

The Decline in Prime Age Employment

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Declining employment rate

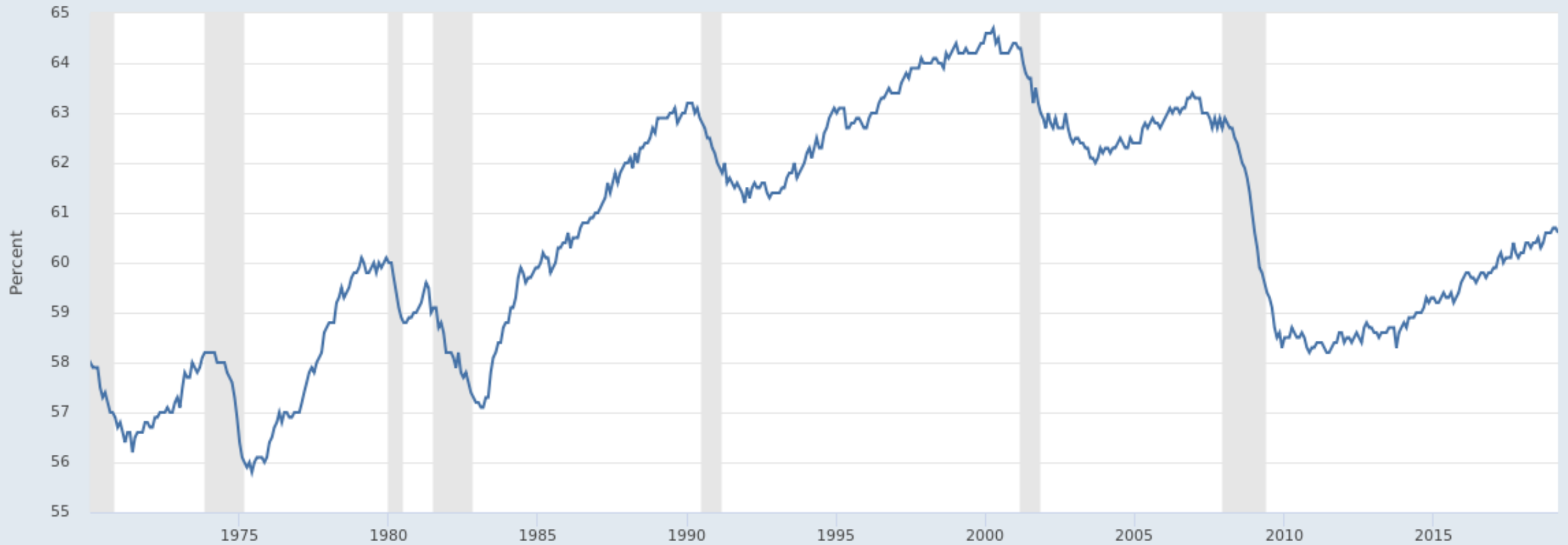
A falling share of the population is working

- 64.6% in 2000, down to 60.5% in 2019

The decline in employment among prime-age and younger workers is a key driver ... *Why?*

This is a secular issue

Negative implications for individual economic security and economic growth

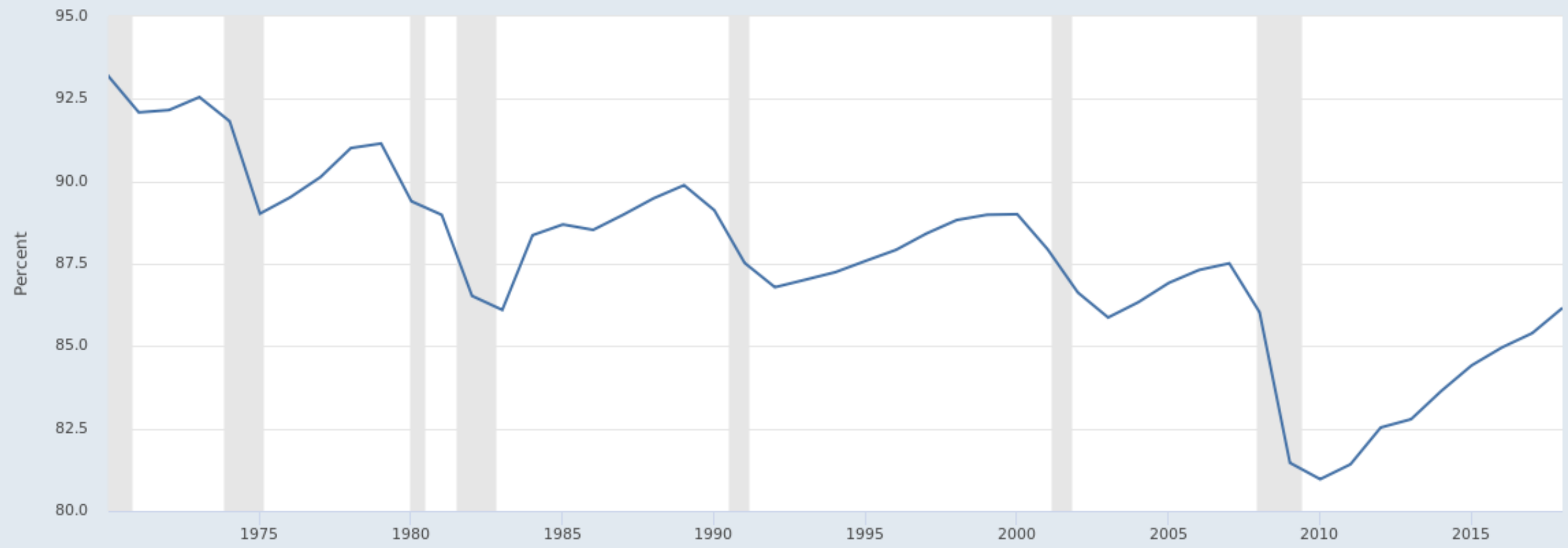


Shaded areas indicate U.S. recessions

Source: Organization for Economic Co-operation and Development

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FRED — Employment Rate: Aged 25-54: Males for the United States



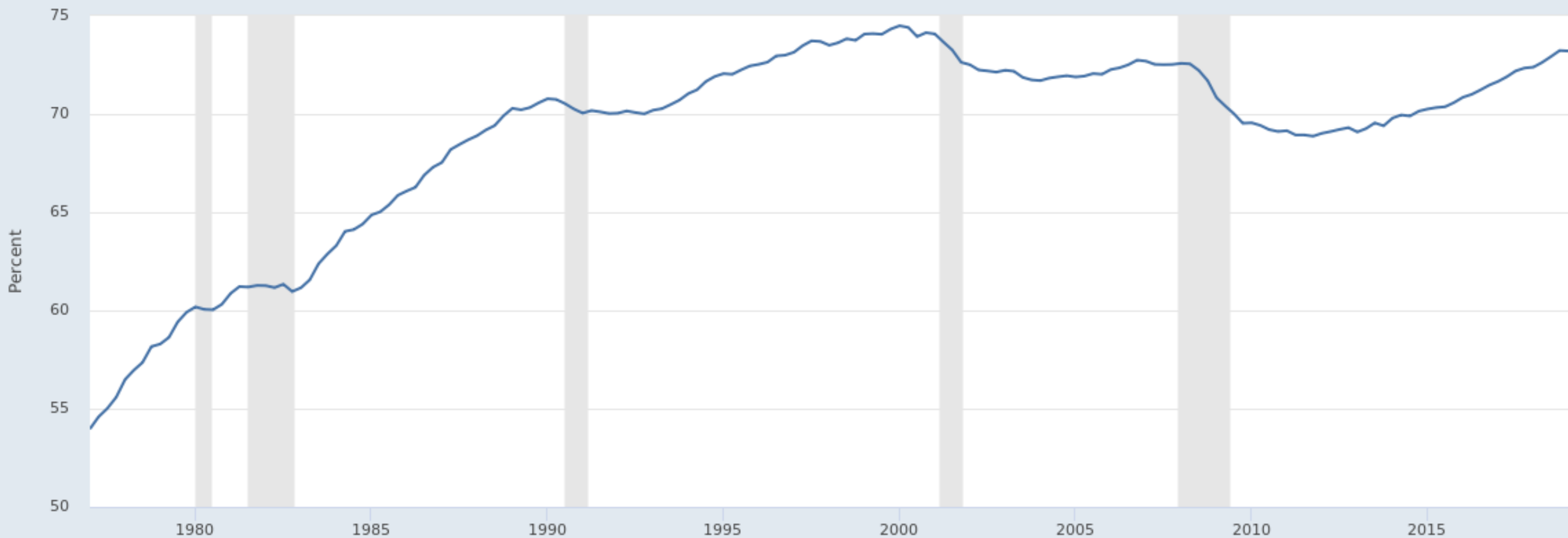
Shaded areas indicate U.S. recessions

Source: Organization for Economic Co-operation and Development

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— Employment Rate: Aged 25-54: Females for the United States

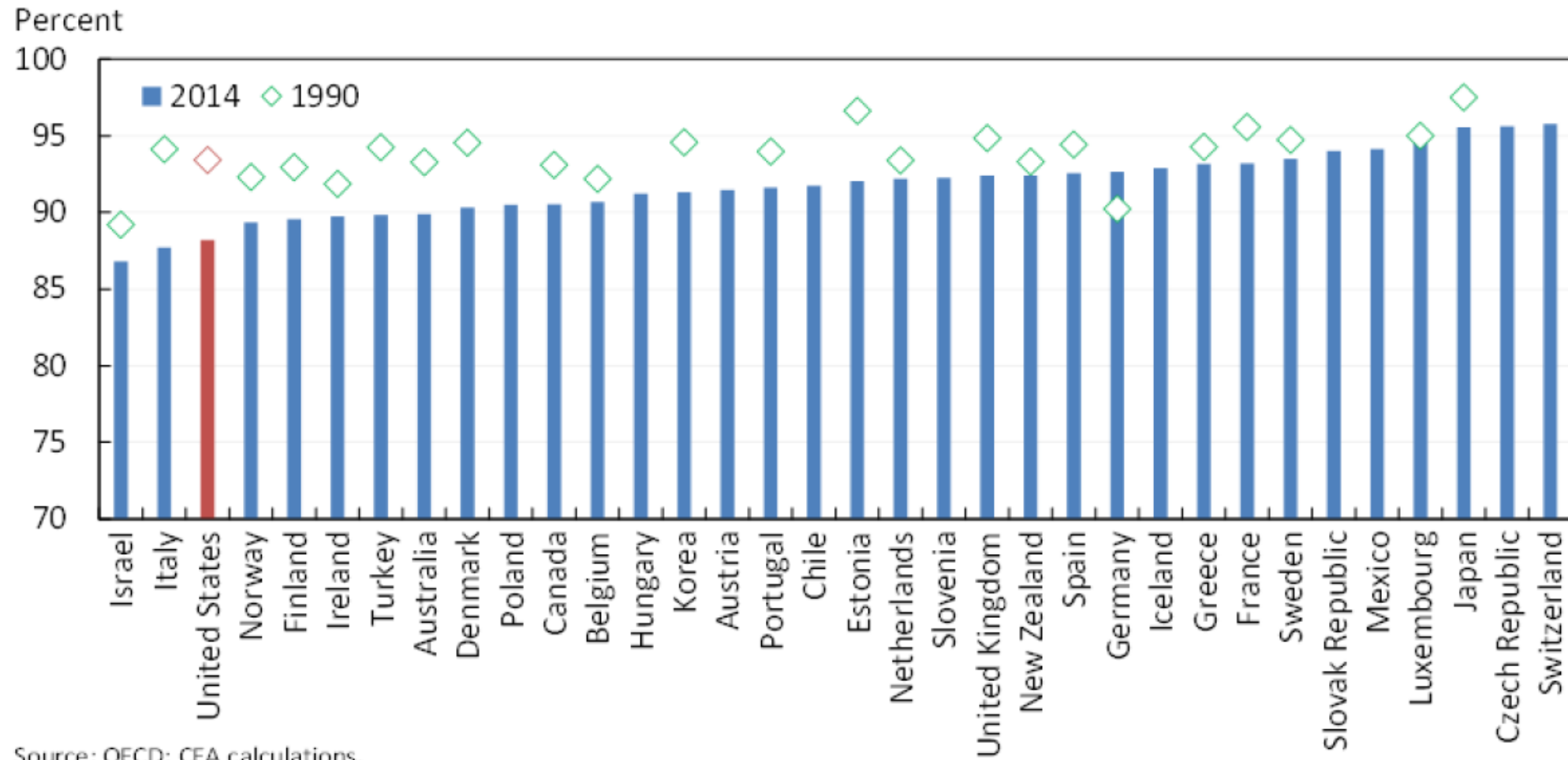


Shaded areas indicate U.S. recessions

Source: Organization for Economic Co-operation and Development

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Figure 3: Prime-Age Male Labor Force Participation Rates Across the OECD



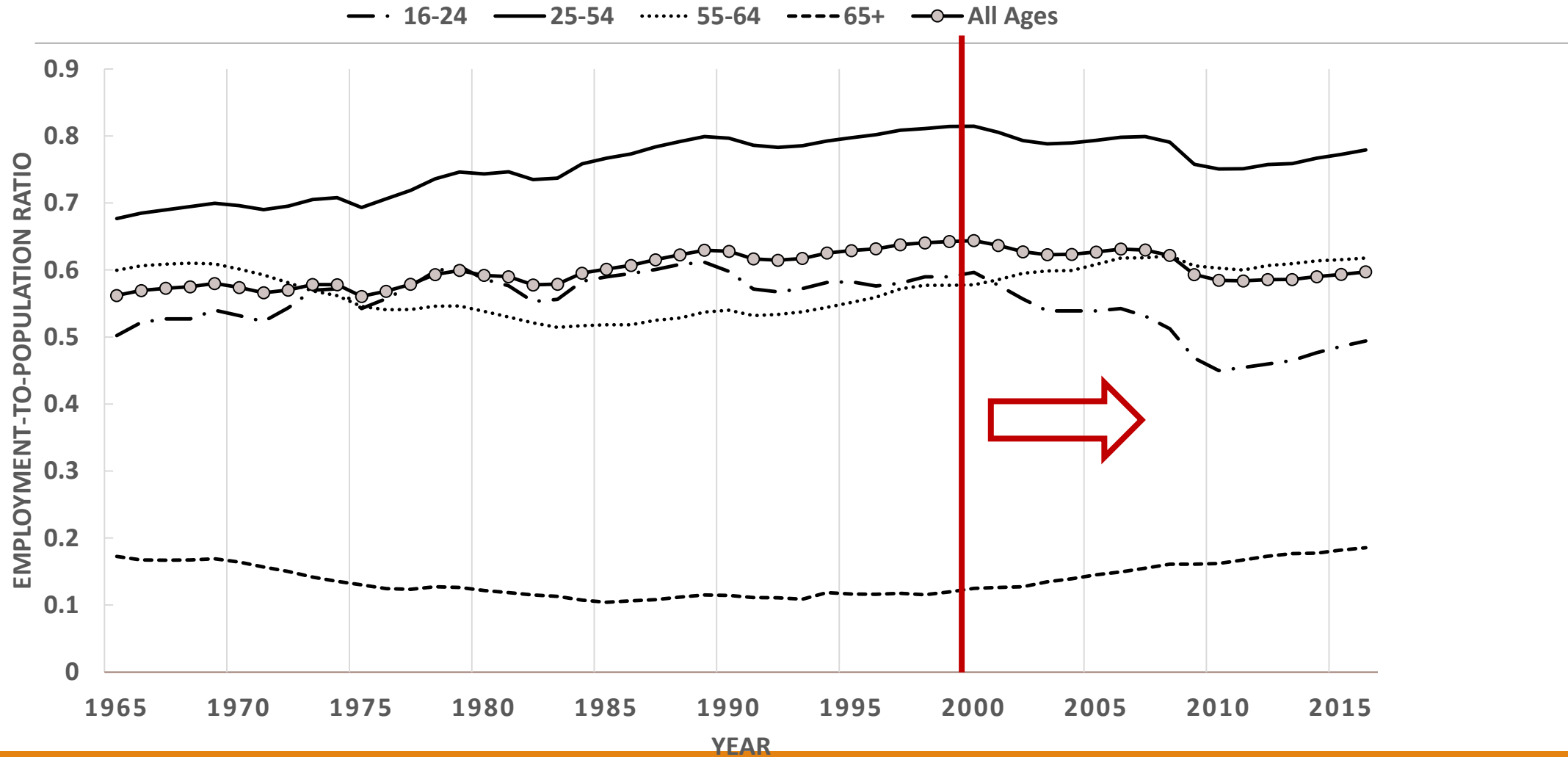
Source: OECD; CEA calculations.

Analyzing the causes

What does the evidence indicate about the causes of the 1999-2016 decline in the U.S. E/POP ratio?

1. Document demographic and group-specific trends for this period
 - Decompose into demographic shifts and within group declines
2. Consider broad set of potential explanatory factors for within-group declines
 - What is causal link between factor and employment?
 - Might changes in this factor have led to lower employment during the period?

Employment-to-Population Ratio by Age, 1965-2016



	TOTAL		MALE		FEMALE	
	E/P ₁₉₉₉	ΔE/P ₉₉₋₁₆	E/P ₁₉₉₉	ΔE/P ₉₉₋₁₆	E/P ₁₉₉₉	ΔE/P ₉₉₋₁₆
<i>Age 16-24</i>	0.590	-0.096	0.610	-0.110	0.570	-0.082
<i>Age 25-54</i>	0.814	-0.035	0.890	-0.040	0.741	-0.030
<i>Age 55+</i>	0.310	0.076	0.385	0.060	0.249	0.086
<i>Age 16-24</i>						
<i>Not In School</i>	0.726	-0.046	0.778	-0.072	0.672	-0.021
<i>In School</i>	0.443	-0.116	0.424	-0.121	0.461	-0.111
<i>Age 25-54</i>						
<i>Less than HS</i>	0.639	-0.030	0.769	-0.027	0.502	-0.046
<i>HS</i>	0.796	-0.071	0.878	-0.075	0.718	-0.086
<i>Some College</i>	0.838	-0.051	0.903	-0.049	0.781	-0.052
<i>College</i>	0.882	-0.024	0.941	-0.021	0.822	-0.017
<i>Age 55+</i>						
<i>Less than HS</i>	0.171	0.047	0.236	0.053	0.120	0.035
<i>HS</i>	0.301	0.033	0.380	0.026	0.250	0.027
<i>Some College</i>	0.364	0.048	0.426	0.032	0.315	0.061
<i>College</i>	0.464	0.024	0.516	0.013	0.395	0.051
<i>TOTAL</i>	0.643	-0.045	0.716	-0.059	0.574	-0.033

Decomposition into population changes versus changes within pop groups

What are the contributions of changes in within-group employment rates versus changes in population shares (age/sex) to the overall E/POP decline?

Changes in population shares	3.1 pp decline
Employment declines among those age 16-54	3.7 pp decline
Employment increases among those age 55 plus	1.3 pp increase
<u>Interaction terms</u>	<u>0.9 pp increase</u>
Total	4.5 pp decline

Potential causes of within-group E/POP declines

1. Shifts in labor demand

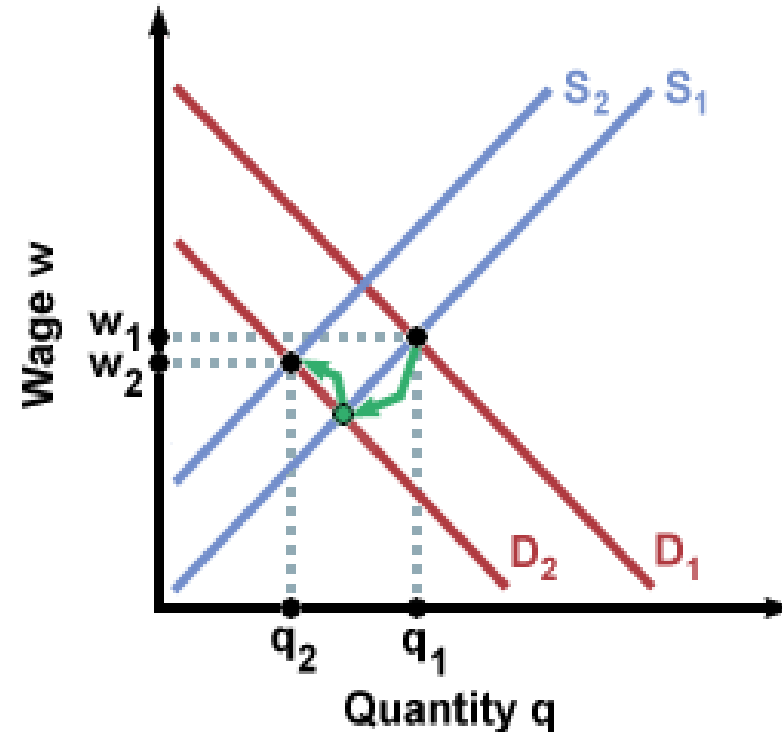
e.g., imports, robots, technology

2. Shifts in labor supply

e.g., disability insurance, safety net, child care, opioids, leisure time

3. Institutional factors and labor market frictions

e.g., minimum wage, occupational licensing, mismatch, incarceration



Demand side factors have been most important

<i>Factors</i>	<i>Estimated reduction in E/Pop (pp)</i>
<u>Major contributing factor</u>	
<i>Growth in imports from China</i>	1.04
<i>Adoption of industrial robots</i>	0.55
<u>Significant contributing factor</u>	
<i>Increased receipt of disability benefits (SSDI, VDC)</i>	.20
<i>Increased rate of incarceration</i>	.13
<i>Higher minimum wages</i>	.05

(Total explained ~ 2 pp)

Major contributors

1. Growth in imports from China

- From 1999 to 2016, value of Chinese imports increased by 302%
- Considerable evidence links manufacturing employment declines to China

2. Adoption of industrial robots

- About one new robot per 1000 US workers adopted over past couple of decades
- Estimates imply 5.6 workers displaced per robot

3. Disability benefits

- SSDI caseload grew by 3.9M recipients between 1999 and 2016, from 4.9M to 8.8M
- We estimate 1.6M “excess” people on SSDI; also in VADC
- Apply age-group emp elasticities from academic literature

4. Rise in incarceration

- Tremendous growth in incarceration, but no federal dataset of former prisoners in population, est ~6.2M
- Incarceration weakens employment for those with substantial earnings before conviction, small share

5. Increased minimum wages

- Driven by local and state raises; younger, less skilled workers most affected

Maybe, but more research needed

Occupational licensing

- Plausible that growth in occ lic (~5% in 1950s, ~30% today) hindered employment over this period

Child care

- Female employment responsive to price of child care; but has it become harder to access?

Skill mismatch

- CEOs often complain that workforce lacks needed skills, but unclear if this is widespread

Geographic mismatch and worker mobility

- Mobility has declined, but less clear whether and how this has affected employment rates

Improved video game technology versus changing social norms

- Young men spending more time gaming, young men living with relatives
- But, hard to separate from cohort changes in norms –how to document?

Role of opioid addiction/prescriptions

- Increased rates of reported pain among those out of workforce; assuming increased opioid use is cause not effect of declining employment, can explain upper bound of 20% of decline in LFPR
- But, some evidence suggesting causation in other direction, or no causal link.

Insignificant factors

- SNAP expansions
- Public health expansions
- Increased rates of spousal employment
- Increased difficulties due to lack of family leave
- Immigration

Policy responses

1. Need to increase number of college graduates
 - More people going to college than ever, but completion rates are too low.
 - Investments in public colleges, community colleges
2. Need productive pathways to work for non-college adults
 - Expansion of CTE programs
3. Reform SSDI
 - Partial system, temporary system, focus on entry margin
4. Increase take-home pay – expansions to EITC
5. Child care provision/subsidies
6. Reform prison system to focus on training, post-release employment