Comments on Bob Hall

"Why Has the Unemployment Rate Fared Better than GDP Growth?"

John Fernald

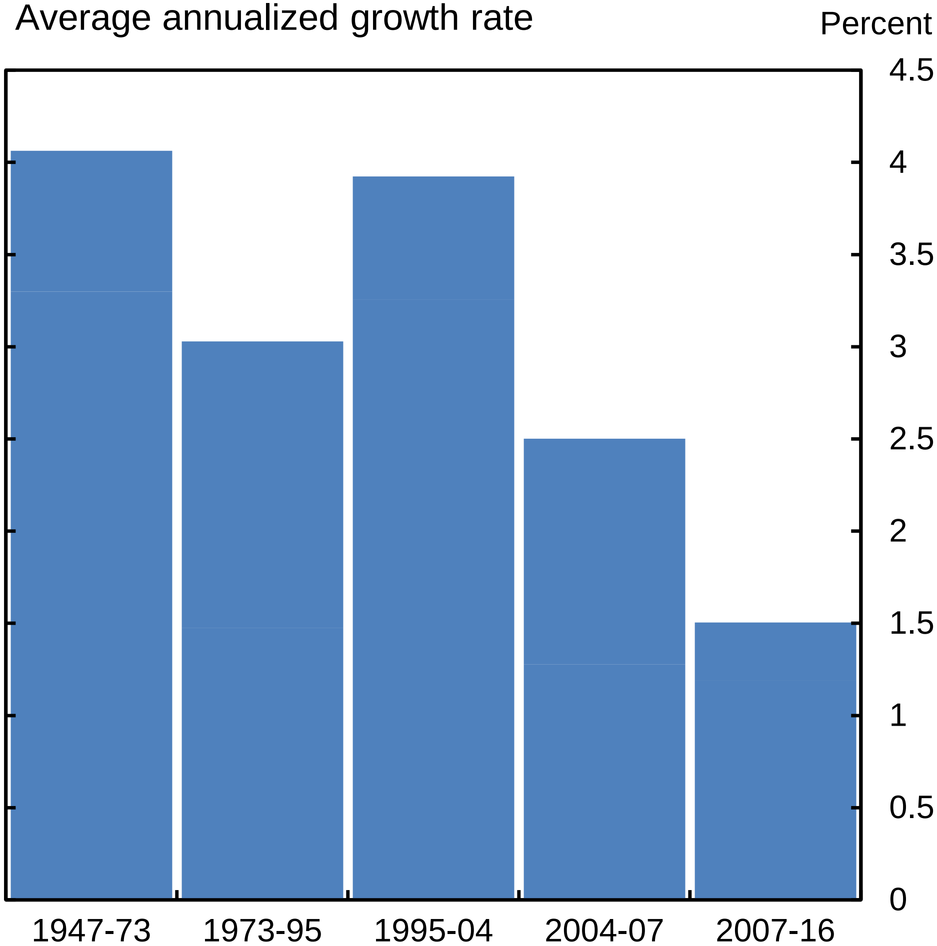
October 14, 2016

My thanks to FRBSF colleagues for helpful conversations in recent years about the issues in this discussion. But the views expressed here are my own and do not necessarily reflect the views of the Federal Reserve Bank of San Francisco or the Federal Reserve System

Unemployment rate is where it was in 2007
…but output growth has disappointed

Business-sector output growth

Average annualized growth rate

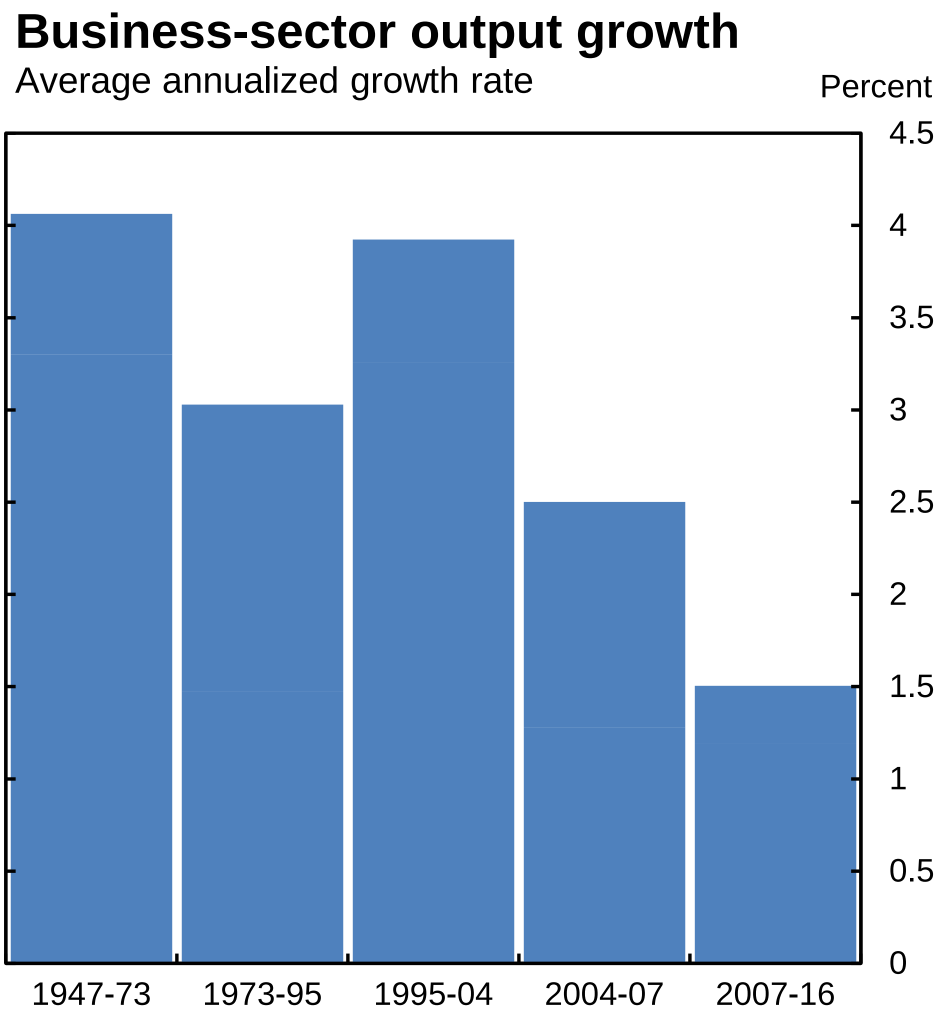


Source: Fernald (2014a), BEA, BLS. Quarterly; samples end in Q4 of years shown except 1973 (end Q1) and 2016 (ends Q2). Output averages income and expend.

Paper

- Uses Okun's Law to control for the cycle
- Growth-accounting for non-cyclical output shortfall:
  - Labor (LFPR, working-age population)
  - TFP
  - Capital

My take: Slow growth from demographics and productivity—not Great-Recession



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- Okun's Law was normal (with low potential)
- Demographics and productivity are slow
- Best guess: slow growth the new reality

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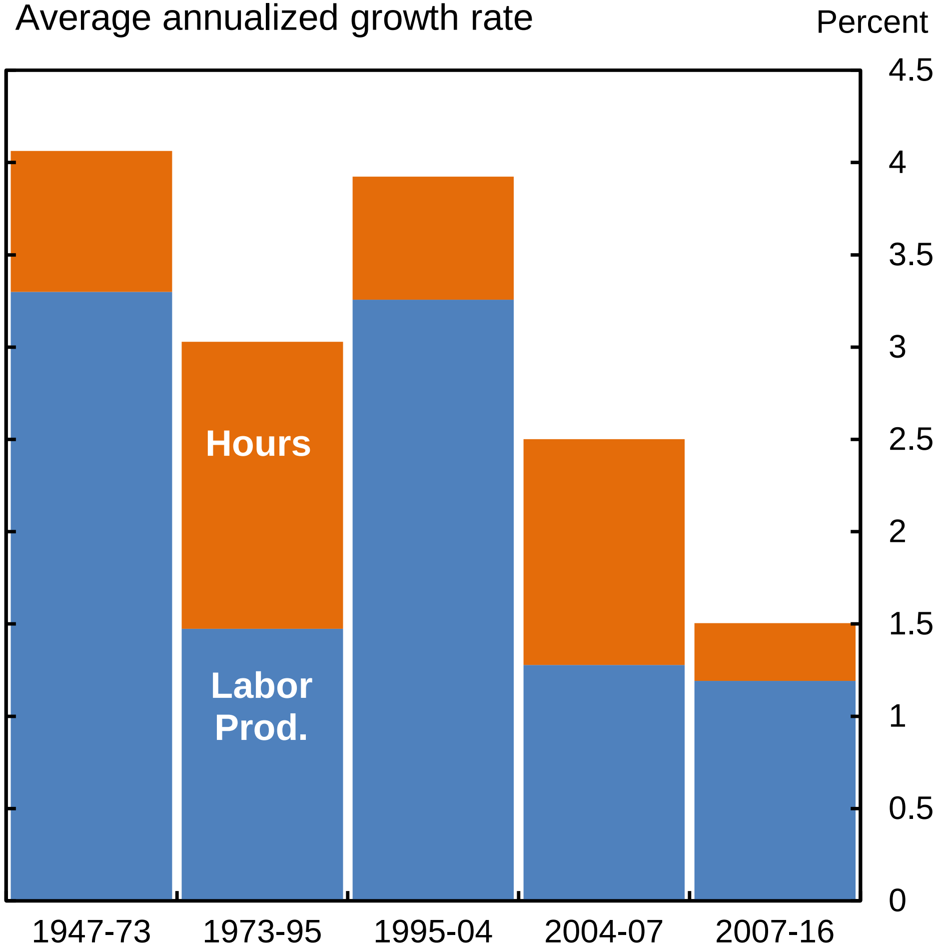

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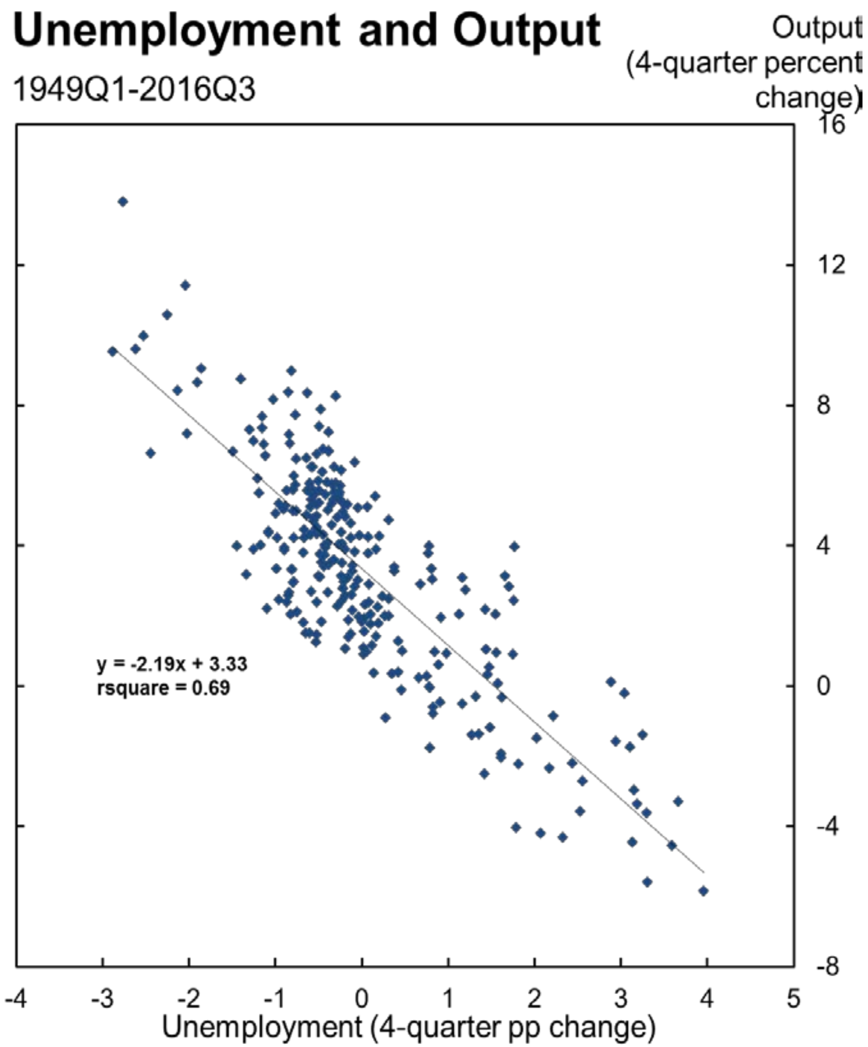
Okun’s Law consistent with low potential

Hall, p.2: "U.S. Experience since the crisis is a major deviation from [Okun's] Law"



(From Daly, Fernald, Jorda, and Nechio, 2013)

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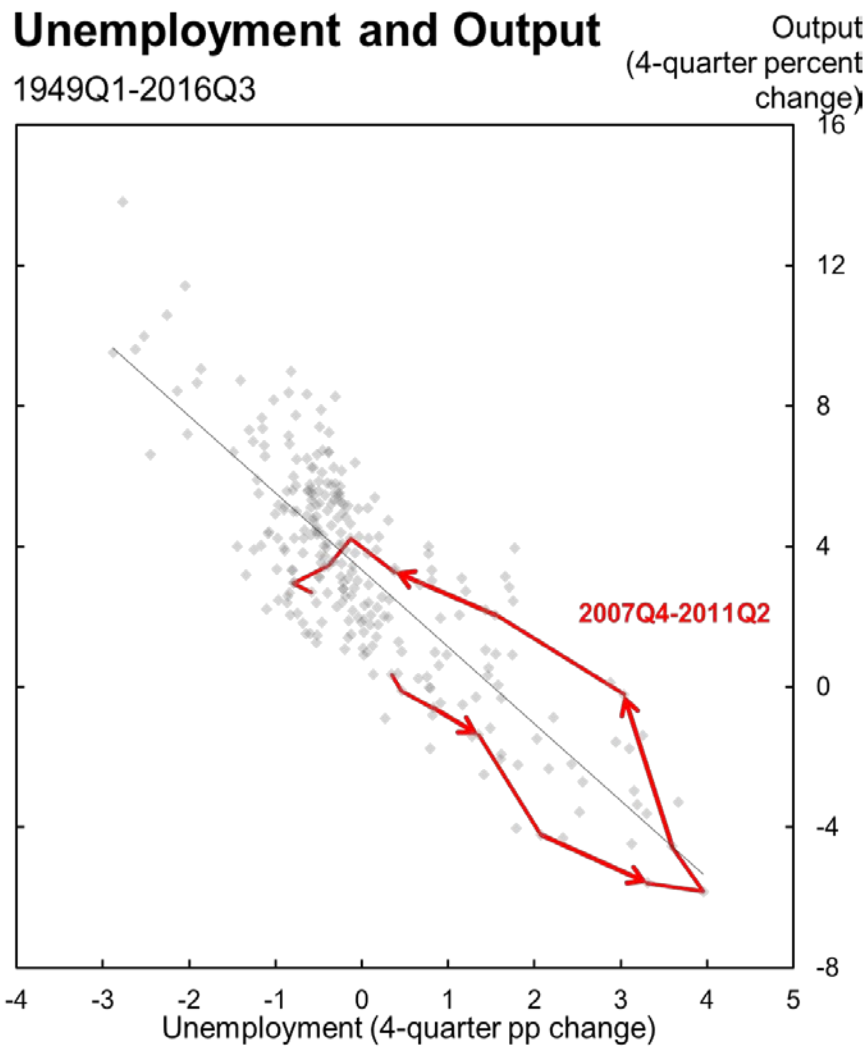

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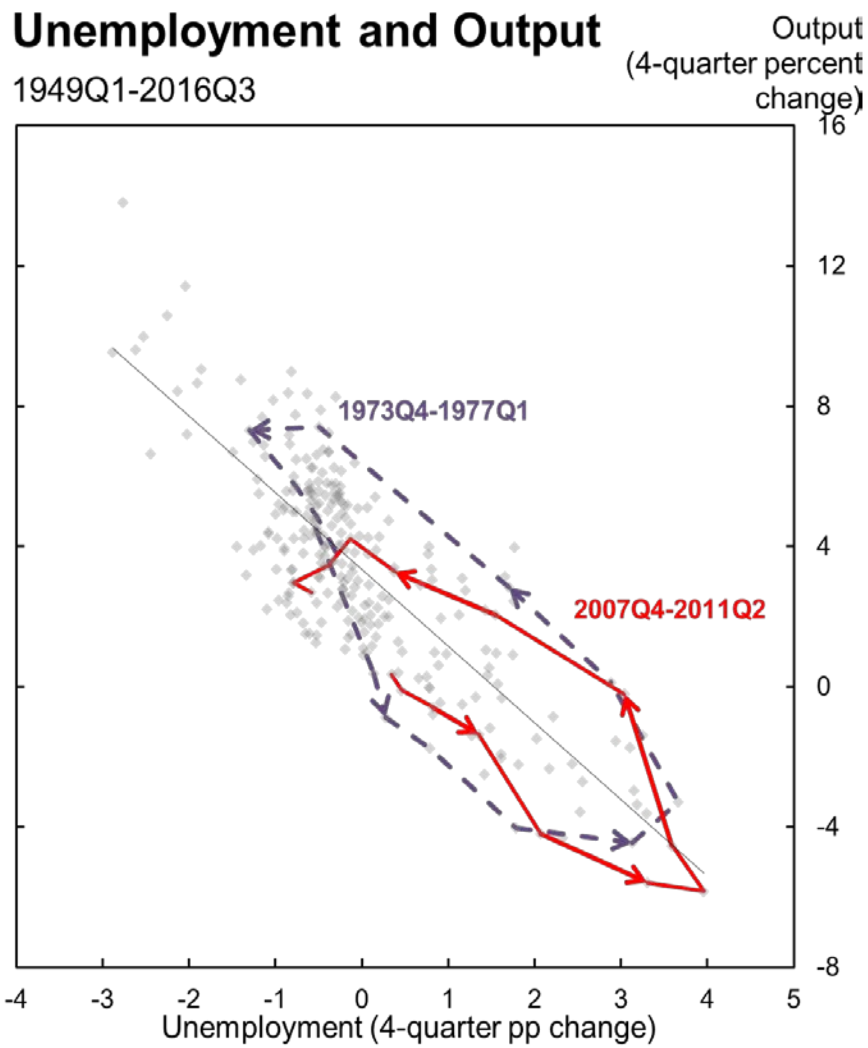
Okun like previous recessions…but with low potential growth



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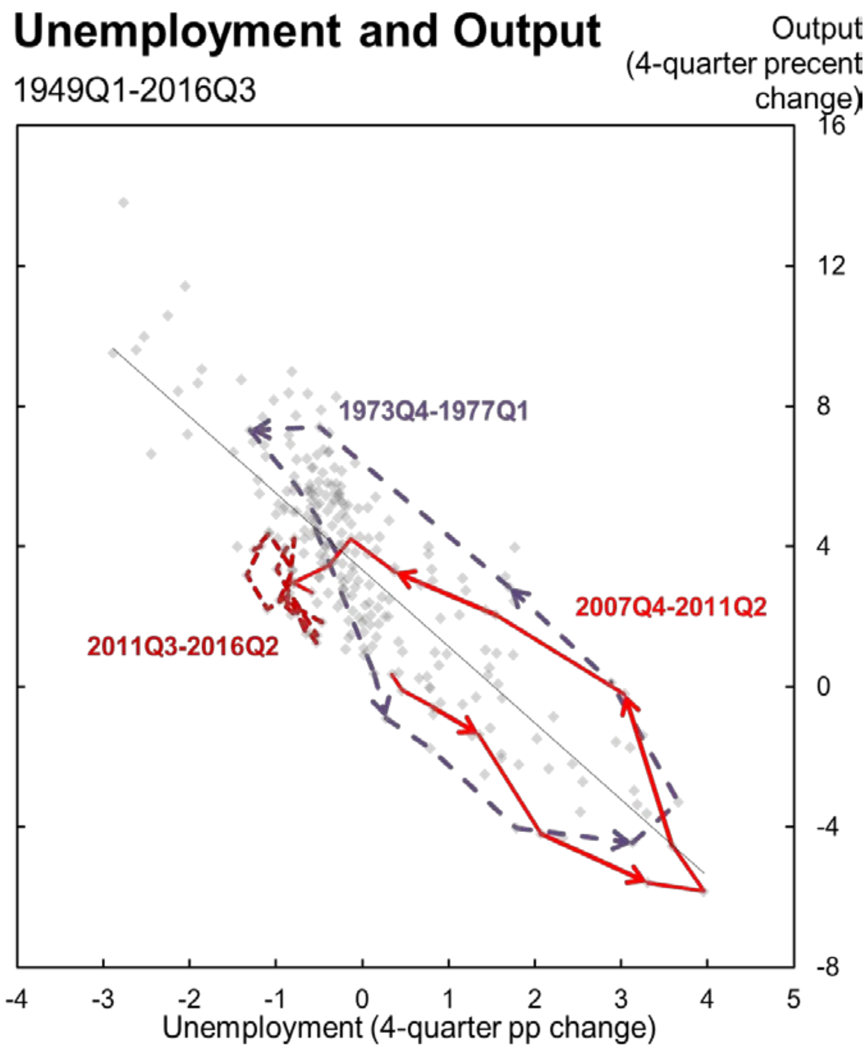

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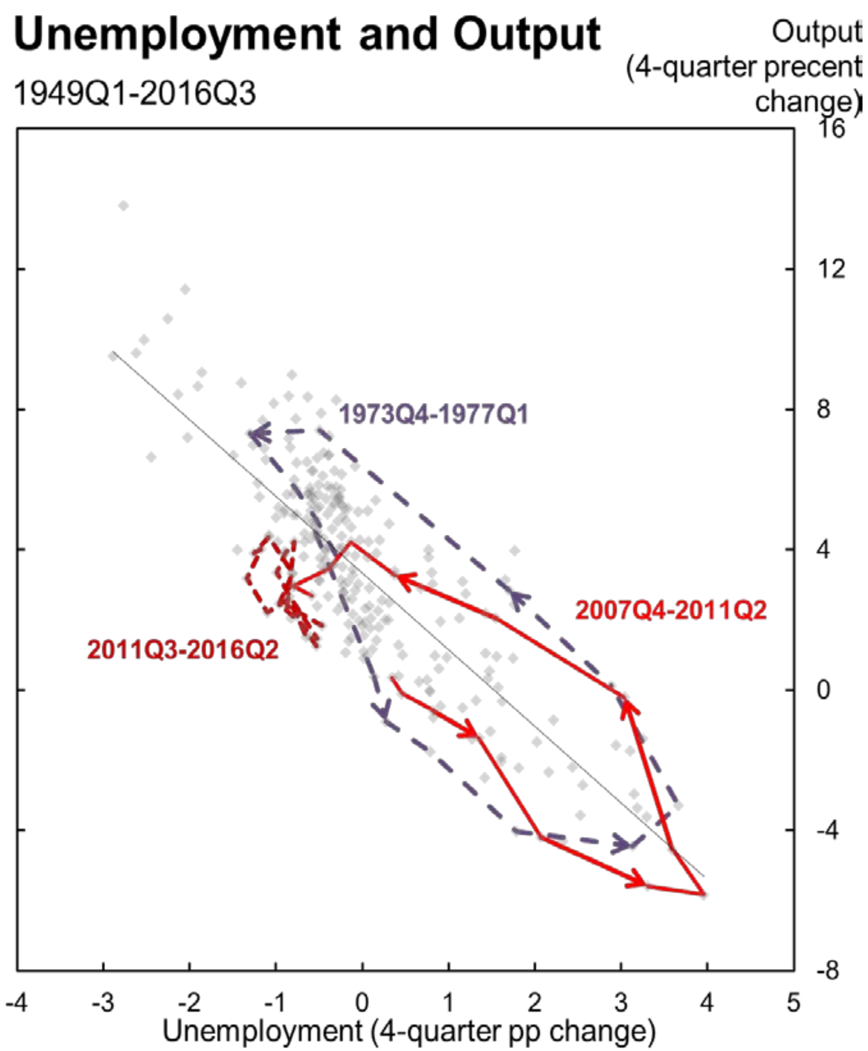

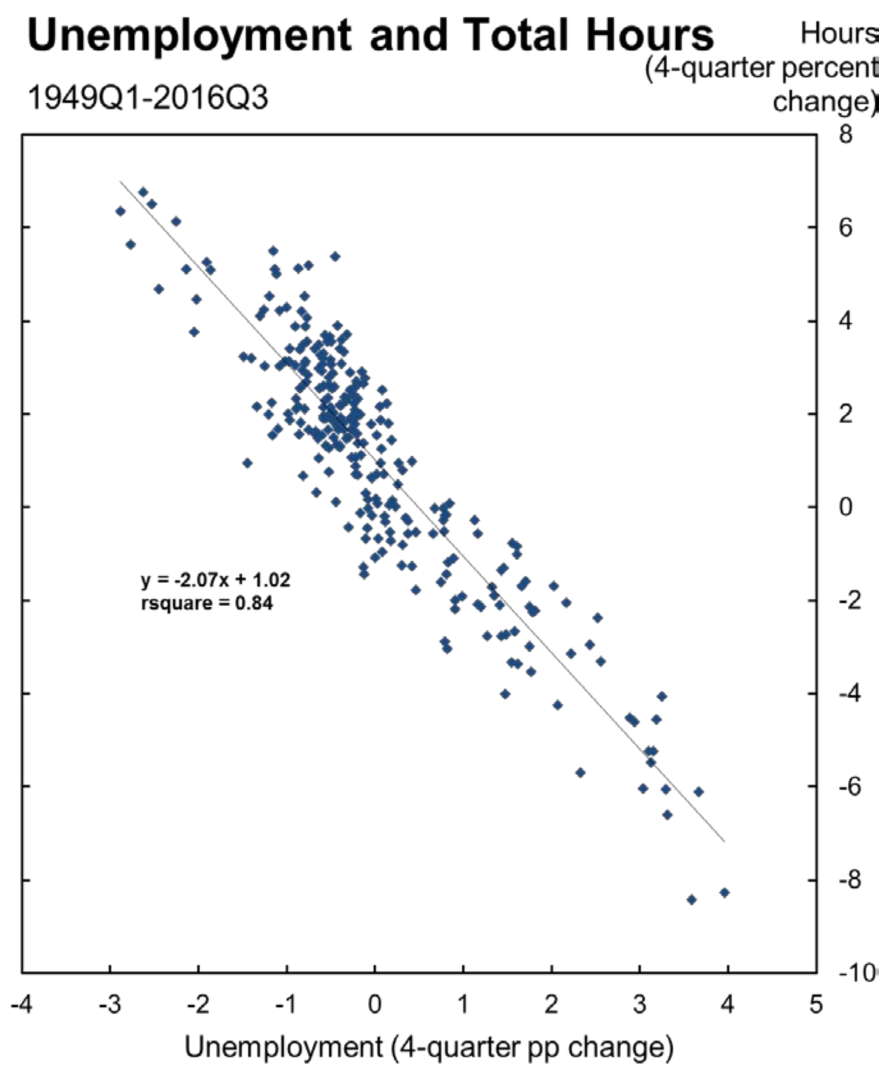

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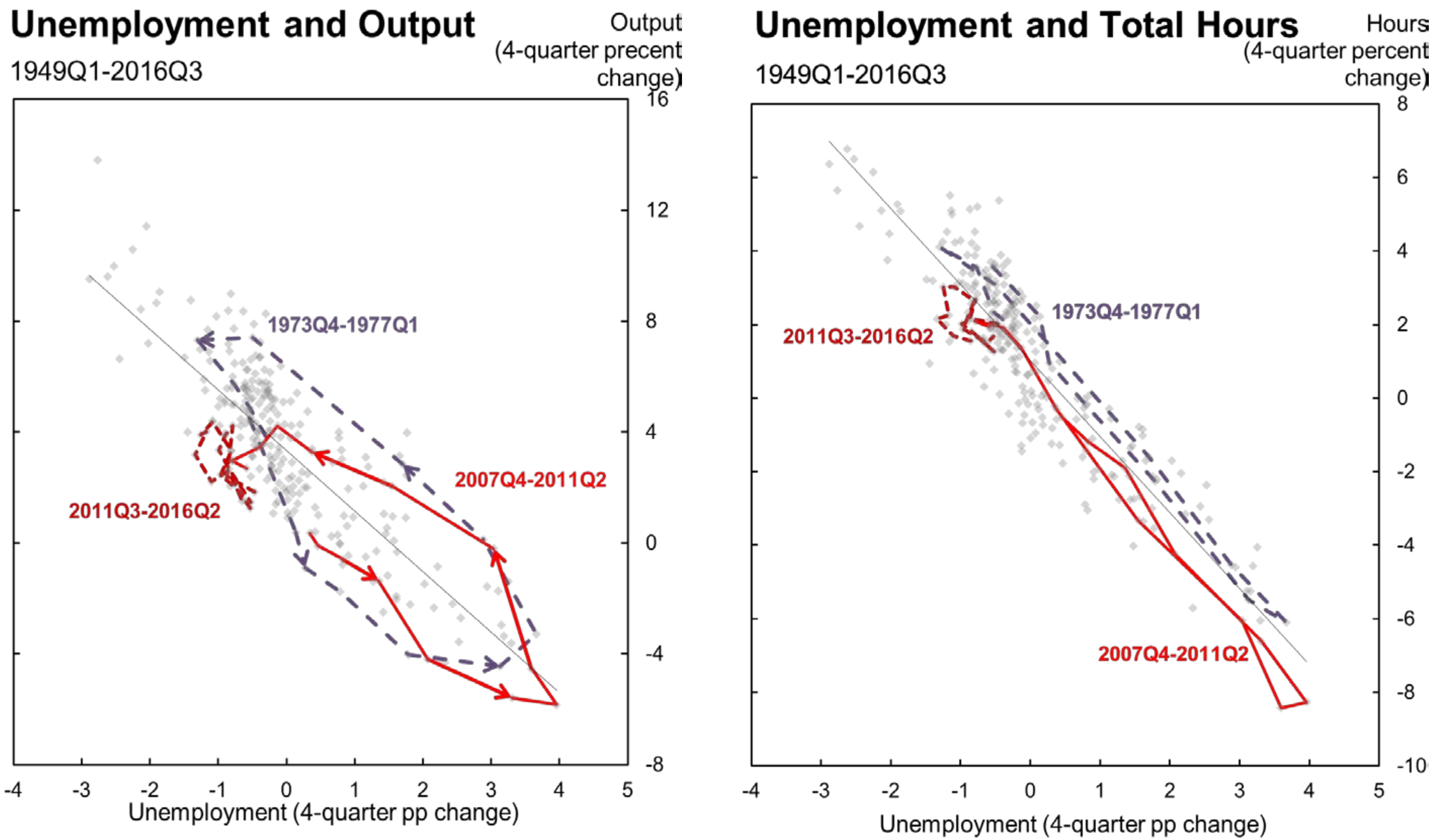

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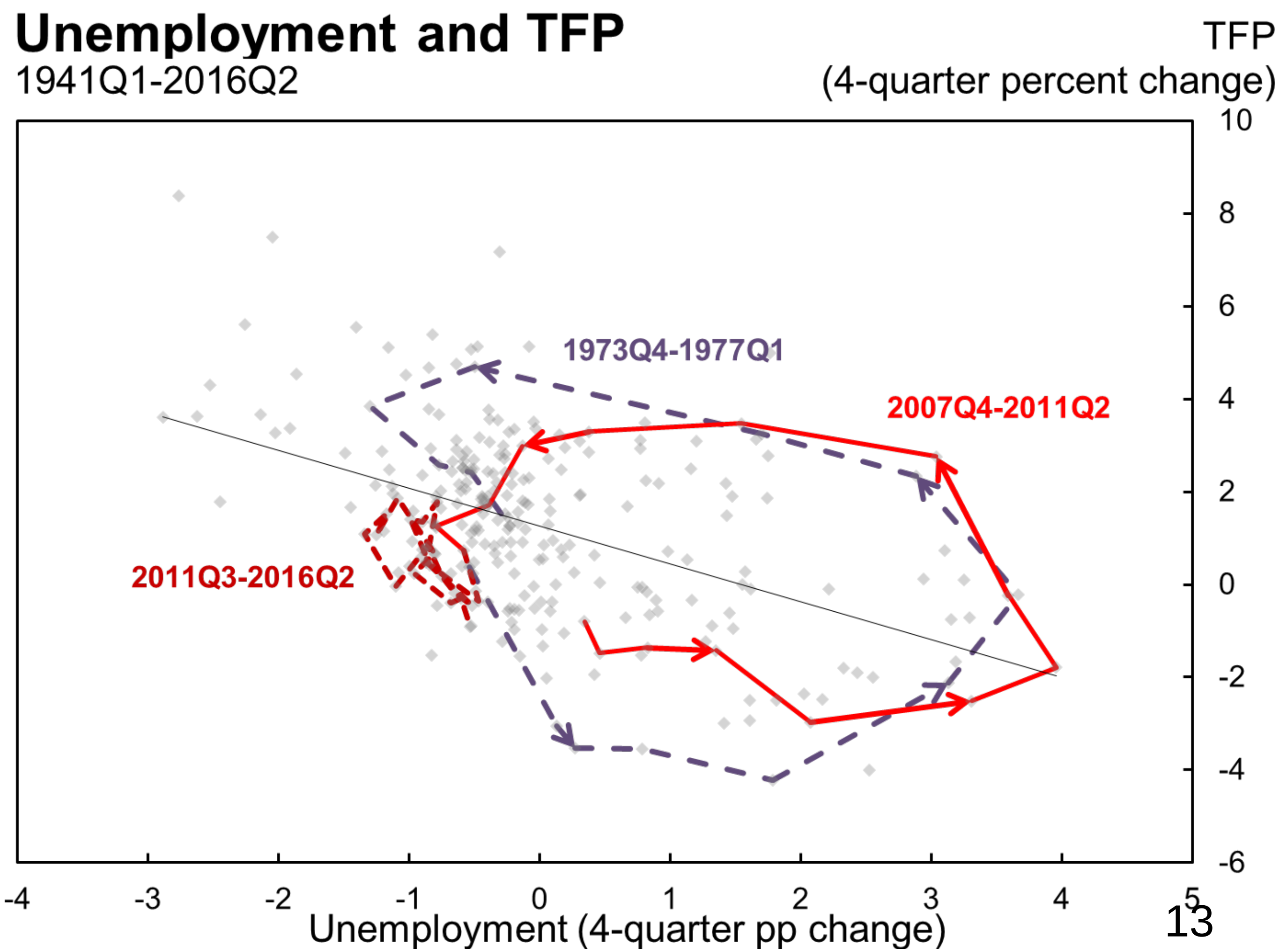
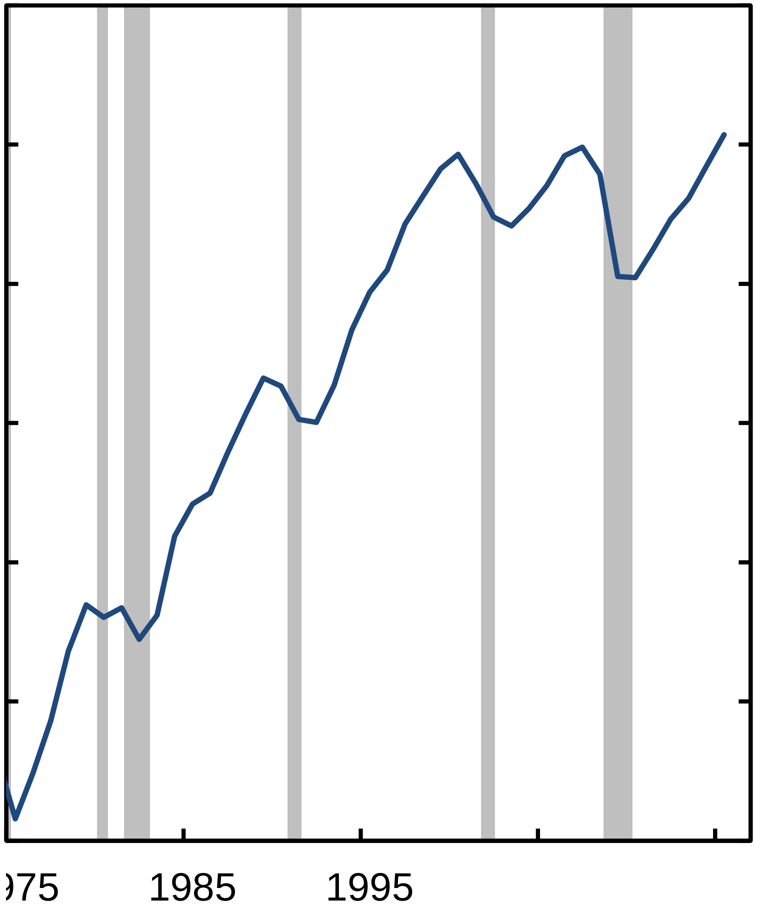


Why has potential growth been so slow since 2007?

Has cyclical become structural? Maybe for hours…



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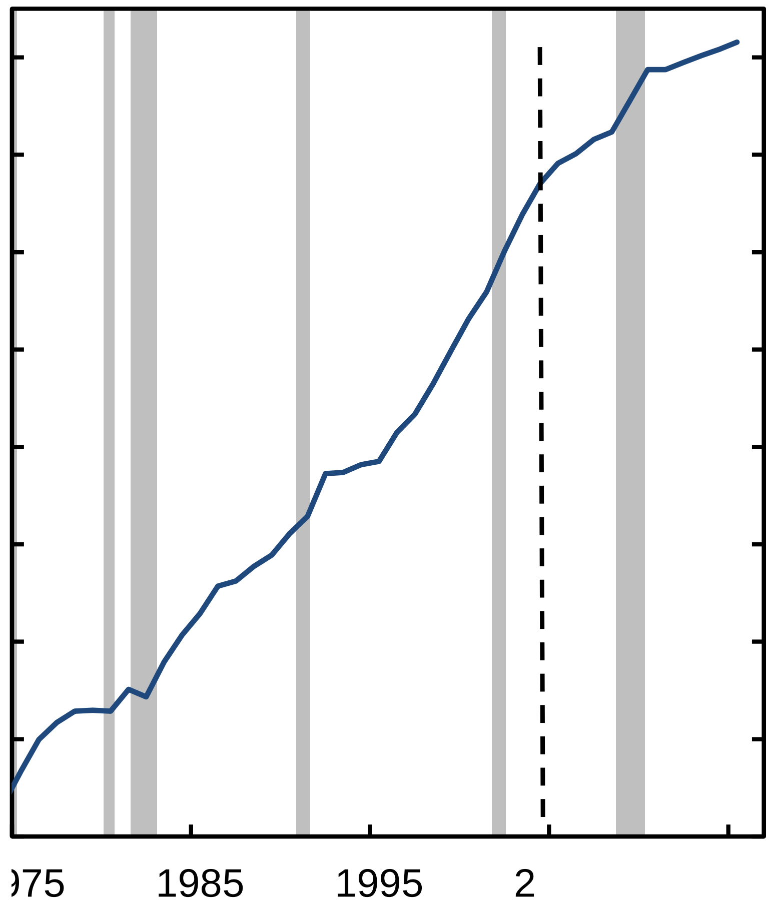

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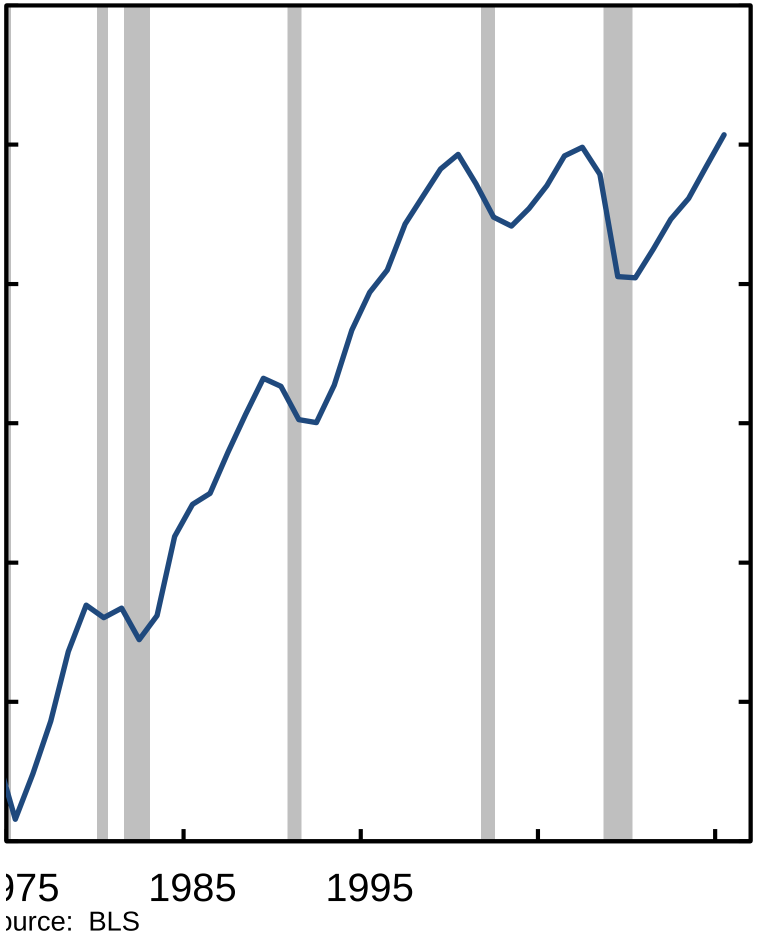

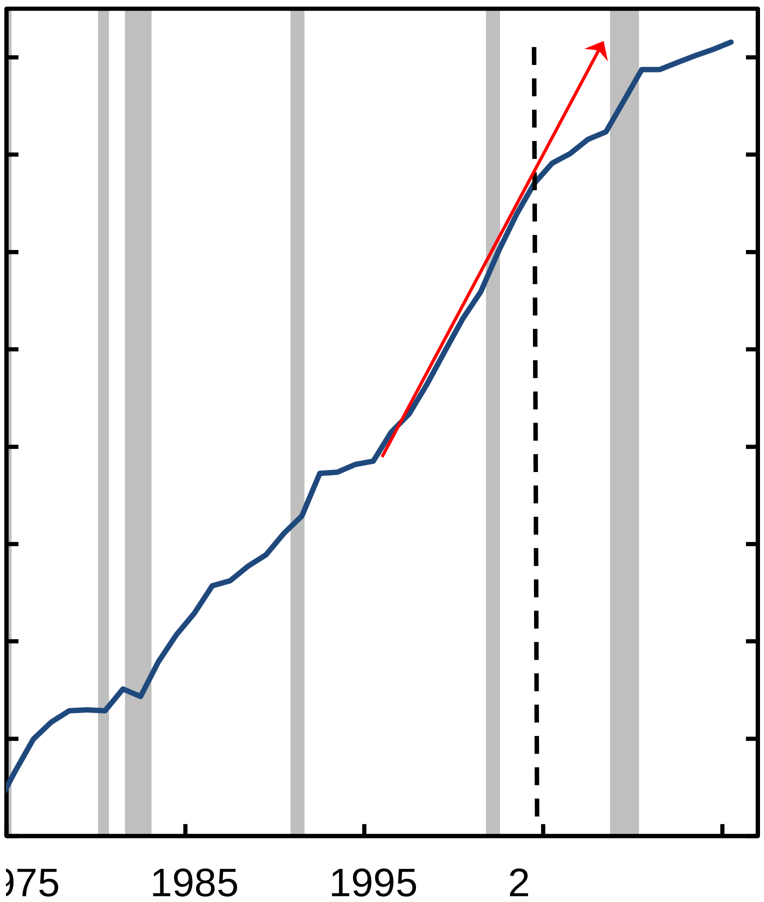

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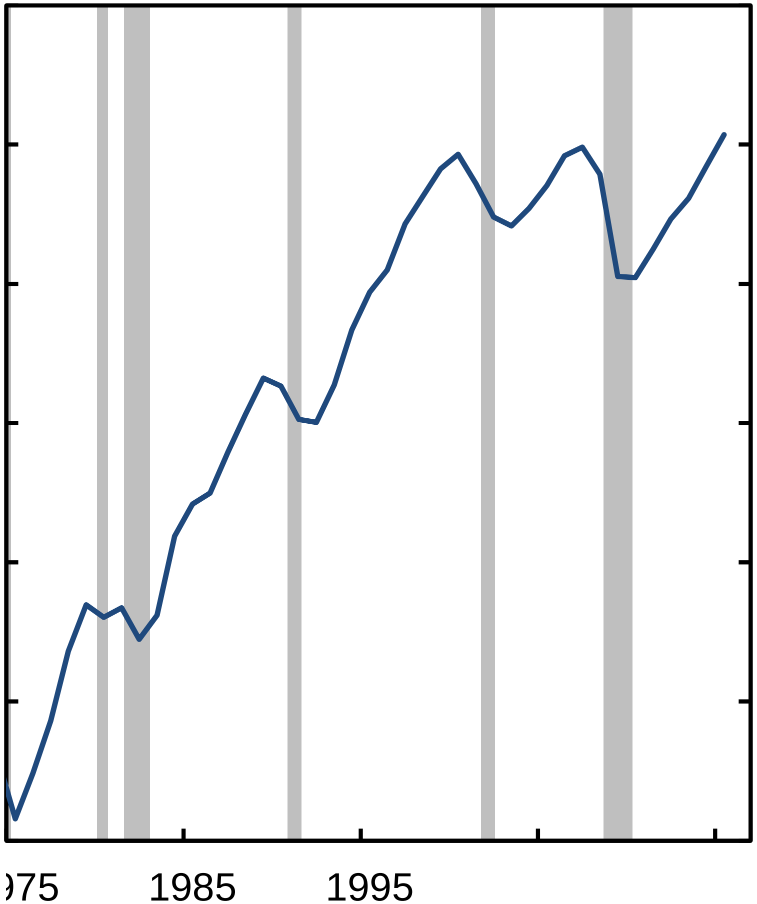

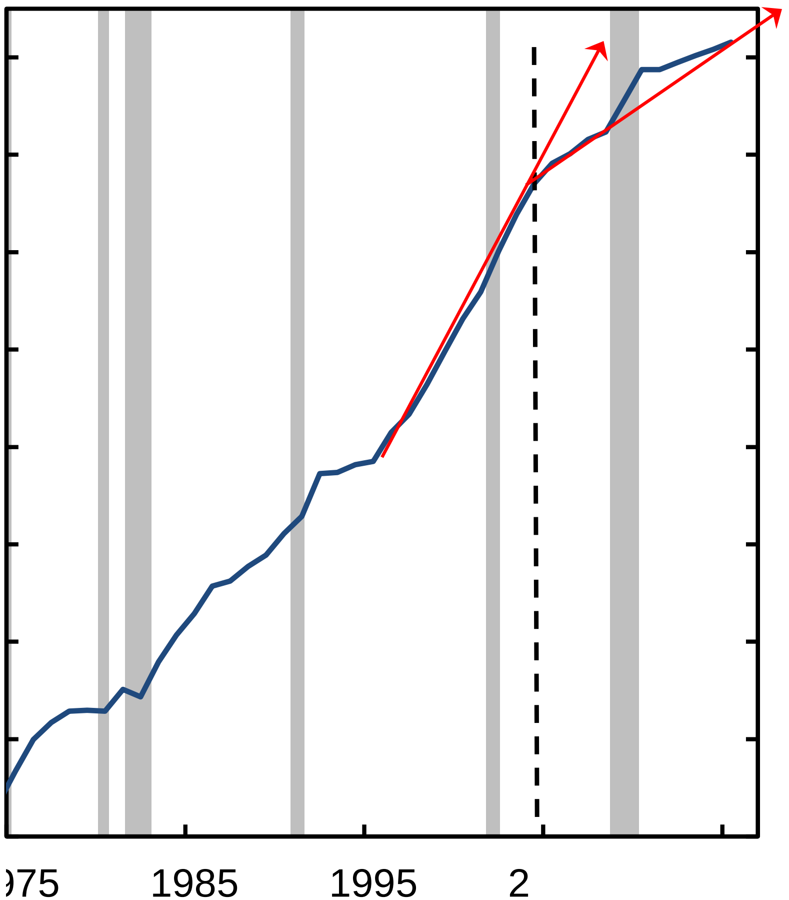

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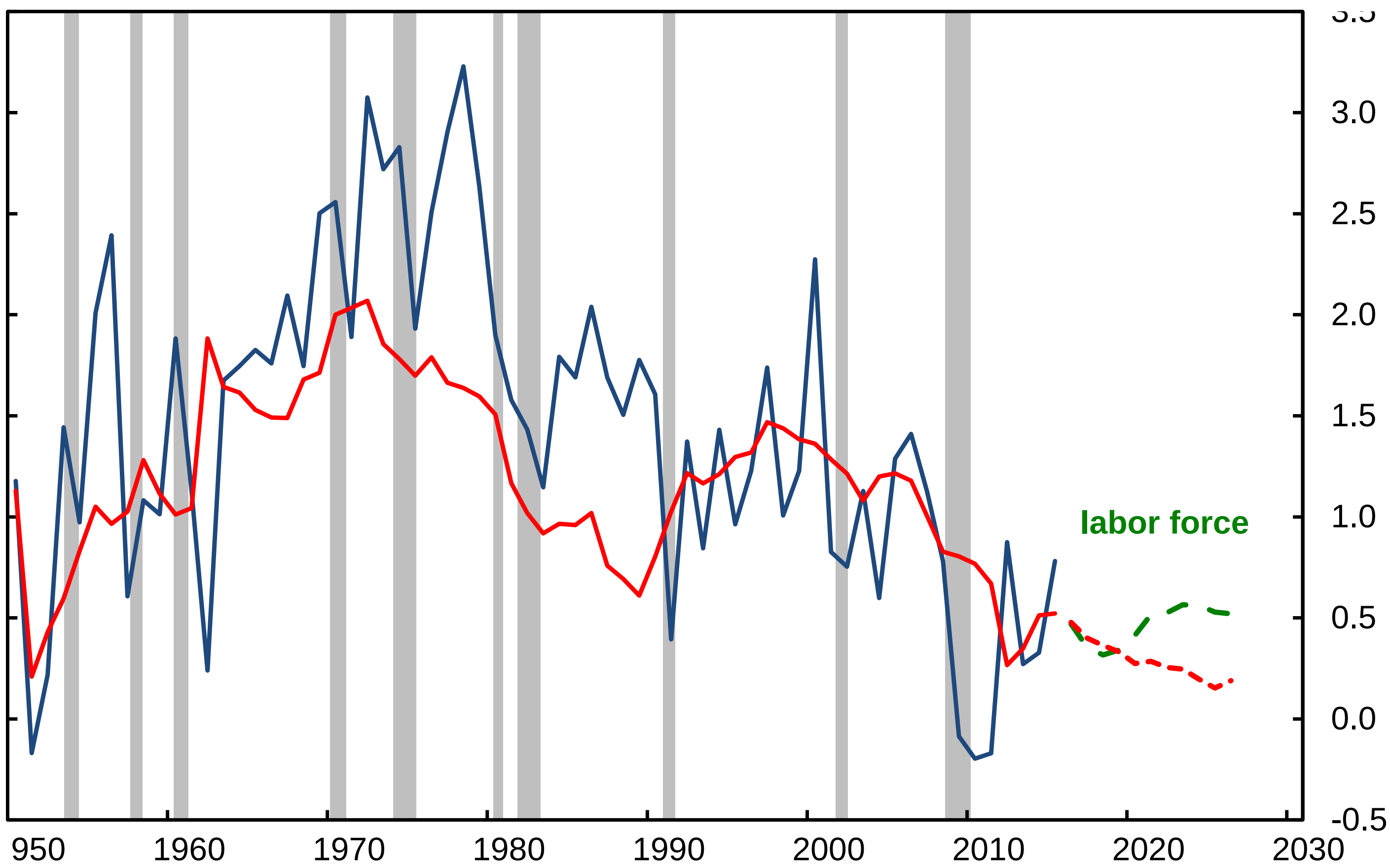
Has cyclical become structural? Maybe for hours…

- Oulton and Sebastia-Barriel (2013)
  - For *advanced* economies, financial crises do not permanently affect level of TFP or labor productivity
  - Employment per capita is permanently lower
- Huang, Luo, and Startz (2015)
  - TFP level recovers rapidly after all U.S. recessions
  - Hours worked no longer recovers (L-shaped)
- But U.S. employment growth would have slowed anyway
  - Krueger (2016), Gagnon, Johannsen, and Lopez-Salido (2016)

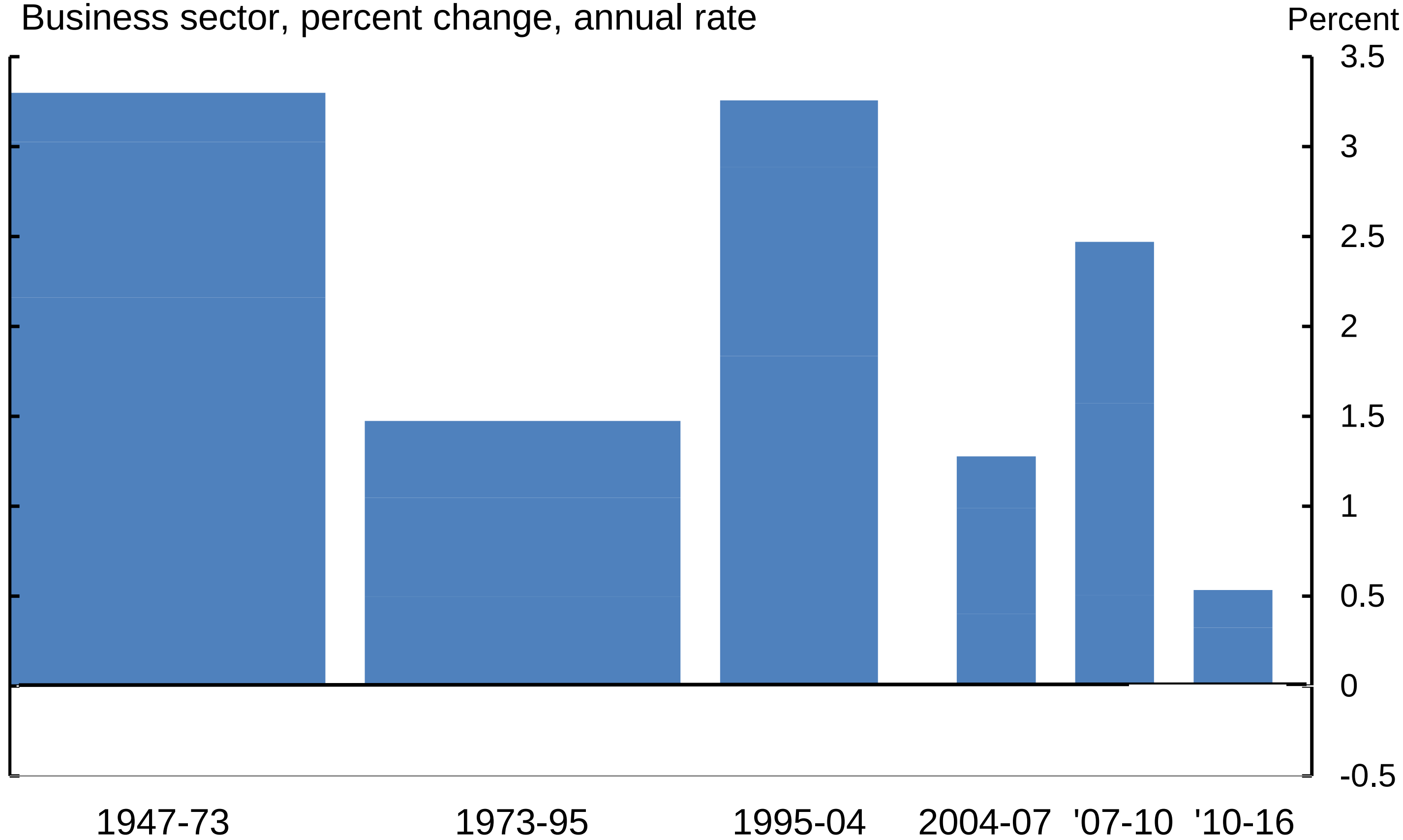
Slowing labor-force growth not (just) the Great Recession



TFP has been consistent (and slow)

Contributions to growth in U.S. output per hour

Business sector, percent change, annual rate



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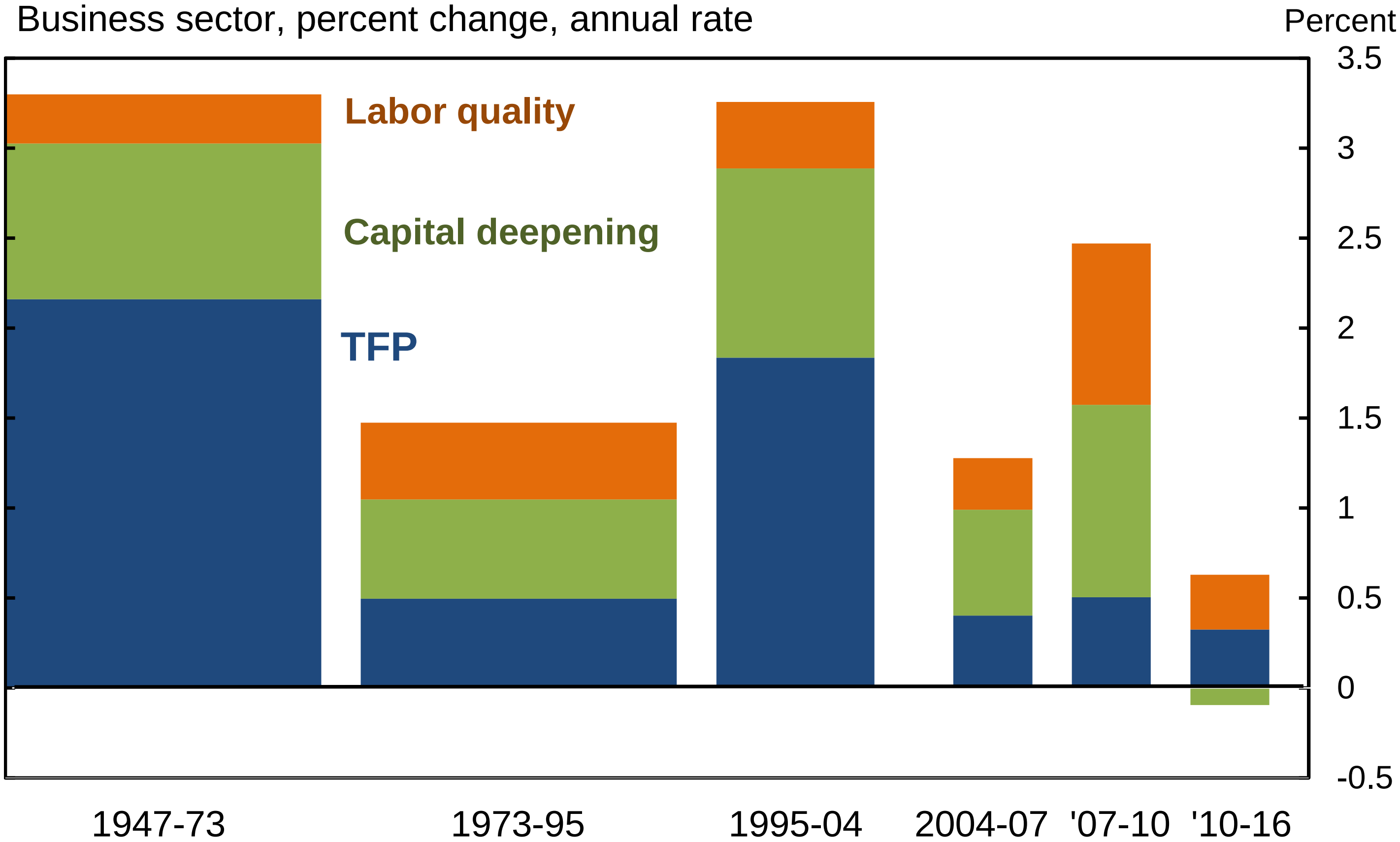

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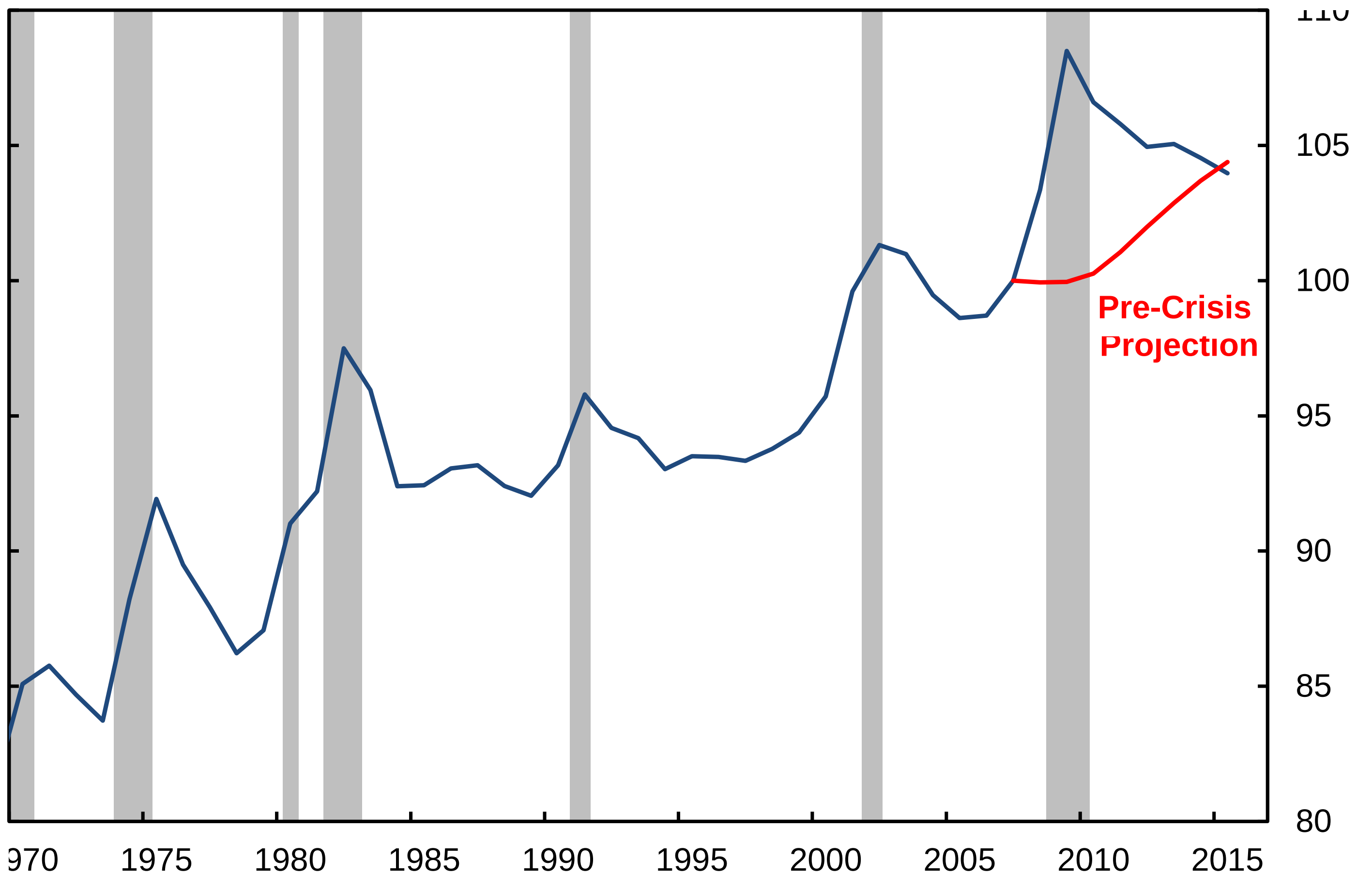
Capital: Unwinding of dynamics of Great Recession



Low growth is the new normal

Demographics: Low growth the new normal

- Demographics: Slow hours growth
  - Gagnon et al (2016): 1-1/4 percent slowdown since 1980
- If GDP per hour like 1973-95: GDP growth around 1¾ %

- Likely optimistic: Plateau in educational attainment means less growth in labor quality (Goldin-Katz, 2009; Jorgenson)
  - Bosler, Daly, Fernald, Hobijn (2016): Around ¼ pp less growth from that source, implying GDP growth around 1½ %

Takeaway: Was the Great Recovery really ‘Elusive’?

- Paper finds that growth in recovery exceeded (slow) potential
- Since 2007, TFP growth at its “typical” pace of past 40 years, plus demographics, can explain disappointing GDP growth
- May have to accept the new reality