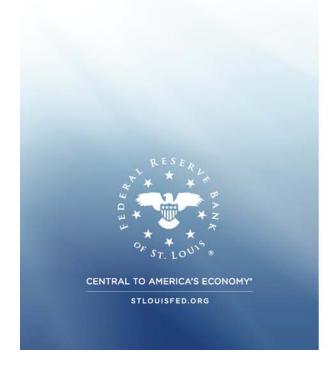


## Understanding the Unemployment Picture

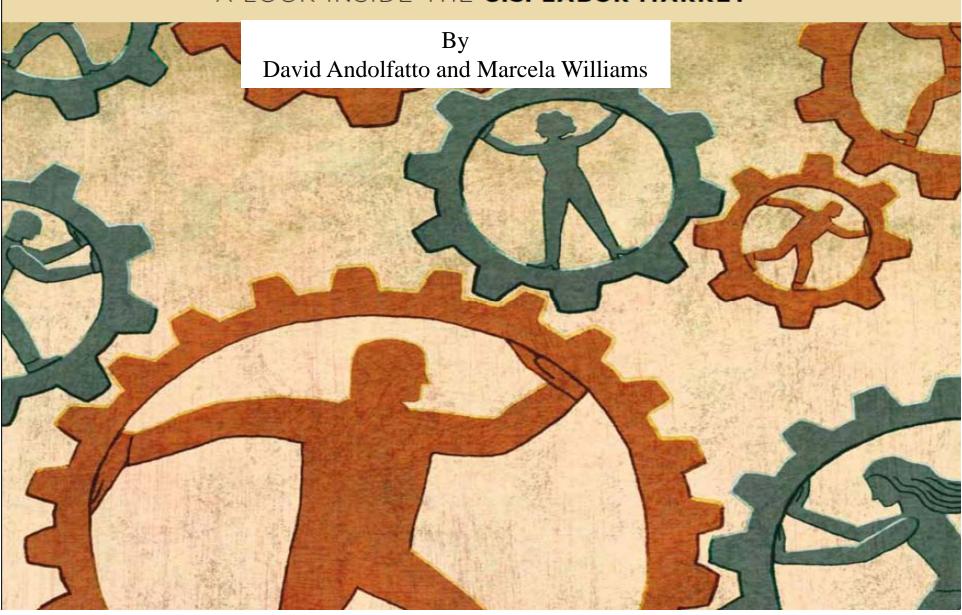


#### **Dr. Christopher Waller**

Senior Vice President and Director of Research Federal Reserve Bank of St. Louis

## Many Moving Parts

A LOOK INSIDE THE U.S. LABOR MARKET



#### The Great Recession

■ Labor markets have been ravaged by the worst U.S. economic crisis since the Great Depression.

Over the course of 25 months approximately **8,838,000** Americans in the labor force lost their jobs.

□ That amounts to a loss of **353,520** jobs *each month* (on average).

#### The Great Recession

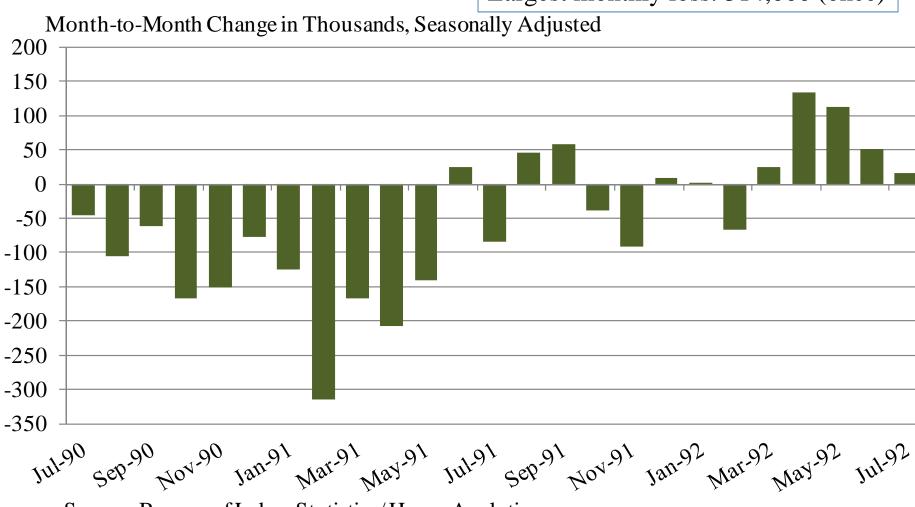
☐ The unemployment rate **doubled** from January 2008 to October 2009.

☐ It went from 5% to more than 10%!

□ Since October 2009 the unemployment rate has dropped a measly 1.1 percentage points (to 9.0%).

## U.S. Private Payroll Employment: 1990-1992

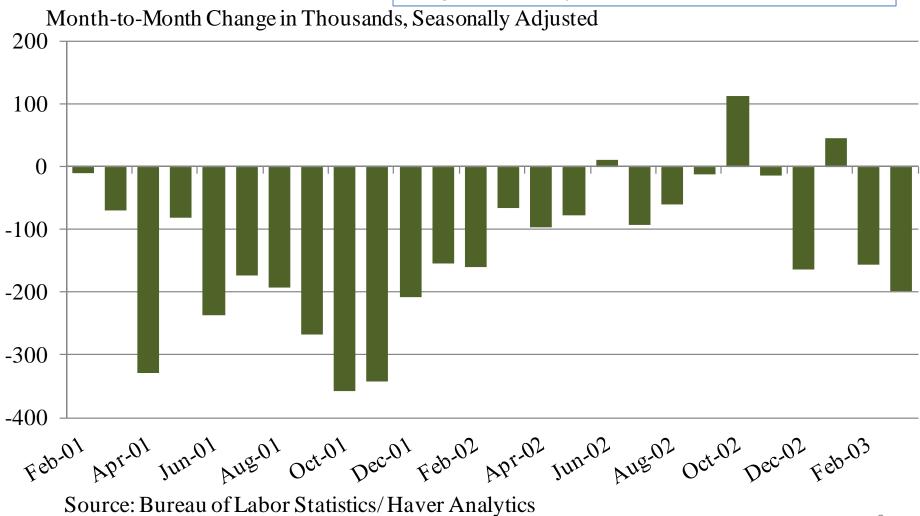
Largest monthly loss: 314,000 (once)



Source: Bureau of Labor Statistics/Haver Analytics

## U.S. Private Payroll Employment: 2001-2003

Largest monthly loss: 350,000 (three times)

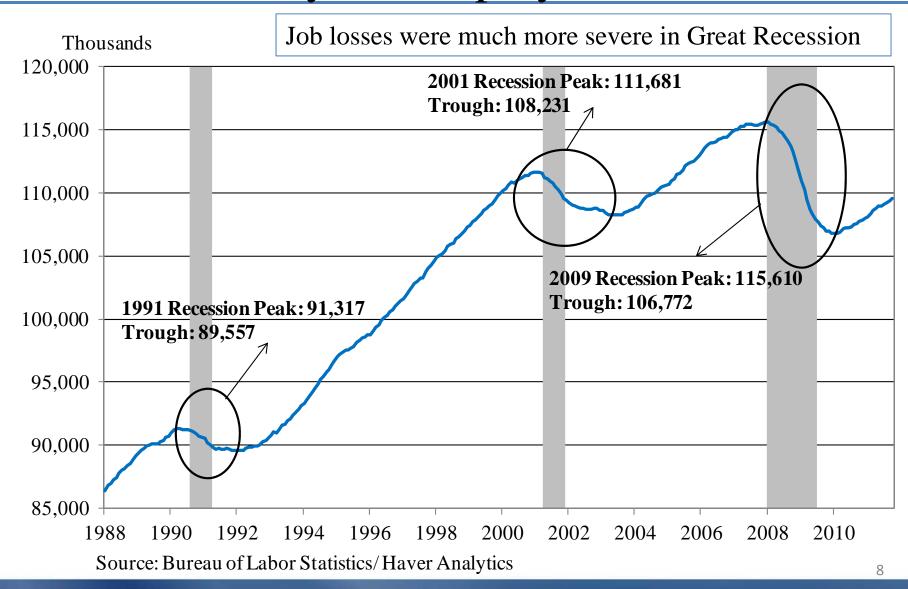


## U.S. Private Payroll Employment: 2008-2011

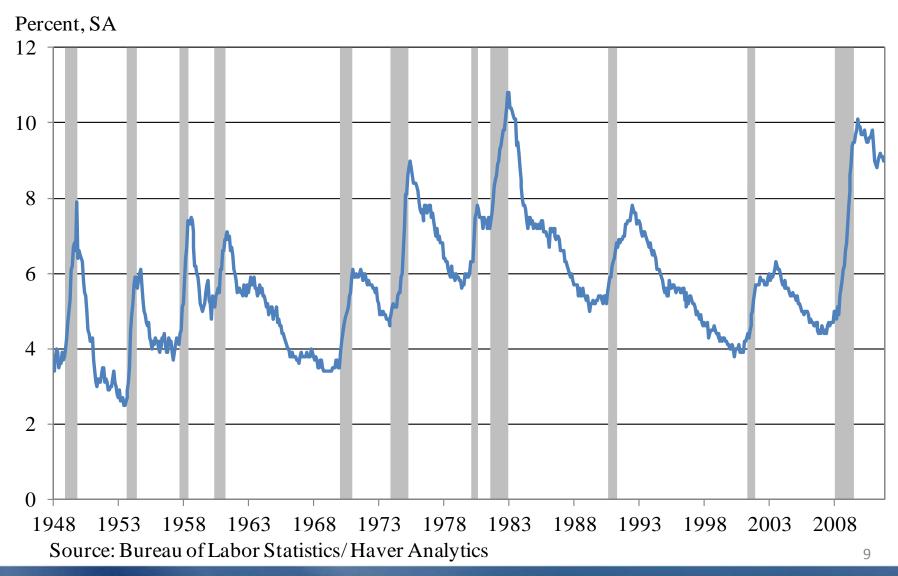
Largest monthly loss: Average of 750,000 for 6 months!!!

Month-to-Month Change in Thousands, Seasonally Adjusted 400 200 -200 -400 -600 -800 -1000 Source: Bureau of Labor Statistics/ Haver Analytics

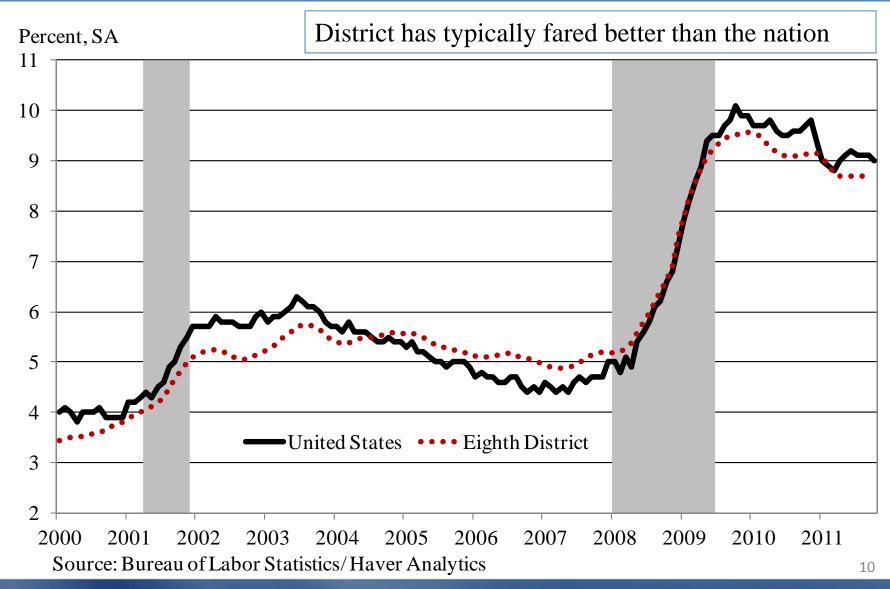
#### U.S. Private Payroll Employment



## Unemployment Rate – 1948-Present

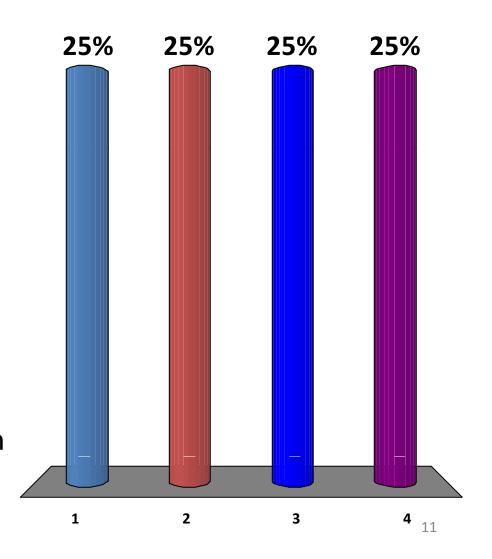


## Unemployment Rate – Nation vs. District



#### The unemployment rate is based on:

- Surveys of fifty percent of households in each large city.
- 2. Reports of the number of people collecting unemployment benefits each month.
- 3. Surveys of a representative sample of households each month.
- 4. Surveys of all households in the U.S. each month.



- □ The unemployment rate is calculated using **60,000** household survey responses.
- Based on those responses each adult in each household is placed into one of three categories:
  - 1. Employed: Those who worked as paid employees, worked in their own business, or worked as unpaid workers in a family member's business.

- 2. <u>Unemployed</u>: Those who were not employed, were available for work, and had tried to find employment during the previous **four weeks**.
- 3. Not in the labor force: Those who fit neither of the first two categories, such as a full-time student, homemaker, or retiree.
- □ A person who has given up looking for a job is counted as **not being in the labor force**.

The labor force is the sum of the employed and unemployed

Labor Force = Number of Employed + Number of Unemployed,

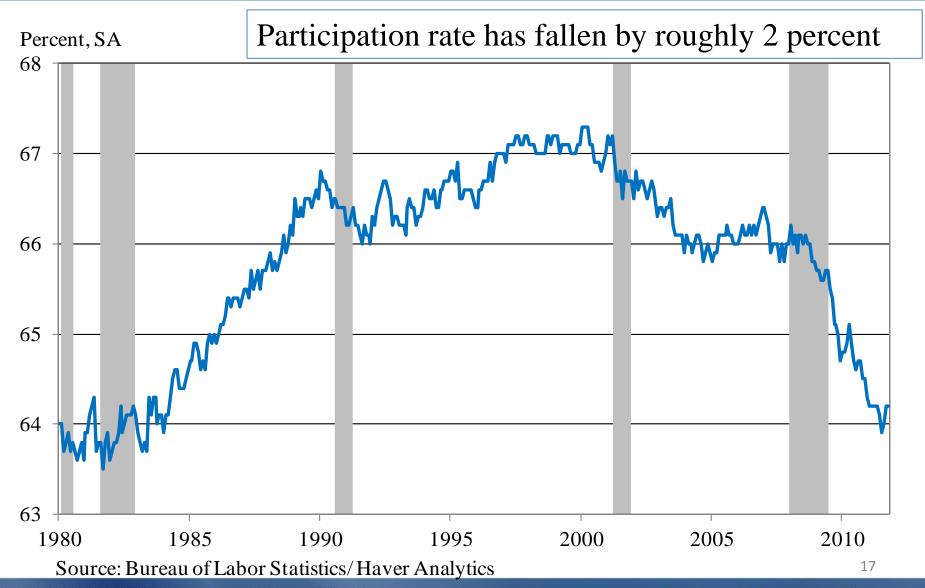
■ The **unemployment rate** is the *percentage* of the labor force that is unemployed:

Unemployment Rate = 
$$\frac{\text{Number of Unemployed}}{\text{Labor Force}} X 100$$

The labor-force participation rate is the percentage of the adult population that is in the labor force:

Labor-Force Participation Rate = 
$$\frac{\text{Labor Force}}{\text{Adult Population}} X$$
 100

#### Labor-Force Participation Rate



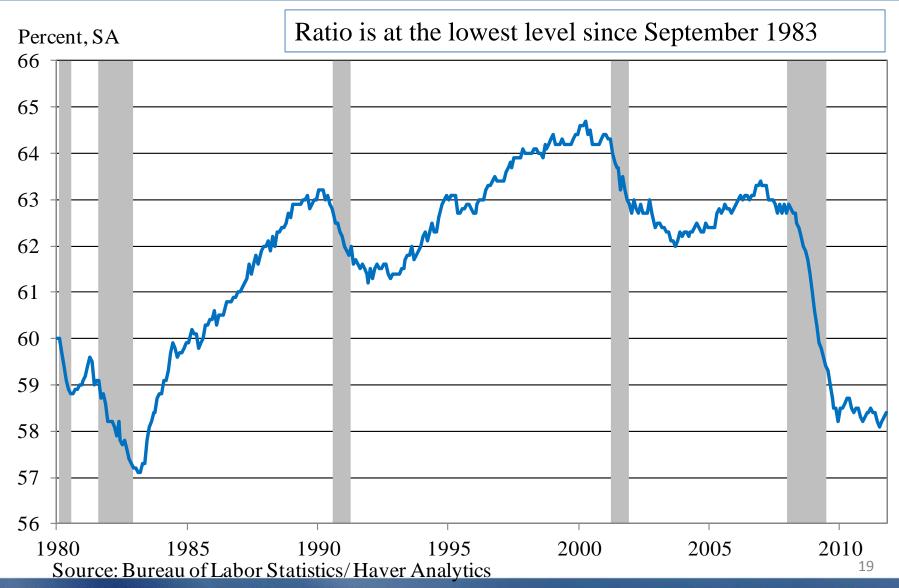
## **Employment-Population Ratio Defined**

Another statistic that evaluates labor market performance is the Employment-Population Ratio.

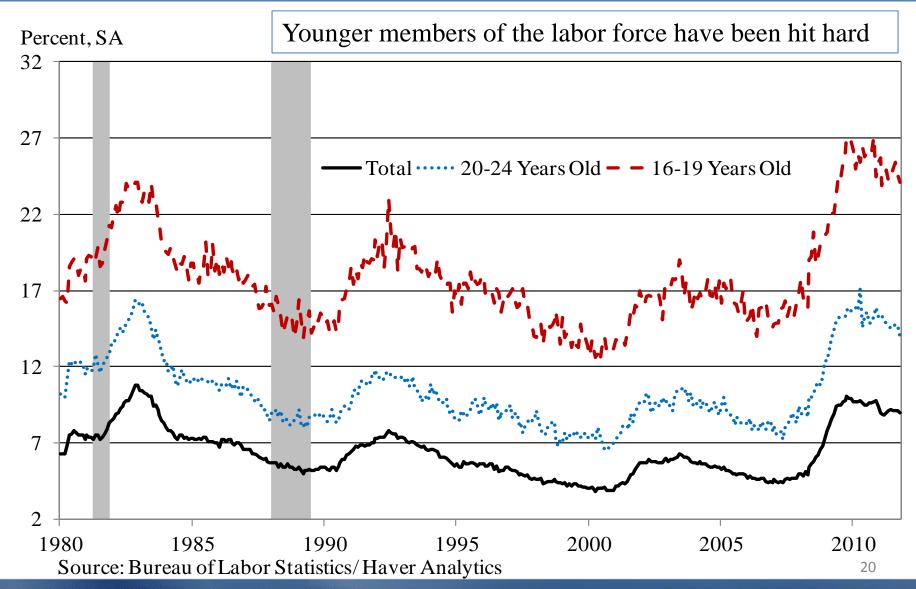
□ The ratio measures the proportion of the working-age population that is employed.

Employment-Population Ratio = 
$$\frac{\text{Number Employed}}{\text{Adult Population}} X 100$$

## **Employment-Population Ratio**

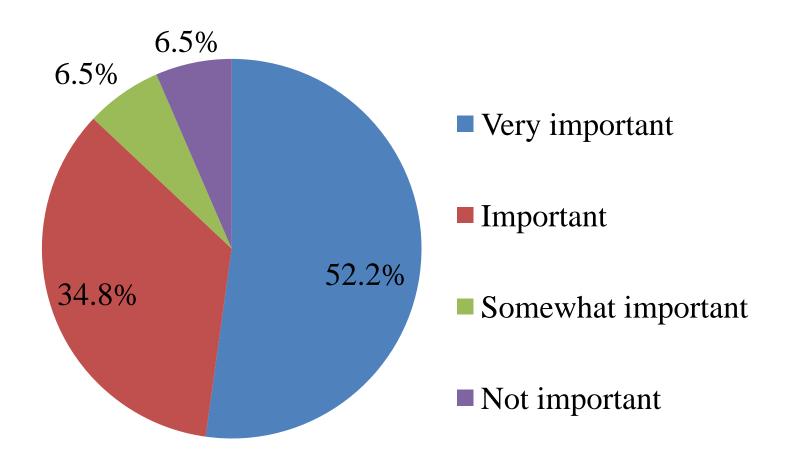


## Unemployment Rate – By Age



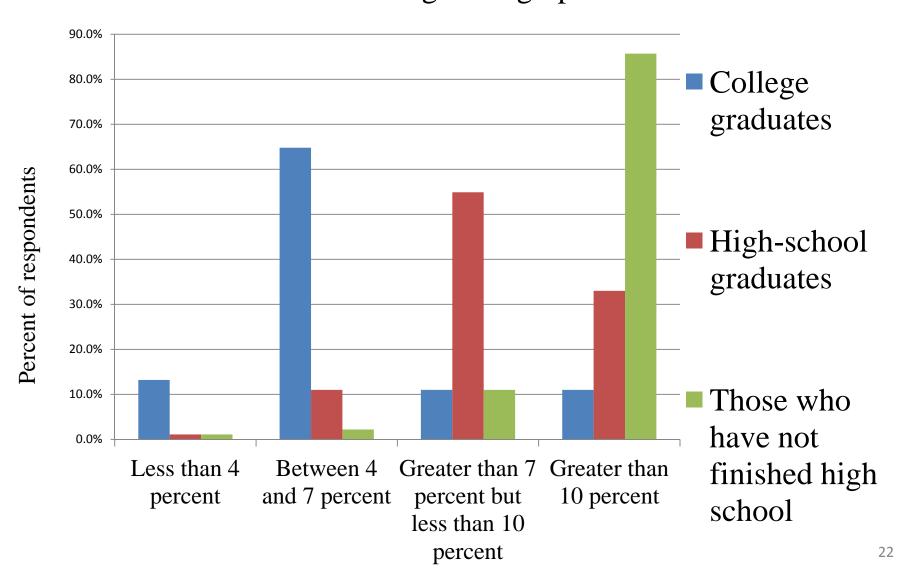
#### **Pre-event poll question**

How important do you think differences across individuals in their levels of education, training, and skills are in explaining current levels of unemployment?

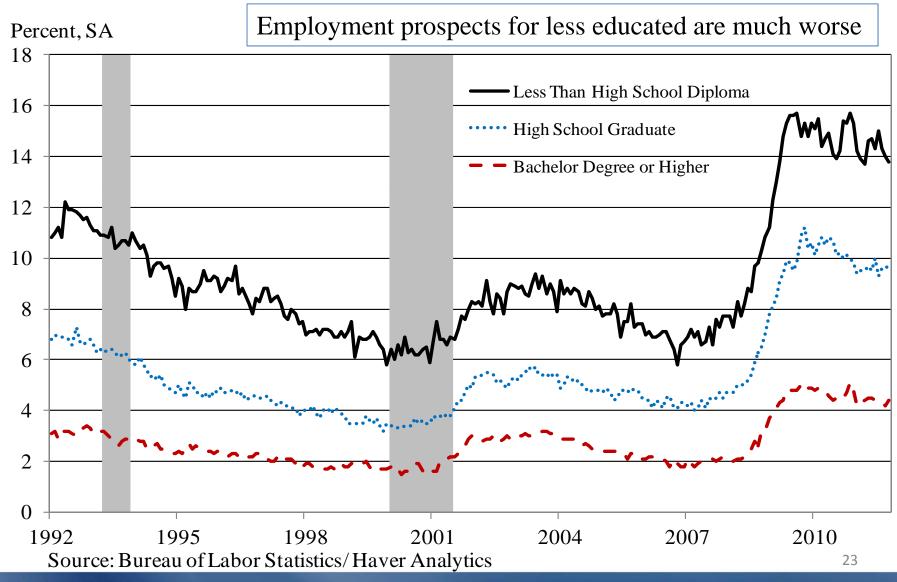


#### **Pre-event poll question**

Please provide your estimate of the unemployment rate among the following demographics:



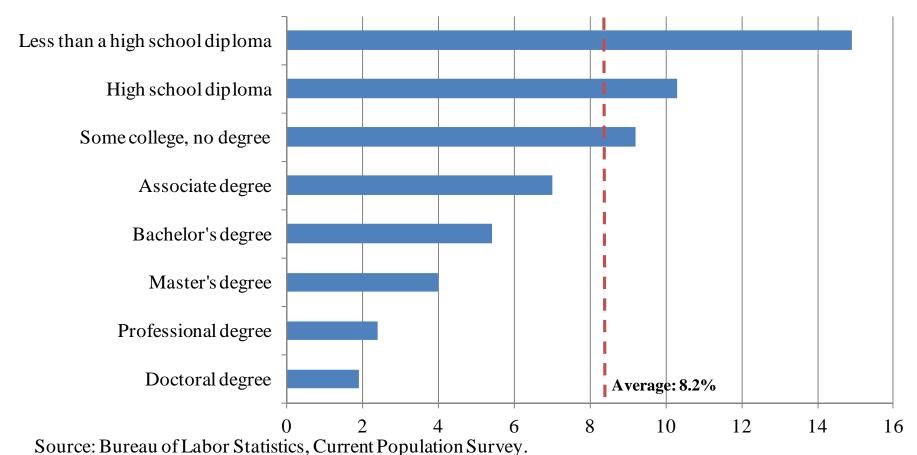
## Unemployment Rate – By Education



## Unemployment Rate – By Education

Each level of educational attainment lowers the average UR

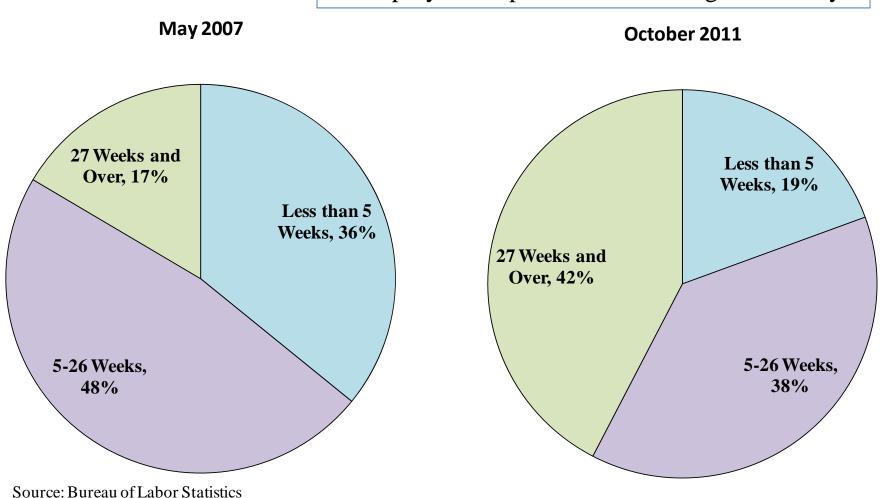
#### **Unemployment rate in 2010 (%)**



24

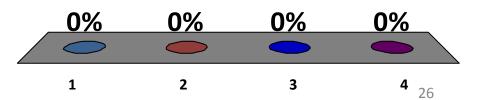
## **Unemployment Duration**

Unemployment spells are much longer for many



# The government should drive the unemployment rate to zero.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly Disagree



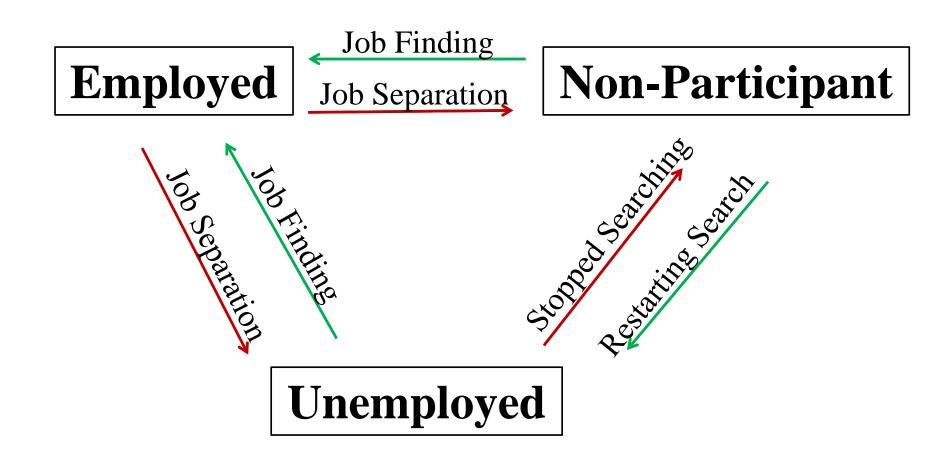
## Two Important Questions

Why isn't the unemployment rate ever zero?

Why doesn't government simply hire these workers and drive it to zero?

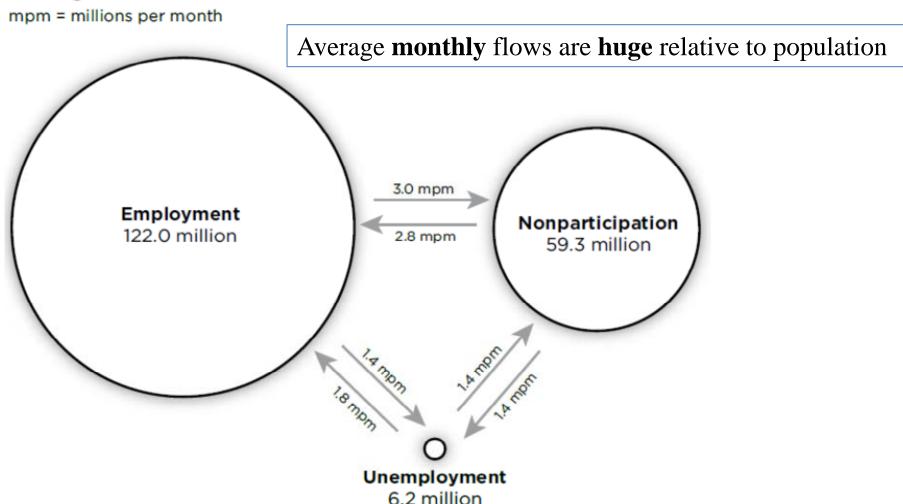
- □ The labor market is a **dynamic** place it has many moving parts.
- □ Think of a river the water level appears to be unchanged from one day to the next.
- But the water you saw yesterday is gone and replaced by new water.
- □ The same holds for the labor market.

- Employment, unemployment, and participation rates provide a brief "snap shot" of labor market activity.
- However, over a given time period workers will transition from one labor market category to another.
- □ Think of workers like water they flow from one category to another.



#### Magnitude of Labor Flows

#### Average Worker Flows 1996-2003



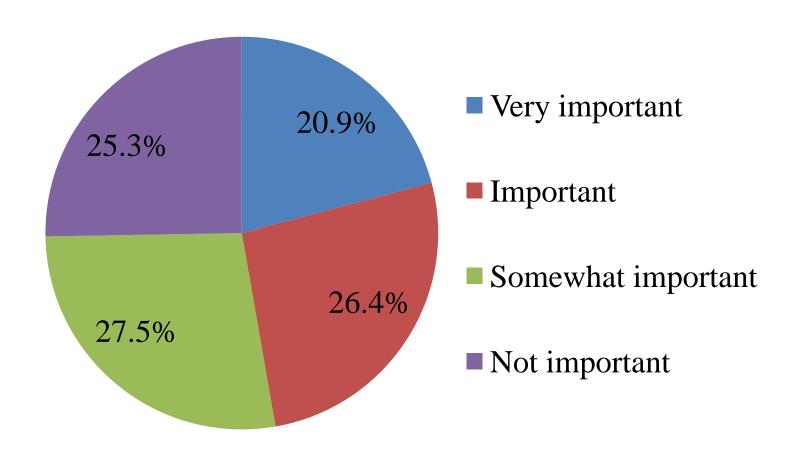
SOURCE: Adapted from Davis, Faberman and Haltiwanger (2006) Figure 1.

- Demand side and supply side economic forces dictate worker flows:
  - Demand side: Employers continuously destroy old jobs and create new ones. Post vacancies to find workers.

• Supply side: Workers switch jobs and change their labor market status due to various life events.

#### **Pre-event poll question**

How important do you think the availability of unemployment benefits is in explaining current levels of unemployment?



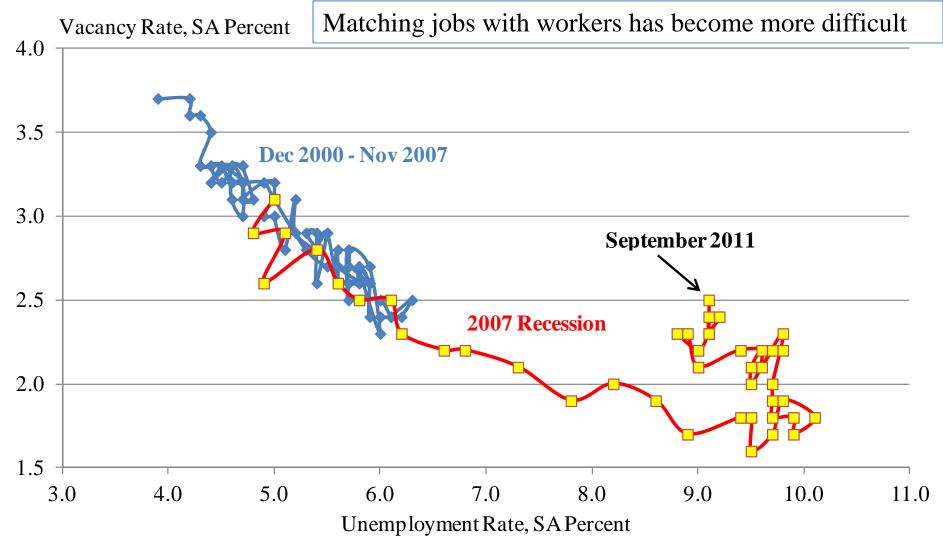
## Beveridge Curve

□ Job vacancy rates and unemployment vary over the business cycle.

□ The relationship between these two variables is referred to as the **Beveridge curve**.

■ A negative slope is the norm – vacancies are high when unemployment is low and vice versa.

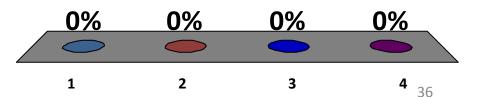
## Beveridge Curve



Source: Job Opening and Labor Turnover Survey, Bureau of Labor Statistics/Haver Analytics 35

How important do you think negative housing equity is in explaining the current level of worker mobility across state lines and high levels of unemployment?

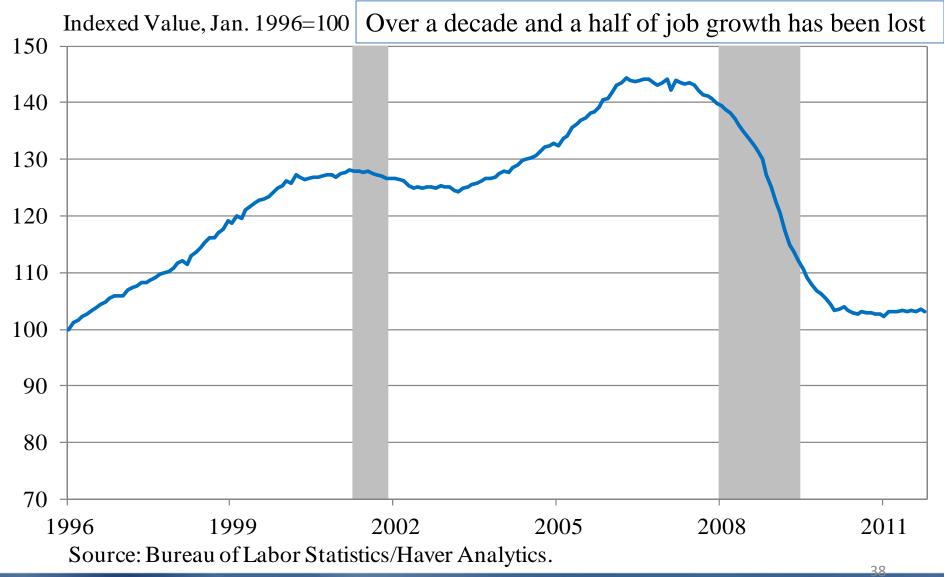
- 1. Very important
- 2. Important
- 3. Somewhat important
- 4. Not important



### Role of the Housing Collapse

- □ The collapse in housing displaced **1,954,000** construction workers.
- Prior to 2007, employment in the residential construction sector and peripheral industries grew dramatically.
- □ It will take time for those employees to shift to a different industry.
- □ The housing market also affects the mobility of workers and could impede labor relocation.

#### Construction Employment



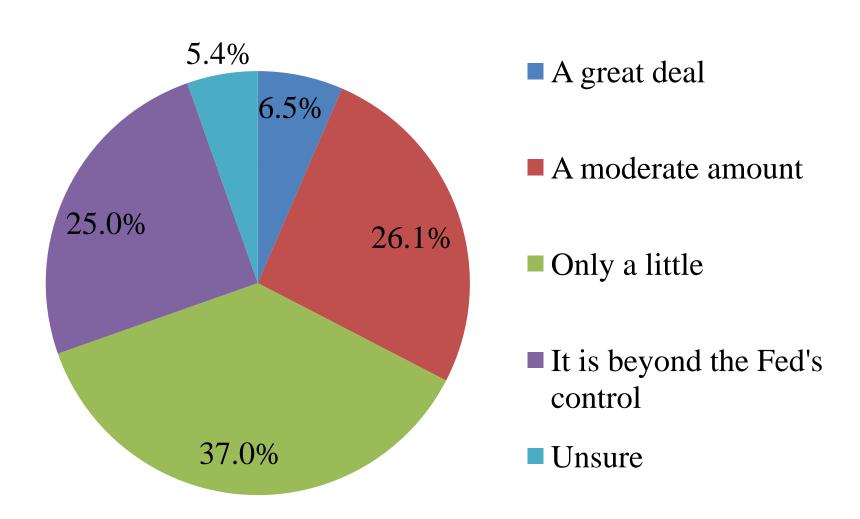
#### Role of the Housing Collapse

- □Juan Sanchez, a St. Louis Fed economist, points out that the 2 million jobs lost in construction is only the direct effect of the recession on one industry.
- Nearly **800,000** additional jobs were lost in other industries that relied on construction.

■ The decline in construction employment and its connected industries accounts for 40 percent of the total decline.

#### **Pre-event poll question**

In general, how much do you think the Federal Reserve can do to affect the unemployment situation in the United States?



#### **Policy Options**

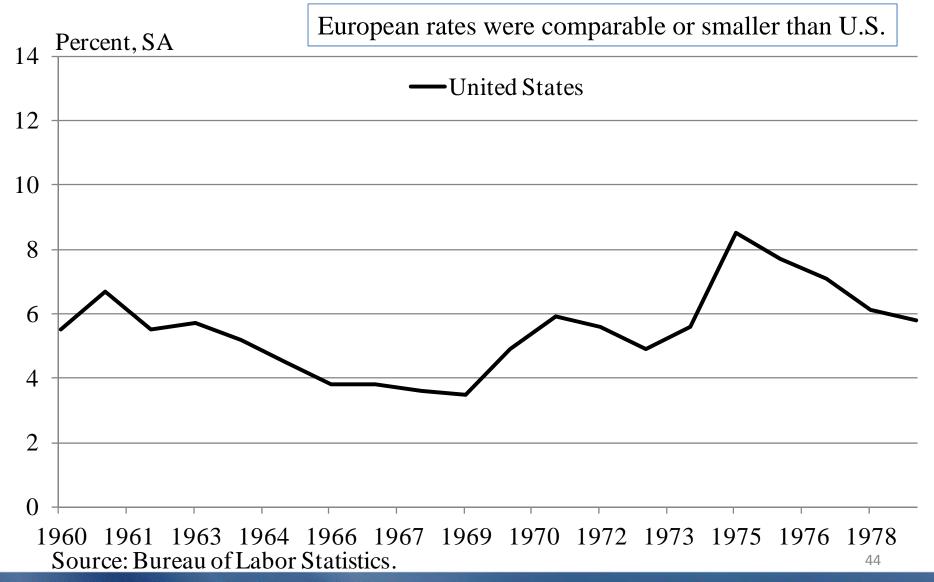
- □ The Fed has lowered interest rates dramatically.
  - Should encourage investment and consumption of big ticket items.
  - This has not spurred businesses to hire more or consumers to spend more on durables and housing.
- Fiscal policy has lowered tax rates and spent a LOT of money to stimulate the economy.
- Again, this does not appear to have had much effect.

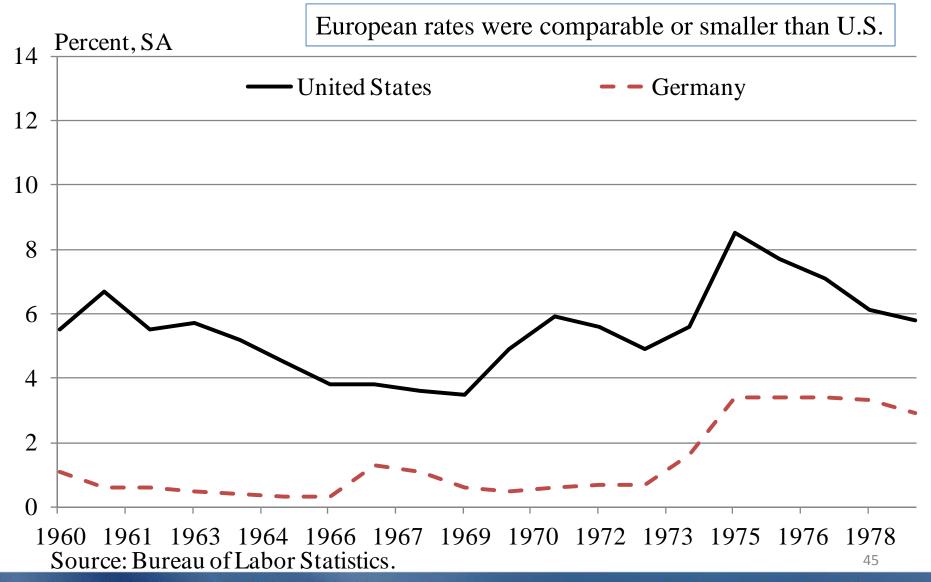
#### Reasons

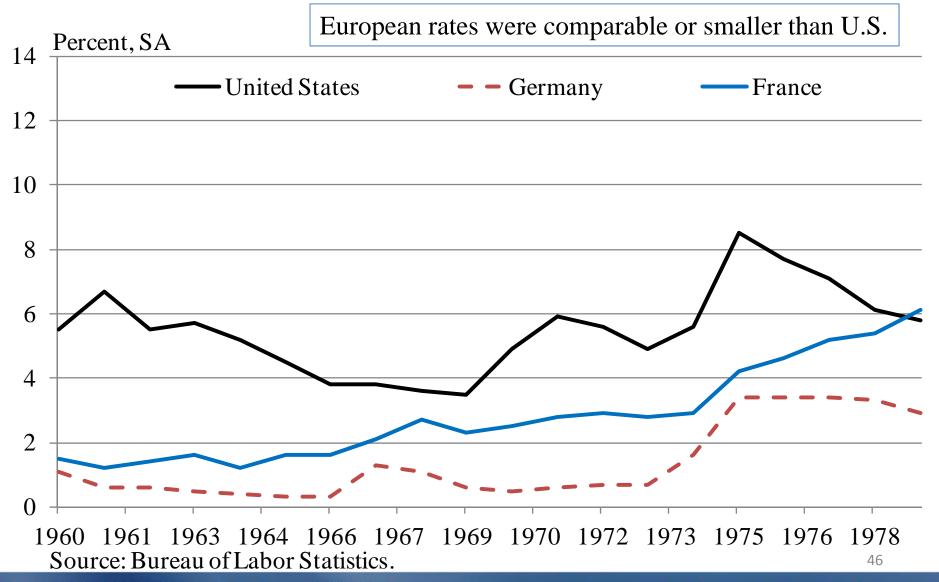
- □ Firms are reluctant to hire due to:
  - 1. Weak demand for their products and pessimism.
  - 2. Legitimate concerns about policy uncertainty resulting from new regulations and political power struggles.
- Households are deleveraging and restraining consumption of durables.
- □ Housing was overbuilt no recovery in housing.

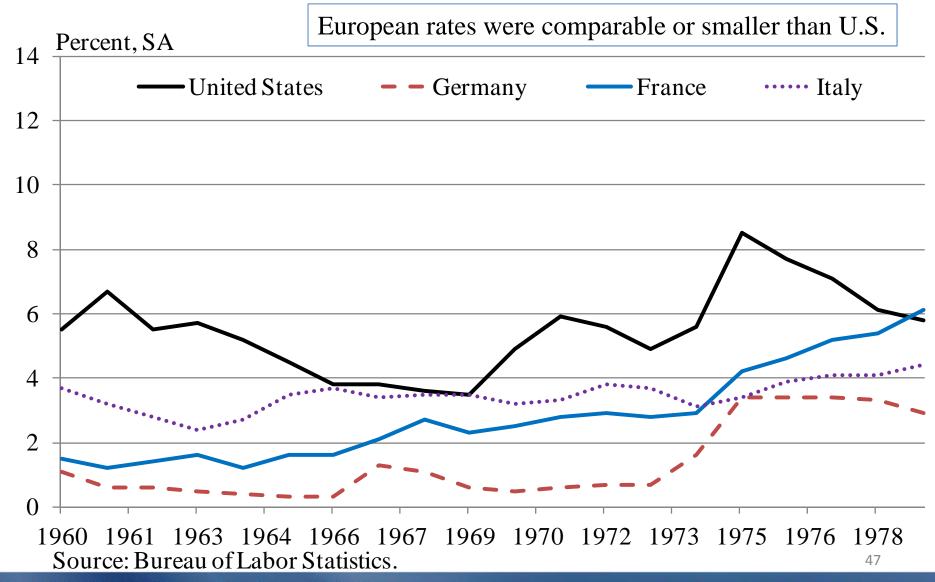
### A Cautionary Tale: European Labor Markets

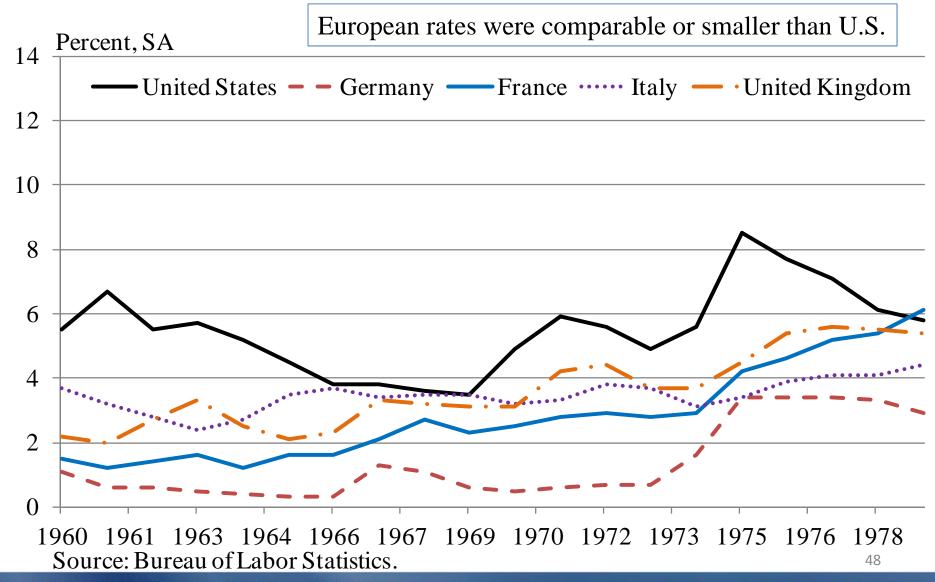
- □ Unemployment rates in the U.S. were higher than those in Europe prior to 1980.
- □ Oil shocks of 1970s drove up the unemployment rate in both areas.
- Europe created a very rigid labor market in response high firing costs and generous UI.







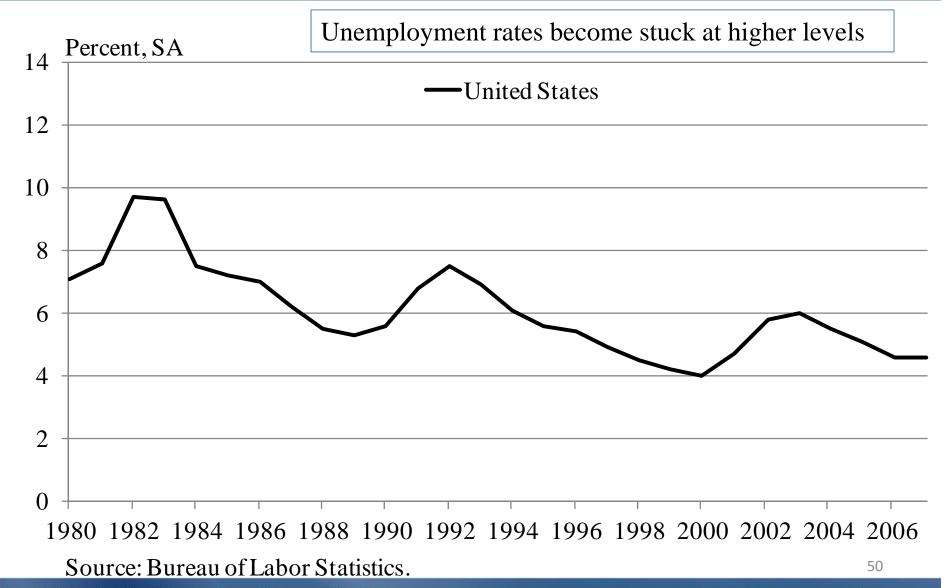


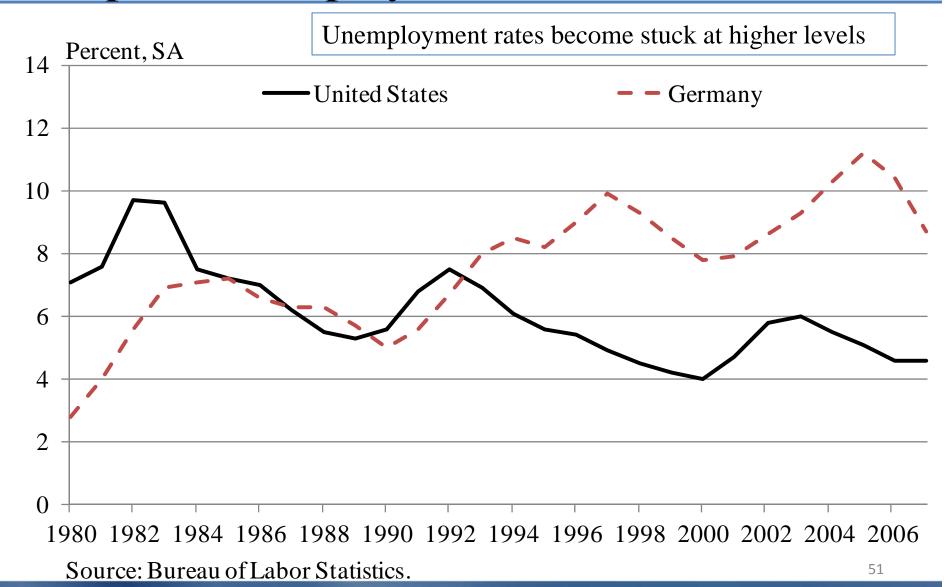


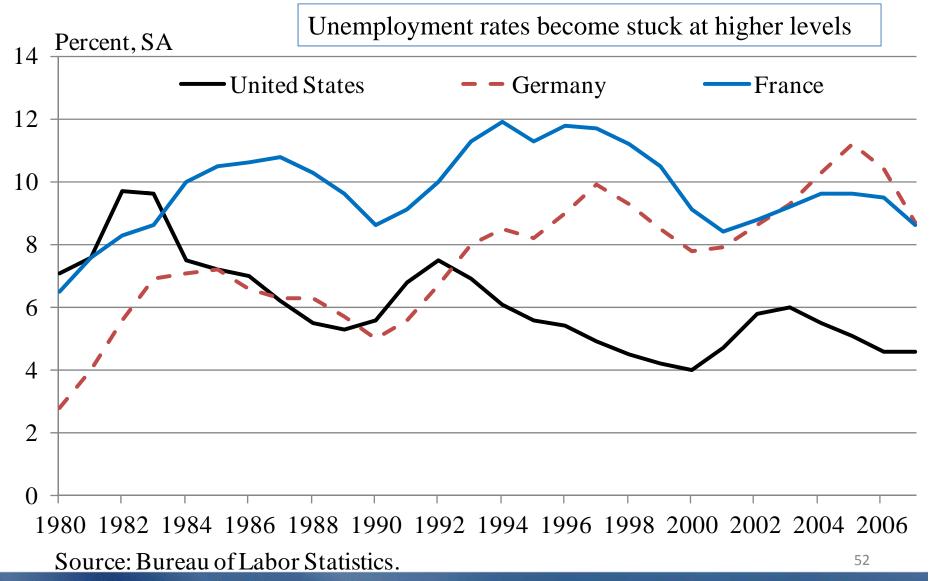
## A Cautionary Tale: European Labor Markets

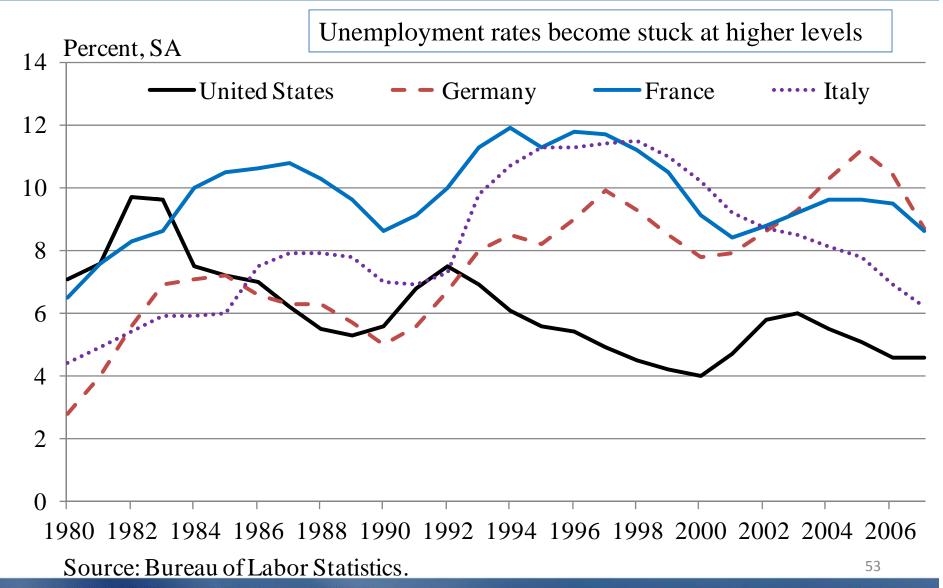
- □ U.S. unemployment rates declined after 1980.
- As a result of its labor market policies, Europe's did not.

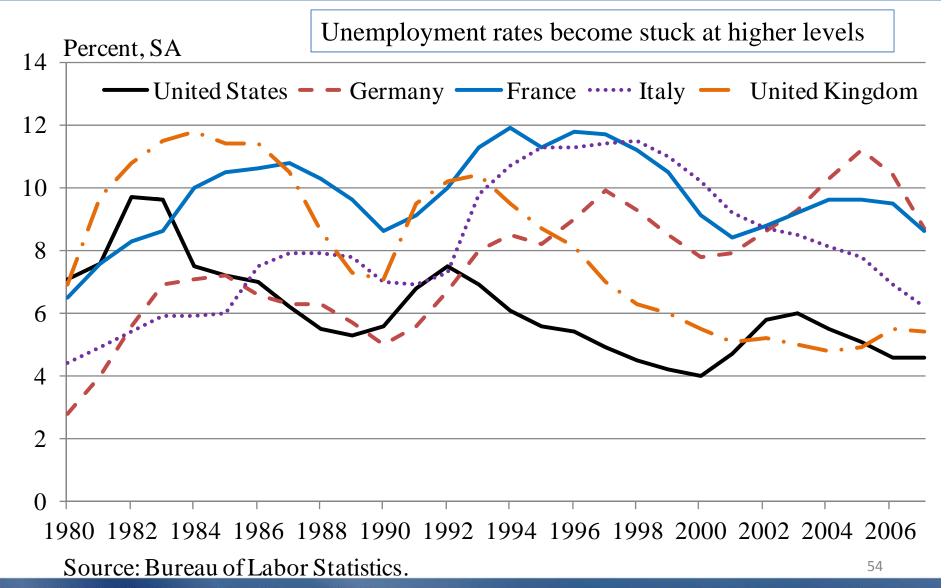
□ Is the U.S. labor market experiencing the same phenomena now?









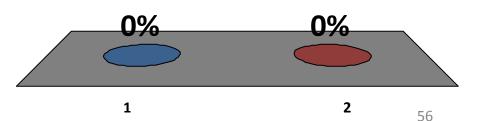


#### Conclusion

- The Great Recession was very severe and the recovery has had high unemployment and a longer duration of unemployment.
- Jobs are opening up but hires are not being made.
- Employment has not responded to aggressive monetary and fiscal policies.
- Parallels with Europe raise the concern we are headed for a long period of high unemployment.

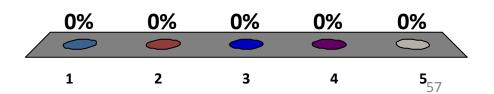
# Are you interested in attending future Dialogues with the Fed?

- 1. Yes
- 2. No



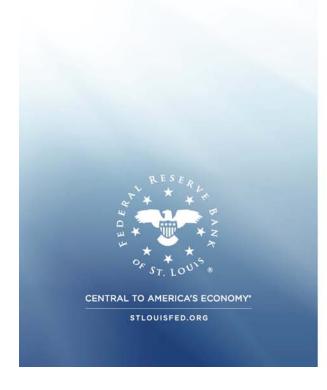
# Please choose the 3 topics in which you would be most interested.

- Dodd-Frank
  Legislation
- 2. Structure and Functions of the Federal Reserve
- 3. History of the Federal Reserve
- 4. Monetary Policy
- 5. Regional Topics





## Question and Answer Session



Please be sure to turn on your microphone when asking a question.