CONFERENCE ON GLOBAL ECONOMIC ISSUES
Session 3
Macro Implications of Structural Change in the Labor Market
Men and Women in the Labor Market: The Long View

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Unemployment
Slow Recoveries

Average Growth Rate over 4 Years Following Business Cycle Trough

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<th>Year Interval</th>
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Employment Rates

Prime-age Employment Rate

Year

Employment Rate (%)

Source: Fukui, Nakamura, Steinsson (2018)
Men vs. Women

Source: Fukui, Nakamura, Steinsson (2018)
Trends: All about LFP (not Unemployment)

![Prime-age Labor Force Participation Rate](image)

Source: Fukui, Nakamura, Steinsson (2018)
Slow Recoveries

Average Growth Rate over 4 Years Following Business Cycle Trough

- 73-75
- 81-82
- 90-91
- 01
- 07-09

Male
Female

%
Prime Age Men: Trend Since 1970

Source: Fukui, Nakamura, Steinsson (2018)
Men> 24: Trend Since 1950

Source: Fukui, Nakamura, Steinsson (2018)
Gender Gap in Employment Rates

Source: Fukui, Nakamura, Steinsson (2018)
Not Womens’ Fault

• Little evidence that increasing female employment “crowds out” men
  – Synthetic cohort: Juhn and Murphy (1997)
  – Married vs. Single
    (McGratten and Rogerson, 2008)
  – State level evidence:
    (Fukui, Nakamura, Steinsson, 2018)
Cross-State Convergence of Female Employment Rate

Source: Fukui, Nakamura, Steinsson (2018)
Cross-State Convergence of Total Employment Rate

Source: Fukui, Nakamura, Steinsson (2018)
Long-Term Decline: Male Employment Rates

• What is behind these trends?
  – Long-term decline in many countries (Boppart-Krusell, 2018)

• Many prime age men continue to live with their parents

• Why?
  – Cultural factors: Eberstadt (2016)
  – Opioids (Krueger, 2017)
  – Price of leisure (Aguiar et al, 2017)
Living with Parents
(Employed vs. Non-Employed)

Source: Fukui, Nakamura, Steinsson (2018)
Longer-Run Perspective

(a) Weekly U.S. hours worked per worker in nonfarm establishments 1830–2015

Source: Boppart and Krusell (2018)
Figure 1: Hours worked per worker

Source: Boppart and Krusell (2018)
Net-Net: Opportunity

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Mary C. Daly
President & CEO
Federal Reserve Bank of San Francisco

The views expressed here are my own and do not necessarily reflect those of anyone else in the Federal Reserve System.
Unemployment near historic lows

Unemployment Rate

Sources: FOMC Summary of Economic Projections, Haver Analytics.
Inflation below 2% target

Core and headline PCE inflation

Sources: Bureau of Economic Analysis, Haver Analytics, FRBSF staff calculations.
Note: 12-month change.
Phillips Curve has flattened

Slopes of Wage and Price Inflation Phillips Curves

Source: Hooper, Mishkin, and Sufi (2019).
Dilemma or Opportunity?
Cyclical inflation is alive

Core PCE Inflation by Sector

Source: Update from Mahedy and Shapiro (2017).
Natural rate of unemployment ($u^*$) is a moving target.

**SEP Longer Run Unemployment Rate**

- **Median**
- **Central Tendency**

Sources: FOMC Summary of Economic Projections, Haver Analytics.
Short-run and long-run $u^*$ may differ

Source: Updated from Petrosky-Nadeau and Valletta (2019).
Dilemma or Opportunity?
Benefits
Prime-age participation is up

Labor force participation rates

Disadvantaged workers making gains

Job finding rate, men aged 25 to 64

Source: Petrosky-Nadeau and Valletta (2019).
Note: 12-month moving average.
Disadvantaged workers making gains

• Similar improvements seen in other outcomes*
  • Unemployment
  • Labor force participation
  • EPOP
  • Wage growth

• Confirmed in reports from Fed Listens events

Source: Aaronson, Daly, Wascher, and Wilcox (2019).
Costs?
Young workers not rushing in

Labor force participation rates

Note: 6-month moving average, seasonally adjusted.
School enrollment rates still high

Percentage of population enrolled in school, by age

18 and 19 year olds (left axis) 20 to 24 year olds (right axis)

Net-Net: Opportunity
...for the labor market
Implications for Fed policy

• Dual mandate
  • Full employment
  • Price stability

• Financial stability
Net-Net: Opportunity
...for the economy
Getting beyond “will automation kill jobs”

- **Not just technology but:**
  - Relative prices
  - Complementary processes, structures, and norms
- **Not just labor demand, but labor supply**
- **Not too much change, but too little dynamism and mobility**
- **Not uncertain aggregate effects, but likely distributional impact**
Job shifts across occupational sectors
10-year rate, by decade, through 2017 (Census)
The less-educated are most at risk

**Workers in routine occupations, by education**

- No high school degree: 59%
- High school degree only: 62%
- Associate's degree or some college: 50%
- Bachelor's degree: 28%
- Graduate degree: 11%

Source: U.S. Census, American Community Survey
Coasts at lower job-loss risk from automation

Share of jobs that are "routine"
Geography inequality

- Top pulling away, not bottom falling out
- Again: too little mobility & dynamism
The richest places are pulling away
Earnings inequality across counties, percentile ratios

Source: BLS QCEW
Places are less mobile across the distribution

10-year cross-CZ correlation in income, endpoints shown
Partisanship

- Geographic differences are politicized
- It’s getting worse
Local economic conditions and partisanship

Metro correlation with 2016 Democratic margin, population-weighted

- Job growth, year to 2019 Q1: 0.02
- Lower unemployment rate: 0.07
- Lower volatility of annual job growth: 0.22
- Prime-age employment-population ratio: 0.32
- Home price growth since 2000: 0.45
- Household income inequality (Gini): 0.46
- Projected job growth, based on job mix: 0.64
- Median household income: 0.65
- % adults with bachelor's degree: 0.68
- % jobs in non-routine occupations: 0.70
- Cost of living: 0.76
Policy directions on regional inequality

- Questioning location incentives
- Reducing barriers to geographic mobility
- Investing in struggling places
- Non-place-based strategies
Thank you.

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