

Lecture 04

2018/2019, 2º semester

Economia II



LISBON
SCHOOL OF
ECONOMICS &
MANAGEMENT
UNIVERSIDADE DE LISBOA

Summary:

Unemployment Measurement

Biblio:

Amaral et al. (2007), cap. 1

Frank e Bernanke (2011), cap. 6

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*After this session
the student should be able to:*

- ✓ Understand the concepts of employment and unemployment
- ✓ Compute the unemployment rates
- ✓ Understand the unemployment costs

2.1.2. Measurement of Unemployment

- Unemployment is a sensitive indicator of conditions in the labor market
- Low unemployment can signal
 - Higher job security
 - High job availability
 - Tendency for wage increase

Measuring Unemployment

The unemployment rate is calculated (in Portugal)

- Quarterly
- by Statistics Portugal (Instituto Nacional de Estatística INE)
- by a survey Labour Force Survey/ Inquérito ao Emprego (household sample)

Each person 15 or older is placed in one of the following categories:

- Employed [in Labor force]
- Unemployed [in Labor force]
- Out of the labor force

Employed and Unemployed

- **Employed**
 - Worked full-time or part-time during the past week (survey as reference period) and had a revenue.
 - On vacation or sick leave from a regular job
 - Some national statistics (as in Portugal) partition “Employed” into “sub-employed”, i.e., part-time workers available to work full time.
- **Unemployed**
 - Did not work during the preceding week but made some effort to find work **in the past 4 weeks.**

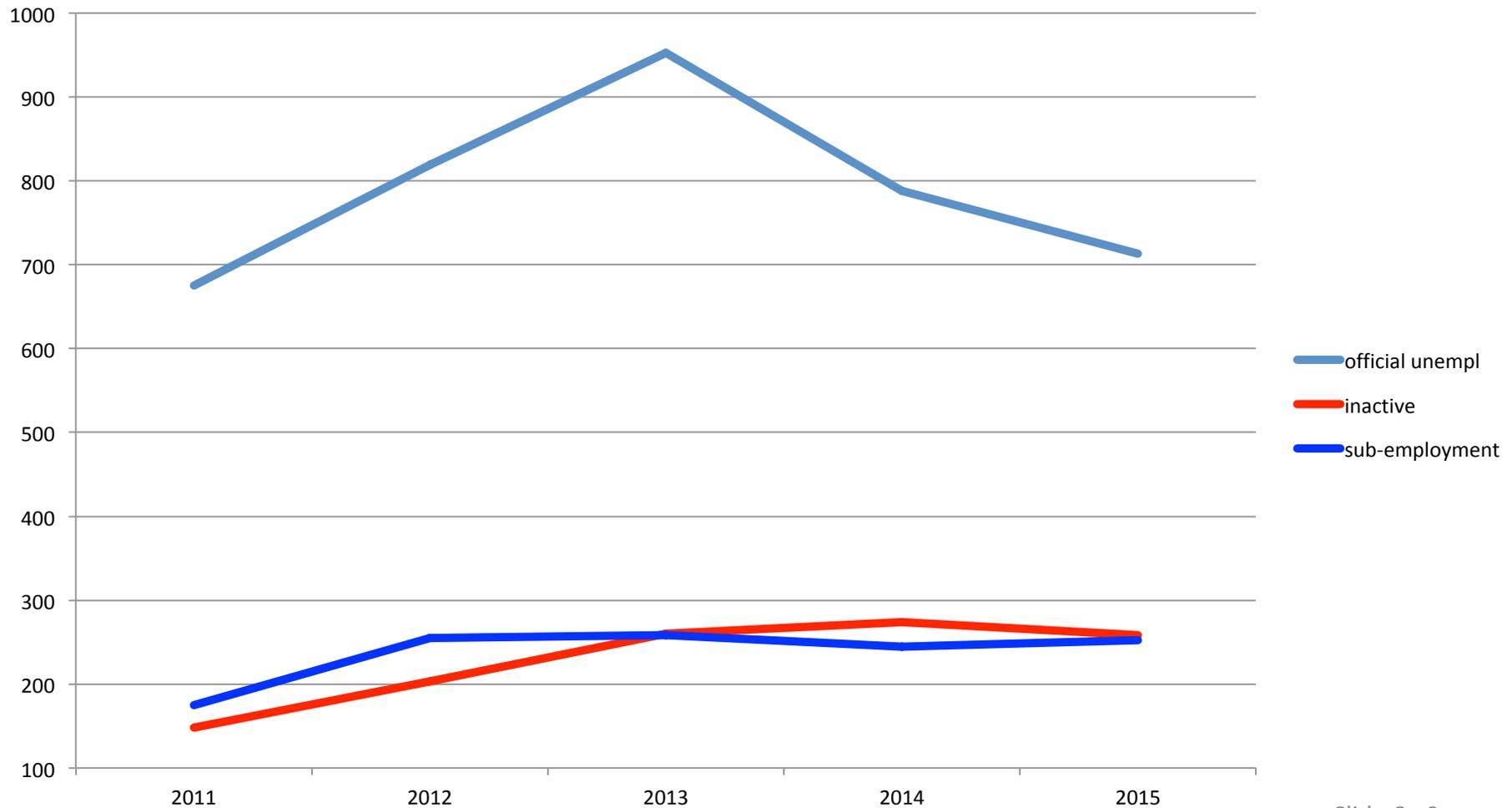
Out of the Labor Force

[*Inactivos*]

- Out of the labor force includes:
 - Did not work in the past week
 - Did not look for work in the past 4 weeks
 - Which in turn Includes:
 - Full-time students who do not work
 - Unpaid homemakers (women or men)
 - Retirees (who do not work)
 - Persons who do not want work
 - Disabled unable to get work
 - *Discouraged* [*]

Discouraged [*] “People who say they would like to have a job but **have not made an effort to find one in the past four weeks**” [F& B 2011, p.169]

Unemployed and inactive (Portugal 2010-2016)



Labor Force at period t

Unemployment at period t

- **Labor force** at period t (L_t)
 - The total number of **employed** and **unemployed** people in the economy at a moment of period t (e.g. beginning, end). Is a stock.
- **Unemployment** at period t (U_t)
 - The total number of **unemployed** people in the economy at a moment of period t (e.g. beginning, end). Is a stock.

Unemployment Rate and Activity Rate

- Unemployment rate at period t : u_t

- The number of unemployed people divided by the labor force

$u_t =$ (Number of unemployed people _{t} / N of people in the labor force)

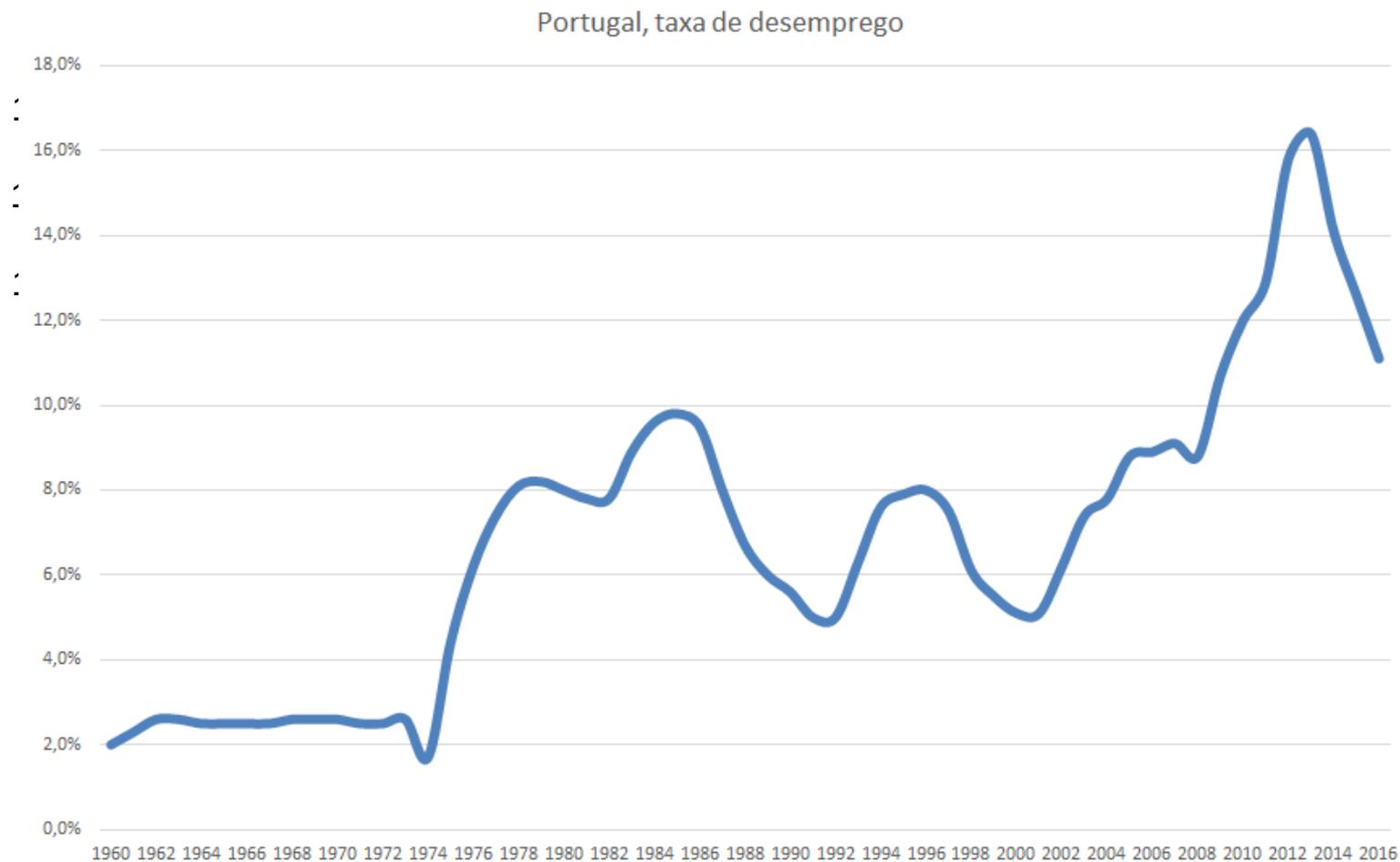
$$u_t = \frac{\text{Unemployed}_t}{\text{Labor Force}_t}$$

- Activity or “participation” rate at period t : ta_t

is the percentage of the population who belongs to (or participates in) the labor force (employed+unemployed)

$$ta_t = \frac{PA_t}{Pop_t}$$

Portugal: Unemployment Rate

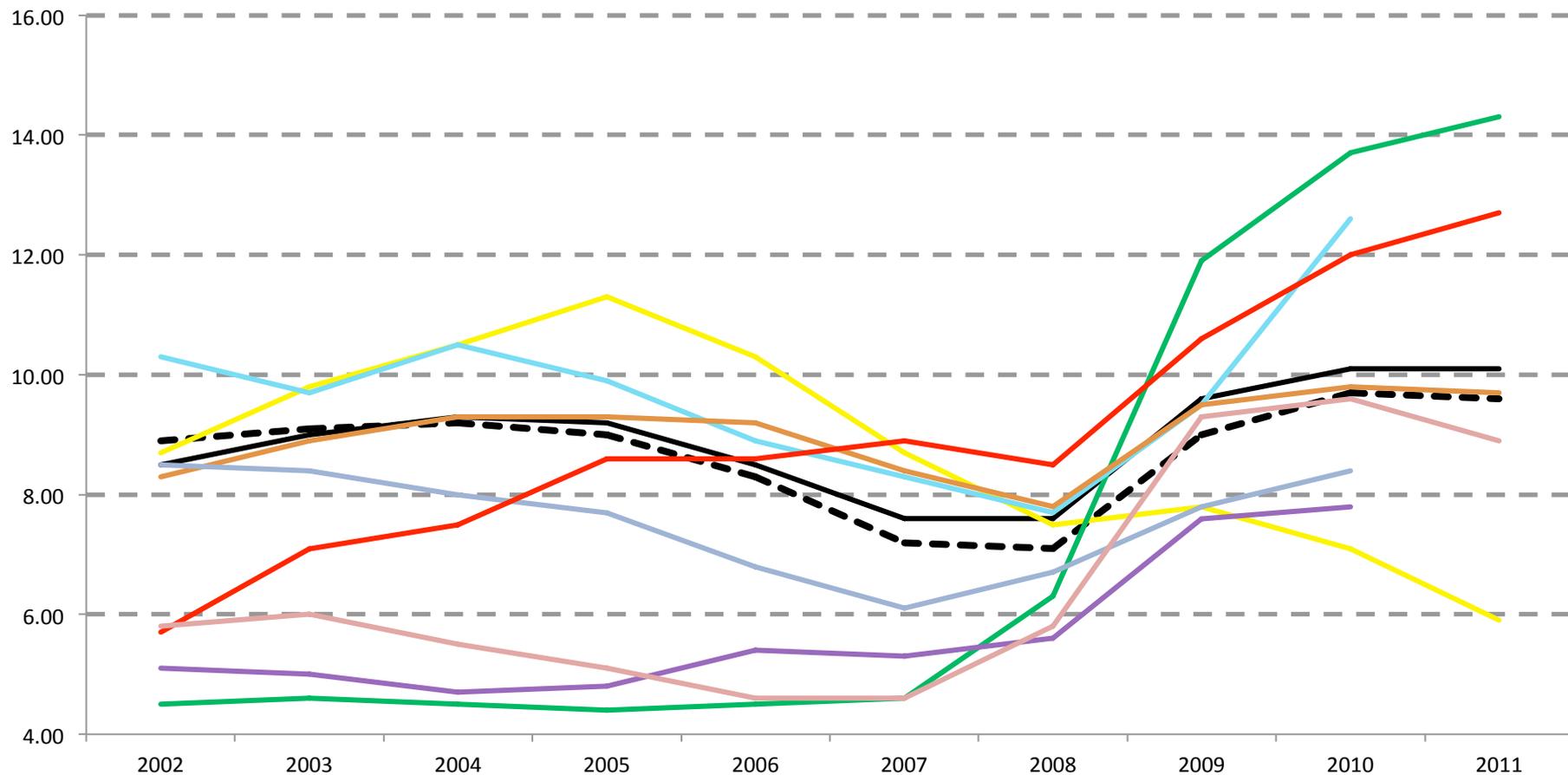


Source: European Commission, 2017



Unemployment Rate annual average (2002-2011)

Source: Eurostat

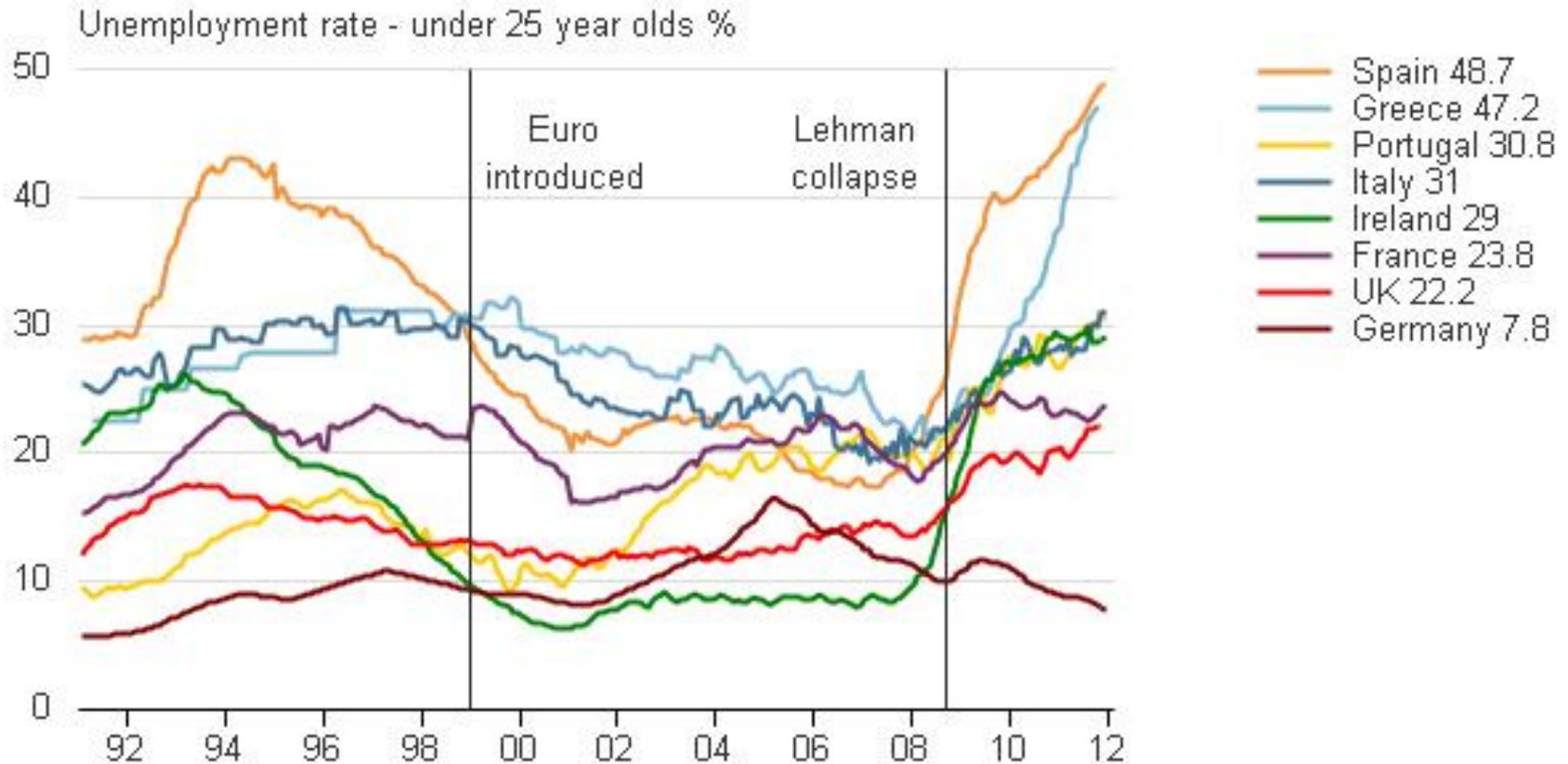


- European Union (27 countries)
- Euro area (17 countries)
- Germany
- Ireland
- Greece
- France
- Italy
- United Kingdom
- United States
- Portugal

European Youth (under 25 yrs) Unemployment Rate (1992-2012)



European youth unemployment



Costs of Unemployment

Unemployment imposes costs

- Economic
 - Lower income
 - Increased government expenditure (e.g. unemployment benefits)
- Psychological
 - Loss of self-esteem, depression
- Social
 - Increase in crime, violence at home, alcoholism, alcohol and drug abuse, etc.

Understated and Overstated Unemployment

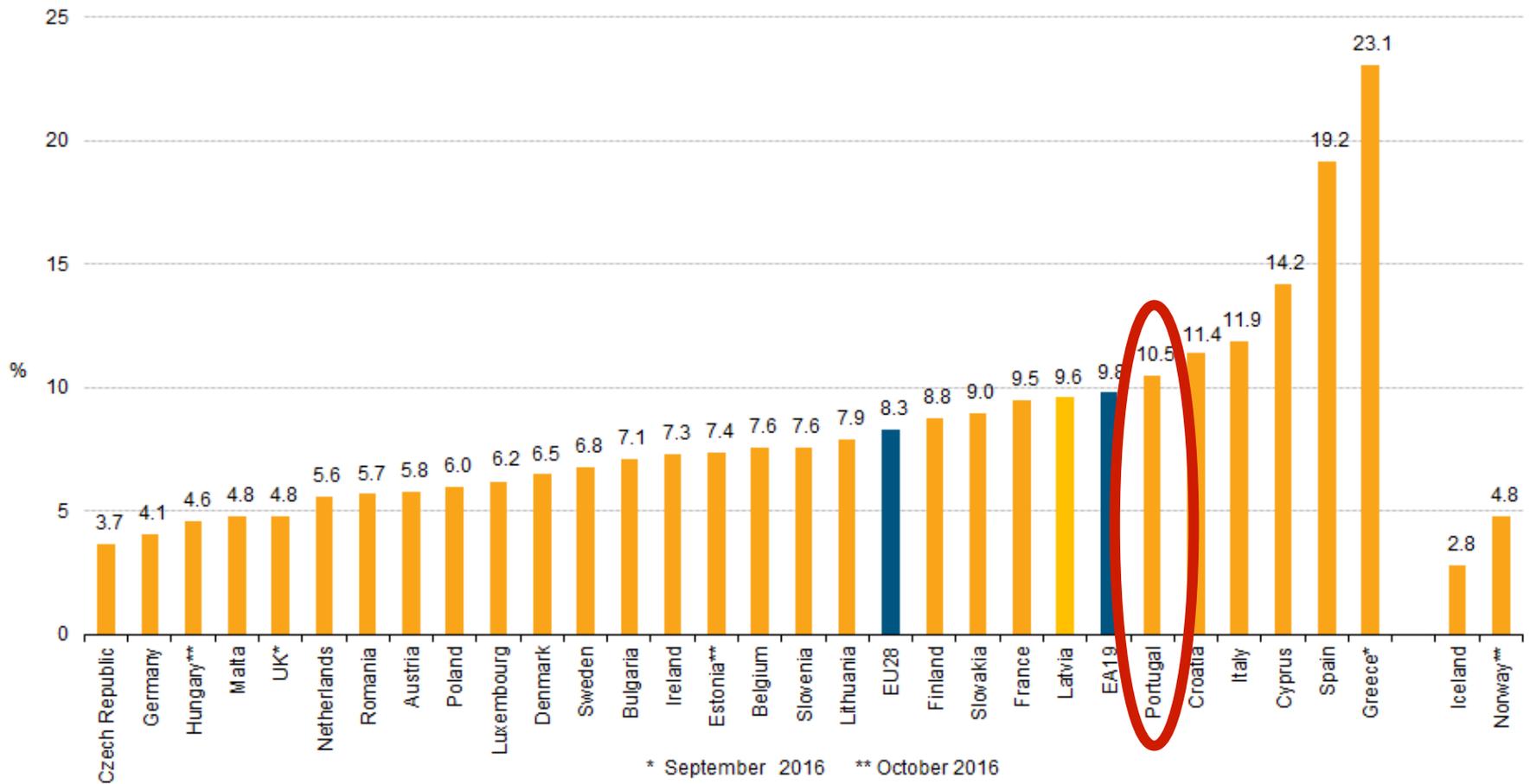
Official unemployment rate **understates** the true level of unemployment because

- Discouraged People who say they would like to have a job but have not made an effort to find one in the past 4 weeks
- Involuntary part-time workers People who say they would like to work full-time but are able to find only part-time work (Frank & Bernanke 2011, p.169)

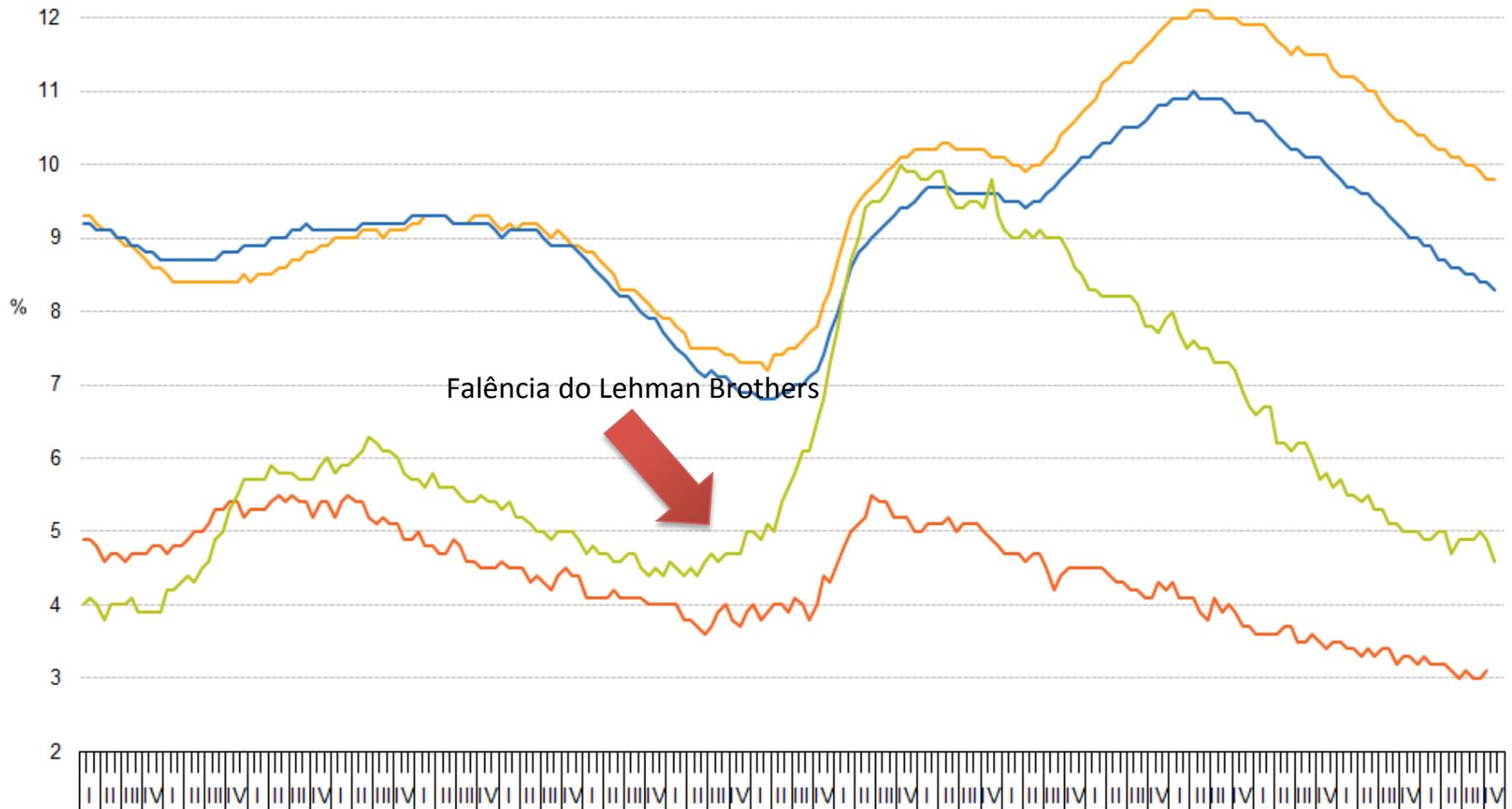
Official unemployment rate **overstates** the true level of unemployment because

- Underground Economy illegal activities (e.g. gambling, the sale of controlled substances).
- Fraudulent behavior: to collect transfer payments (unemployment compensation) by fraudulently "neglecting" to inform government officials of actual employment.

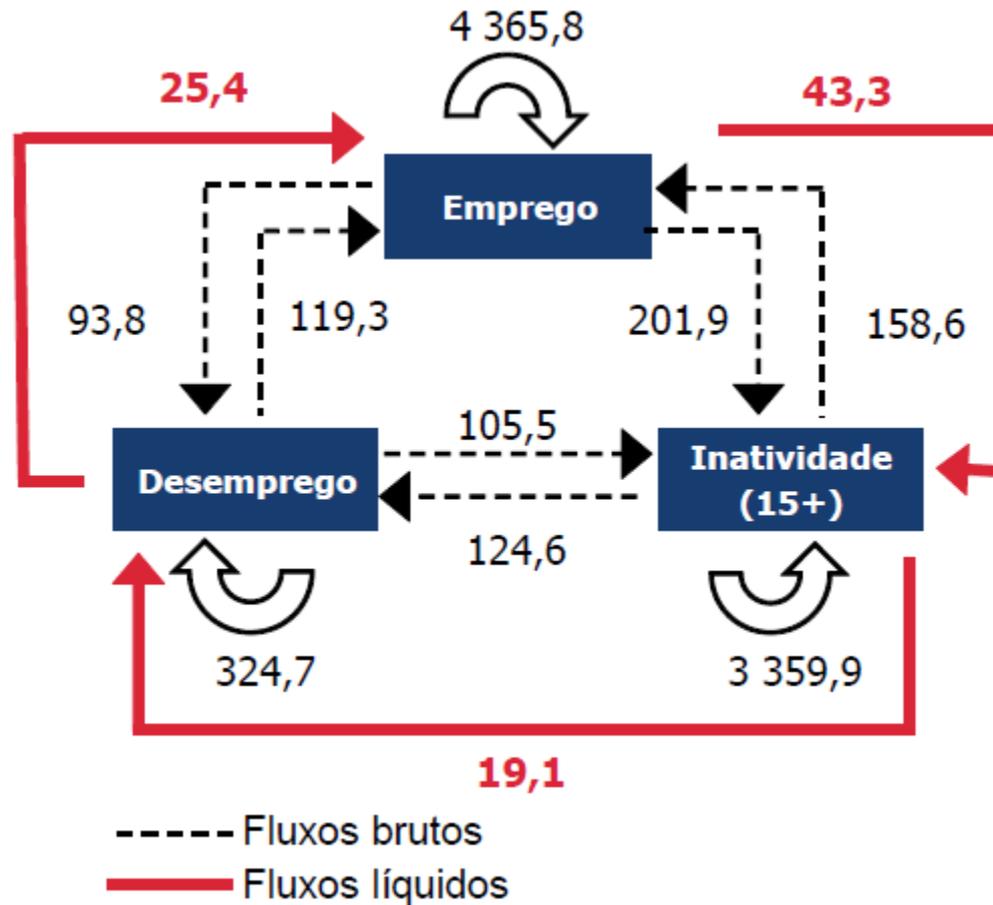
Unemployment rates, seasonally adjusted, December 2016



Unemployment rates, EU-28 EA-19 US and Japan , seasonally adjusted, January 2000 to December 2015



Labor Flows:



Fonte: INE, Destaque, Estatísticas do Emprego, 4.º trimestre de 2016