Interest on trust fund reserves
 - Invested in interest-bearing securities of the US government

Where Does the Money Go (Cost)?

- Benefit payments
 - About **65 million** people getting benefits as of December 2020:
 - **49 million** retired workers and dependents of retired workers
 - **6 million** survivors of deceased workers
 - **10 million** disabled workers and dependents of disabled workers
- Administrative expenses
 - Only about **0.6 percent** of total program cost in 2020

Financial Status: 2020 Trustees Report

Key Results from the 2020 Trustees Report

- First, an important caveat—the projections in the 2020 Trustees Report, released in April 2020, do NOT reflect the potential implications of the COVID-19 pandemic
- The combined funds have run surpluses since the early 1980s and through calendar year 2019 (and 2020)
- Beginning in 2021, combined asset reserves are projected to decline until they are depleted in **2035**
- The OASI fund alone is projected to be depleted in **2034**; the DI fund alone in **2065**

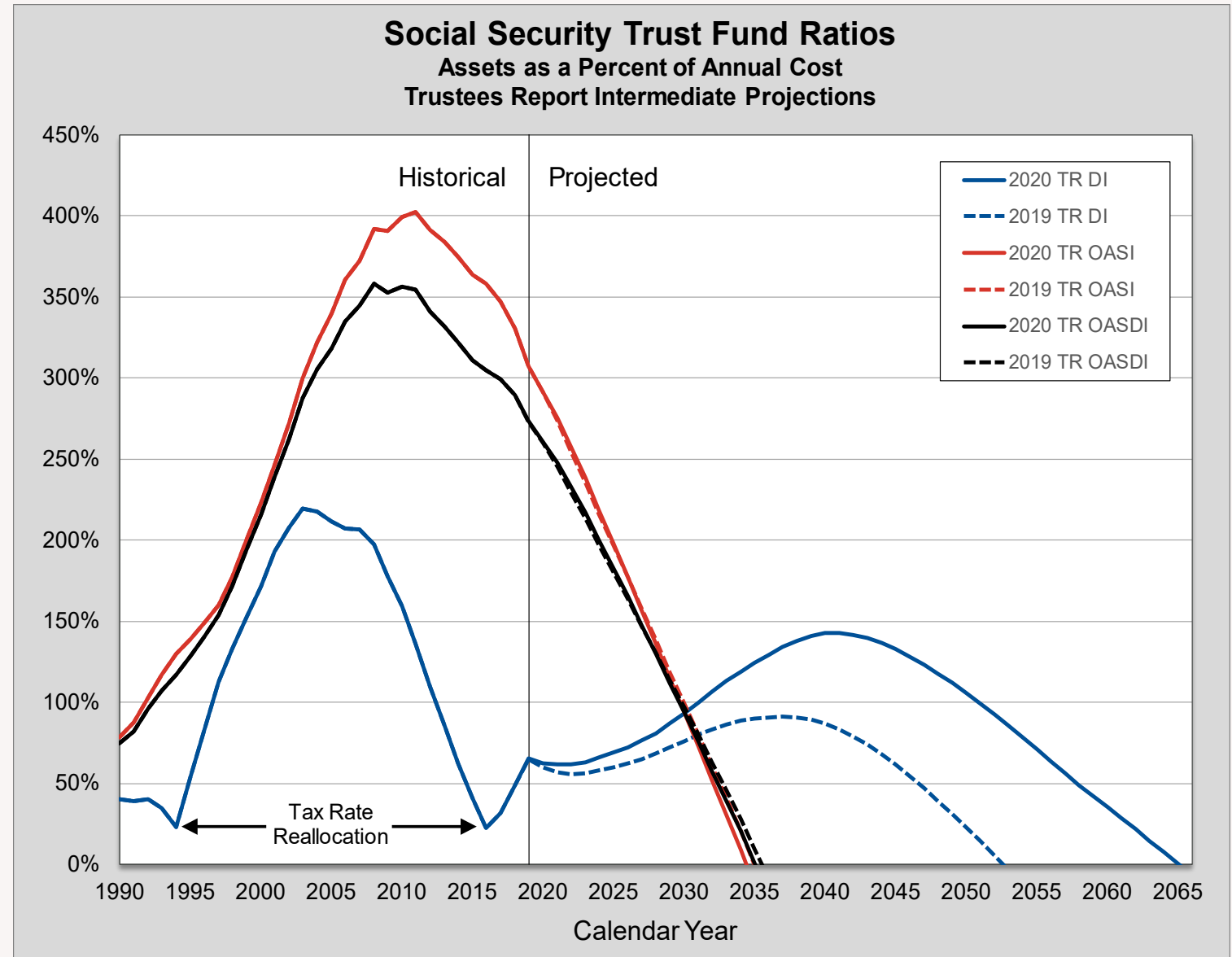
SOLVENCY: OASDI Trust Fund Reserve Depletion in 2035

(same year as in the 2019 Trustees Report)

OASDI reserve depletion date varied from 2029 to 2042 in reports over the past 30 years

DI Trust Fund: reserve depletion in 2065, thirteen years later than last year

Due largely to low recent and near-term disability applications and awards, and an assumed lower ultimate disability incidence rate

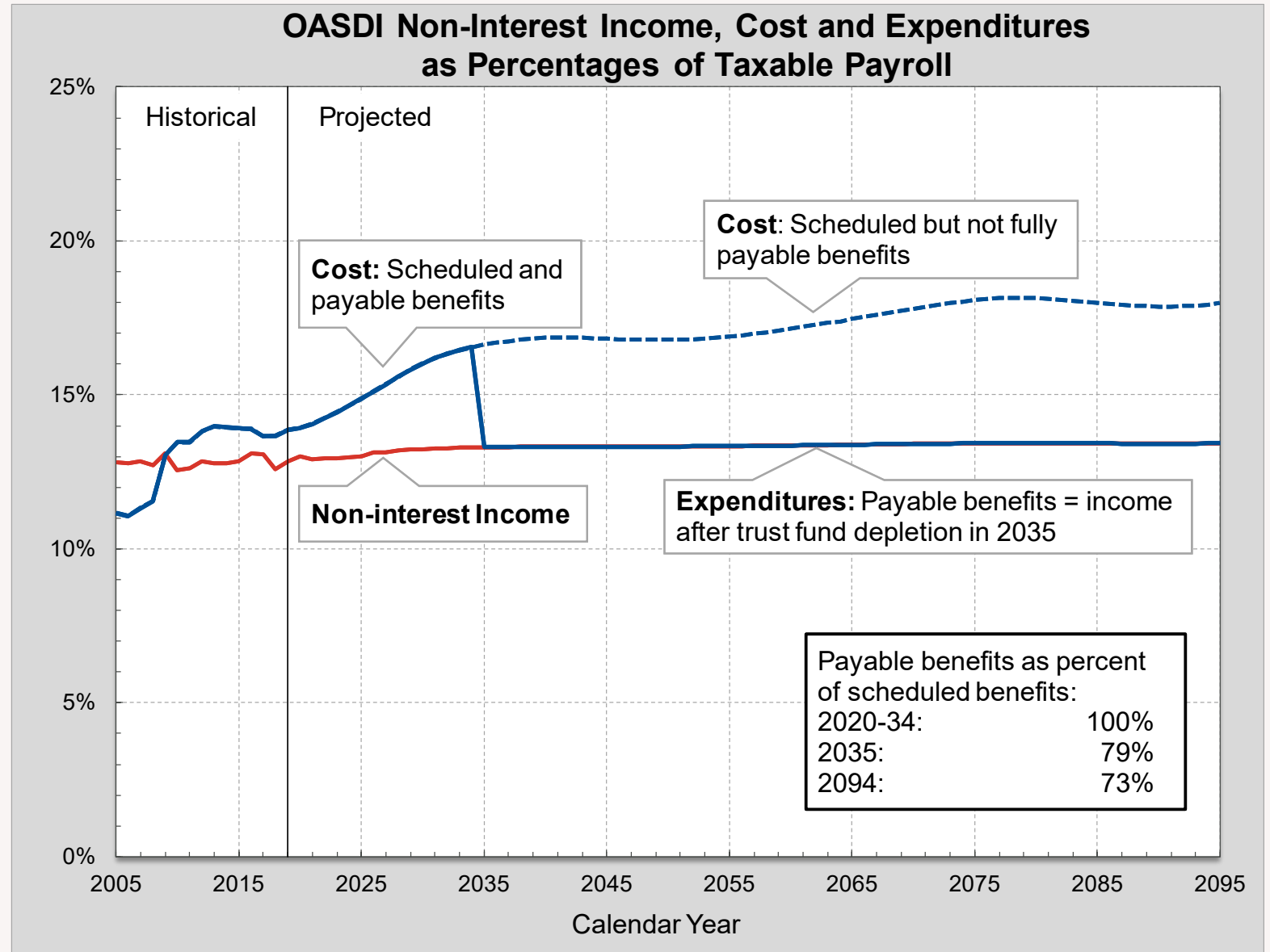


SOLVENCY: Annual Cost and Non-Interest Income as Percent of Taxable Payroll

Persistent negative annual cash-flow balance starting in 2010

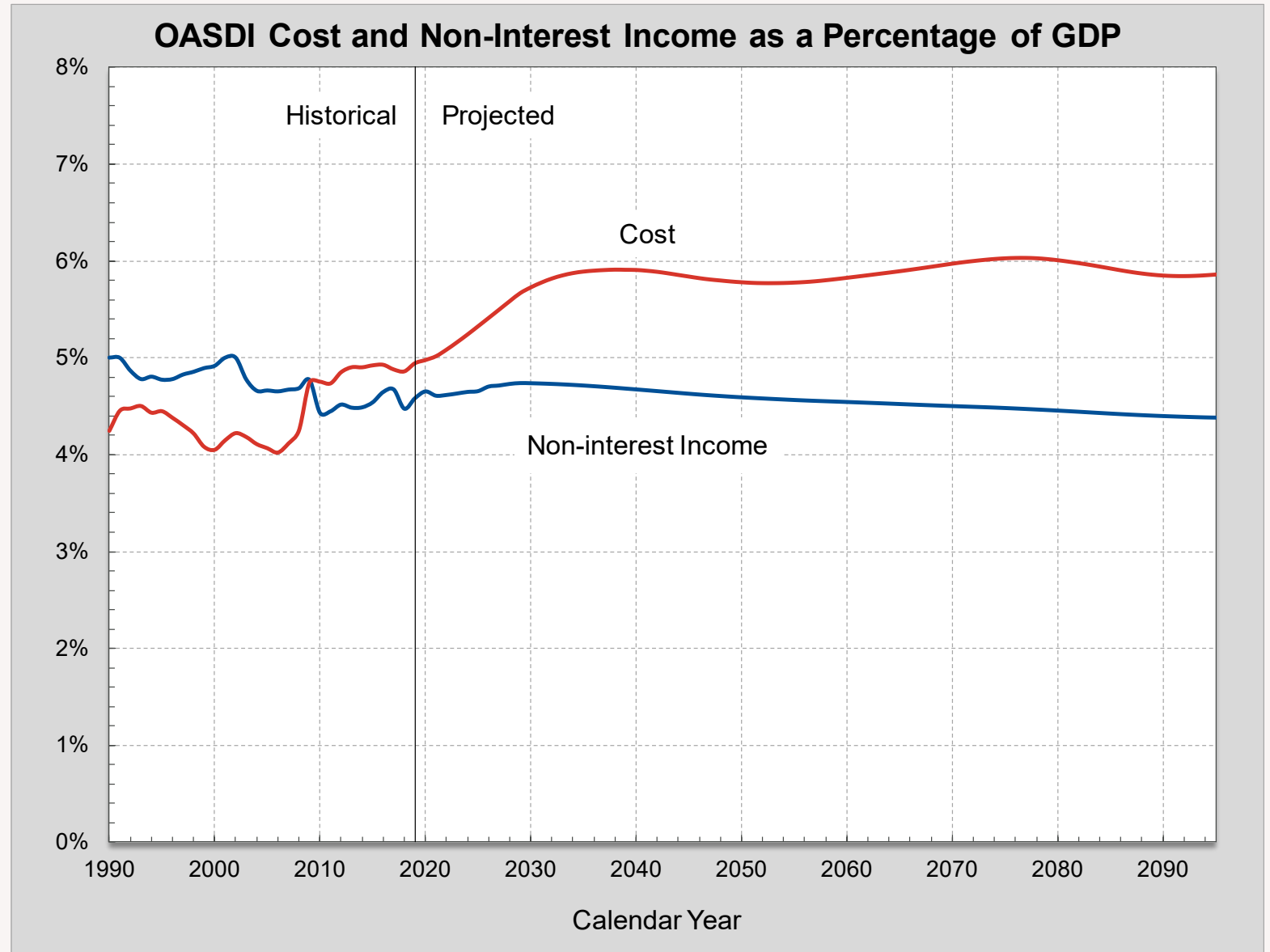
79 percent of scheduled benefits still payable at trust fund reserve depletion

Annual deficit in 2094: 4.51 percent of payroll: 0.36 percent larger than in the 2019 Trustees Report



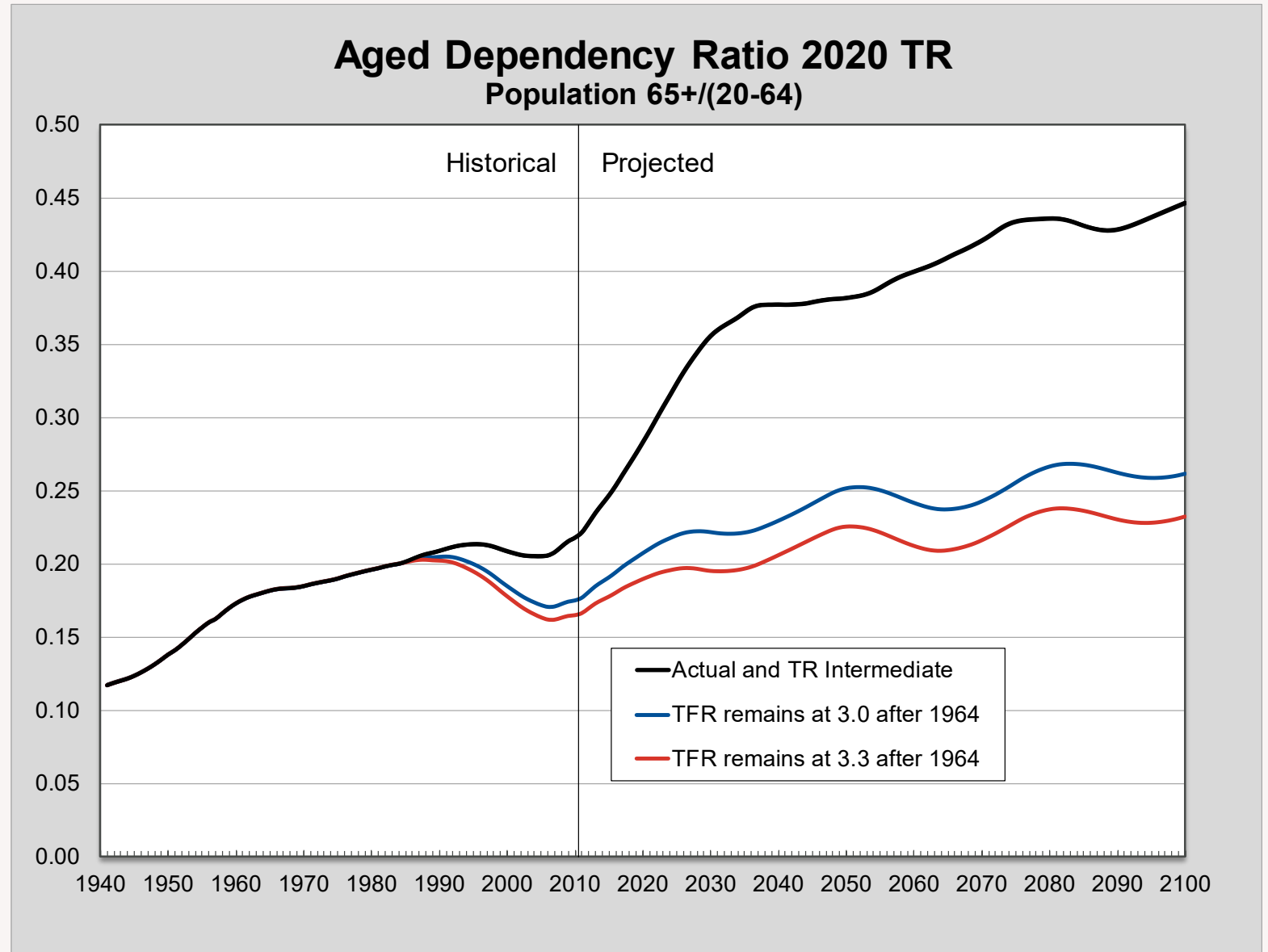
SUSTAINABILITY: Cost as percent of GDP

Rises from a 4.2 percent average in 1990-2008, to about 5.9 percent by 2038, then declines to 5.8 percent by 2053, and generally increases to 5.9 percent by 2094

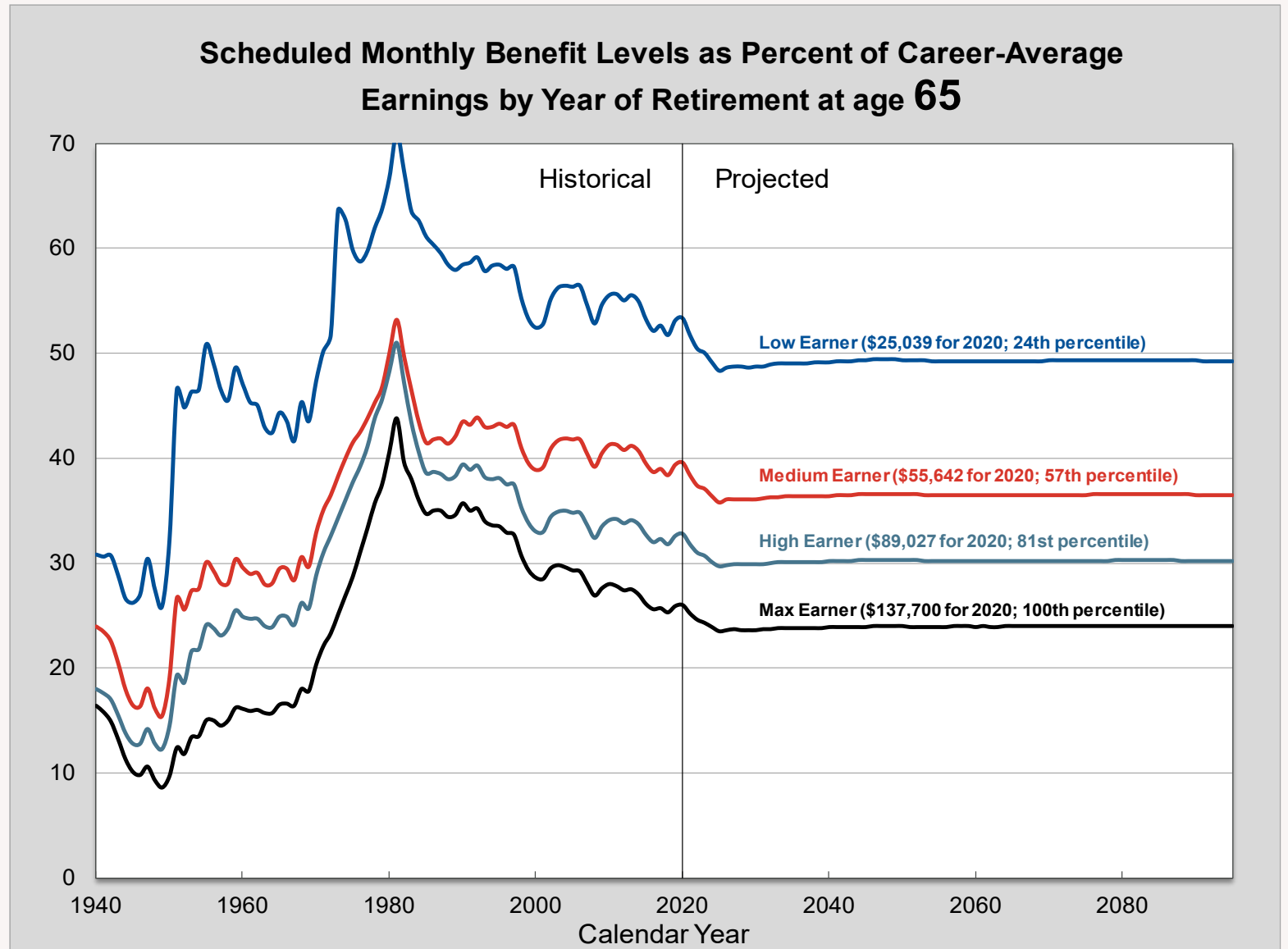


Aging: Change in Age Distribution

Mainly due to drop in birth rates

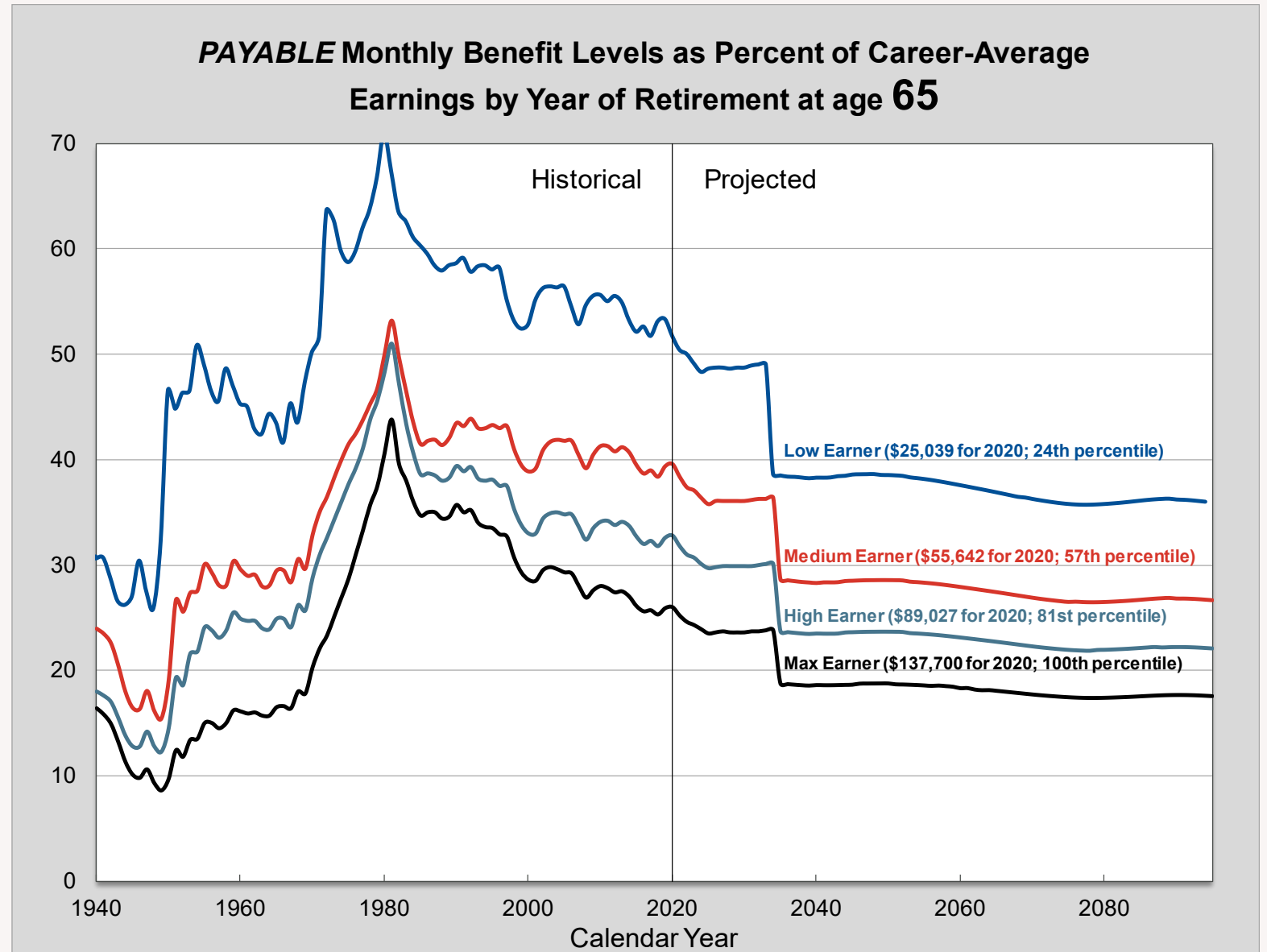


ADEQUACY: Replacement Rates Based on the 2020 Trustees Report



Source: Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html

ADEQUACY: Payable Benefits Under the Law, After Trust Fund Reserves Are Depleted, Are Even Lower



Source: Actuarial Note #9 at www.ssa.gov/oact/NOTES/ran9/index.html

Critical Assumptions and Effects of COVID-19

Updated Baseline / Subsequent Event

- PV dollar values consistent with the current Trustees Report are included in the SSA Agency Financial Report (AFR) each November
- Significant things that happen after Trustees Report numbers are developed but before the AFR is released are called “subsequent events” in auditor-speak
- So in September/October 2020, we developed modifications of the 2020 Trustees Report assumptions to reflect COVID-19 effects
- A subsequent event disclosure was included as a paragraph in SSA’s FY 2020 AFR (<https://www.ssa.gov/finance/>)
- We released a memo with some details on the assumptions and cost effects (https://www.ssa.gov/OACT/solvency/UpdatedBaseline_20201124.pdf)
- Importantly—we are using this updated baseline as the basis for scoring any new legislative proposals

Our Thinking in Fall 2020 About Implications of COVID-19 on Social Security

- Over the 75-year long-range projection period, likely minor
 - The pandemic itself, and the pandemic-induced recession, may be largely recovered by 2023 with little permanent effect
 - Note that Trustees Reports have incorporated the likelihood of periodic negative events
 - For example, we have assumed an ultimate annual improvement in death rates of around 0.73 percent on average; others have persistently assumed 1.0 percent or higher with no deceleration
 - The Trustees Reports have also assumed long-term unemployment rates will be higher on average than “forecasters”, reflecting occasional downturns
- However, there are near-term considerations due to the pandemic

Fertility—Our Fall 2020 Thinking

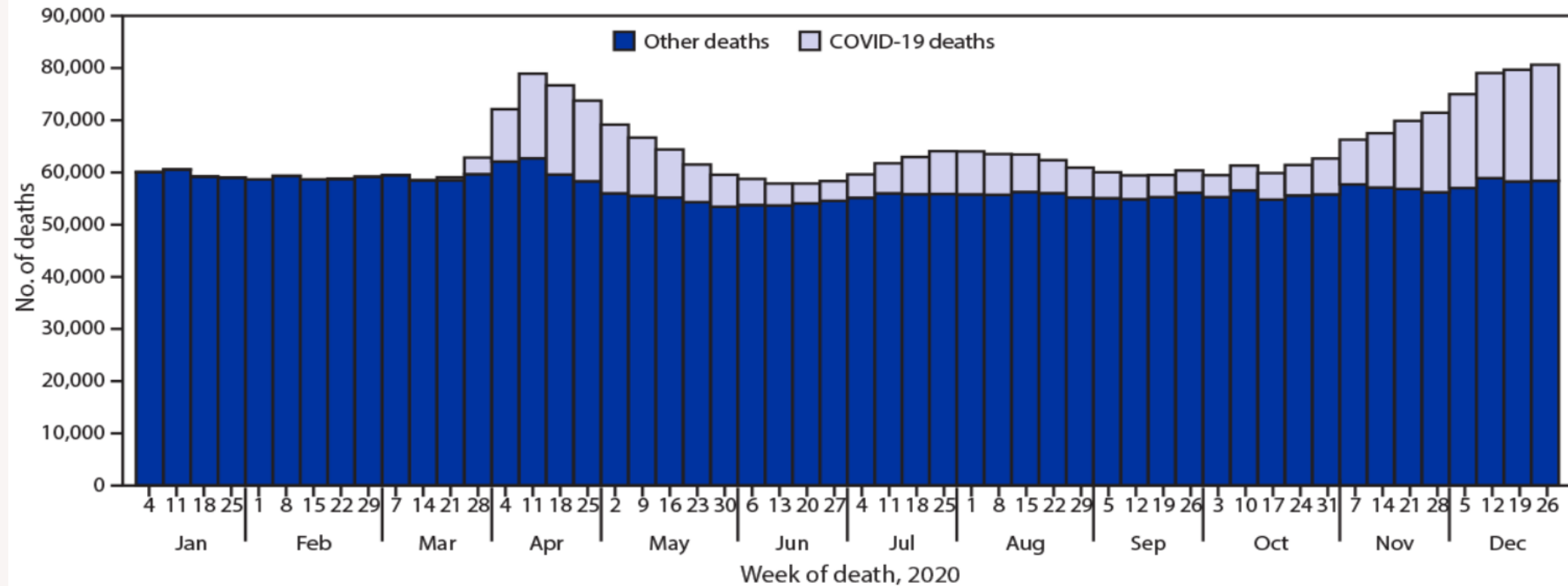
- We assumed that the COVID-19 pandemic will affect birth rates in years 2021 through 2025
- We assumed lower birth rates, resulting in a total fertility rate (TFR) of 1.57 in 2021 (about **340K fewer births**) and 1.65 (about **200K fewer births**) in 2022
- We assumed that these low rates in 2021 and 2022 will be fully made up for by increased rates in 2023 through 2025, before returning to the “no pandemic” rates starting in 2026
- In other words, the pandemic will cause a number of women to defer childbearing from 2021-2022 to 2023-2025
- *What do we know now? Not much more...*

Mortality—Our Fall 2020 Thinking

- Assuming that there would be only a modest increase in deaths above typical levels in the fall of 2020, we estimated that overall mortality rates for calendar year 2020 would be about **12 percent higher** than projected last year, increased by the same percentage across all ages and causes of death; this means about **350K excess deaths** for calendar year 2020
- For 2021 and 2022, we assumed temporary increases in the levels of deaths of about **6 percent** and **2 percent**, respectively, due to COVID-19 effects
- For years after 2022, we assumed no significant net effect from COVID-19
- *What do we know now? Assumed excess deaths for 2020 and 2021 were too low*

Mortality—Recent Data

FIGURE 1. Provisional* number of COVID-19–related deaths† and other deaths, by week — National Vital Statistics System, United States, 2020



* National Vital Statistics System provisional data are incomplete. Data from December are less complete due to reporting lags. Deaths that occurred in the United States among residents of U.S. territories and foreign countries were excluded.

† Deaths with confirmed or presumed COVID-19 as an underlying or contributing cause of death, with *International Classification of Diseases, Tenth Revision* code U07.1.

Source: Ahmad FB, Cisewski JA, Miniño A, Anderson RN. Provisional Mortality Data — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:519–522. DOI: <http://dx.doi.org/10.15585/mmwr.mm7014e1>

Mortality—Recent Data

Table. Number of Deaths for Leading Causes of Death, US, 2015-2020^a

Cause of death	No. of deaths by year					
	2015	2016	2017	2018	2019	2020
Total deaths	2 712 630	2 744 248	2 813 503	2 839 205	2 854 838	3 358 814
Heart disease	633 842	635 260	647 457	655 381	659 041	690 882
Cancer	595 930	598 038	599 108	599 274	599 601	598 932
COVID-19 ^b						345 323
Unintentional injuries	146 571	161 374	169 936	167 127	173 040	192 176
Stroke	140 323	142 142	146 383	147 810	150 005	159 050
Chronic lower respiratory diseases	155 041	154 596	160 201	159 486	156 979	151 637
Alzheimer disease	110 561	116 103	121 404	122 019	121 499	133 382
Diabetes	79 535	80 058	83 564	84 946	87 647	101 106
Influenza and pneumonia	57 062	51 537	55 672	59 120	49 783	53 495
Kidney disease	49 959	50 046	50 633	51 386	51 565	52 260
Suicide	44 193	44 965	47 173	48 344	47 511	44 834

^a Leading causes are classified according to underlying cause and presented according to the number of deaths among US residents. For more information, see the article by Heron.⁴ Source: National Center for Health Statistics. National Vital Statistics System: mortality statistics (<http://www.cdc.gov/nchs/deaths.htm>). Data for 2015-2019 are final; data for 2020 are provisional.

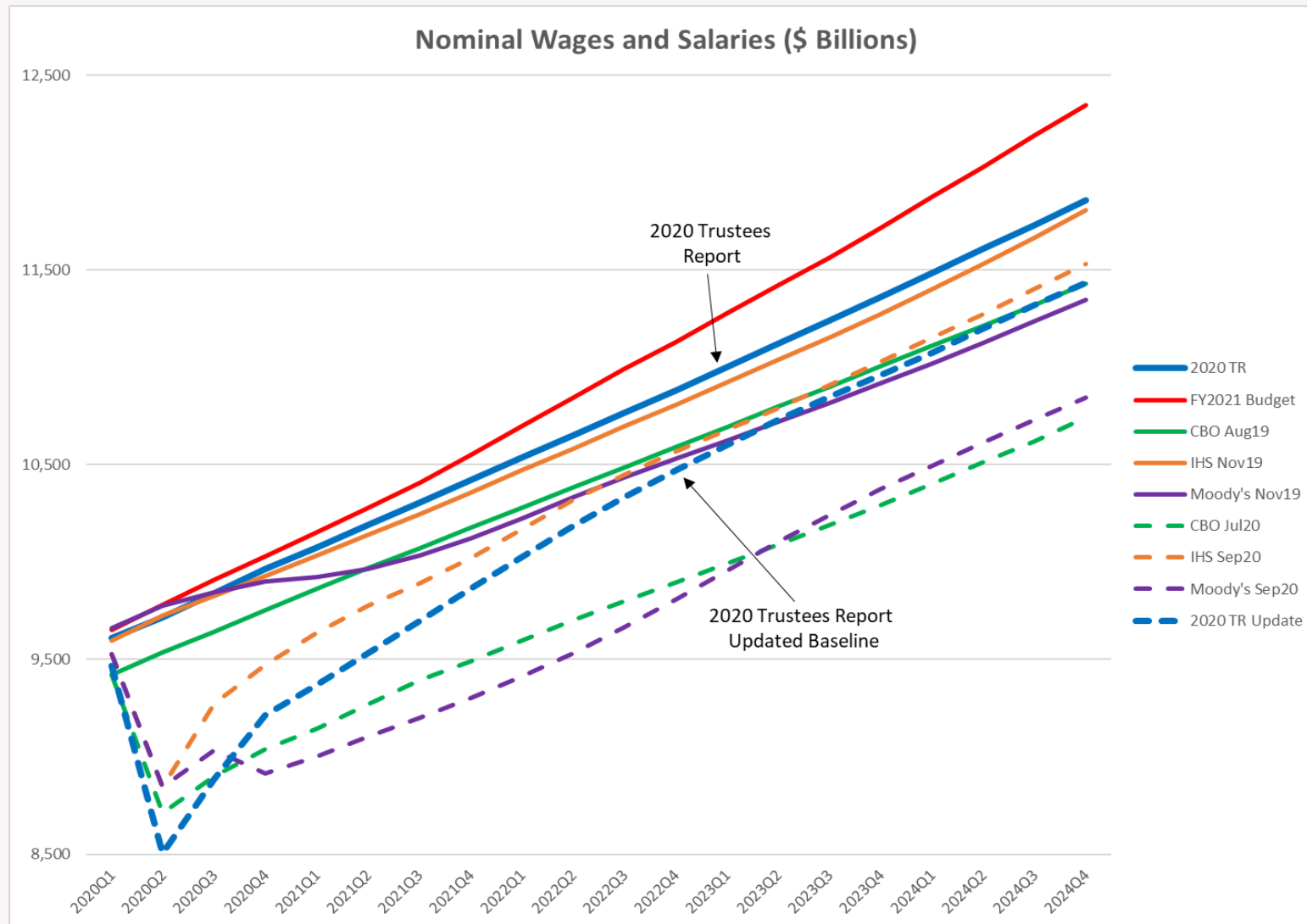
^b Deaths with confirmed or presumed COVID-19, coded to *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision* code U07.1 as the underlying cause of death.

Source: Ahmad FB, Anderson RN. The Leading Causes of Death in the US for 2020. JAMA. Published online March 31, 2021. DOI: <http://dx.doi.org/10.1001/jama.2021.5469>

Immigration—Our Fall 2020 Thinking

- We assumed **reduced levels of immigration for 2020 and 2021, with offsetting increases in 2022 through 2024**, reflecting deferred entry into the United States
- These assumptions reflected travel restrictions due to the pandemic, decreased economic opportunity, and President Trump's measures to restrict both immigrant and nonimmigrant entry into the US
- *What do we know now? Change in administration, DACA extension, additional data*

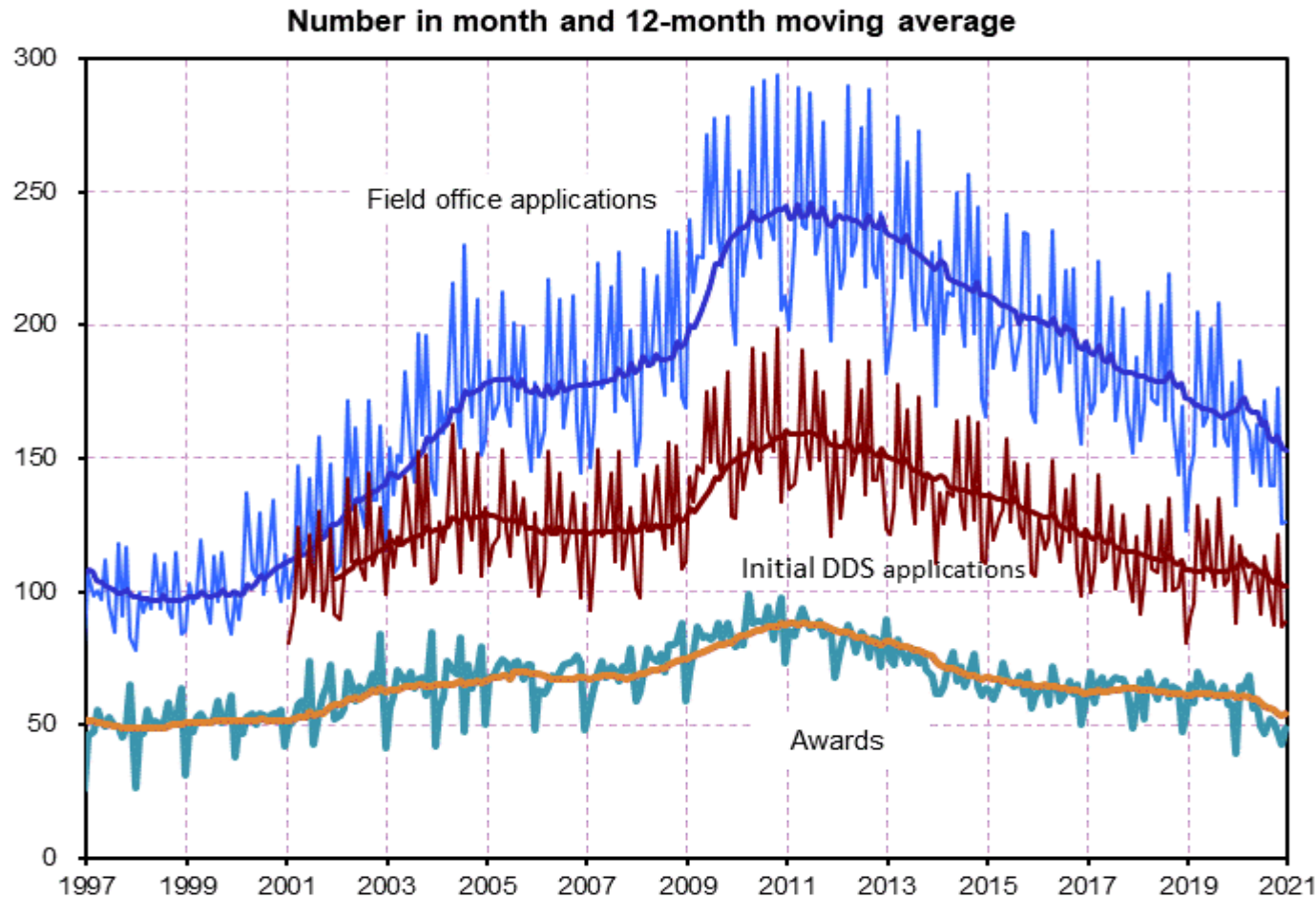
Earnings and Payroll Tax Revenue—Our Fall 2020 Thinking



- Projections of wages and salaries (in billions)
- What were the Trustees and other forecasters projecting before COVID (solid lines)?
- What about after COVID (dashed lines)?
- Lower earnings means lower payroll tax revenue for the trust funds
- *What do we know now? Stronger recovery in 2020Q3 through 2021Q1*

COVID Effects: Timing of Benefit Applications

Disabled worker data through December 2020 (numbers in thousands)



Source: <https://www.ssa.gov/oact/STATS/dibGraphs.html>

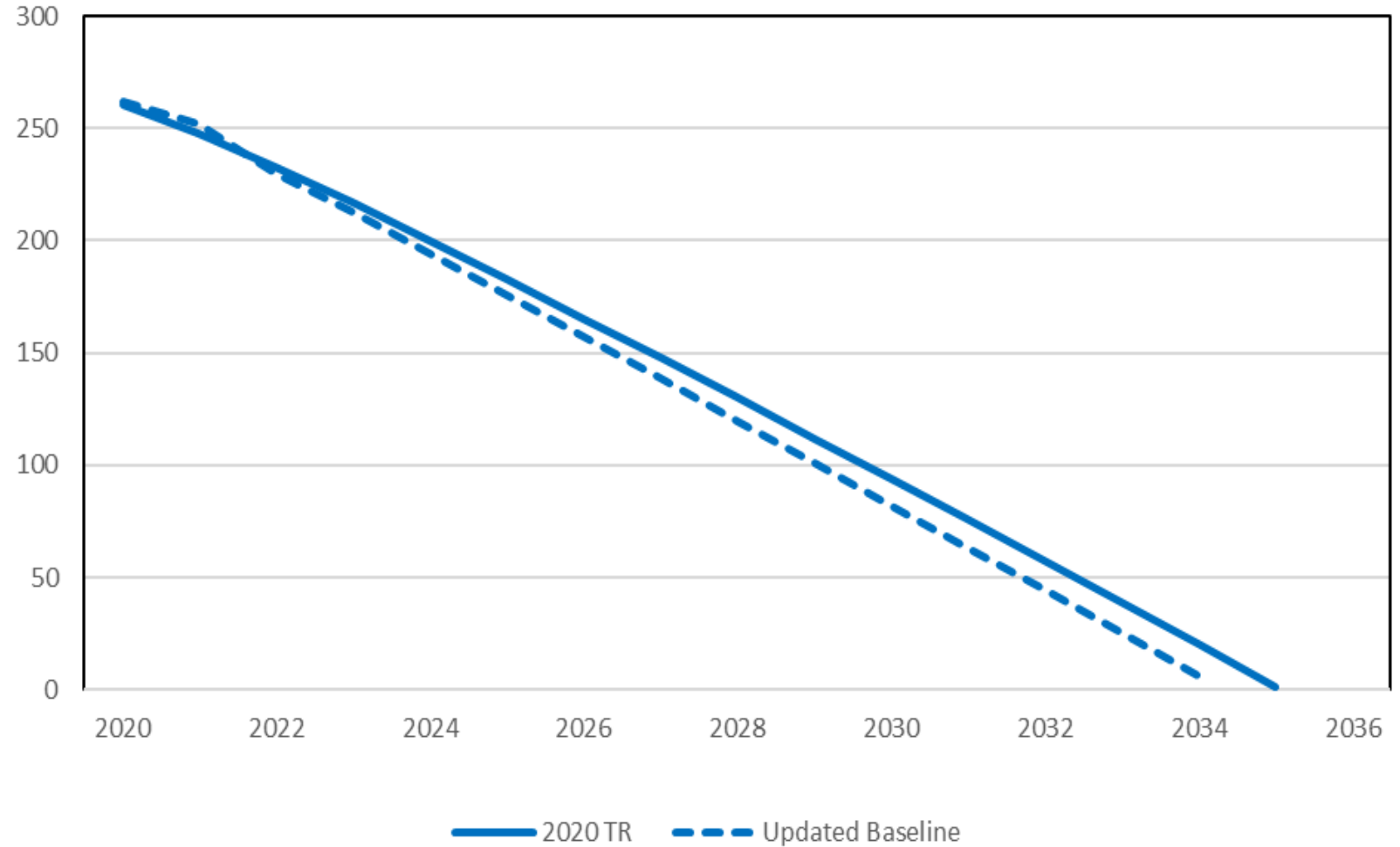
- There has been speculation in the press and elsewhere that the COVID-induced recession will cause workers to apply for retirement benefits earlier than they would have otherwise
- We aren't seeing this in the data—yet
- Similarly, we aren't yet seeing evidence of increased DI or SSI applications
- Speculation is that folks have been relying on extended unemployment benefits

Putting it All Together: Year of Reserve Depletion (November 2020 Updated Baseline)

Under the updated baseline, **OASDI** and OASI reserves are projected to become depleted in **2034** and 2033, respectively, one year earlier than in the 2020 Trustees Report

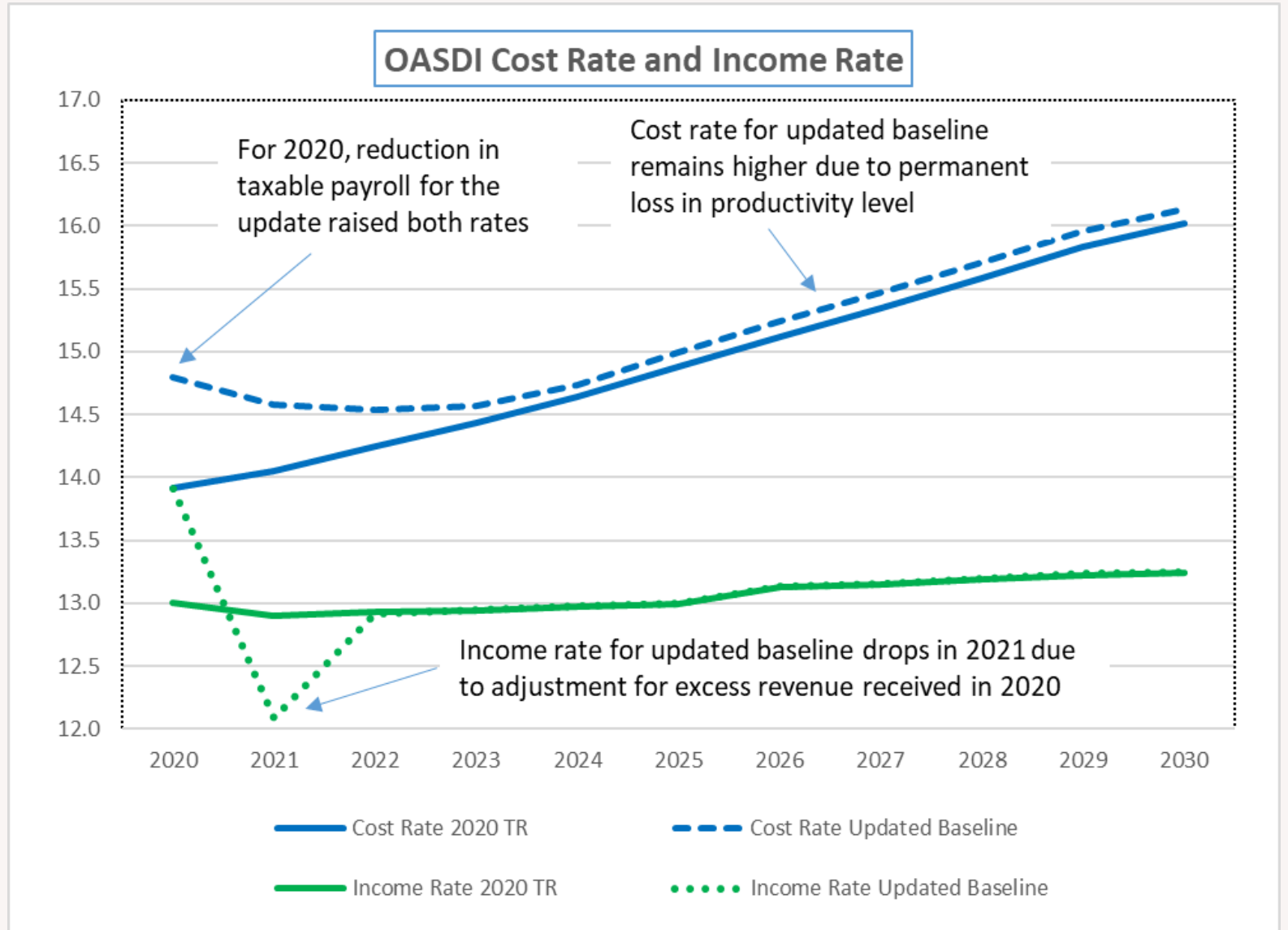
DI reserves are projected to become depleted in 2059, six years earlier than in the 2020 Trustees Report

OASDI Trust Fund Ratio: Reserve Depletion One Year Earlier from COVID-19



Putting It All Together: OASDI Annual Cost and Non-Interest Income as Percent of Taxable Payroll (November 2020 Updated Baseline)

Both the cost and income rates are higher under the updated baseline in 2020, ONLY because of lower payroll (denominator is lower)



Possible Legislative Changes to Address Solvency

Why Do These Actuarial Projections Matter?

- Long-term projections provide information to assess solvency and changes needed to eliminate shortfalls
- If trust fund reserves were to become depleted:
 - Full benefits could not be paid timely
 - NO pressure on the budget or Federal debt
 - So Congress must act, as it always has
- Straightforward solutions:
 - Add revenue and/or lower cost for OASDI
 - Comprehensive changes ***implemented*** by 2034

How to Eliminate the Long-Term Actuarial Deficit

- Make choices addressing OASDI deficits 2034-2094:
 - Raise scheduled revenue after 2033 by about one-third
 - Reduce scheduled benefits after 2033 by about one-fourth
 - Or some combination of approaches
 - Also consider benefit adequacy?

Ways to Lower Cost

- Lower benefits for retirees—not disabled
 - Increase normal retirement age (lowers OASI cost, but increases DI cost)
 - Can exempt long-career low earners
- Lower benefits mainly for high earners
 - Reduce PIA above some level
 - Often combined with increasing PIA below some level, subject to work year requirements

Ways to Lower Cost (continued)

- Lower benefits mainly for the oldest old
 - Reduce the COLA by using a chained version of the CPI
 - Some say instead raise the COLA by using the CPI-E (based on purchases of consumers over age 62)
- Increase the number of years used in calculation (currently 35)
 - Especially hurts those who haven't been in the workforce for more than 35 years

Ways to Increase Revenue

- Raise tax rate on all earners
 - Increasing rate immediately from current 12.4 percent to about **15.6** percent is projected to eliminate the long-range shortfall
- Raise tax on highest earners
 - Increase taxable maximum amount (**\$142,800** in 2021) or remove it completely
 - Some tax on all earnings above the maximum

Ways to Increase Revenue (continued)

- Tax employer group health insurance premiums
 - Affects only middle class if taxable maximum remains the same
- Tax certain investment income
 - Consistent with ACA approach?
 - Or potentially a wealth tax?
- Maintain larger trust fund reserves
 - Could do this by investing some portion of reserves in equities
 - Added interest/yield can lower needed taxes

Many Comprehensive Proposals Scored

Example 1: Representative John Larson (D-CT) and others, September 2019

- Make PIA formula slightly more generous, more “progressive” (**shortfall ↑9%**)
- Increase the COLA (**↑15%**)
 - Based on CPI-E for all beneficiaries; 0.2pp higher on average
 - Index designed to better reflect the purchases of the elderly
- Improve the minimum benefit (**↑5%**)
- Lower taxation of OASDI benefits slightly (**↑5%**)
- Tax earnings above \$400K (not indexed) with small benefit credit (**↓69%**)
- Increase payroll tax rate gradually from 12.4 percent to 14.8 percent (**↓67%**)
- Would produce “**sustainable solvency**” (**shortfall ↓114%**)

Go to: https://www.ssa.gov/OACT/solvency/LarsonBlumenthalVanHollen_20190918.pdf

Many Comprehensive Proposals Scored

Example 2: Former Representative Sam Johnson (R-TX), December 2016

- Make PIA formula less generous but more “progressive” (**shortfall ↓32%**)
- Change to mini-PIA approach (**↓13%**)
- Raise the Normal Retirement Age to age 69 soon (8-year phase-in) (**↓32%**)
- Lower the COLA (**↓47%**)
 - Based on chain-weighted CPI for most beneficiaries; 0.3pp lower on average
 - No COLA if prior year’s MAGI is above certain thresholds
- Add a new minimum benefit (**↑9%**)
- Eliminate taxation of OASDI benefits in 2054 and later (**↑15%**)
- Would produce “**sustainable solvency**” (**shortfall ↓100%**)

Go to: https://www.ssa.gov/OACT/solvency/SJohnson_20161208.pdf

Many Comprehensive Proposals Scored

Example 3: Bipartisan Policy Center, October 2016

- Change to mini-PIA approach for OASI beneficiaries only (**shortfall ↓9%**)
- Increase the taxable maximum (**↓21%**)
 - To \$203,700 in 2021, indexed by AWI plus 0.5 percent thereafter
 - With benefit credit
- Increase payroll tax rate gradually from 12.4 percent to 13.4 percent (**↓33%**)
- Raise the Normal Retirement Age to age 69 gradually (49-year phase-in) (**↓19%**)
- Lower the COLA for OASI beneficiaries only (**↓18%**)
 - Based on chain-weighted CPI; 0.3pp lower on average
- Add a new minimum benefit (**↑7%**)
- Would produce “**sustainable solvency**” (**shortfall ↓104%**)

Go to: https://www.ssa.gov/OACT/solvency/BPCCRSPS_20161011.pdf

Timing for Changes

- Historically, Congress has waited until reserve depletion is imminent
 - Difficult to lower benefits or raise taxes until necessary
- Enacting sooner allows more options, more gradual phase in, and more advance notice
 - Best example: 17-year delay in implementing NRA increase in 1983 amendments
- OASDI reserve depletion now projected for 2034
 - One year sooner due to COVID-19
 - The date has varied between 2029 and 2042 over the past 30 years

For More Information, Go To

<https://www.ssa.gov/OACT/>

- There you will find:
 - The 2020 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
 - Extensive databases about the trust funds and program beneficiaries
 - Congressional testimonies
 - Presentations by OCACT employees

Appendix

Average Wage Index (AWI): “Notch” and “Boost”

- The AWI declined in 2009 by 1.5%; every other year it has increased
- If the AWI declines for 2020 then ALL beneficiaries becoming newly eligible in 2022 (retirees, disabled, survivors) would have benefits permanently lower than those who became eligible a year earlier (“notch”)
- But for those becoming eligible after 2022 who had earnings in 2020, the indexed value of their 2020 earnings will be increased (“boost”)
- For the updated baseline, we assumed the AWI would decrease by about 4%
- The net effect on actuarial status would be small regardless—*but based on current data, it is unlikely there will be a substantial decrease*
- Two bills have been introduced to address possibility of a decline in the 2020 AWI, and for the possibility of declines in the future; see testimony at https://www.ssa.gov/oact/testimony/HouseWM_20200717.pdf