

# Unemployment

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Econ520

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# Involuntary unemployment

- Involuntary unemployment means:
  - Some unemployed would like to work at the prevailing wage.
- A puzzle: **why don't the unemployed bid down wages?**
- Something must prevent firms from replacing existing workers and from lowering their wages.
- These frictions generate unemployment.

# Theories of unemployment

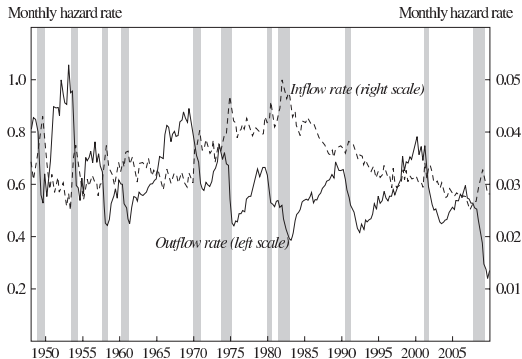
- ① Rigid wages
- ② Search / matching
- ③ Efficiency wages
- ④ Contracts

- Centralized wage bargaining - important in Europe.
- Labor unions and employer associations bargain over wage structures.
- They raise wages above market clearing → unemployment.
  - Cf Walrasian model
- Redistribution from the unemployed to the employed.

- There is huge job turnover among young workers.
  - 122m jobs
  - each month 7.4m jobs are changed / lost

# Large flows

Figure 6. Unemployment Inflow and Outflow Rates, 1948–2009<sup>a</sup>



Source: Elsbj et al. (2010)

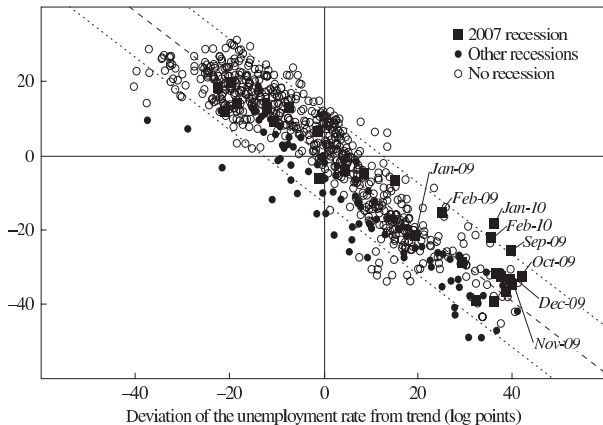
Inflow rate: fraction of employed who become unemployed each month

Outflow rate: fraction of unemployed who become employed each month

# Beveridge Curve

**Figure 12.** The Beveridge Curve, 1951–2010<sup>a</sup>

Deviation of job vacancies from trend (log points)



Source: Elsy et al. (2010)

The cyclical behavior of vacancies.

# Frictional Unemployment

- Workers sample different occupations to find a good match.
- Jobs get destroyed by price changes, shocks to firms...
- In the search view, unemployment is a **productive activity**:
  - it produces good matches between workers and jobs.

- What determines the unemployment rate?
- How willing are firms to
  - post new jobs (vacancies)
  - keep workers when shocks occur
- How willing are workers to accept jobs?

- Labor market policies affect both margins.
- What is the effect of
  - employment protection / firing costs?
  - unemployment benefits?

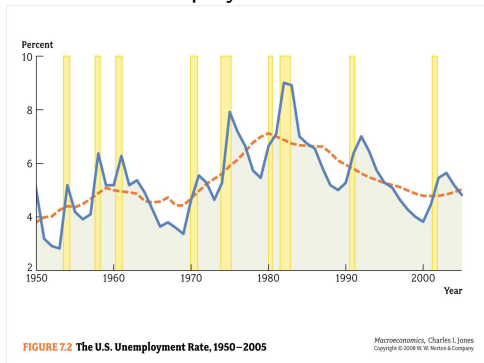
- Why do workers work hard?
- One reason: slacking gets you fired.
- Why is losing the job costly?
  - In part because it takes time to find a new job.
- One role of unemployment: induce effort.

- Firms do not lower wages when productivity falls.
- Why not?
- A form of insurance.
- Risk averse workers prefer smooth wages.
- The downside: cannot cut wages in recessions.
- Rigid wages create unemployment.

# European Unemployment

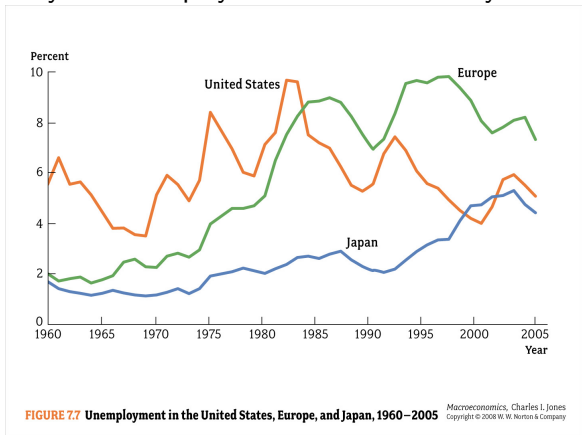
# Unemployment rate: USA

The U.S. unemployment rate has been roughly flat since 1948.



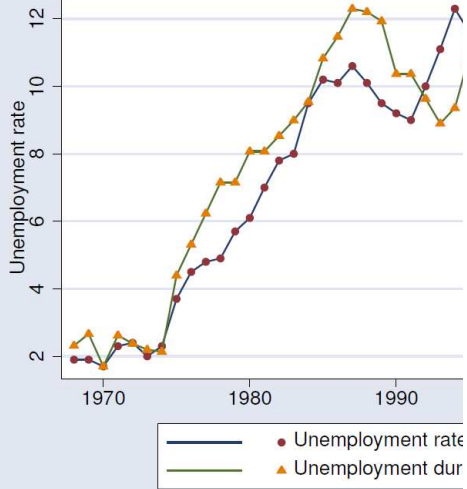
# Unemployment rate: Europe

Why did unemployment rise dramatically in Europe?



# Unemployment duration

Figure 4. Unemployment rate and



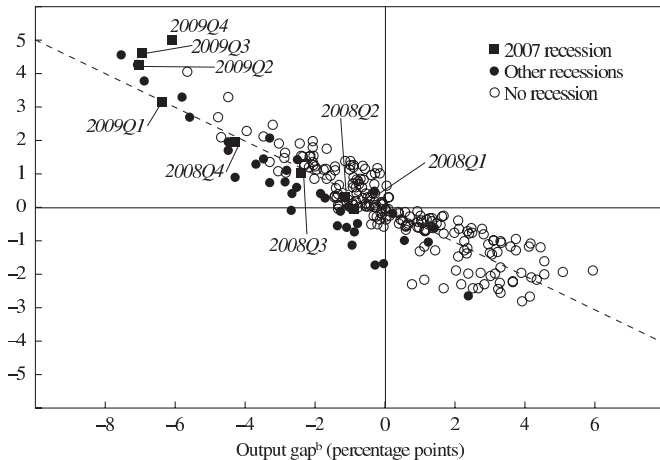
# The Puzzle

- Europe had lower unemployment than the U.S. in the 1950s/60s
- Since the 1970s, European unemployment has been persistently high
- Large numbers of long-term unemployed
- Institutions did not fundamentally change during this period

# U.S.: Okun's Law

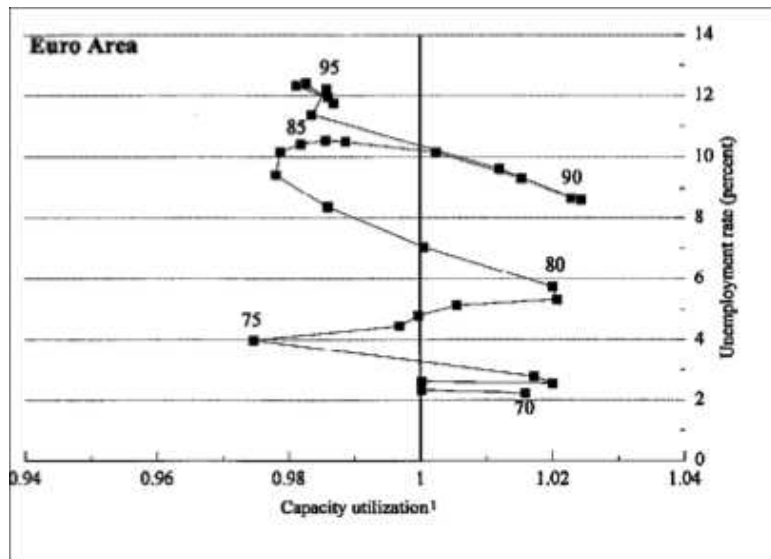
Figure 3. Okun's Law, 1949–2009

Unemployment gap<sup>a</sup> (percentage points)

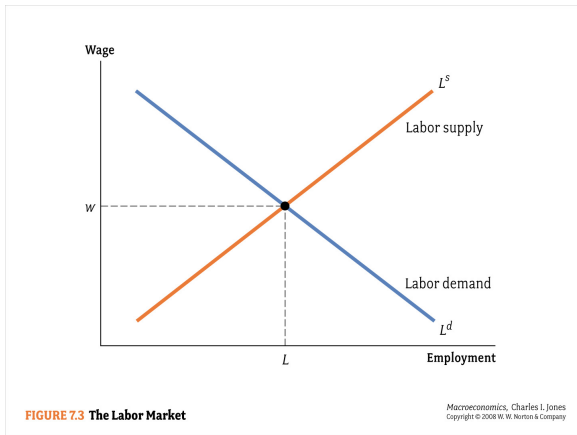


A 1% increase in output (above trend) is associated with a 0.5% drop in unemployment.

# Europe: Okun's Law Breaks Down



# Walrasian Model

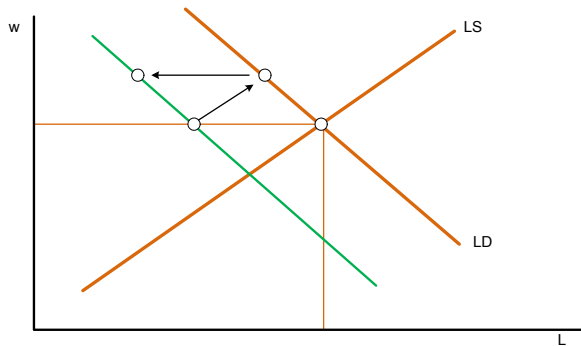


A Walrasian interpretation of the European experience.

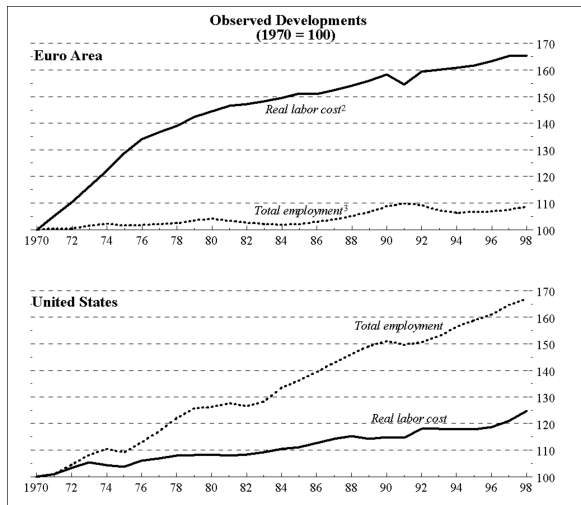
# A Walrasian Interpretation

- **U.S.:** Wages are flexible.
  - In recessions, wages fall and employment need not fall too much.
- **Europe:** Wages are downward rigid.
  - Perhaps due to collective bargaining / unions.
  - In expansions: Wages rise.
  - In recessions, wages stay flat.
  - Each expansion starts with lower employment.

# A Walrasian Interpretation



# Unemployment and labor cost



Labor costs are consistent with the Walrasian view.

- European labor markets are more regulated than U.S. labor markets.
- More generous unemployment benefits.
- Better protection against layoffs.
- How does this affect European unemployment?

- How do firing costs affect unemployment?
- Two effects:

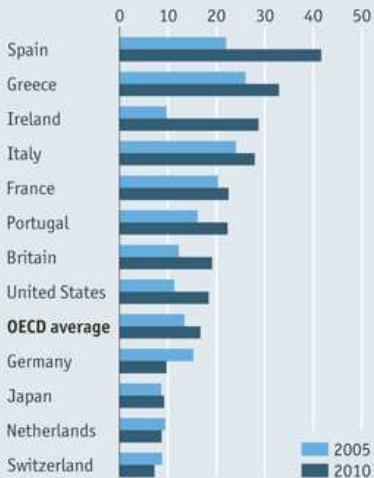
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# Youth Unemployment in Europe

## A poor present

Youth\* unemployment, selected countries  
% of youth labour force



Source: OECD

\*15- to 24-year-olds

Source: Economist.com

Countries with rigid employment protection have high youth unemployment.

# Increasing Turbulence

1950s:

- strong growth
- high “stability”

Since 1970s: Turbulence

- oil shocks
- financial liberalization
- trade liberalization
- move to floating (volatile) exchange rates

# Implications of Turbulence

- Labor earnings are more volatile.
- Workers need to “retool” more often.
- Job changes lead to larger wage losses (obsolete human capital).
- The result: employment protection becomes more distortionary.

# Implications of Turbulence

Low turbulence:

- Displaced workers can find jobs with comparable pay.
- They search for jobs, even if unemployment benefits are generous.

High turbulence:

- Displaced workers take a pay cut.
- A larger fraction prefers unemployment over work.

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