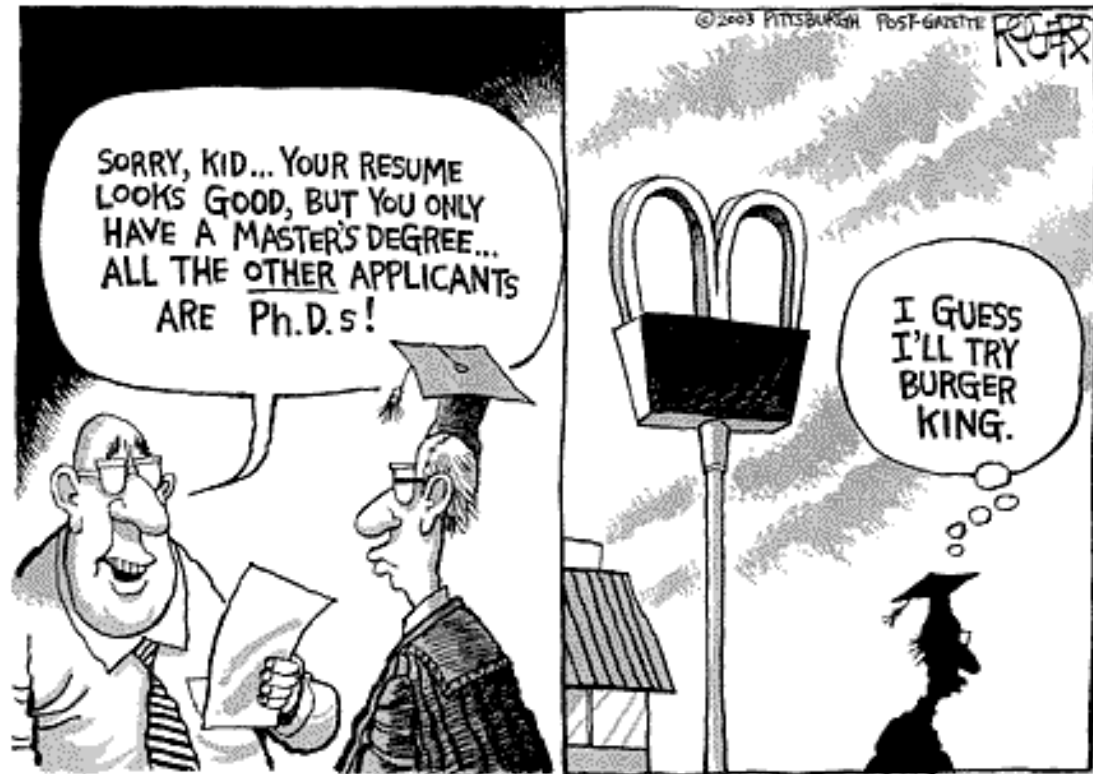


# Labor Market

*“When the unemployment rate rises, your education can make the difference ...”*



## Disappointed Graduates

### How is the Labor Market?

TABLE 1

**Median Starting Salaries of New MBAs from Selected Schools in 2000, 2002, and 2004**

School	2000	2002	2004
Stanford	\$165,500	\$138,100	\$150,000
Harvard	160,000	134,600	147,500
Pennsylvania	156,000	124,500	144,000
Columbia	142,500	123,600	142,500
Dartmouth	149,500	122,100	135,000

In 2002 (unemployment rate was 6%) the median student earned 20% less than in 2000 (unemployment rate was 4%) and 10-15% less than in 2004.

## Labor Market Indicators (I)

### Important Definitions

- The ***working-age population (WAp)*** of a country consists of everyone of working age, typically above a certain age (16 in the US or Europe) and below retirement (around 65).
- ***Employment (E)*** is the number of people currently employed in the economy.
- ***Unemployment (U)*** is the number of people who are actively looking for work but aren't currently employed.
- The ***Labor Force (LF)*** is equal to the sum of **E** and **U**:  $LF = E + U$ . Basically, the LF is made up of members of the WAp who are **participating workers**, *i.e.*, people actively employed or seeking employment (sometimes called **participants**). People **not counted include students, retired people, stay-at-home parents, people in prisons** or similar institutions, people employed in jobs or professions with unreported income, as well as **discouraged workers** who cannot find work.

## Labor Market Indicators (II)

### Basic Rates

- The **unemployment rate** ( $u$ ) is the percentage of the total number of people in the labor force who are unemployed:

$$u = \frac{U}{LF}$$

- The **labor force participation rate** ( $p$ ) is the ratio between the labor force and labor force population (LFp), *i.e.*, people in working age:

$$p = \frac{LF}{LFp}$$

- The **employment rate** ( $e$ ) is the percentage of the total number of people in working age (LFp) who are employed:

$$e = \frac{E}{LFp}$$

## Labor Market Indicators (III)

### Unemployment (I)

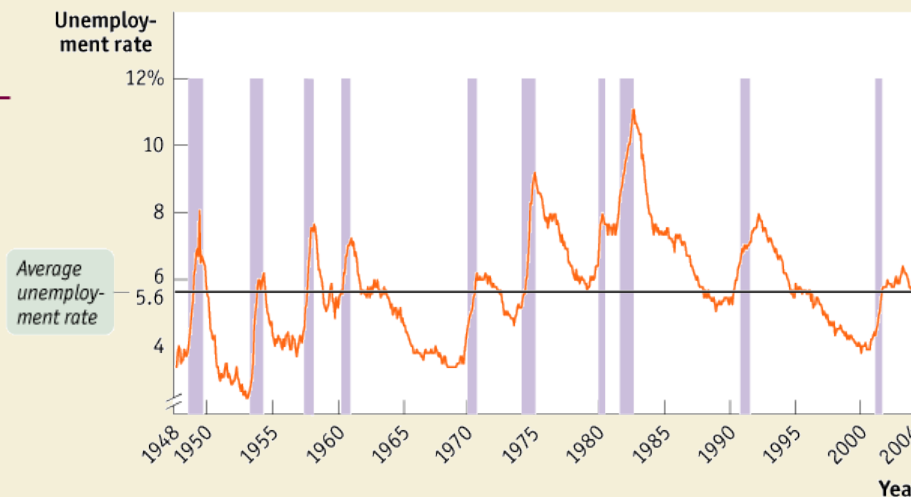
- The **unemployment rate** ( $u$ ) is considered a good indicator of the conditions in the labor market: high  $u$  signals a poor job market (jobs are hard to find). In general, during recessions (expansions)  $u$  is rising (is falling). Therefore, it can be considered as a countercyclic indicator.

Figure 14-2

#### The Unemployment Rate and Recessions Since 1948

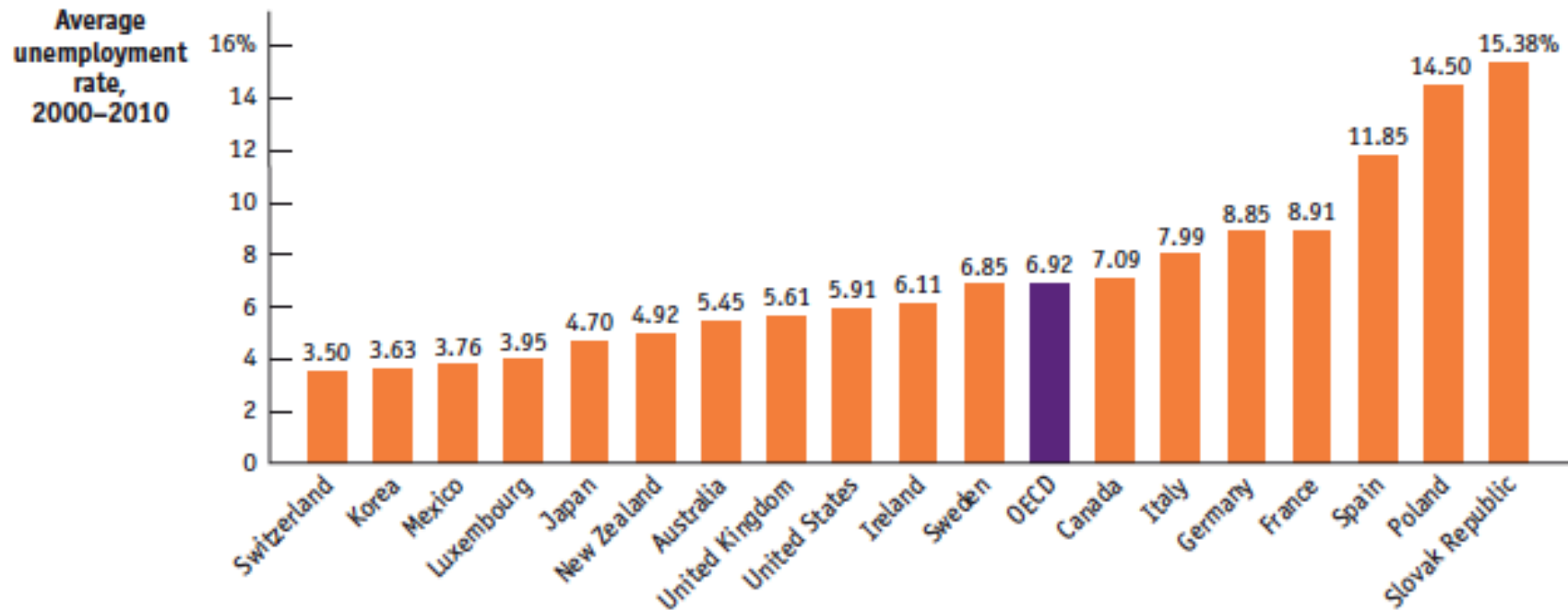
The unemployment rate normally rises during recessions and falls during expansions. As shown here, there were large fluctuations in the U.S. unemployment rate during the period after World War II. Shaded areas show periods of recession; unshaded areas are periods of expansion. Over the entire period from 1948 to 2004, the unemployment rate averaged 5.6%.

Source: Bureau of Labor Statistics; National Bureau of Economic Research.



## Labor Market Indicators (VI)

### Unemployment (II)



Source: Organization for Economic Cooperation and Development (OECD)

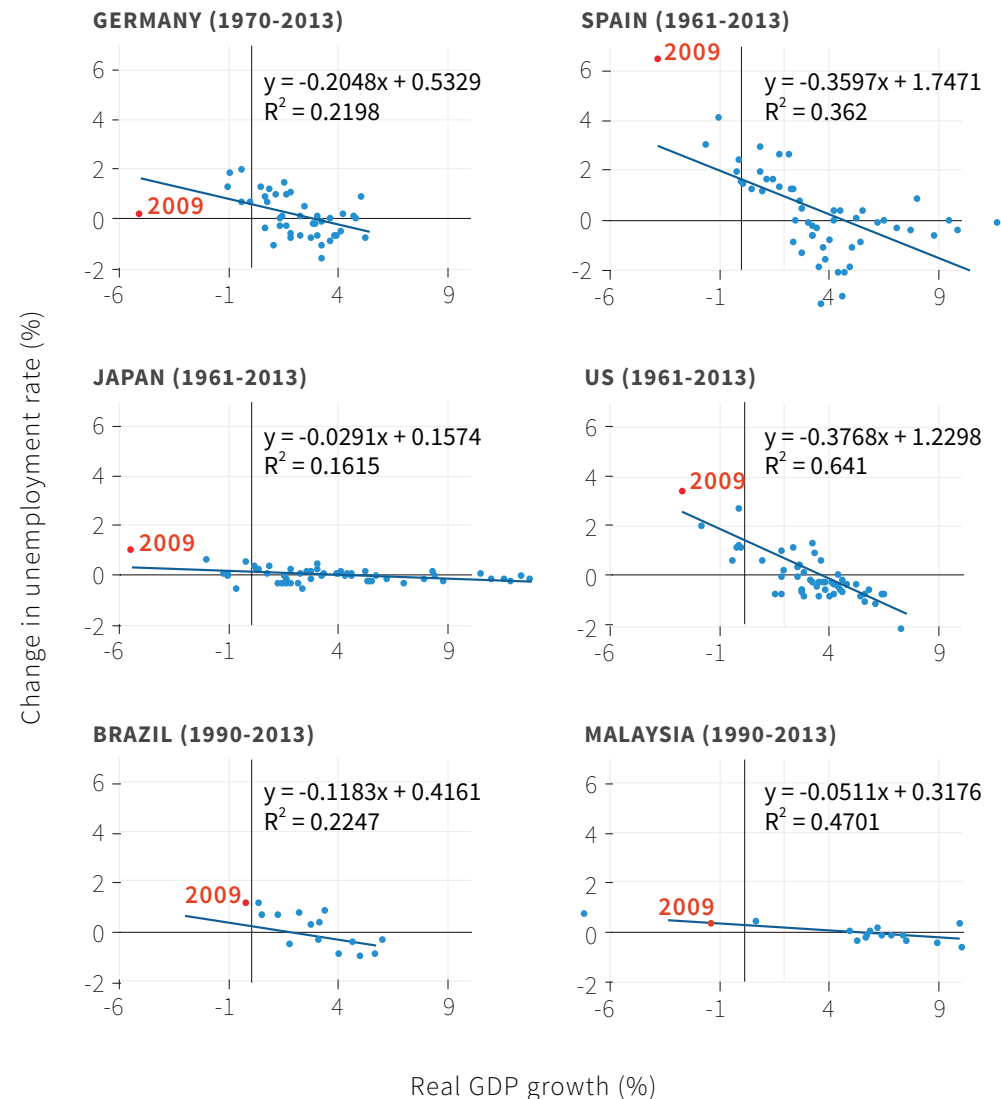
# Unemployment and Growth

## Okun Law

Each dot shows the growth rate of the economy and the change in the unemployment rate for a specific year.

In general, the unemployment rate fell when growth was above a specific rate and rose when growth was below it. Unemployment always rose when real GDP fell.

This is called the **Okun Law**.



## KEY TERMS

Labor Market  
Labor Force Population  
Labor Force (Participants)  
Unemployment  
Employment  
Participation rate  
Unemployment rate  
Employment rate  
Okun Law