



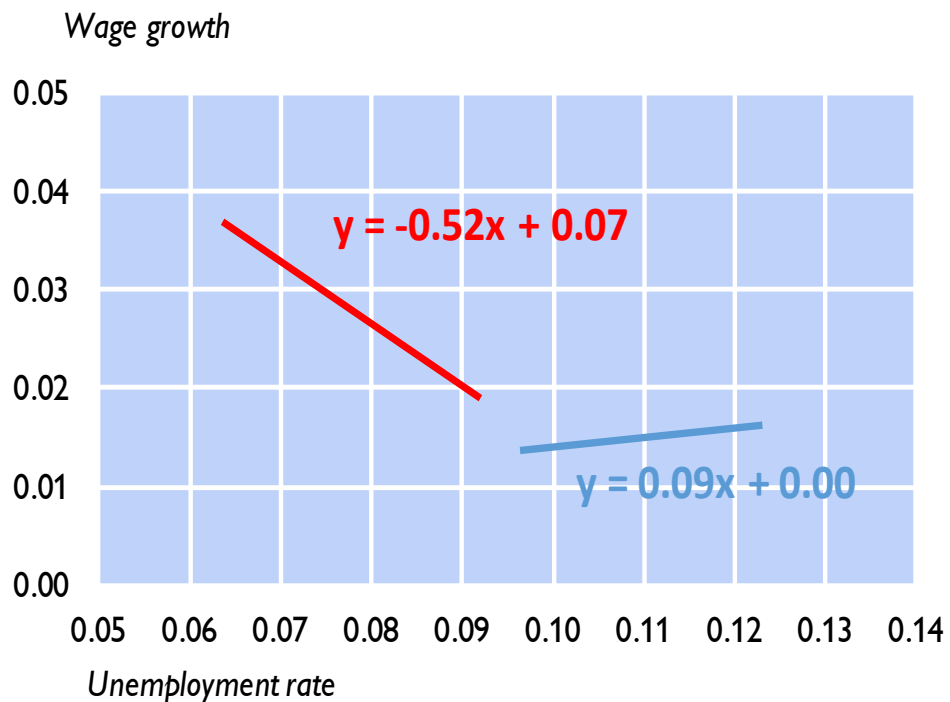
OESTERREICHISCHE NATIONALBANK  
EUROSYSTEM

# Labor market hierarchies - The impact of labor market dualities on aggregate wage growth

Vienna, November 21, 2017

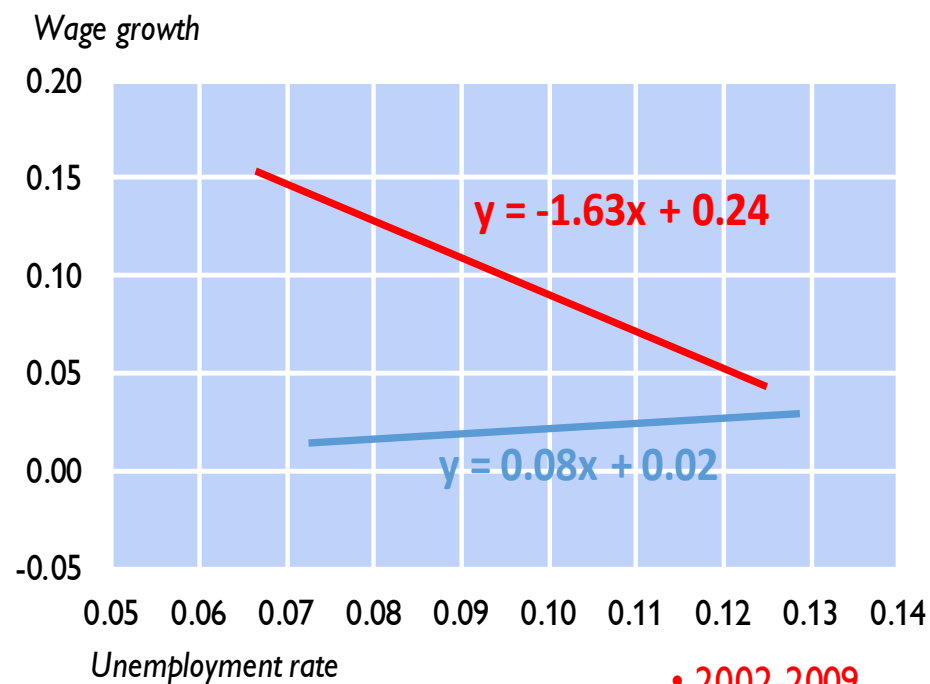
# The unemployment-inflation nexus loosened

## Euro area: Wage Phillips curve



Source: Eurostat.

## CESEE-8: Wage Phillips curve



CZ, EE, LV, LT, HU, PL, SI, SK

- 2002-2009
- 2010-2016

## Labor market slack is more than just unemployment

Drivers of Phillips curve flattening:

### **OECD (2014, 2017)**

- Unemployment dampens wage growth more strongly in recessions than in upswings

### **ECB (2017)**

- Broader unemployment measures (including “underemployed people,” “people available but not seeking work,” ...) improve the fit moderately

### **IMF (2017)**

- Involuntary part time reduces wage growth per employee

## Inflation, productivity and unemployment determine wage growth ...

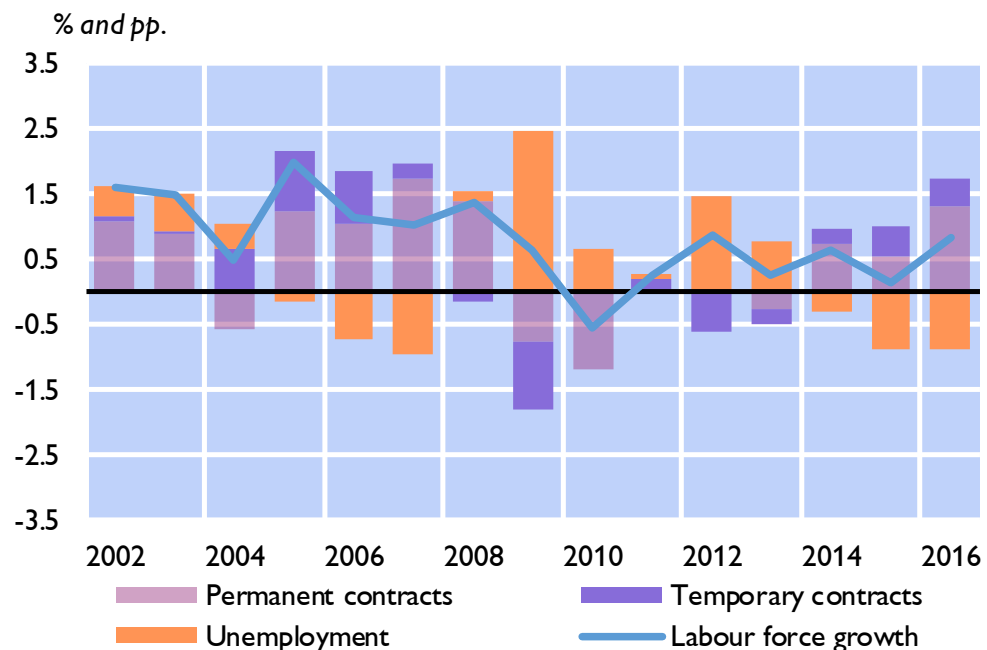
- **Phillips curve:**
  - **Wage growth is a negative function of the unemployment rate**
  
- **Bargaining theories (efficiency wages, insider-outsider models...):**
  - **Wages are a positive function of productivity and the reservation wage**
  
- **Major composite determinants (based on Blanchard/Katz 1999):**
  - ***Nominal wage growth = inflation + productivity growth – wage share – unemployment rate***
  
- ❖ **What about labor market segmentation?**

## ... but does labor market structure affect wage growth?

- **Dual labor market theory**
  - **There is a wage penalty for secondary jobs**
  - **Secondary jobs exist because primary jobs are rationed**
  - **Secondary employees are potential competitors for the primary segment**
  
- **Wage determination:**
  - ***Nominal wage growth = inflation + productivity growth – wage share – unemployment rate – dualities***
  
  - **Dualities can be approximated by the incidence of temporary contracts as a percentage of the labor force**

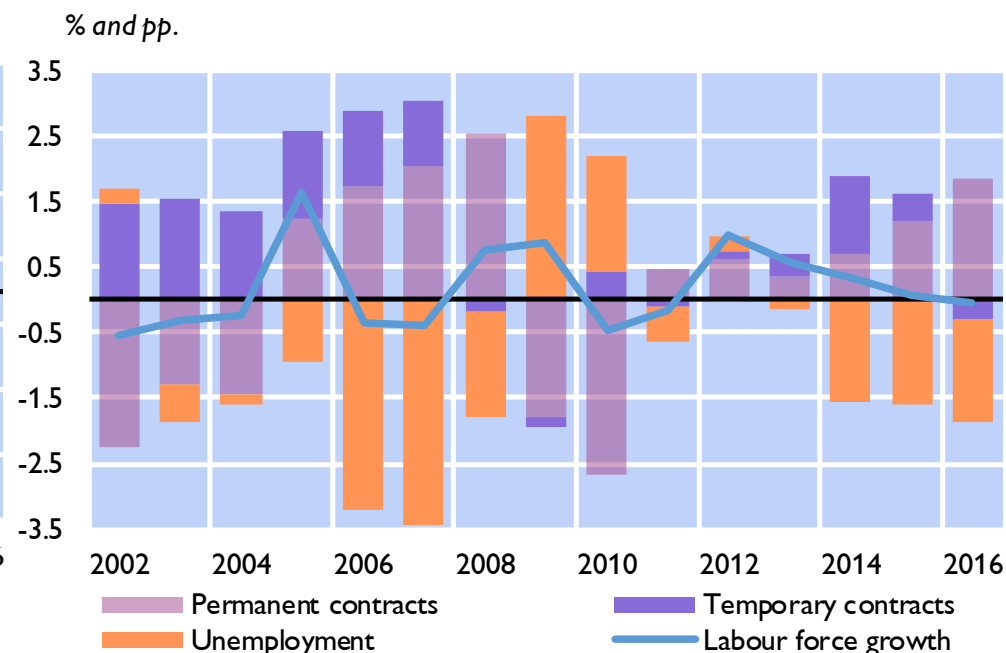
# Drivers of labor force participation: employment, unemployment and temporary employment

**Euro area: Contribution to labor force growth**



Source: Eurostat.

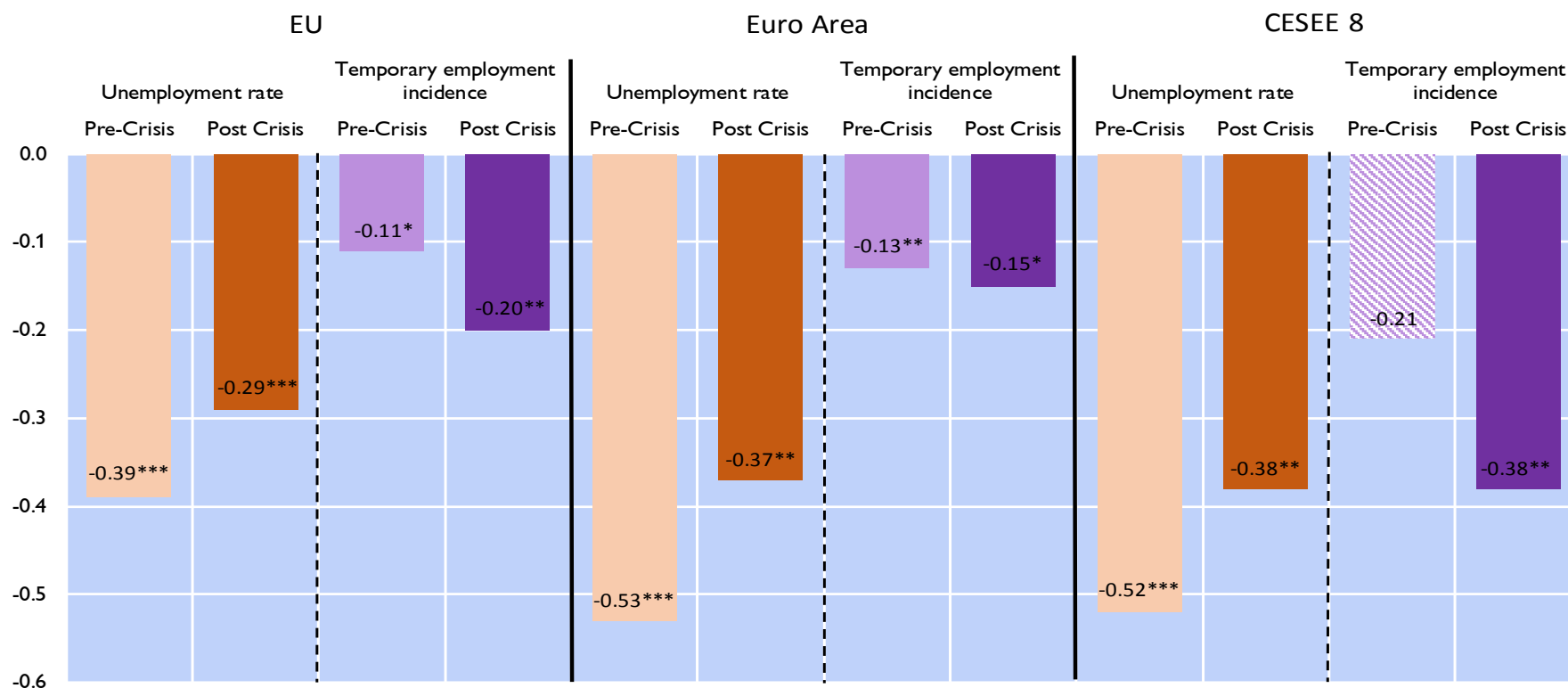
**CESEE-8: Contribution to labor force growth**



Source: Eurostat.

# Wage growth increasingly dampened by the incidence of temporary contracts

Effect of a 1pp. increase in the unemployment rate and the rate of temporary employment



Source: Eurostat. The underlying estimation is based on a regression of wage growth on its own lag, inflation, the wage share, productivity per hour, relative income, the unemployment rate and the rate of temporary employment for quarterly data for a panel of up to 24 EU countries (excluding HR, BG, RO and UK). Numbers in bars are the estimated coefficients of the respective variables. Effects before and after the crisis are isolated by interacting the respective variables with dummies. Stars show the significance level for \*  $p < 0.1$ , \*\*  $p < 0.05$  and \*\*\*  $p < 0.01$ .

# Why has the effect of temporary contracts on wage growth increased?

## Two possible motives for temporary employment

### ***I. Avoidance of wage institutions:***

Use of temporary contracts to circumvent wage-steering institutions

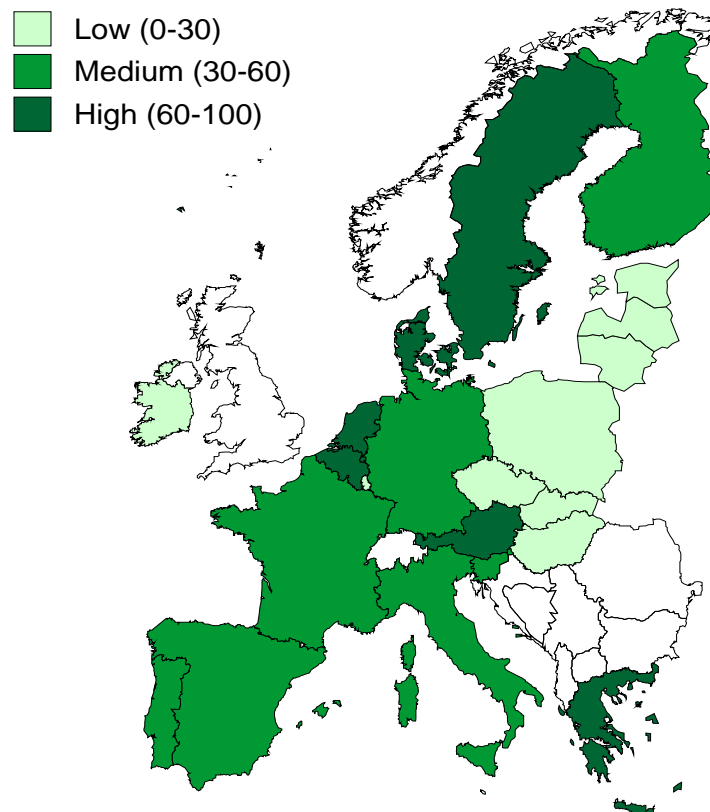
### ***II. Increasing employee competition:***

Use of temporary workers as substitutes (outsourcing, business services, ...)

→ *The severity of the shock might have strengthened motive II.*

→ *The increased effect in CESEE supports this interpretation*

Degree of "wage steering" in Europe



Wage Steering captures the interference with wage setting at firm level. Is is defined as  $(\text{coordination} * \text{coverage ratio})/5$ .



## Conclusion

- **Labor market dualities have important macroeconomic effects**
- **The impact of labor market dualities on wage growth has increased**
- **A lower incidence of temporary contracts can smoothen the macroeconomic impact of labor market developments**