The Spanish Labor Market:
Reform Achievements and Challenges

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Introduction

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Introduction

- Together with Greece, Spain was the European country with the highest unemployment increase during the Great Recession, despite a fall in GDP similar to that in other economies
- Andrés and Doménech (2015) suggest that job destruction between 2008 and 2013 was due, among other things, to rigidities in the labour market, with an adjustment in employment instead of in wages and hours per worker
- In this context, the reforms in 2010 and, particularly, in 2012 onwards were necessary, although they have not been enough to resolve all structural problems of the labour market
- Objective of this seminar: to analyse the main characteristics of the Spanish labour market, its performance during the crisis, the macroeconomic effects of the reforms since 2012, and its challenges during the current recovery
- Among other contributions, this presentation is based on Doménech, García and Ulloa (2016) and Boscá, Doménech, Ferri and García (2017)

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Structure of the presentation

- Introduction
- The structural problems of the Spanish labour market
- Recent changes in labour market policies
- Evaluating recent changes in labour market policies
- Conclusions and proposals

02

## The structural problems of the Spanish labour market

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The structural problems of the Spanish Labour Market

1. High structural unemployment rate (15.5% on average)
2. Very volatile cyclical unemployment (±8pp)
3. Very volatile entry and exit flows
4. High long-term unemployment rate (>12pp)
5. Adjustment via jobs rather than wages (Spain vs Ireland)
6. No adjustment through hours worked per employee (Spain vs Germany)
7. Excessively high rate of temporary employment and inequality
8. Low rate of part-time employment, with a negative correlation with U
9. High rate of youth unemployment, which doubles the aggregate unemployment rate
10. Uneven regional unemployment: negative correlation between U and productivity and human capital

A tale of two recessions 1

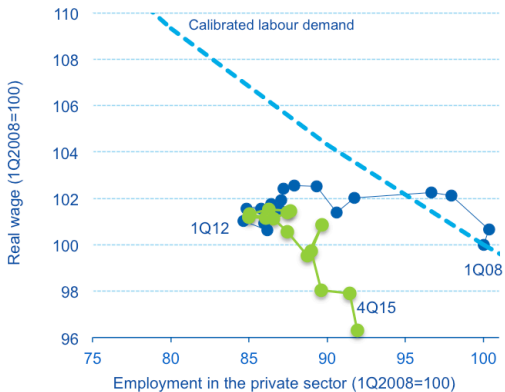**Spain: real wages and employment in the private sector (1Q08 = 100)**
Source: own elaboration from INE (2016).
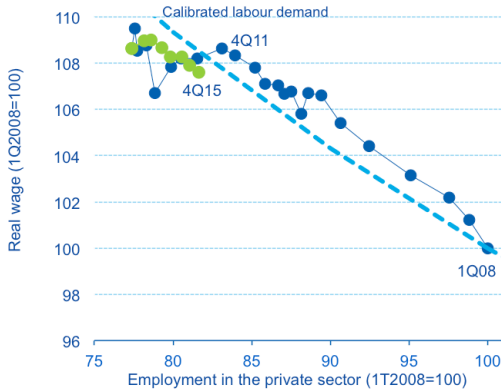
A tale of two recessions 1

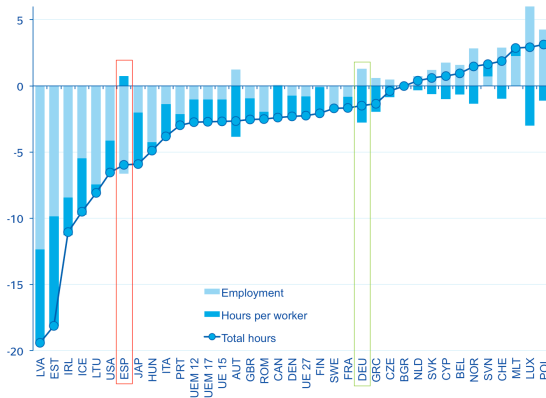**Ireland: real wages and employment in the private sector (1Q08 = 100)**
Source: own elaboration from AMECO (2015).

A tale of two recessions 2

Rate of growth of employment, hours per worker and total hours, 2007-9
Source: own elaboration from AMECO (2015).

The evidence rejects conventional explanations

Unemployment is not explained by the production structure or insufficient economic complexity

Economic complexity and Unemployment
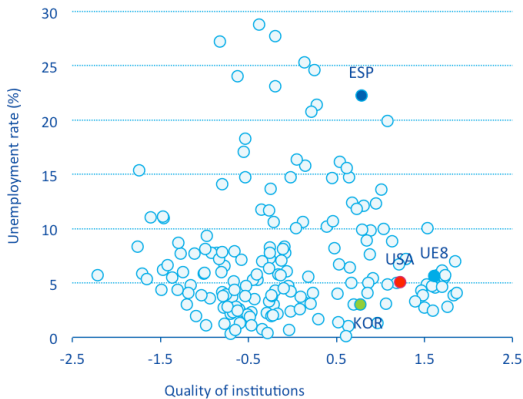Source: own elaboration from ILO and Hausmann et al (2015).

The evidence rejects conventional explanations

Unemployment is not explained by the quality of institutions

Quality of institutions and unemployment
Source: own elaboration from ILO and World Governance Indicators (2015).

The evidence rejects conventional explanations

Unemployment is not explained by the interaction of human capital with the quality of institutions (which has correlation equal to 0.84 with GDP per capita)

Human capital, quality of institutions and unemployment
Source: own elaboration from ILO, Barro and Lee (2013) and World Governance Indicators (2015).

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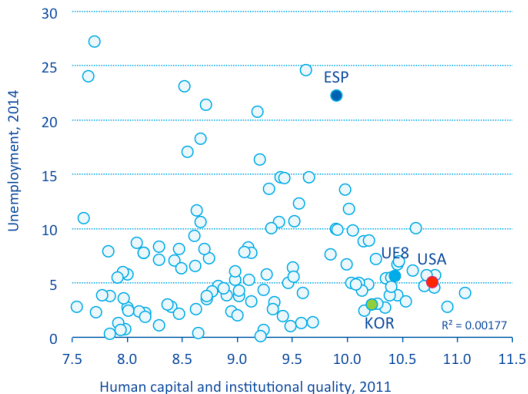
An alternative explanation

- For a given (endogenous) structural capacity (determined by labour demand and supply), its interaction with labour market regulations and the efficiency of active labour market policies determines unemployment and duality

The performance of the labour market in Spain and EU8
Source: own elaboration from Labour Force Surveys, Eurostat (2Q2017).

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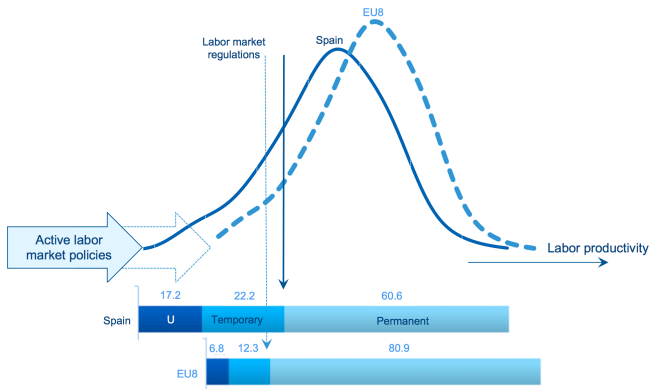
Causes of an inefficient and non-inclusive labour market

- Inefficient collective bargaining (wages and firm productivity) and rigidities
- Rigid wage structure and indexation to inflation
- Duality between permanent vs temporary workers, and legal uncertainty
- A tax structure which is unfavourable to employment
- Mismatch between vacancies and skills: inadequate and/or inefficient active labour market policies
- Generous passive policies inefficiently integrated with active labour market policies
- Other inefficiencies in the economy (regulations, product market competition, firm size, institutions, etc.)

03

Recent changes in labour market policies

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The 2012 labour market reform

- Decentralisation and modernisation of collective bargaining: priority of agreements at the firm level
- Elimination of the indefinite extension of collective bargaining agreements
- Collective bargaining agreement opting-out
- Internal flexibility mechanisms: substantial amendments of wages and hours per worker are possible due to economic, technical, organisational or production-related reasons
- Functional mobility among occupational groups
- A significant reduction in the cost of dismissals and simplification of economic reasons for fair dismissals

Complementary policies to the 2012 labour market reform

- Measures to mitigate duality and promote part-time employment
- Subsidies for open-ended contracts
- Changes in active labour market policies
- Measures to increase the employability of young workers
- Training policies
- Incentives to job search
- Measures to encourage late retirement
- The Second Agreement on Employment and Collective Bargaining for 2012-2014, promoting internal flexibility and wage moderation

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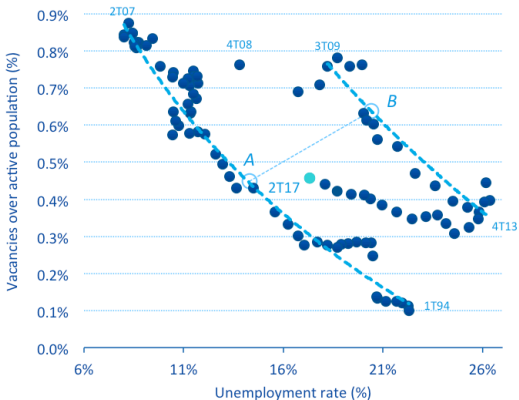# Preliminary evidence on the effects of greater flexibility

- Reduction of labour costs, facilitating the adjustment of the labour market and breaking the vicious cycle of increasing real wages and job destruction from 2009 to 2011 (Spain vs USA or Ireland)
- Lower separation rate after 2Q2012 despite the more intense financial crisis (increase of risk premia and banking restructuring) and the fiscal consolidation
- Positive surprise in employment expectations: the recovery of employment started earlier than anticipated in the consensus forecasts
- A shift of the Beveridge curve towards the origin since 4Q2013
- Job creation with a low inflation and GDP growth deflator, or negative ULC differentials with EMU
- For the first time in the past few decades, from the second half of 2013 onwards jobs have been created with a surplus in the current account

Preliminary evidence on the effects of greater flexibility
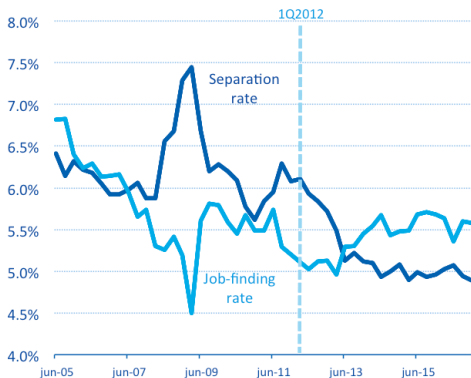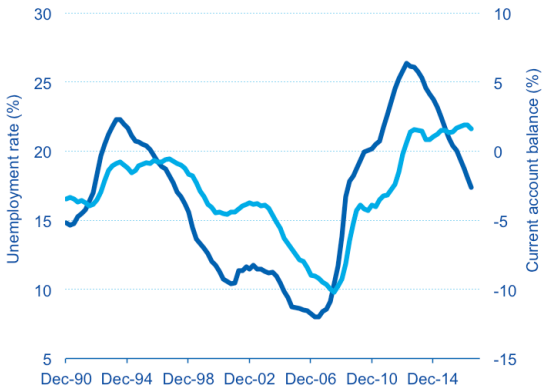

Separation and job-finding rates (2005-2017). Source: Boscá et al (2017)

Preliminary evidence on the effects of greater flexibility

Beveridge curve (1994-2017). Source: Boscá et al (2017)

Preliminary evidence on the effects of greater flexibility

Unemployment rate and the current account balance 4Q1990-2Q2017

04

Evaluating the effects of recent changes in labour market policies

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Evaluating the effects of changes in labour market policies

- We estimate the macroeconomic effects of the greater wage and firms' internal flexibility promoted by various changes in Spanish labour regulations approved since 2012 and by the Second Agreement on Employment and Collective Bargaining (AENC)

- We propose a model and a structural VAR that allows us to decompose the changes in the main macroeconomic variables into different structural shocks

- The simulation of two counterfactual scenarios allows us to conclude that the effects of greater wage flexibility in the labour market from 2012 onwards have been significant, helping to explain the recovery since the end of 2013

- Other studies: OECD (2013), García-Pérez and Jansen (2015), García-Pérez and Mestres (2016) and Cuerpo, Geli and Herrero (2017)

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Evaluating the effects of changes in labour market policies

- Our research also contributes to the debate on the effects of the structural reforms in countries with no monetary policy sovereignty when interest rates are close to or at zero

- There has been much debate on the possible negative short-term effects of the structural reforms in peripheral European countries (e.g., Krugman, 2014, Eggertsson, Ferrero and Raffo, 2014, Galí, 2013, or Galí and Monacelli, 2017)

- Other studies have found results more favourable to these reforms (Vogel, 2014, Andrés, Arce and Thomas, 2017)

- Our results show that the effects of the labour reforms on production and employment have been positive, despite their potentially deflationary effects

- In contrast with some previous results that propose the convenience of postponing structural reforms to periods of greater inflation, our results suggest that, if implemented at the beginning of the crisis, they could have avoided a significant part of the falls in GDP and employment

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The model

- Our model is based on the theoretical framework of Layard et al (1991), as the contributions of Andrés (1993) and Dolado and Jimeno (1997) to explain the persistence of unemployment in Spain

- Following Fabiani et al. (2000), our model extends the standard Blanchard-Quah (1989) structure for GDP and unemployment, with a Layard et al's (1991) price-wage block for an economy with rigidities in prices and wages, and sign restrictions

- Unlike Fabiani et al. (2001), we assume that the market power of firms may also affect the share of wages in GDP and unemployment in the long run

- Additional details of the methodology can be found in Doménech, García and Ulloa (2016)

The model

$$y_t = \phi(z_t^d - p_t) + az_t^s \qquad (1)$$
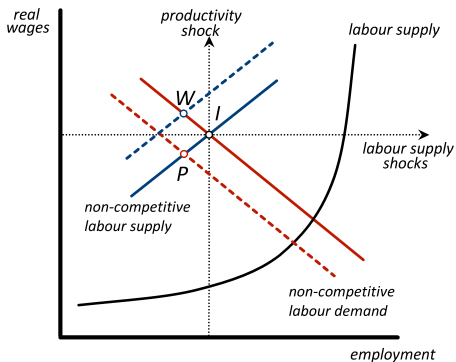
$$y_t = n_t + z_t^s \qquad (2)$$

$$p_t = z_t^p + w_t - z_t^s - \beta u_t \qquad (3)$$

$$l_t = \alpha E_{t-1}(w_t - p_t - z_t^s) + z_t^l \qquad (4)$$

$$w_t = E_{t-1}(p_t + z_t^s) + z_t^w - \sigma E_{t-1} u_t \qquad (5)$$

$$u_t \equiv l_t - n_t \qquad (6)$$

The model

Long-run effects of shocks on real wages and employment in the model

The model

- After solving the model, we arrive to the following MA representation:

$$
\begin{bmatrix}
\Delta\left(w_t + n_t\right) - \left(p_t + y_t\right) \\
\Delta u_t \\
\Delta\left(w_t - p_t\right) \\
\Delta y_t \\
\Delta p_t
\end{bmatrix}
= C(L)_{5\times 5}
\begin{bmatrix}
\varepsilon_t^w \\
\varepsilon_t^p \\
\varepsilon_t^s \\
\varepsilon_t^l \\
\varepsilon_t^d
\end{bmatrix}
$$

with the following long-term solution (*L*=1):

$$
C(1) =
\begin{bmatrix}
\frac{\beta}{\sigma+\beta} & -\frac{\sigma}{\sigma+\beta} & 0 & 0 & 0 \\
\frac{1}{\sigma+\beta} & \frac{1}{\sigma+\beta} & 0 & 0 & 0 \\
\frac{\beta}{\sigma+\beta} & -\frac{\sigma}{\sigma+\beta} & 1 & 0 & 0 \\
-\frac{1-\alpha\beta}{\sigma+\beta} & -\frac{1+\alpha\sigma}{\sigma+\beta} & 1 & 1 & 0 \\
\frac{1-\alpha\beta}{\phi(\sigma+\beta)} & \frac{1+\alpha\sigma}{\phi(\sigma+\beta)} & \frac{a-1}{\phi} & -\frac{1}{\phi} & 1
\end{bmatrix}
$$

The model: identification restrictions

- $C(1)(1,3) = C(1)(1,4) = C(1)(1,5) = C(1)(2,3) = C(1)(2,4) = C(1)(2,5) = 0$: only price and wage shocks have permanent effects on the share of wages in national income and on the unemployment rate
- $C(1)(3,4) = C(1)(3,5) = 0$: neither labour supply shocks nor nominal demand shocks have permanent effects on real wages
- $C(1)(4,5) = 0$: nominal demand shocks have no permanent effects on GDP
- $C(1)(1,2) < 0$: price shocks have a negative and permanent effect on the share of wages in national income

Main results

- Impulse-response functions confirm the predictions of the theoretical model
- Wage and price shocks have a negative, permanent and statistically significant effect on activity and employment.
- The reduction of employment is larger than the increase of real wages after a wage shock, reducing total real payrolls
- There has been an increase in the sensitivity of employment to changes in real wages when latest years are included in the sample
- The greatest part of the increase in the unemployment rate between 2008 and 2011 is explained by rigidities in price and wage formation
- In 2011 and 2012, the biggest contribution to the growth in unemployment came from price shocks: reaction to the wage shocks of previous years or to financial stress (self-financing retaining profits)?
- With greater wage flexibility between 2008 and 2011, as since 2012, the increase of 8 pp in the unemployment rate could have been avoided
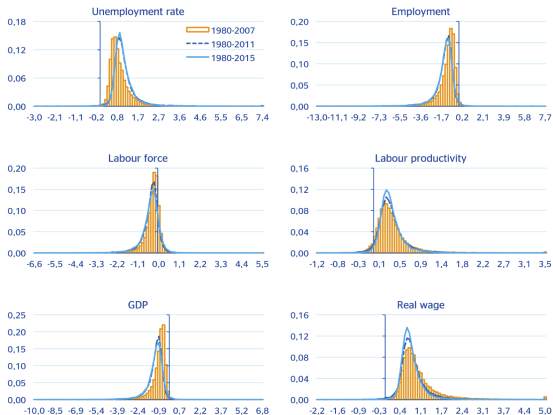
Results: effects of a wage shock
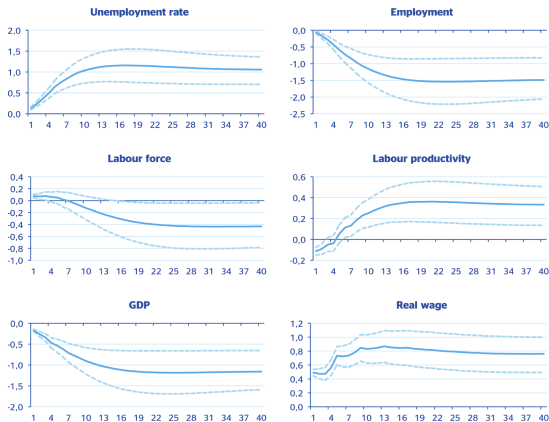
Impulse-response functions to a wage shock
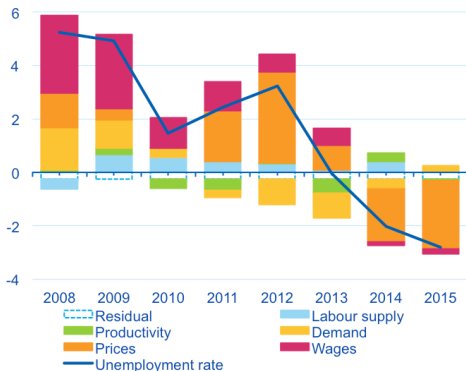
Results: effects of a price shock
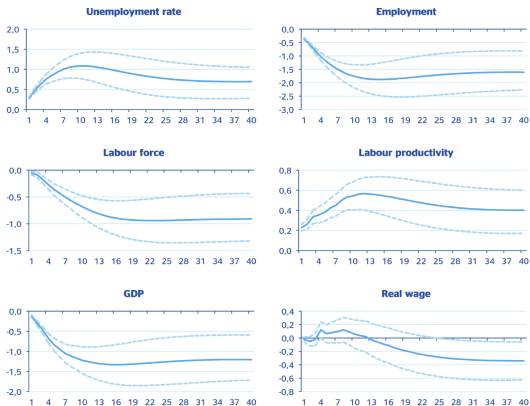
Impulse-response functions to a price shock
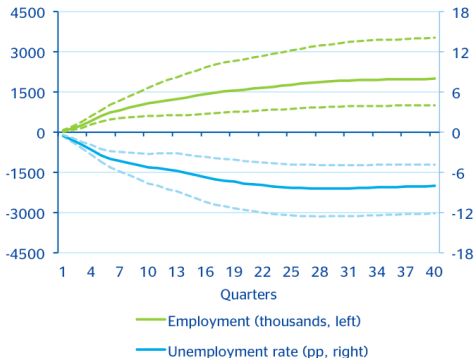
Results: slightly greater effects during the crisis

Probability density functions of long-term responses to a wage shock

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Results: wage and price shocks contributions

Historical decomposition of annual changes in the unemployment rate

Counterfactual: no wage shocks since 2008

Results of the counterfactual (deviations from baseline scenario)

05

Conclusions and proposals

Conclusions

- Our results show that the effects of the greater wage flexibility observed since 2012 have been significant and economically relevant

- If wage shocks in 2010 and 2011 had continued between 2012 and 2015, close to nine hundred thousand additional jobs would have been lost, practically offsetting the net jobs created between 2014 and 2015

- With greater wage flexibility between 2008 and 2011, as since 2012, the increase of 8 pp in the unemployment rate could have been avoided

- Our results are consistent with the evidence that between 2012 and 2013 job destruction was less intense than in previous years (despite the fiscal adjustment and the greater financial stress) and a recovery since then that has been compatible with a surplus in the current account, the improvement in price competitiveness and an inward shift of the Beveridge curve

Proposals

Towards a more efficient, equitable and inclusive labour market: high levels of unemployment, temporary employment and inequality demand new actions, as proposed by BBVA Research (2014b and 2016) and Andrés and Doménech (2015):

- Employment protection for open-ended contracts increasing smoothly with tenure, but below temporary contracts during the first four years
- Firms' contributions to individual accounts (as in Austria), as a insurance scheme for potential future firing costs
- Improvements in collective bargaining, particularly for small firms, and opt-in clause
- Lower taxes on employment: fiscal devaluation and notional accounts
- More efficient active labour market policies (a large share of long-term unemployed lacks basic skills) and more integrated with unemployment benefits
- Better public and private intermediation: platforms with exhaustive information on all vacancies and job searches, taking advantage of big data analysis