

Firm level evidence on wage dynamics in Europe

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*Standard disclaimers apply

Outline of the presentation

I. The main features of wage behavior at the firm level across Europe before the crisis

II. How did firms react to the economic crisis of 2008 / 2009? Did they adjusted wages ?

III. Main implications for structural reforms in EU labor markets

IV. A macro picture!

I. Main features of wage behavior at the firm level across Europe before the crisis

Firm Level Evidence: WDN Survey

First wave. Before the crisis, 2007

- 15 countries, + 15,000 firms: AT, BE, CZ, EE, FR, GR, HU, IT, IR, LT, NL, PL, PT, ES, SL
- data on firms' structural features, institutional environment, market competitiveness, downward nominal rigidity etc.

Second wave: during the crisis in mid 2009:

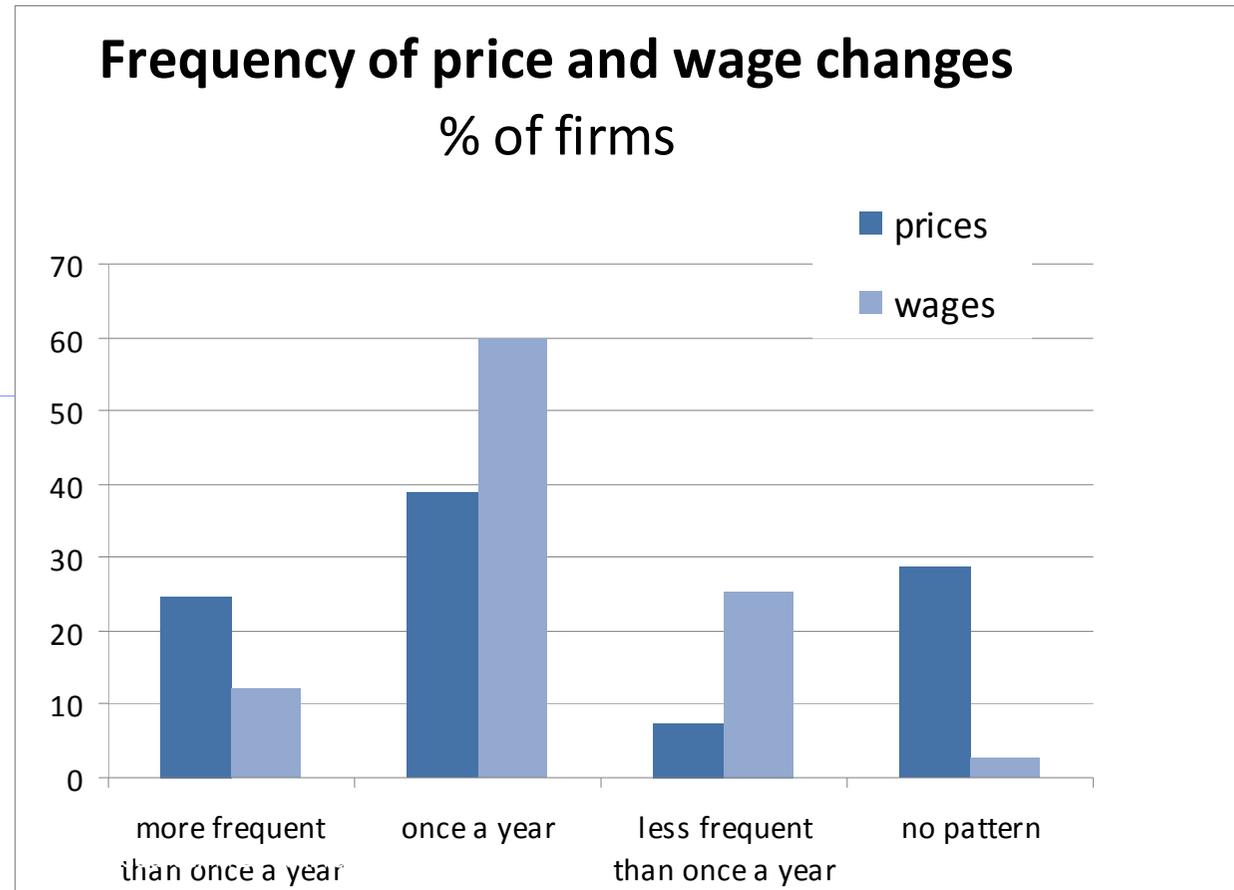
- Same firms but smaller sample (6,000 firms in 10 countries)
- The strategies adopted to face the demand and credit shock during the recession

Advantages: get at information difficult to observe with other types of data. **Disadvantages:** qualitative nature of data

http://www.ecb.europa.eu/home/html/researcher_wdn.en.html

Frequency of adjustment

The frequency of wage changes is lower than that of prices:



Average duration of wages is about 15 months vs 9.5 of prices

Frequency of adjustment: Institutions!

Table 3.2 –Price and wage rigidity
(frequency of wage and price changes)
(ordered probit estimates)

| | PRICES | WAGE |
|--|----------|----------|
| Construction | -0.369** | -0.198** |
| Trade | -0.77** | 0.108** |
| Market services | -0.035 | 0.12** |
| Financial intermediation | -0.672** | 0.21* |
| 20-49 | -0.018 | -0.094* |
| 50-199 | -0.124** | -0.207** |
| >200 | -0.168** | -0.331** |
| Labour cost share | 0.508** | 0.054 |
| competitive pressures | -0.301** | 0.01 |
| Export (% of sales) | -0.139* | -0.013 |
| share of white collars | 0.167** | |
| share of high skilled workers | 0.087* | |
| workforce turnover | -0.15** | -0.144** |
| share of bonuses on total wage bill | 0.01 | -0.172** |
| collective agreement outside the firm | -0.067 | -0.055 |
| collective agreement at the firm level | -0.03 | -0.112* |
| coverage of collective agreement | 0.055 | 0.089* |
| EPL | | 0.104** |
| Country dummies | yes | yes |
| Observations | 5340 | 8993 |

Notes: (*) and (**) denote statistical significance at 5% and 1%, respectively. Source: Druant, Fabiani, Kezdi, Lamo, Martins and Sabbatini (2009). The dependent variable increases with the degree of rigidity.

• Wages change

- less often with high coverage and strong employment protection;
- more often with firm level bargaining and indexation.

• Prices change

- less often with higher labour cost share;
- And more often with higher degree of competition.

Indexation of wages to inflation

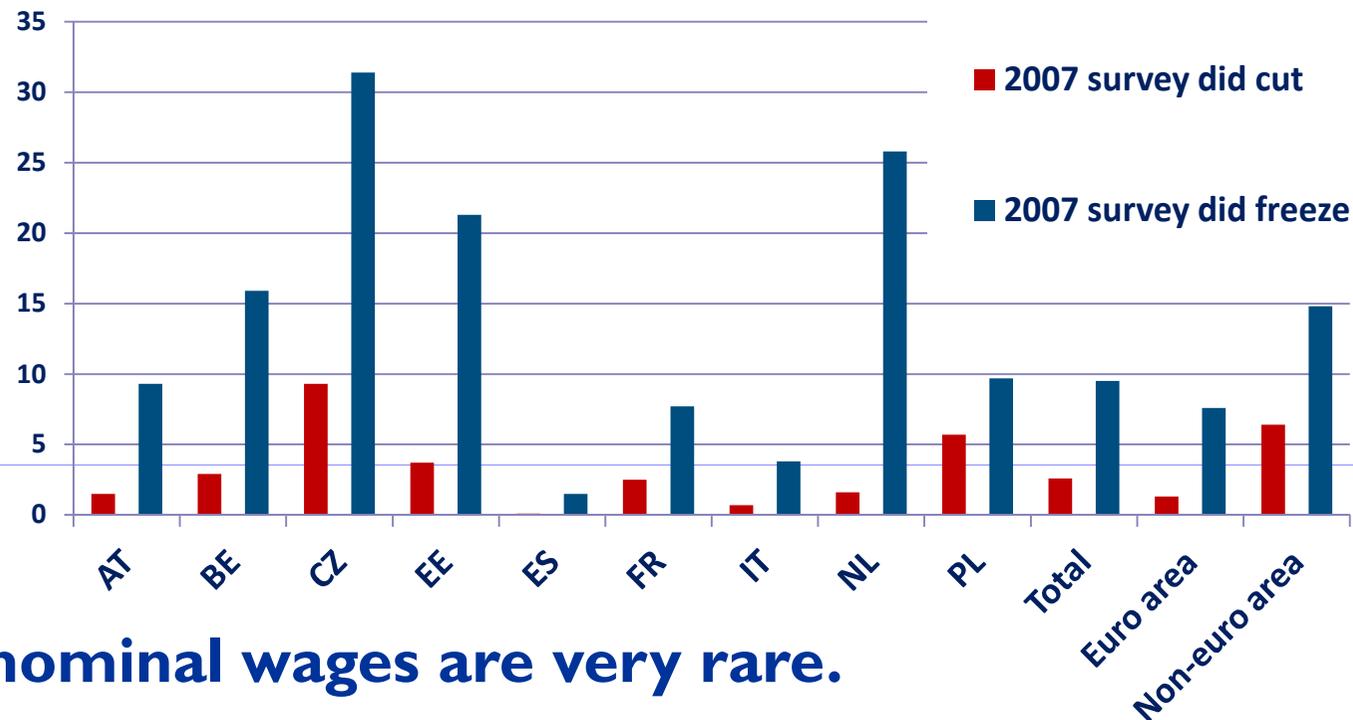
Firm policy of adjusting base wages to inflation: overview

| | Firm-level policy of adjusting base wages to inflation | | | | |
|--------------------------------|--|-------------|-------------|-------------|-------------|
| | Automatic | | Informal | | Total |
| | Past | Expected | Past | Expected | |
| Total | 13.6 | 3.9 | 12.9 | 7.0 | 36.3 |
| Euro area | 16.7 | 4.1 | 10.2 | 5.8 | 35.7 |
| BE, LU, ES | 54.8 | 11.8 | 7.9 | 3.6 | 78.1 |
| Euro area, no aut. Ind. | 6.3 | 1.9 | 10.8 | 6.3 | 23.9 |
| Non euro area | 5.5 | 3.2 | 19.8 | 10.2 | 38.1 |

Note: BG, CY and NL not included in the aggregates. Country details in Table 3.3 of the WDN report.

- **High degree of formal indexation in Belgium, Luxembourg, Cyprus and Spain.**
- **On average, over one third of the firms have a “policy” that adapts changes in base wages to inflation, mostly to past inflation.**

Downward wage rigidity



- **Cuts in nominal wages are very rare.**
- **Econometric analysis confirms that labour market institutions matter: centralized bargaining and strict EPL increase DWR.**
- **Reasons for not cutting wages: fairness and efficiency wage arguments, labour regulations in euro area countries.**

II. How did firms react to the economic crisis of 2008 / 2009?

Sample

WDN survey wave 2

- **9 countries : AT, BE, CZ, EE, ES, FR, IT, NL, PL**
- **~5,700 firms**
- **firms with more than 5 employees**
- **manufacturing, trade and services**
- **Sample composition:**
Not very different ...

Firm's responses

% of firms answering relevant or very relevant

| | Weak demand shock | Strong demand + weak credit shock | Strong demand + strong credit shock |
|----------------|-------------------|-----------------------------------|-------------------------------------|
| reduce prices | 31.5 | 41.7 | 50.3 |
| reduce margins | 37 | 46.2 | 62.2 |
| reduce output | 21.3 | 61.9 | 66.8 |
| reduce costs | 66.5 | 77.8 | 93.8 |

- **Cost reductions were the most common strategy**
- **Firms strongly hit by both shocks reduced costs and margins**
- **No major differences across sectors or countries**

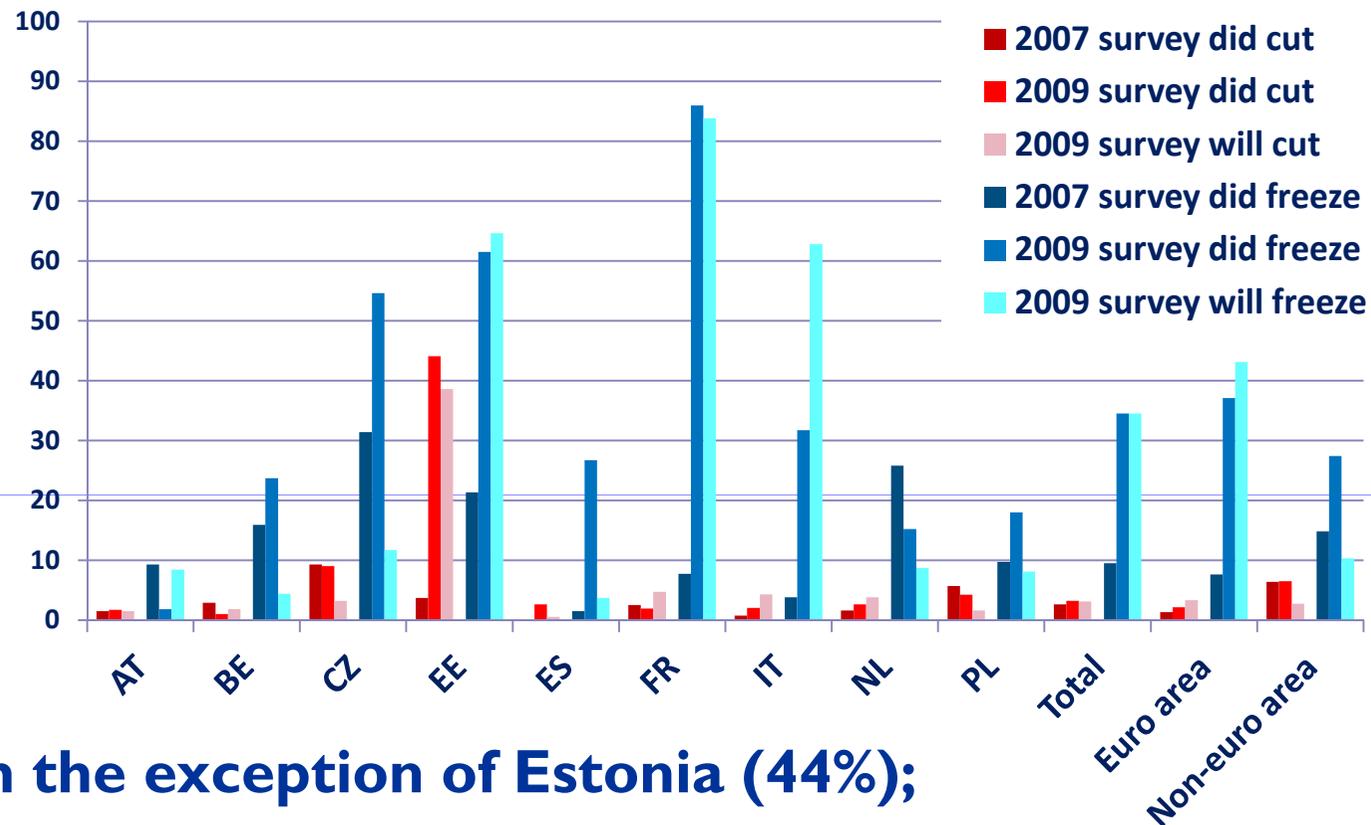
How did firms cut costs?

Main cost-cutting channel (% of firms)

| | Base wages | Flexible wages | Permanent employment | Temporary employment | Hours worked | Non-labour costs |
|--------------------------|------------|----------------|----------------------|----------------------|--------------|------------------|
| Austria | 0.3 | 12.2 | 12.2 | 11.1 | 36.2 | 28 |
| Belgium | 0.9 | 3.1 | 16.8 | 29.6 | 24.9 | 24.6 |
| Czech Republic | 0 | 10.4 | 27.9 | 16.4 | 5.3 | 40.1 |
| Estonia | 14.3 | 25.1 | 24.2 | 3.7 | 9.3 | 23.5 |
| Spain | 1.0 | 5.5 | 23.2 | 41.6 | 5.9 | 22.8 |
| France | 0.1 | 9.9 | 17.1 | 33.9 | 12.4 | 26.2 |
| Italy | 1.3 | 8.9 | 16.6 | 21.1 | 18.4 | 33.7 |
| Netherlands | 1.4 | 5 | 8.1 | 40.5 | 6.2 | 38.8 |
| Poland | 1.9 | 15.9 | 16.7 | 9.1 | 7.6 | 48.7 |
| Total | 1.2 | 9.8 | 16.9 | 24.3 | 13.6 | 33.9 |
| weak demand | 0.8 | 9.5 | 13.2 | 21.6 | 11.6 | 42.5 |
| strong dem/weak credit | 1.6 | 11.9 | 17.5 | 29.8 | 16.1 | 22.6 |
| strong dem/strong credit | 2.4 | 7 | 31.2 | 24 | 14.6 | 20.8 |

- Reduction in labour costs mostly through quantity (mostly via temporary employment)

Downward wage rigidity still binding...



- ... with the exception of Estonia (44%);
- Number of firms that have frozen wages, or intended to do so, increased dramatically
- Large heterogeneity across countries (in the recourse to wage freezes)

III. Main implications for structural reforms in EU labor markets

Institutions matter

- **Again econometric analysis confirms that institutions matter!**

Collective bargaining institutions, EPL and product market competition are all important for nominal and real rigidity and shape the response of wages, employment and prices to economic developments:.

“Firms adjustment during times of crisis” by S. Fabiani, J. Messina, A. Lamo & T. Rõõm

Institutions

- **The presence of centralised collective wage agreements hinders the adjustment of wages, even the flexible components ...**
 - **... and induces firms to reduce labour costs through the intensive margin.**
-
- **Strict employment protection is associated with a higher recourse to layoffs of temporary employees and a lower reduction of hours worked.**

Need to reform some institutions!!

are we moving in the right direction?

Structural reforms to improve the functioning of the labor market should be comprehensive:

- **increasing wage flexibility**
 - **protecting workers rather than inefficient jobs**
 - **avoiding a dual approach to employment adjustment**
 - **improving competition in goods and services markets**
- ... are mutually reinforcing mechanisms to ensure an efficient reallocation of resources**

Recent changes towards increasing wage flexibility

Moving to firm-level bargaining

- **In several countries firms have now the right to opt-out of the sectoral level agreement. IT, GR, PT, ES ... seldom used**
- **Other have recently established the prevalence of firm level agreement: ES, GR, PT**

Indexation

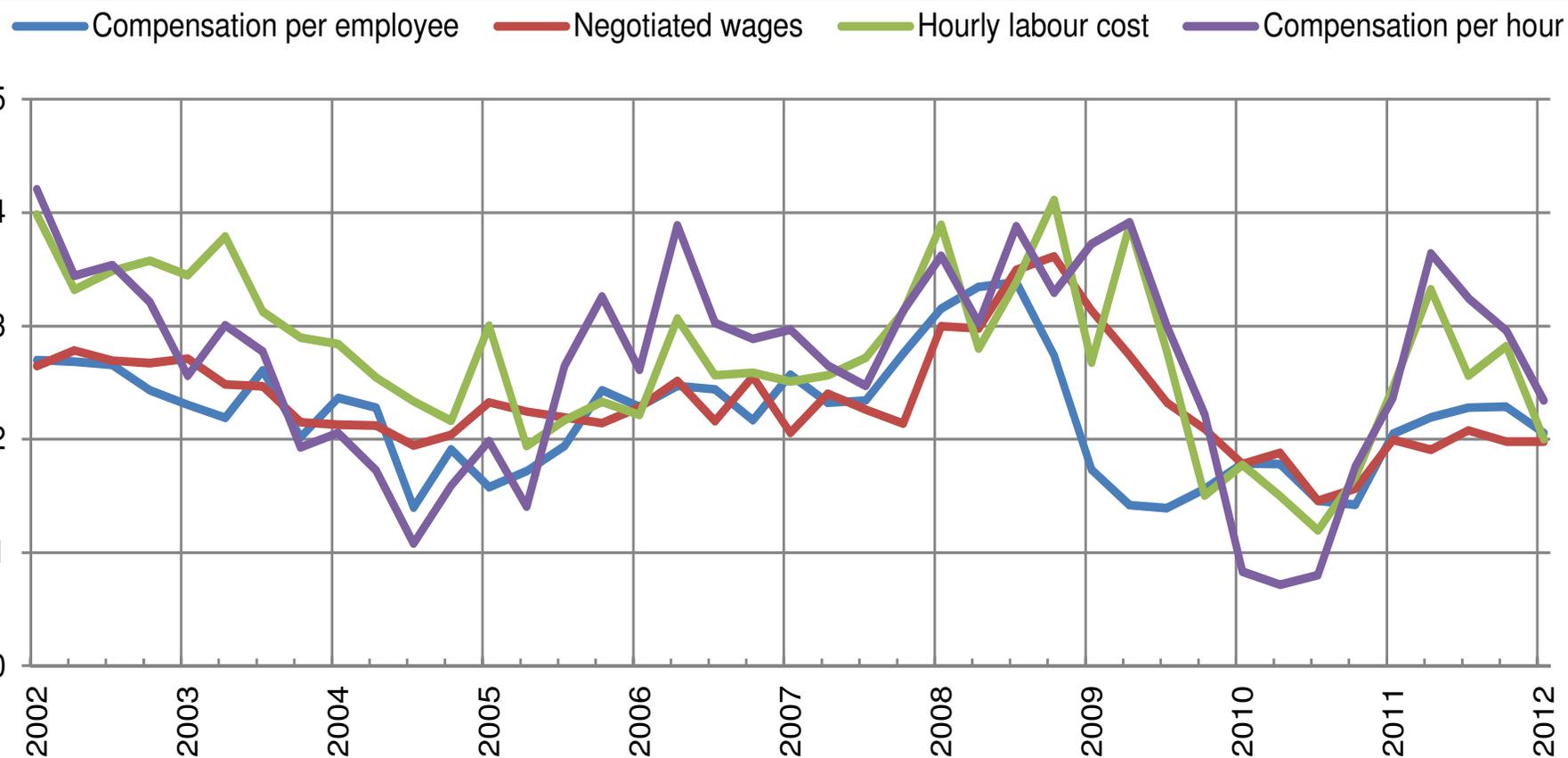
- **Several countries have temporarily suspended wage indexation or recommended via tripartite agreement to do so.**

V. The macro picture

Limited wage adjustment during the crisis

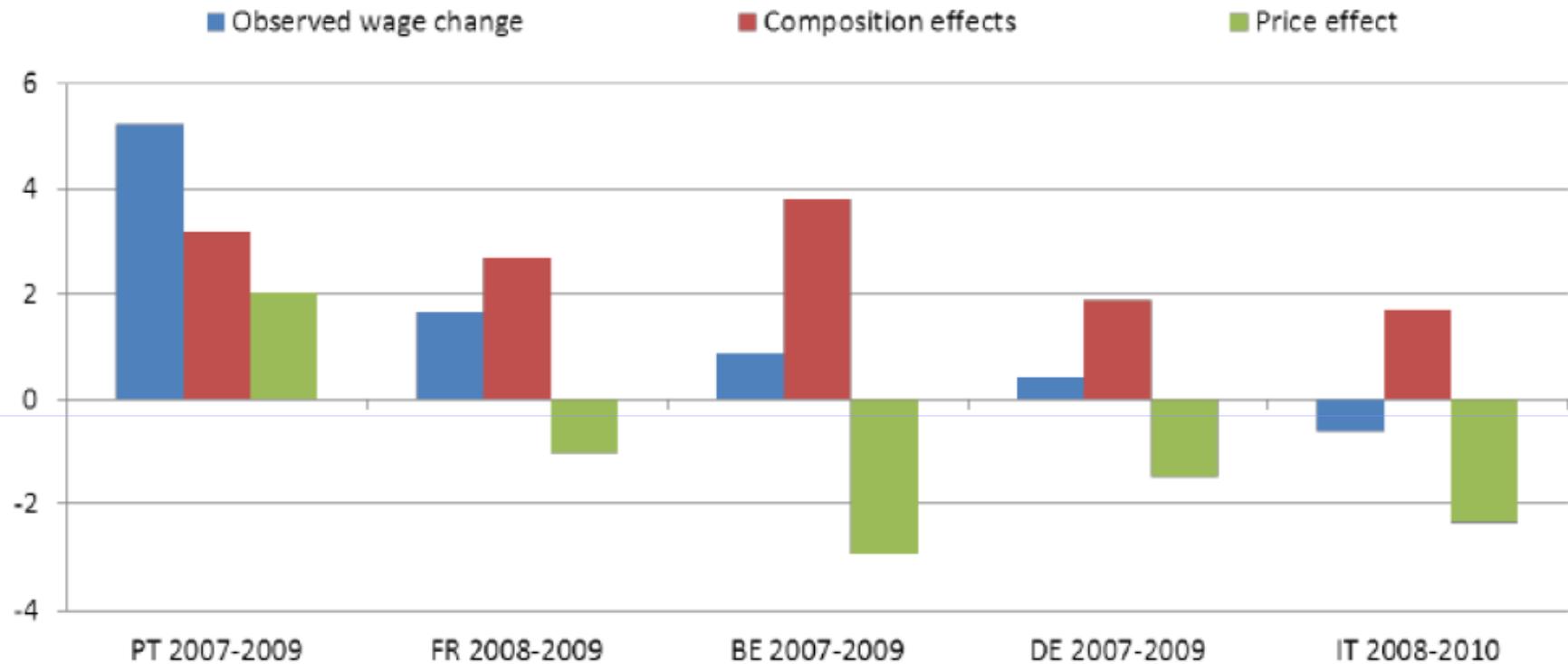
EURO AREA WAGE INDICATORS

(annual percentage changes)



Sources: Eurostat and ECB calculations.

... but composition effects matter



Source: Structural Issues Report 2012 . ECB Occasional Paper 138

As the impact of the crisis concentrated on low-wage workers, real wage evolution since the start of the crisis net of these composition effects show a more marked cyclical adjustment

Thank you!