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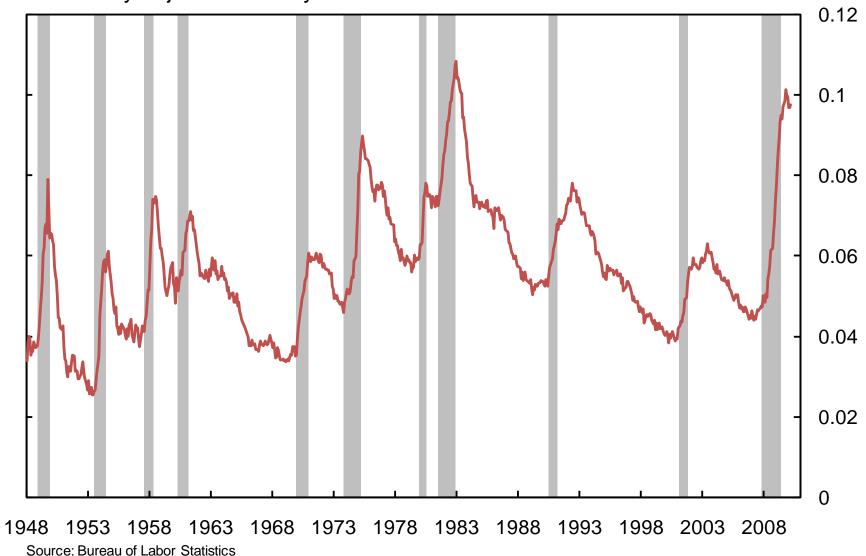
THE LABOR MARKET IN THE GREAT RECESSION

Disclaimer: The views expressed in this presentation are those of the authors and do not necessarily reflect those of the Federal Reserve Bank of New York, the Federal Reserve Bank of San Francisco, or the Federal Reserve System as a whole.

These slides cover data through April .15th.

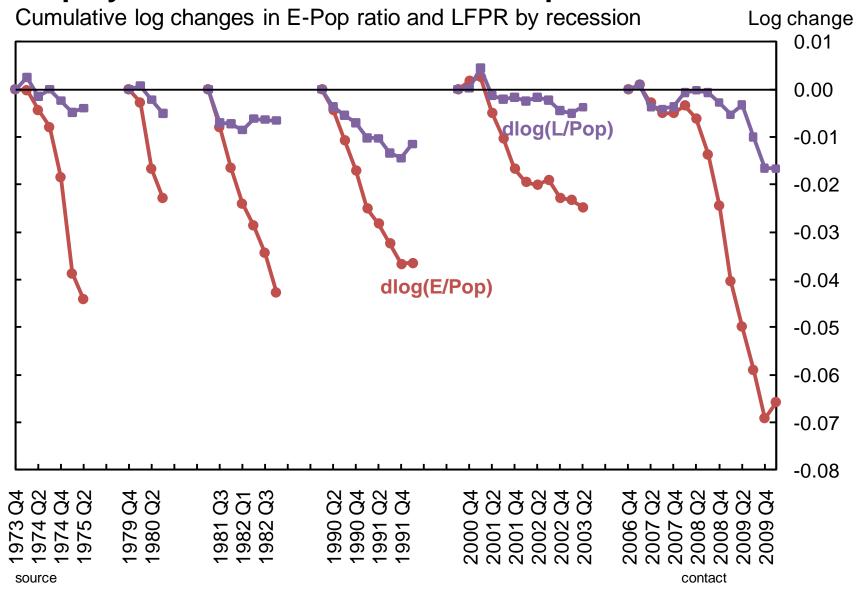
Unemployment Rate, 1948-2010

Seasonally-adjusted monthly series



Fraction of Labor Force

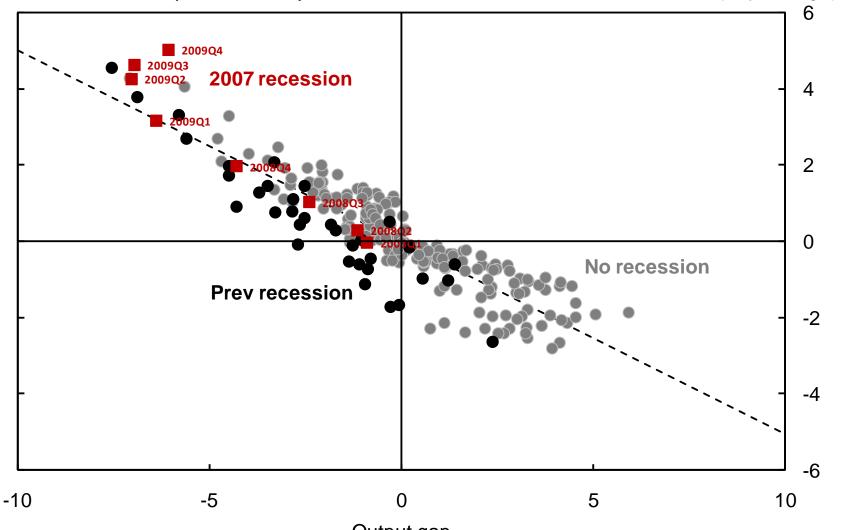
Employment and Labor Force Participation 1973-10



Okun's Law

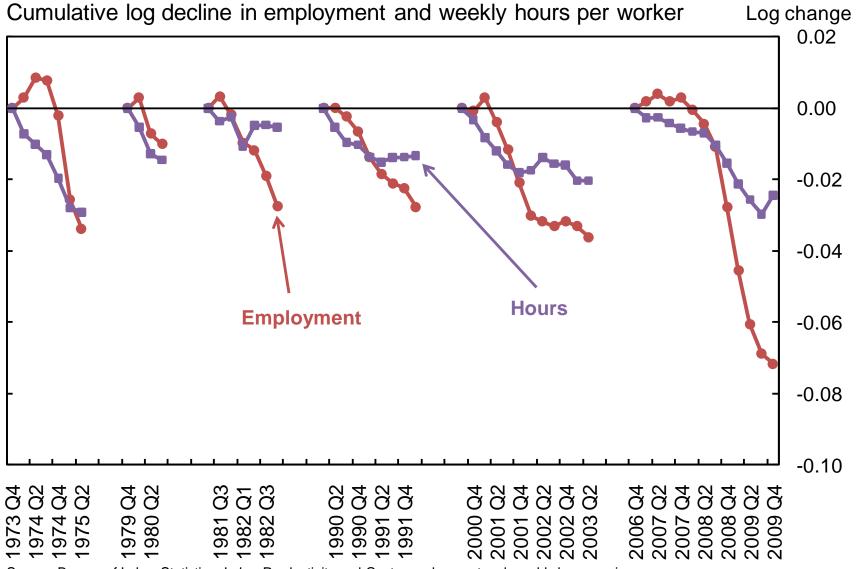
Based on CBO potential output and Nairu (1949-now)

Unemployment gap



Output gap Source: Bureau of Economic Analysis, Bureau of Labor Statistics, and Congressional Budget Office

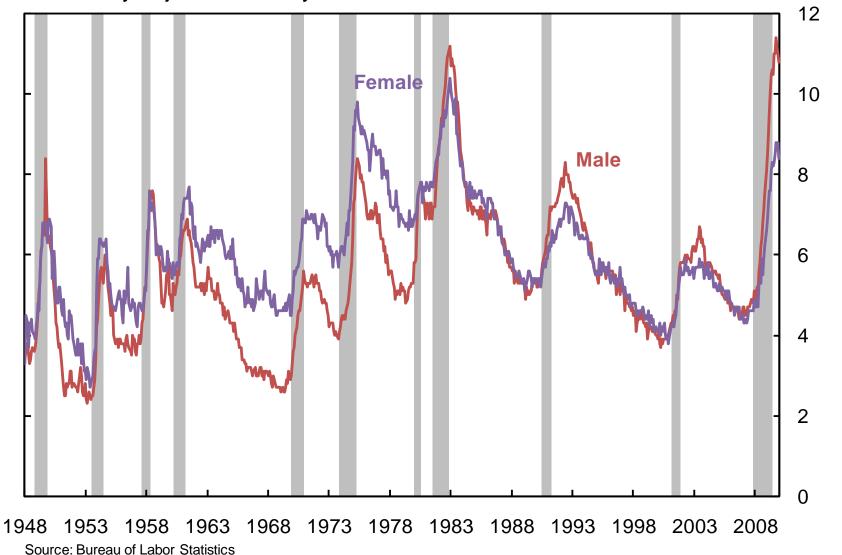
Hours vs. Bodies by Recession 1973-09



Source: Bureau of Labor Statistics, Labor Productivity and Costs employment and weekly hours series.

Unemployment by Gender

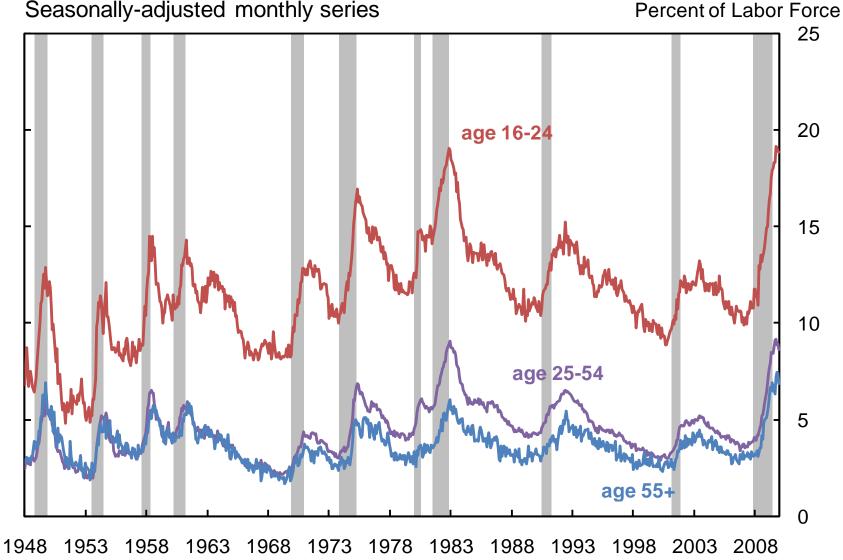
Seasonally-adjusted monthly series



Percent of Labor Force

Unemployment by Age

Seasonally-adjusted monthly series

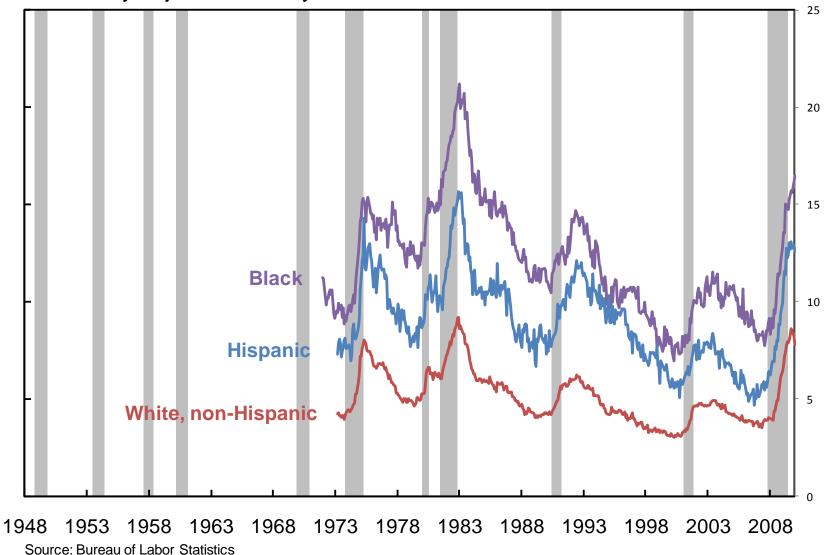


Source: Bureau of Labor Statistics

Unemployment by Race/Ethnicity

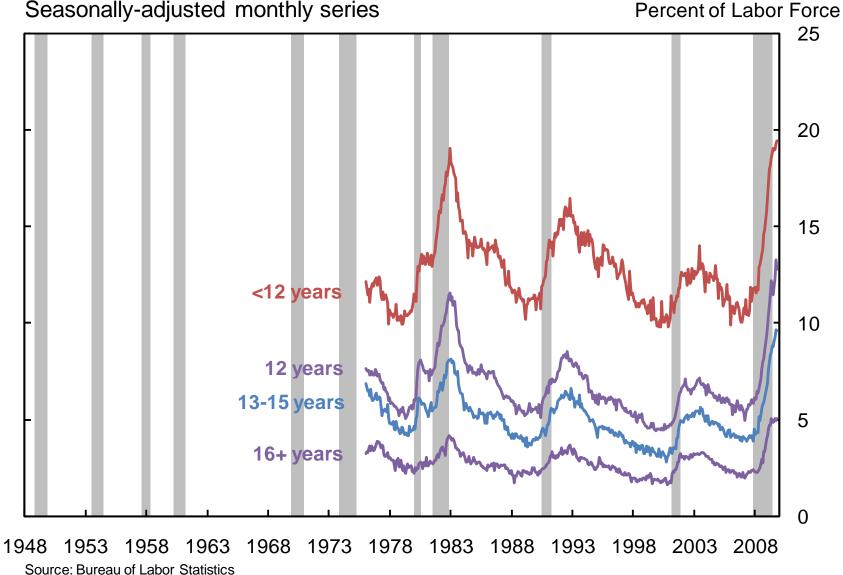
Seasonally-adjusted monthly series

Percent of Labor Force



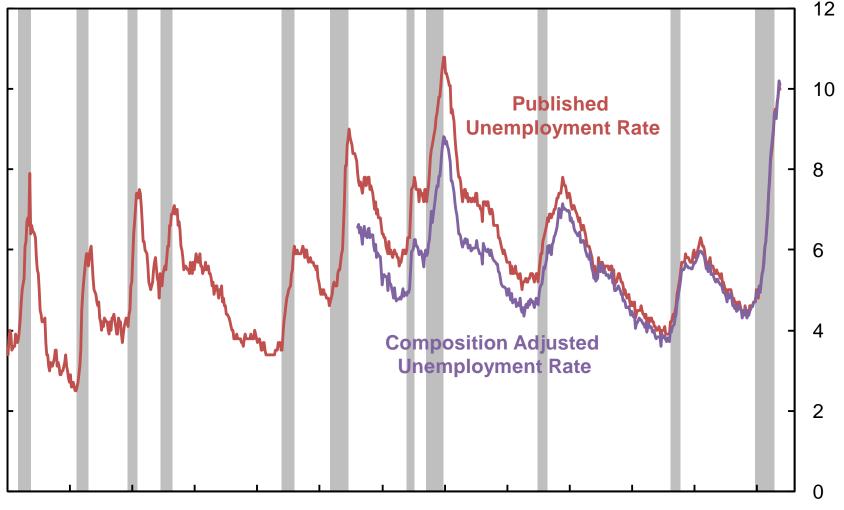
Unemployment by Education

Seasonally-adjusted monthly series



Composition-Adjusted Unemployment

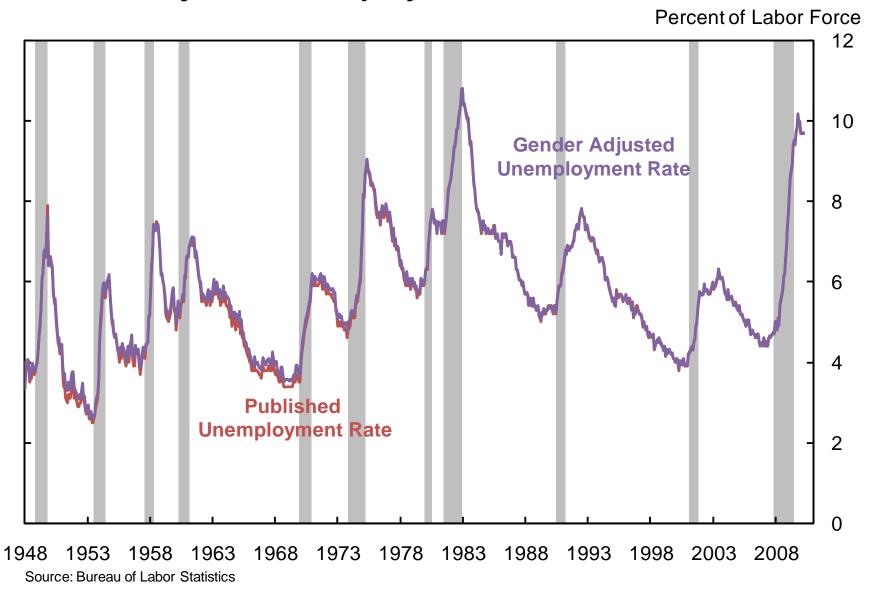
Adjusted for full age, gender, race and education interactions Percent of Labor Force



1948 1953 1958 1963 1968 1973 1978 1983 1988 1993 1998 2003 2008

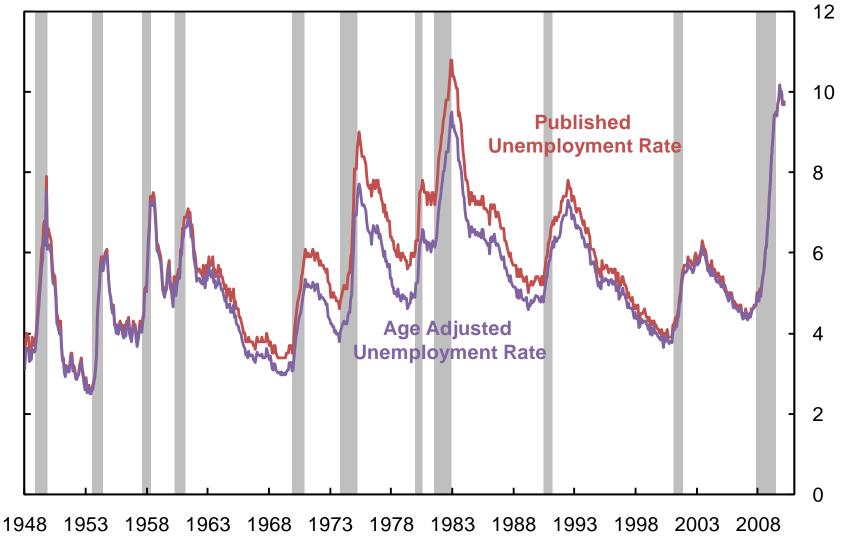
Source: Bureau of Labor Statistics, Current Population Survey. Adjusted for full age, gender, race, and education interactions

Gender-Adjusted Unemployment



Age-Adjusted Unemployment

Adjusted for 16-24, 25-34, 35-44, 45-54, and 55+ age groups Percent of Labor Force



Source: Bureau of Labor Statistics

Race/Ethnicity-Adjusted Unemployment

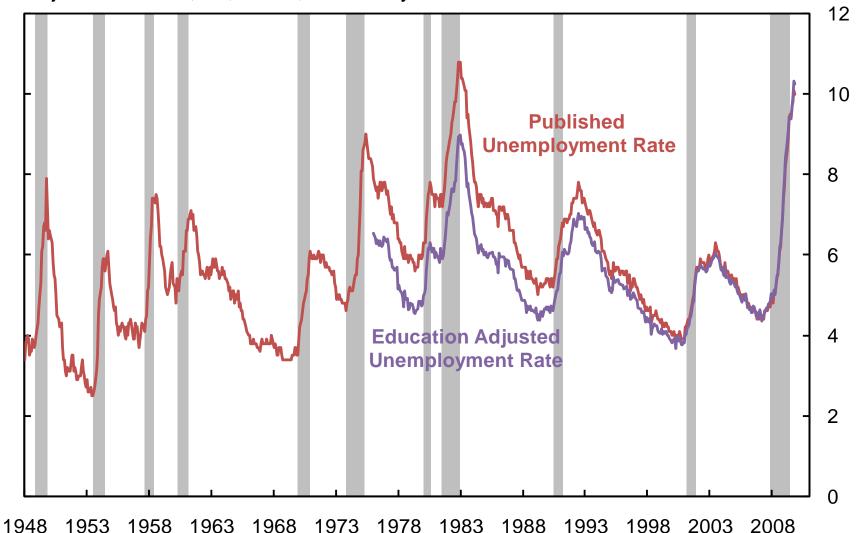
Adjusted for white, black, and hispanic groups Percent of Labor Force 12 Race/Ethnicity Adjusted **Unemployment Rate** 10 8 6 **Published Unemployment Rate** 2 1973 1978 1983 1988 1948 1953 1958 1963 1968 1993 1998 2003 2008

Source: Bureau of Labor Statistics

Education-Adjusted Unemployment

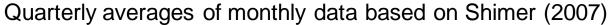
Adjusted for <12, 12, 13-15, and 16+ years of education

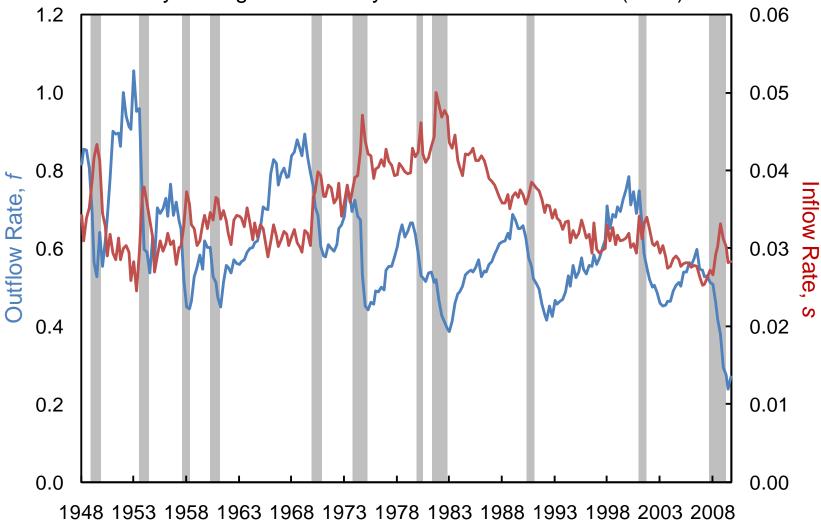
Percent of Labor Force



Source: Bureau of Labor Statistics, Current Population Survey

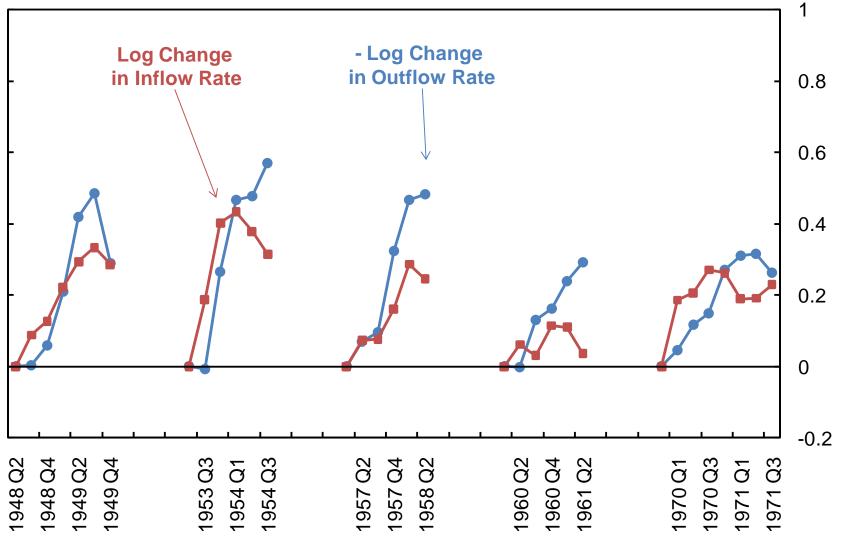
Unemployment Inflow and Outflow Rates





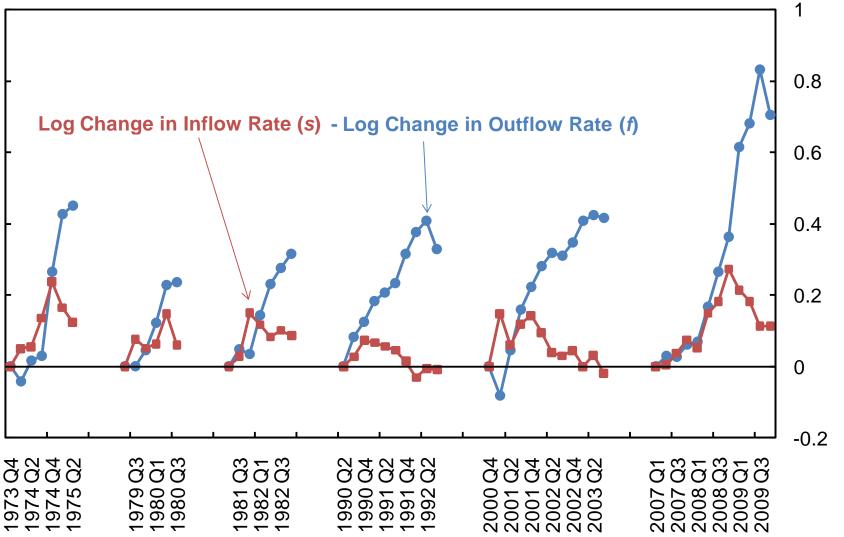
Contributions of Inflow vs. Outflow Rates, 1948-1971

Cumulative log change in hazards since start of unemployment ramp up Log Change

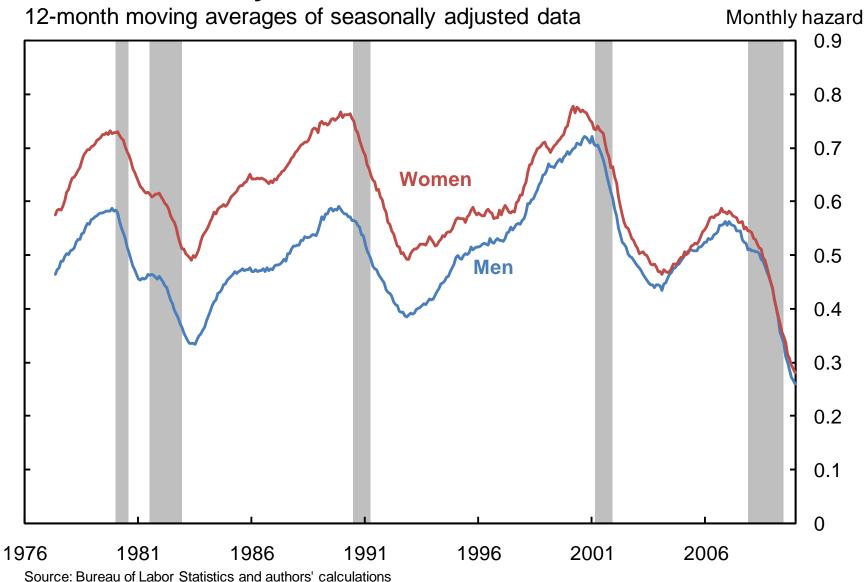


Contributions of Inflow vs. Outflow Rates, 1973-2009

Cumulative log change in hazards since start of unemployment ramp up Log Change



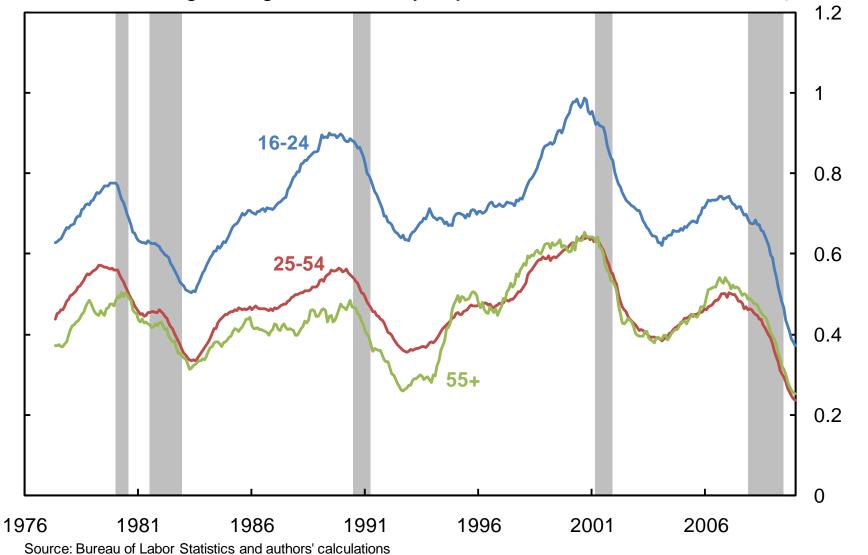
Outflow Rates by Gender



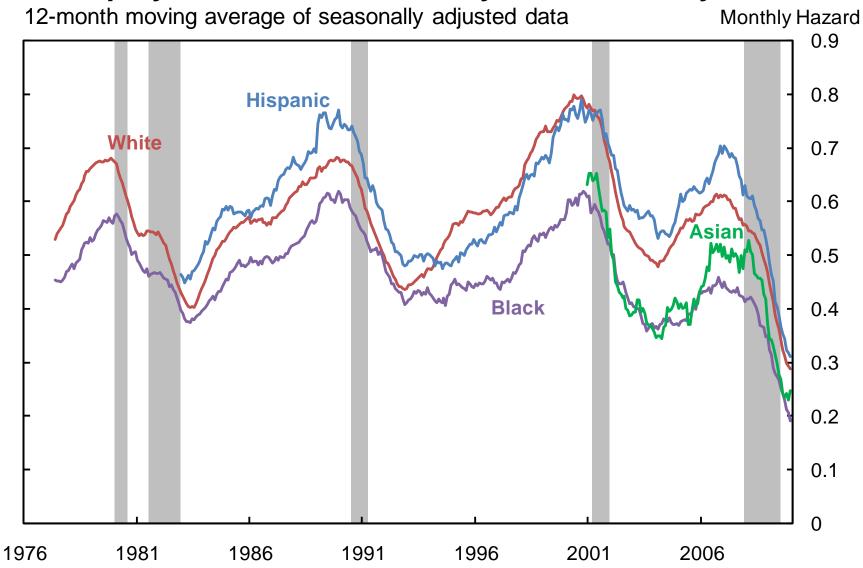
Outflow Rates by Age Group

12-month moving average of seasonally adjusted data

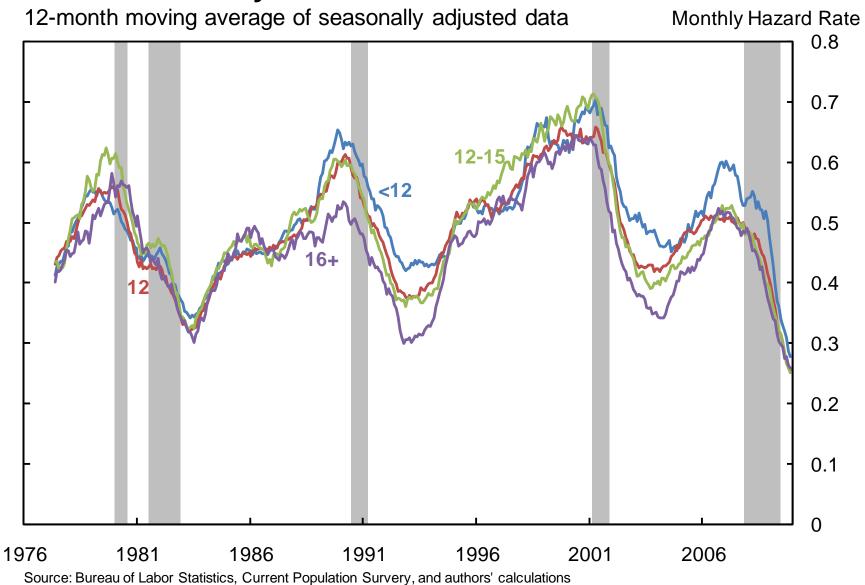
Monthly Hazard



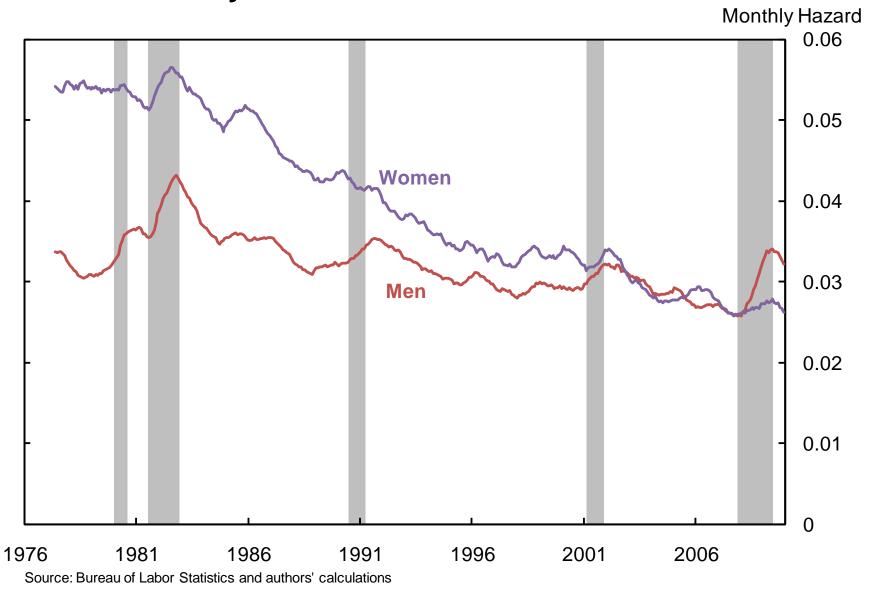
Unemployment Outflow Rates by Race/Ethnicity



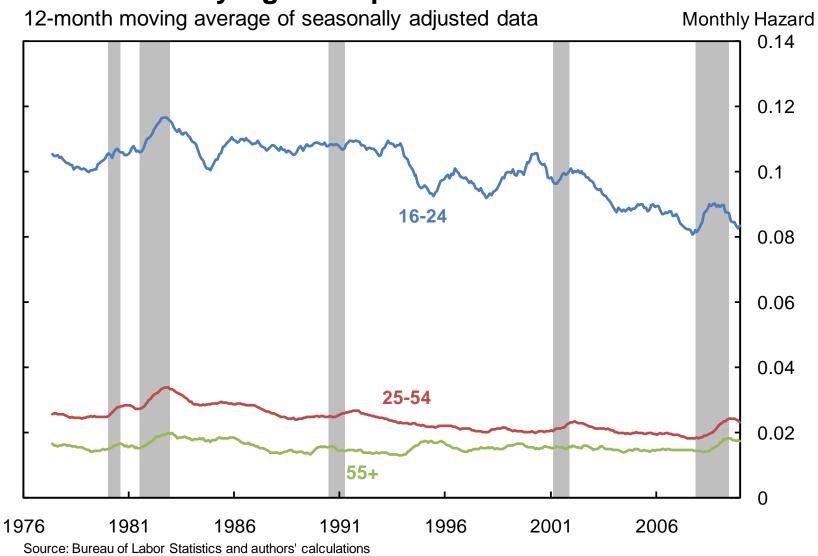
Outflow Rates by Education



Inflow Rates by Gender



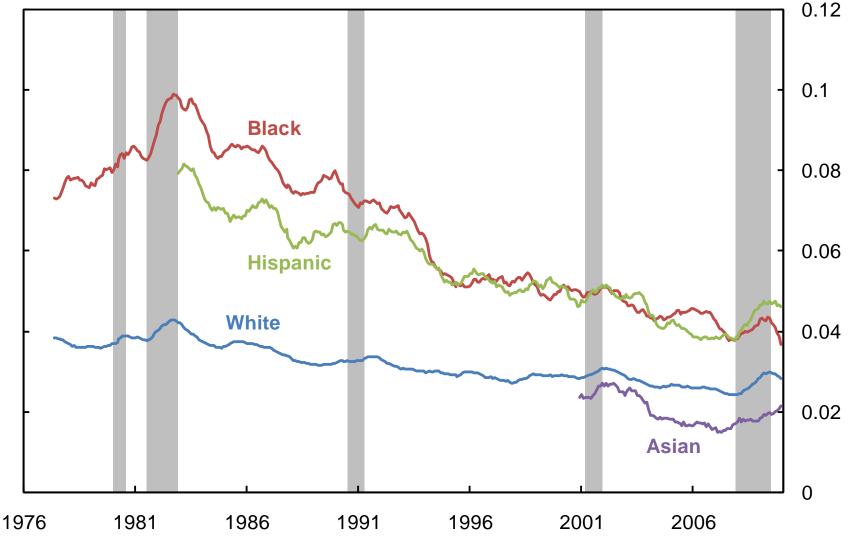
Inflow Rates by Age Group



Unemployment Inflow Rates by Race/Ethnicity

12-month moving average of seasonally adjusted data

Monthly Hazard

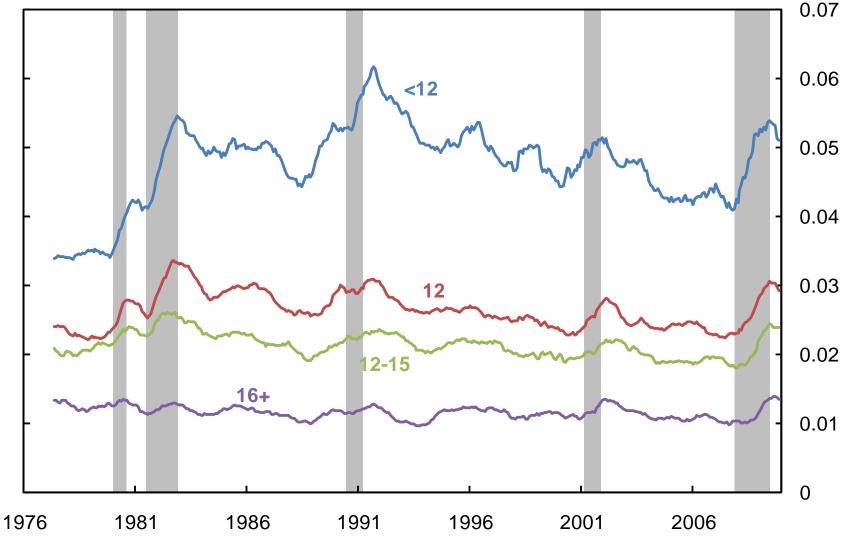


Source: Bureau of Labor Statistics, Current Population Survey, and authors' calculations

Inflow Rates by Education

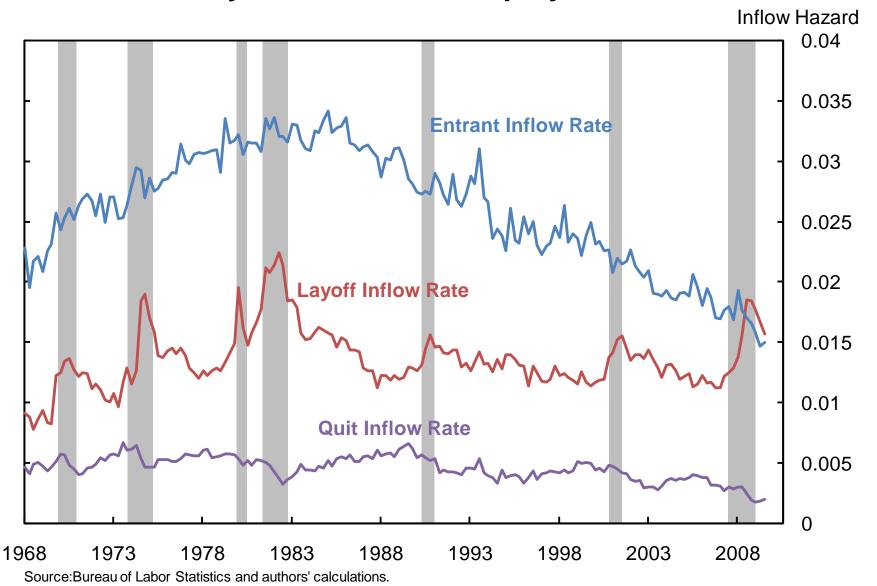
12-month moving average of seasonally adjusted data

Monthly Hazard



Source: Bureau of Labor Statistics, Current Population Survey, and authors' calculations

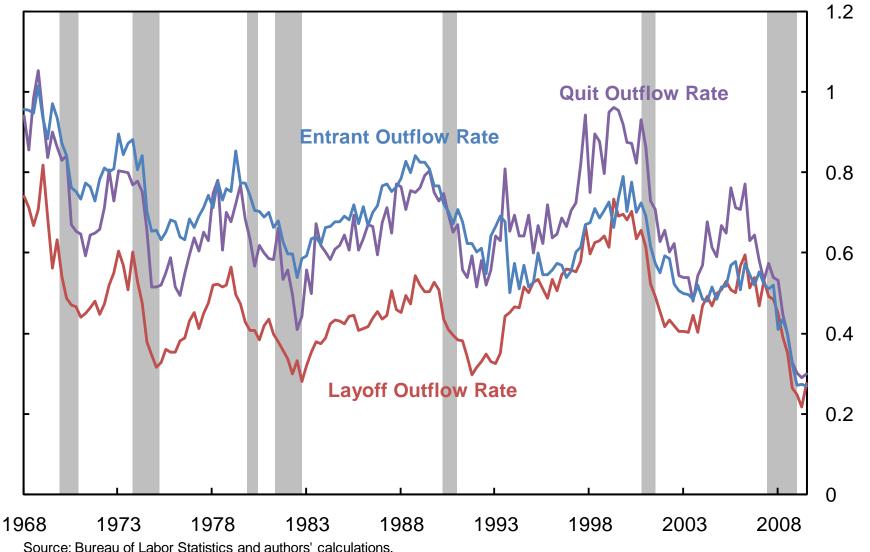
Inflow Rates by Reason for Unemployment



Outflow Rates by Reason for Unemployment

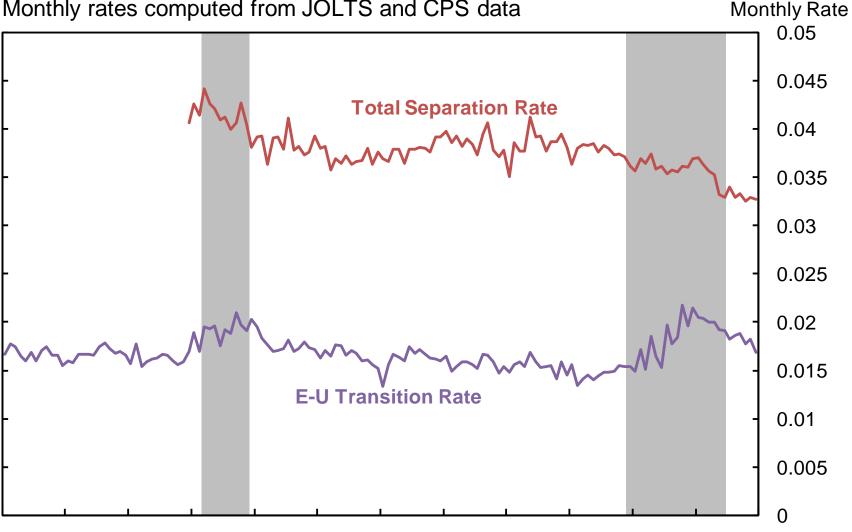
Monthly hazards based on Elsby, Michaels and Solon (2009)

Outflow Hazard



Separation Rate vs. E-U Transition Rate

Monthly rates computed from JOLTS and CPS data

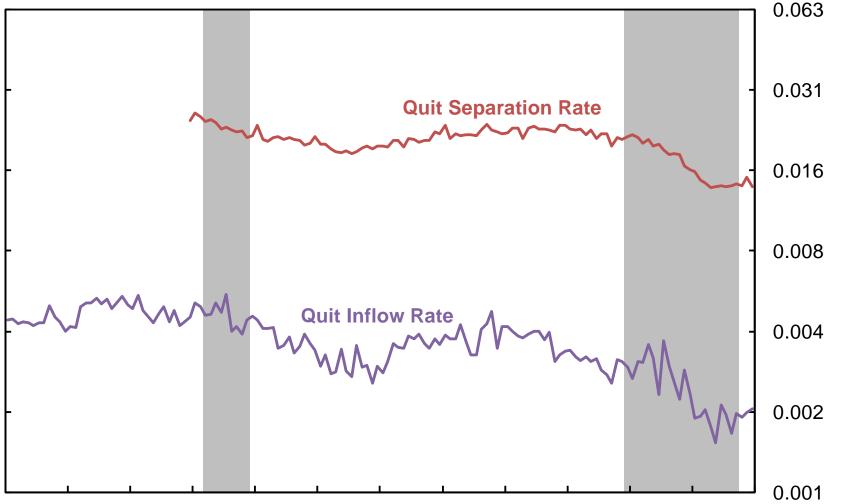


998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Separations vs. Unemployment Inflows: Quits

Monthly rates computed from JOLTS and CPS data

Monthly Rate (log scale)

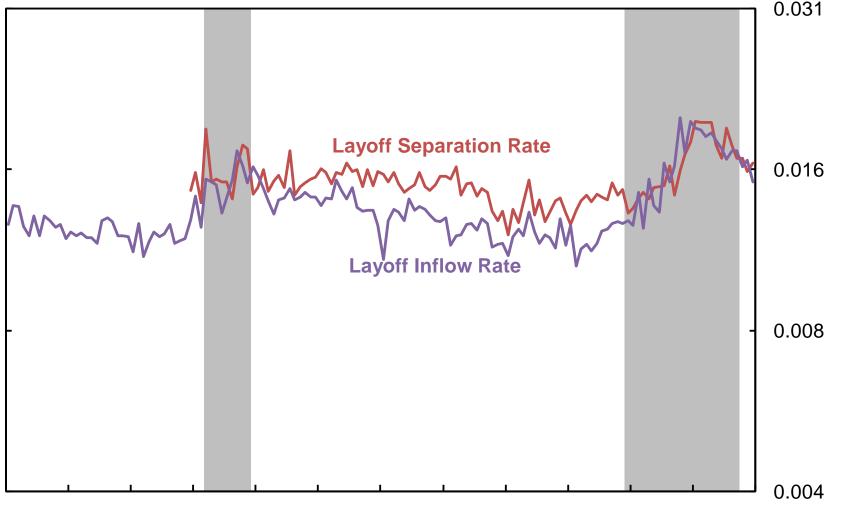


1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Separations vs. Unemployment Inflows: Layoffs

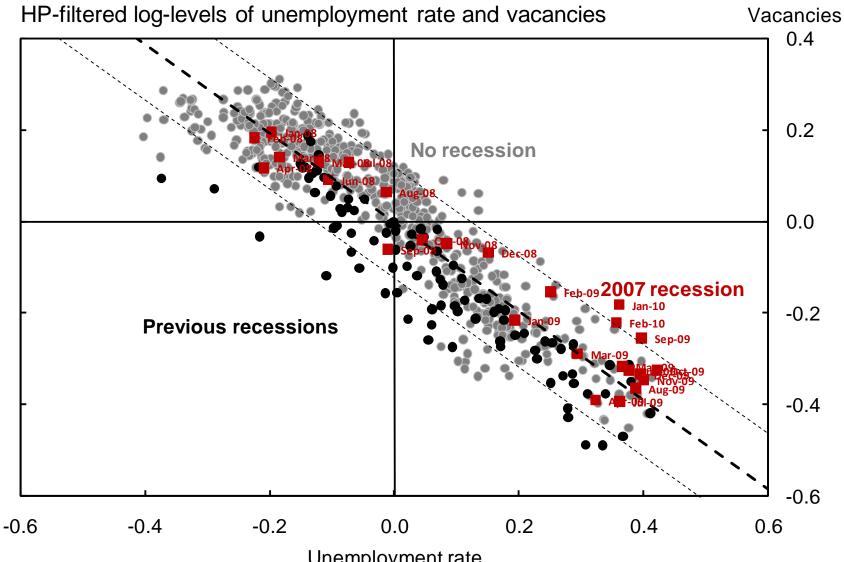
Monthly rates computed from JOLTS and CPS data

Monthly Rate (log scale)



1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Beveridge Curve

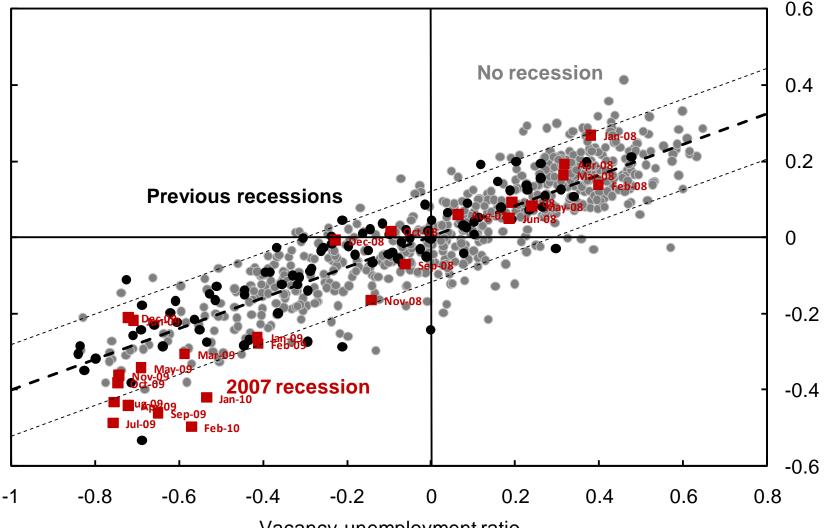


Unemployment rate Source: Bureau of Labor Statistics, Barnichon (2009), and authors' calculations

Matching Function

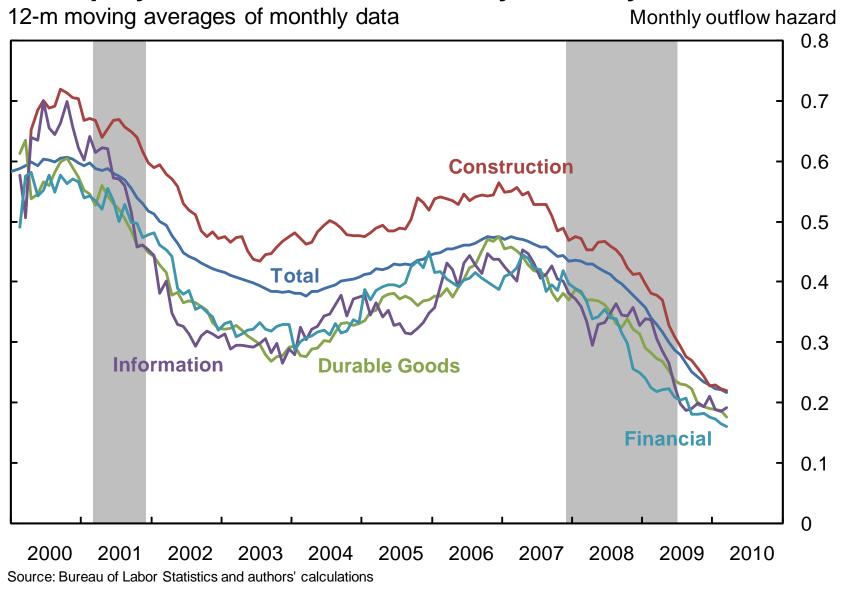
HP-filtered log-levels; seasonally adjusted

Outflow hazard rate

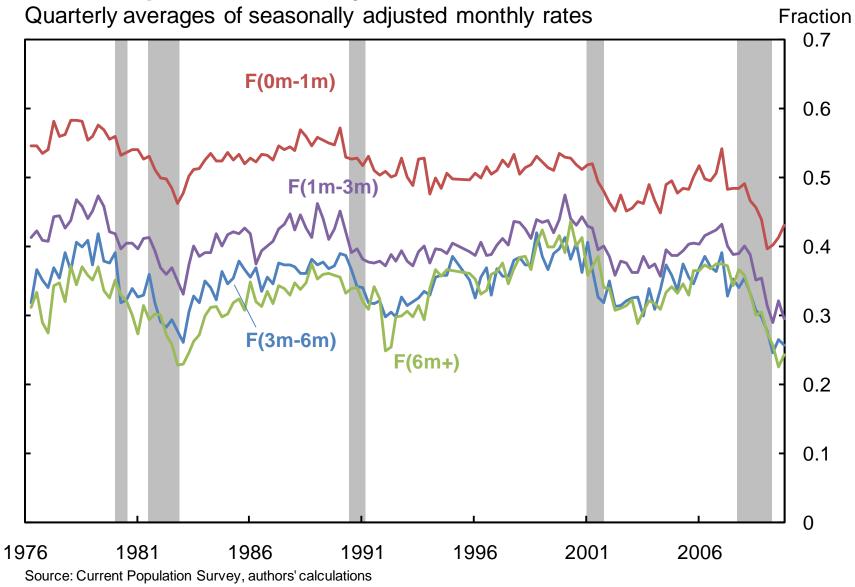


Vacancy-unemployment ratio Source: Bureau of Labor Statistics, Barnichon (2009), and authors' calculations

Unemployment Outflow Hazards by Industry



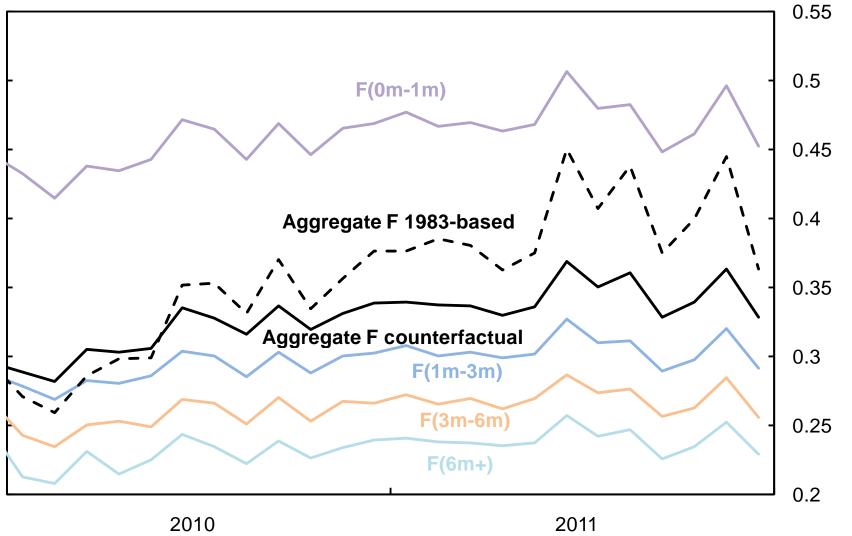
Outflow probabilities by duration



Aggregate outflow probability simulations

Outflow probability simulation based on 1983 recovery

Monthly outflow probability



Source: Assuming post 1982 recession percentage changes in outflow rates