

Long-Term Dynamics of the Employment-to-Population Ratio

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Why Does Employment Matter for Social Security Projections?

- First order: a higher employment-to-population ratio leads to more workers who make payroll tax contributions—and therefore an increase in payroll tax revenue
- Second order: over time, more contributing workers means more workers who receive benefits, and/or more total years of work per worker—and therefore an increase in benefit payments
- The net effect of higher E/P on financial status tends to be positive, because the increase in payroll tax revenue is realized before the increase in benefit payments

Factors in the OCACT (Trustees) Model

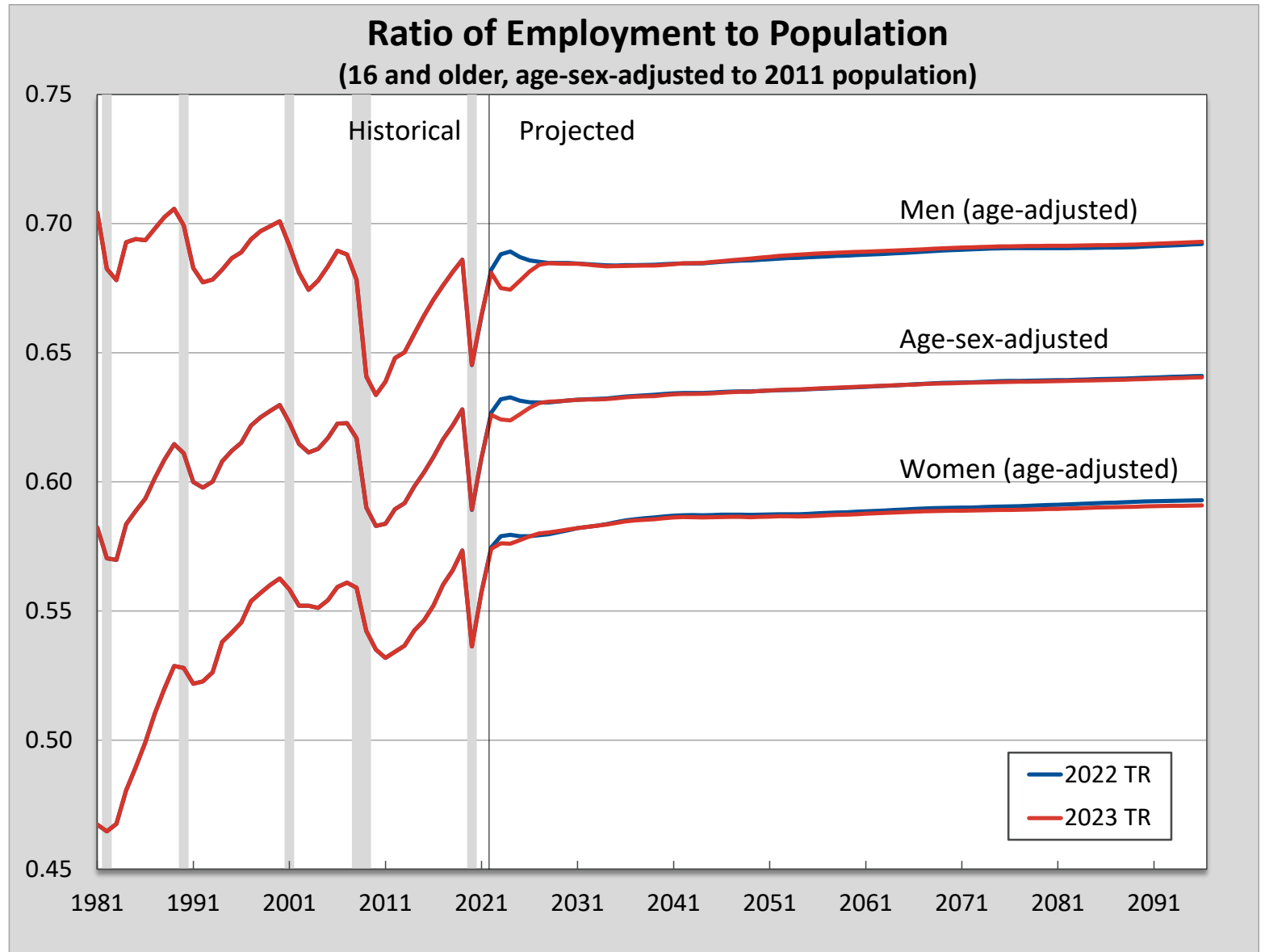
- Age
- Sex
- Marital status
- Presence of children under age 6
- State of the economy
- Disability prevalence
- Educational attainment
- Social Security benefit replacement rate
- Social Security retirement earnings test
- Cohort effects: lagged cohort effects for those age 75 and older
- Time trend: used only for some (younger) groups

For more detail, see Actuarial Study 127, Employment Projections in the 2022 Social Security Trustees Report, by Polina Vlasenko and Judith Aboagye (https://www.ssa.gov/OACT/NOTES/pdf_studies/study127.pdf)

Ratio of Employment to Population

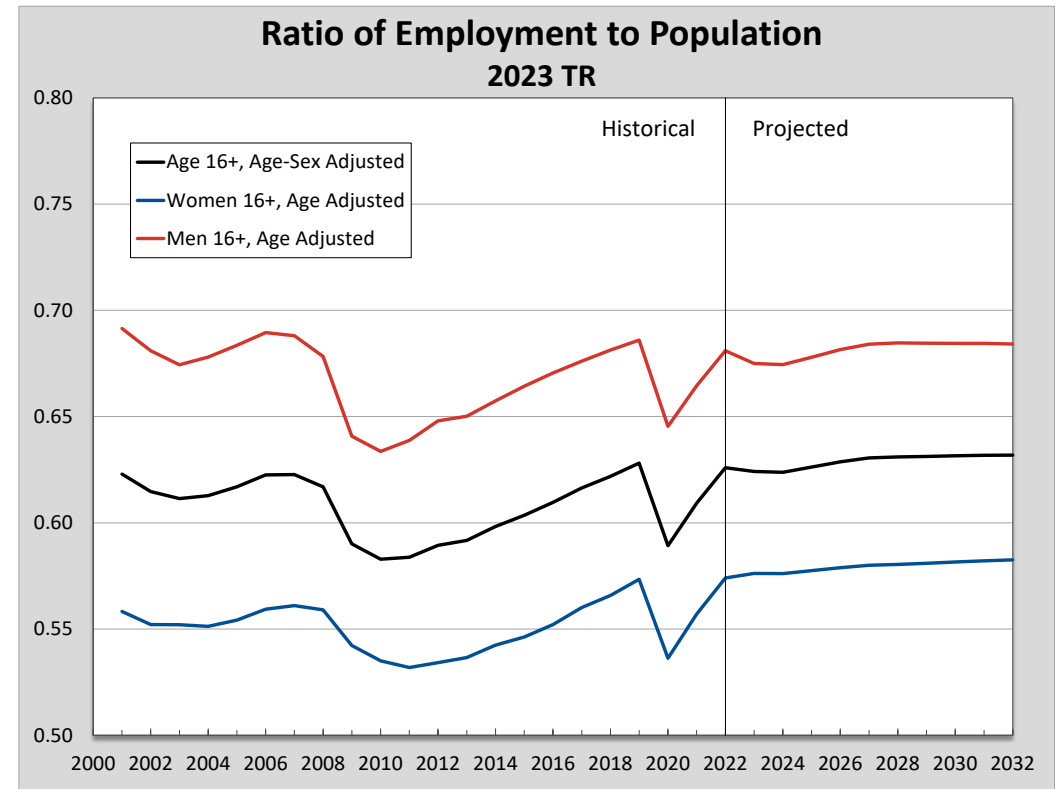
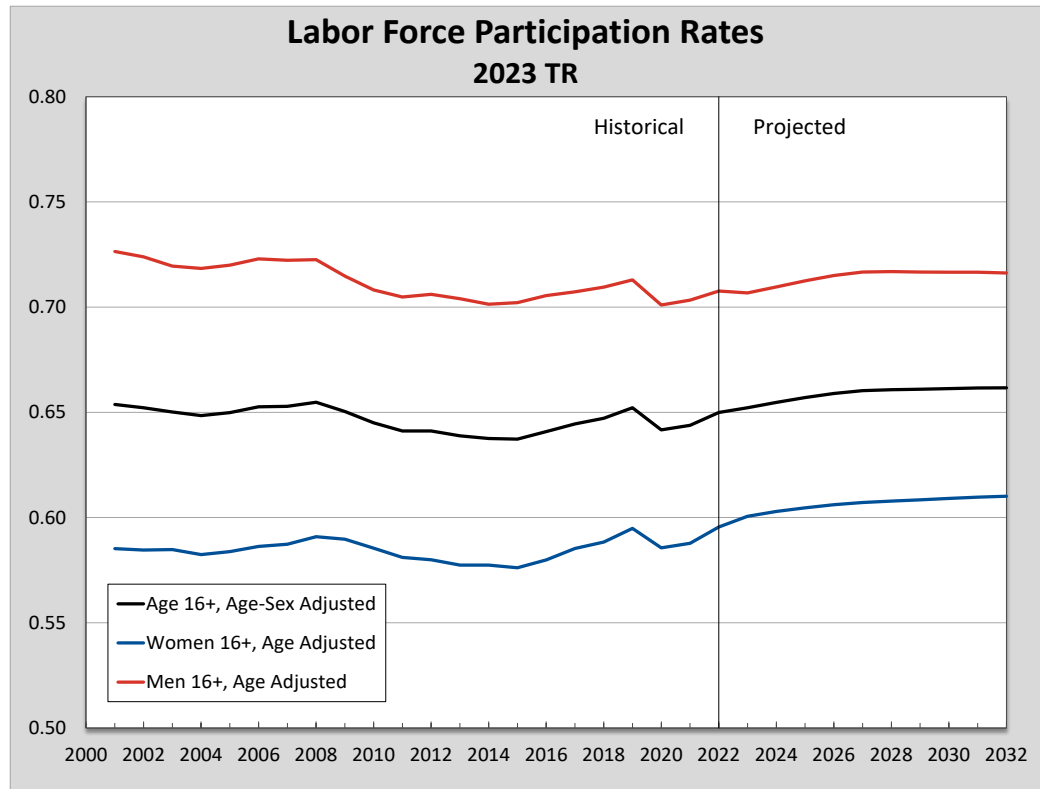
Recovered strongly from the brief but steep 2020 recession.

After the assumed slowdown in growth in 2023, the ratio is projected to return to about the peak level of 2019.



Has the Labor Market Fully Recovered?

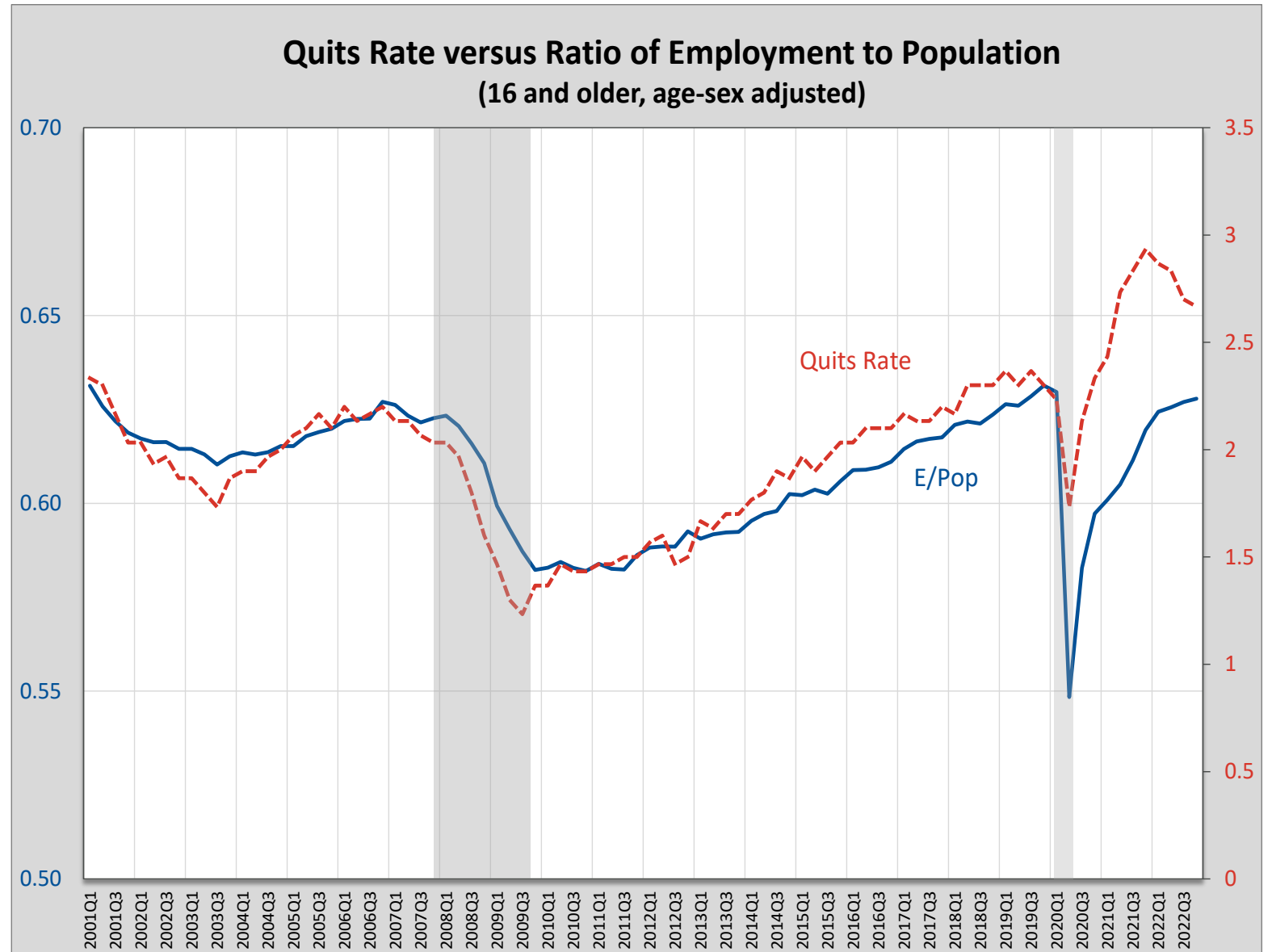
Employment and labor force participation have recovered to pre-recession peak for women, but not for men



Ratio of Employment to Population vs. Quits Rate

The quits rate represents the number of voluntary separations (when an employee voluntarily leaves a job, regardless of whether it is followed by taking a job with a different employer) as a percentage of total employment.

Elevated quits rates suggest a tight labor market, in which workers are able to switch jobs easily, and usually correspond to periods of a high (or rising) ratio of employment to population.

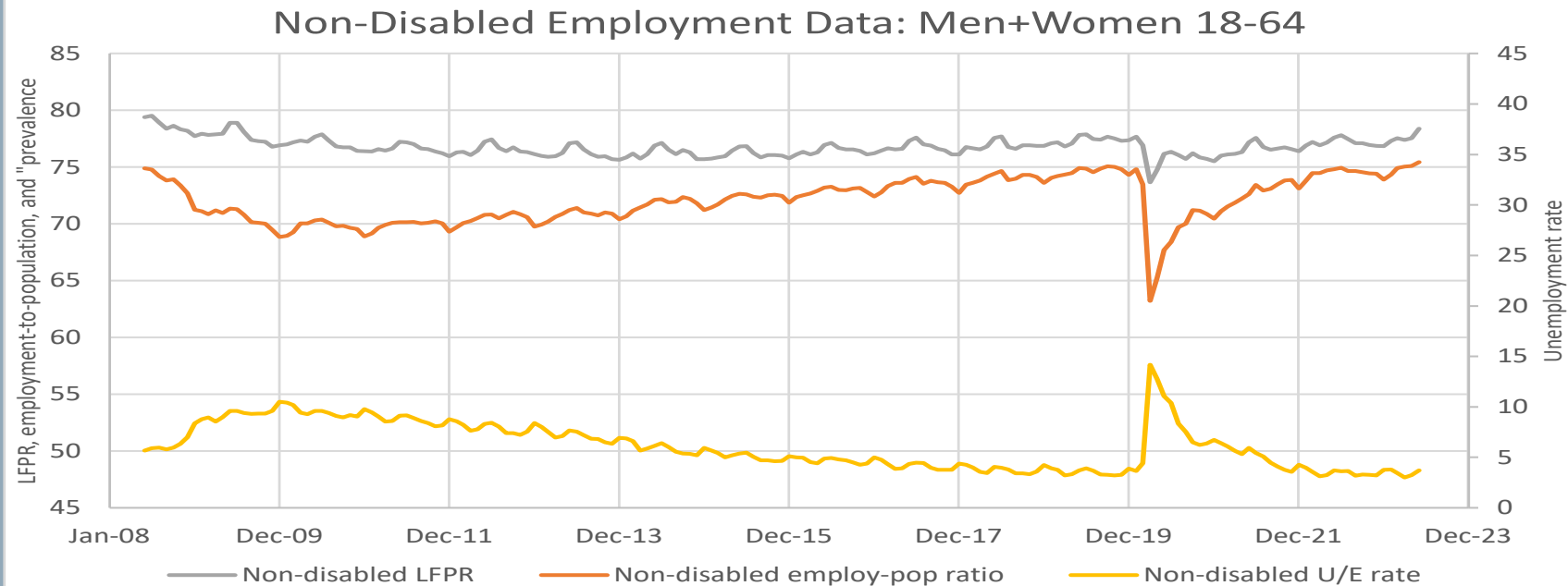
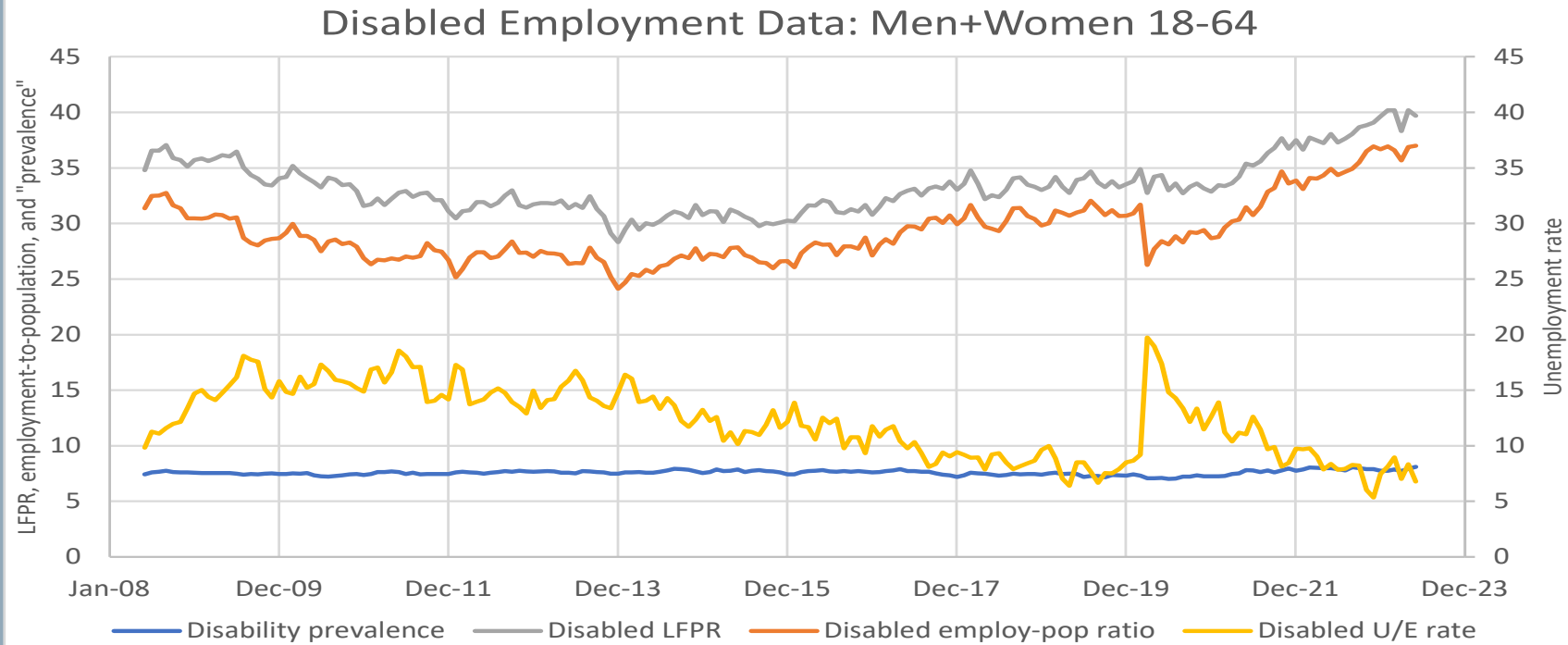


Employment of the Disabled

Employment of individuals self-identifying as disabled appears to be gradually rising from low rates experienced in 2013-15.

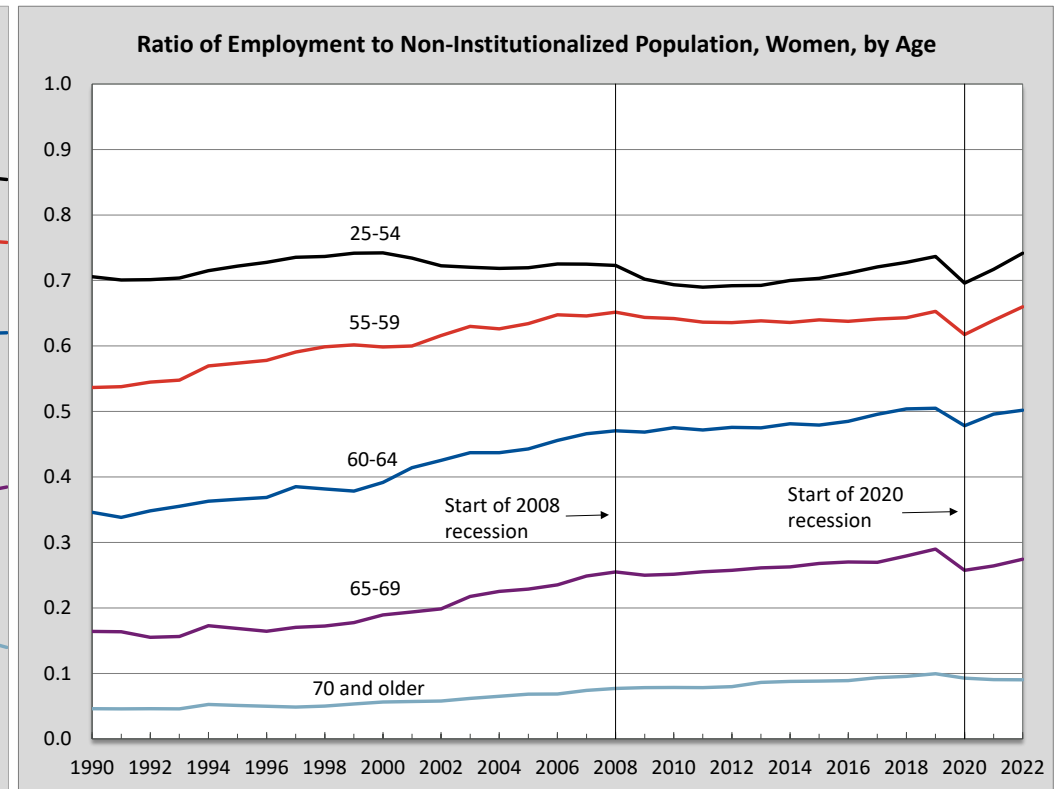
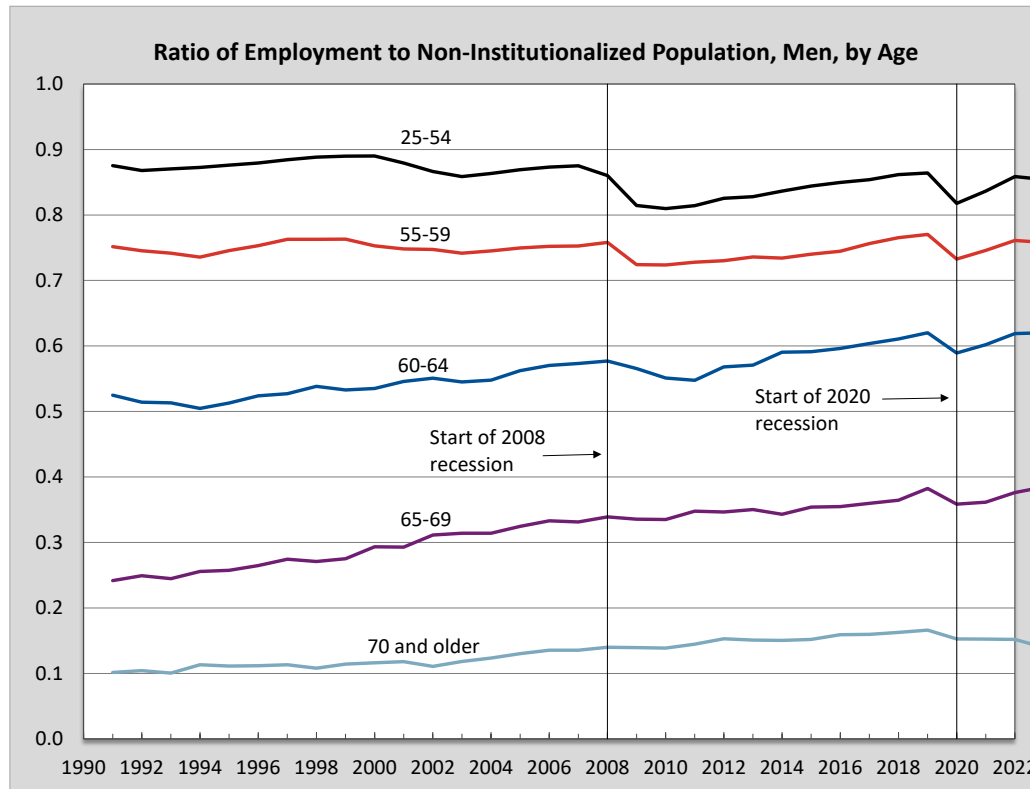
Current rates of employment are at the highest levels since the beginning of 2008. Will this continue to increase or level out?

Note that this is self-identification of disability by CPS survey respondents, so the definition of disability may greatly differ from what is used for the OASDI program.



Employment Over Age 65...

declined briefly with the 2020 recession, but is projected to continue rising. How much of this is from changing the NRA and earnings test? *Is the best retirement approach a job (Paul Samuelson)?*



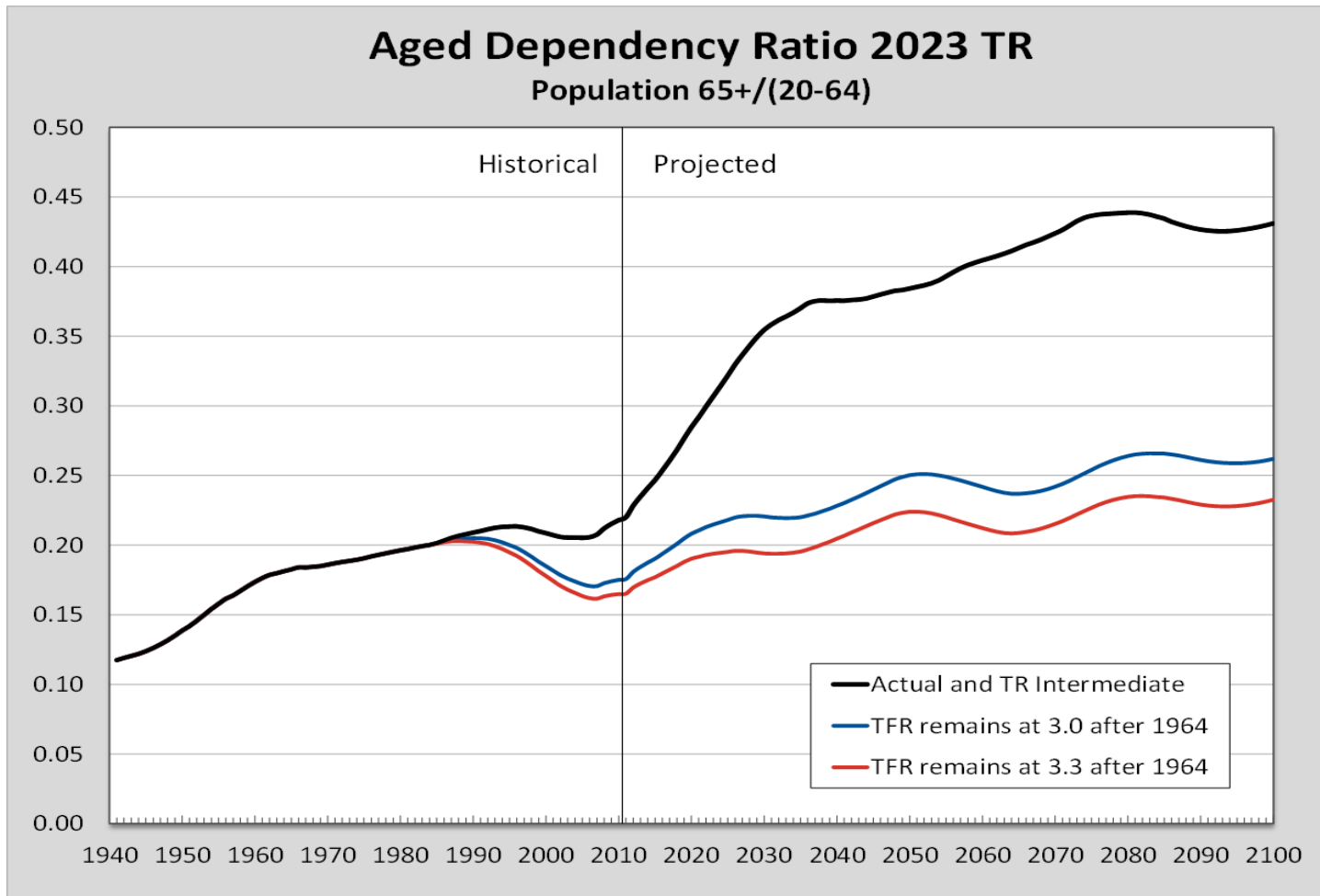
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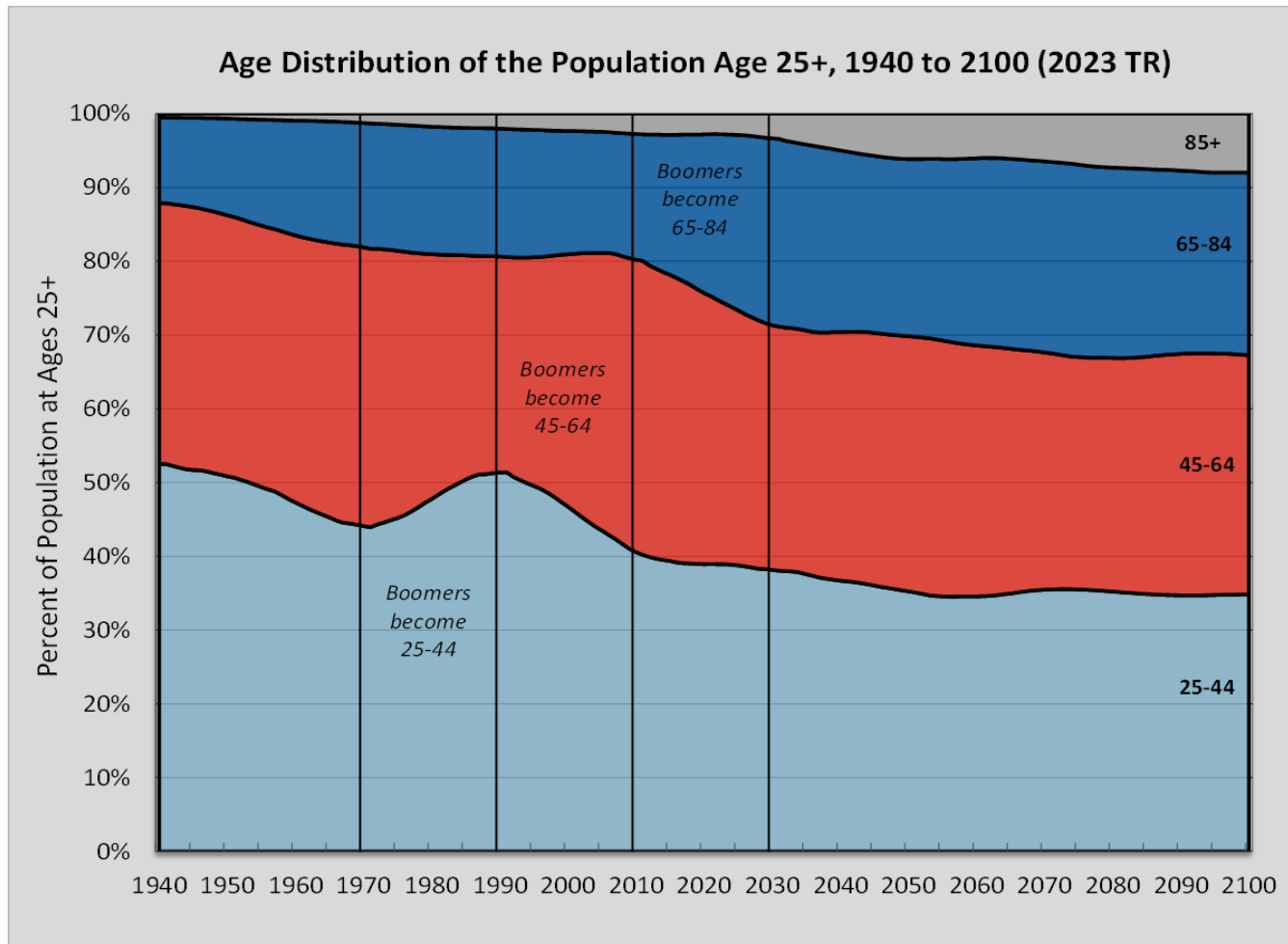
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Goods and Services Produced by Those Employed Support the Entire Population—So Age Distribution is Key



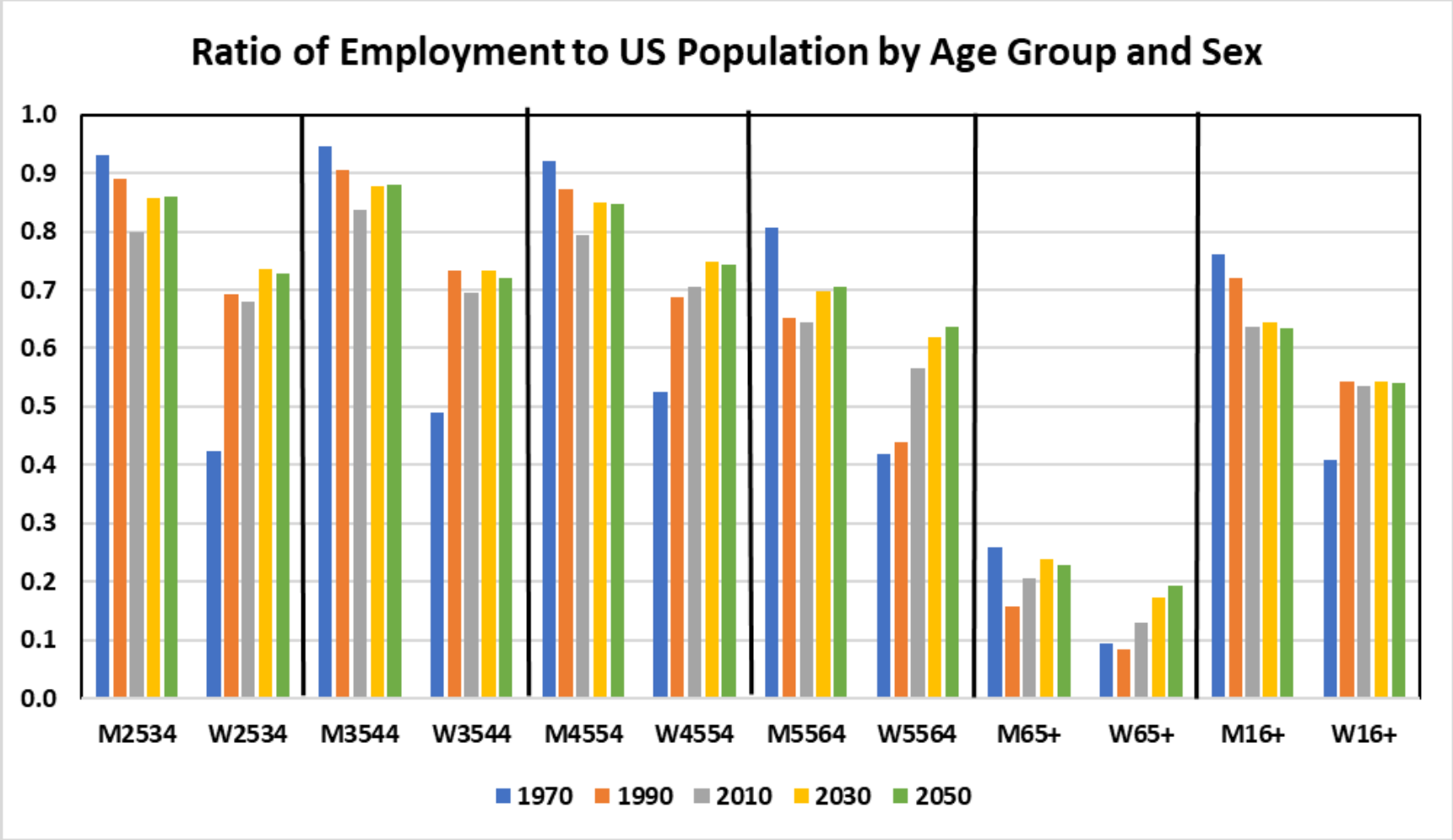
With the drop in birth rates after 1964, we have long known that the share of the adult population (and of the total population) at traditional working ages 20-64 would be shrinking in the future.

Goods and Services Produced by Those Employed Support the Entire Population—So Age Distribution is Key (cont.)



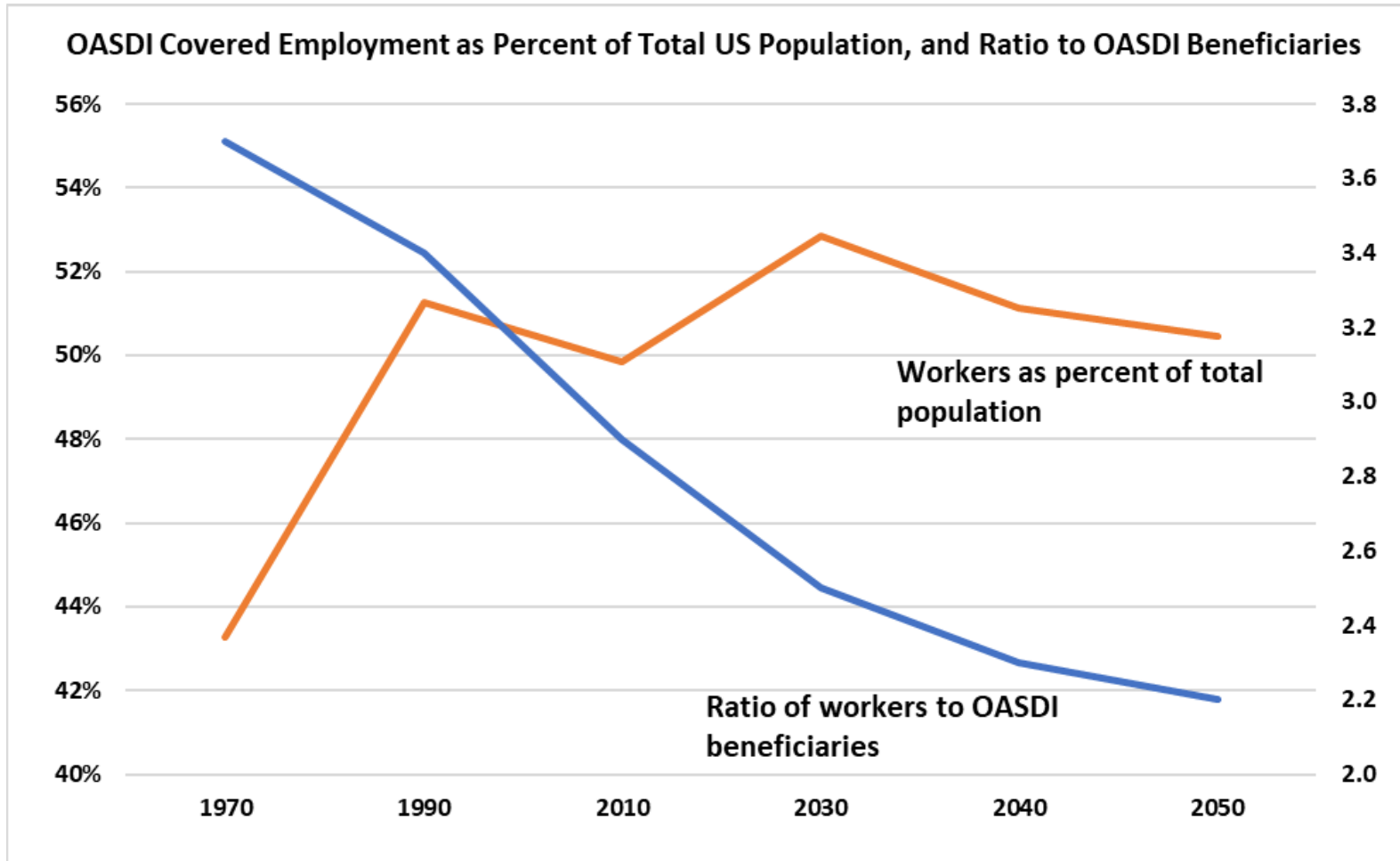
- After 1970, the share of the adult population under age 45 rose quickly through 1990, lessening relative demand for workers at higher ages.
- But this reversed dramatically after 1990, with the share of the population under age 45 shrinking.
- There was a similar shrinking share under age 65 after 2010.

Since 1970, Employment Rates by Age Have Changed Substantially, and Very Differently for Men and Women



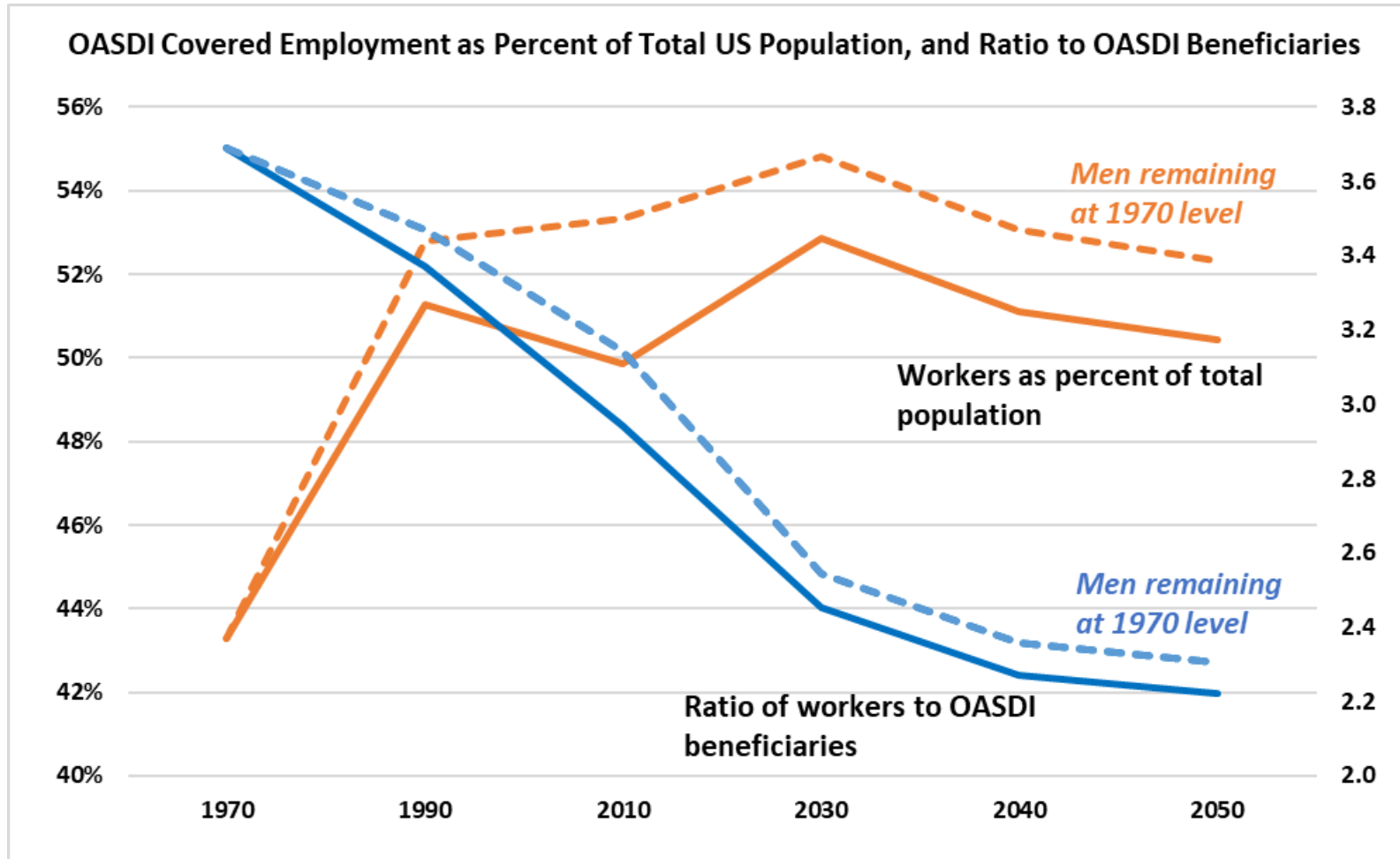
- Women have responded, increasing employment at all ages.
- But men have fallen from their employment rates in 1970.

Between 1970 and 1990, Increased Employment by Women Under Age 55 and Drop in Population Under Age 20 Caused Employment as a Percent of Total Population to Increase



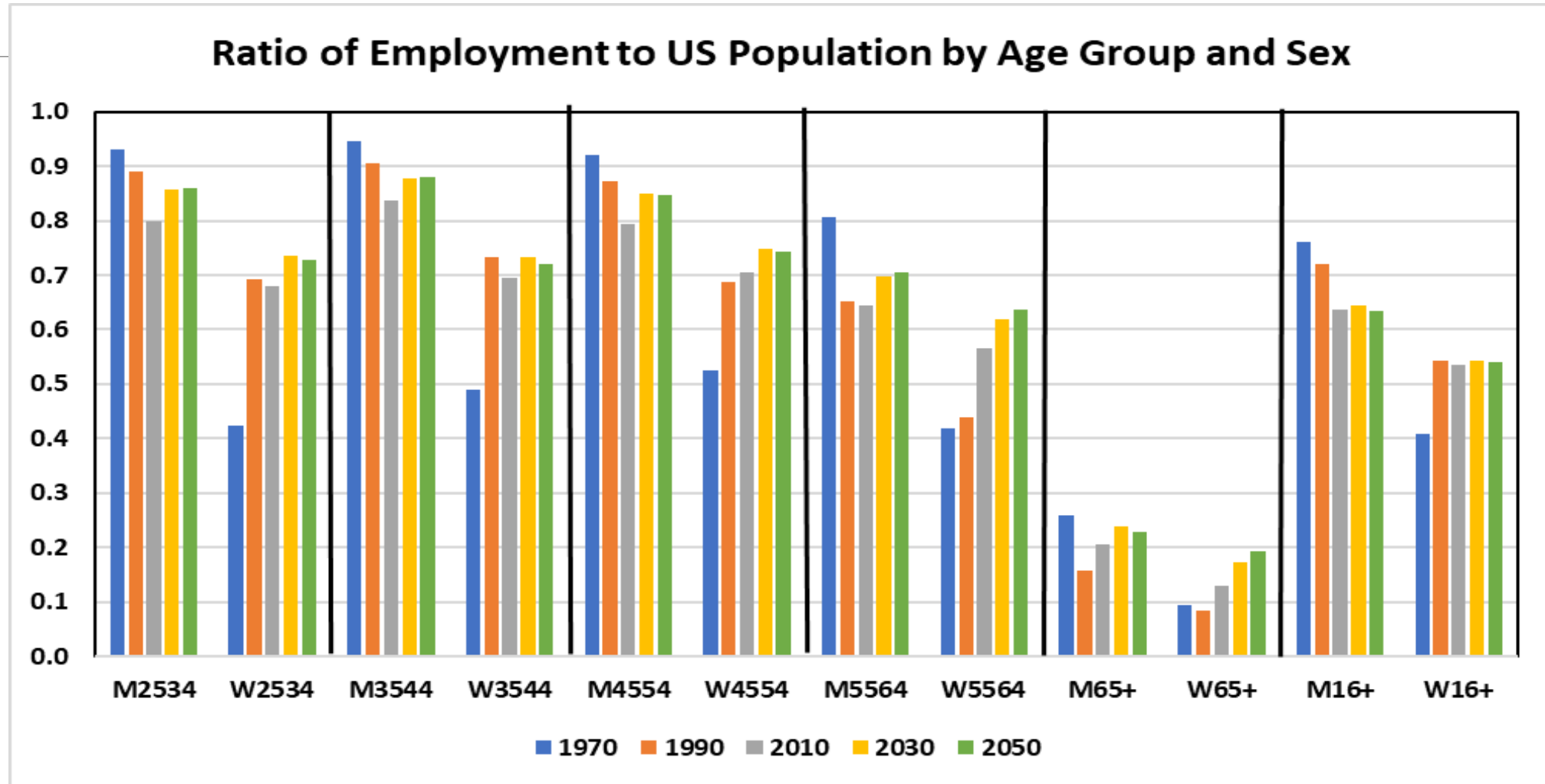
- However, due to DI maturing through 1990, and the changing adult age distribution after 1990, employment is steadily falling behind growth in OASDI beneficiaries.
- In order to maintain the ratio of workers to OASDI beneficiaries, we would need a much larger increase in employment.

What If the Employment Rate for Men Had Not Changed Since 1970?



- This would not have been nearly enough.
- To avoid the need for increasing taxes or reducing benefits, employment would need to increase above current expectations by over one-third.

A One-Third Increase in Average Weekly Employment for All Ages Above Current Expectation (63% for Men and 54% for Women) Seems Implausible



So, What Are Our Options, Given the Dramatic Change in Population Age Distribution We Are Experiencing? Not Just Social Security, But Overall Standard of Living Is at Risk

1. Increasing population will increase demand for goods and services, and thus demand for workers, as we are now seeing in current tight labor markets. Will increased E/P above current expectations materialize as a result? Will the nature of work evolve to facilitate and encourage people to continue working to ever older ages?
2. Will there be increases in births and immigration due to future national policy, resulting from public understanding of the implications of the changing age distribution?
3. Will there be an increased demand for workers in the face of aging infrastructure and the need to address the challenges of climate change?
4. Will there be innovations to greatly increase labor productivity far beyond growth in recent years? Will this help or hurt employment demand?
5. Or will we need to increase scheduled taxes, lower scheduled benefits, or some combination of these approaches—as in most past major legislation?

Questions? Comments? Discussion?
