Reducing High Structural Unemployment and Labor Market Duality

Samuel Bentolila

CEMFI

Joint Conference Banco de España and International Monetary Fund, "Spain: From Recovery to Resilience", Madrid, 3 April 2018. I wish to thank Jiayi Wen for excellent research assistance.

Issues

1. Spanish structural unemployment rate: Do we understand why it has always been so high?
2. Has there been any structural change in structural unemployment in recent years? The 2012 labor market reform
3. How can it be reduced?

Some dimensions of underperformance

Table 1. Labor market variables (% rates), 2017:4

	Spain	Euro area*	US
Standardized unemployment	16.6	8.7	4.1
Employment (15-64 y.o.)	61.6	66.5	70.2
Temporary employment	26.7	14.6	–
Youth unemployment (15-24 y.o.)	37.1	18.6	9.2

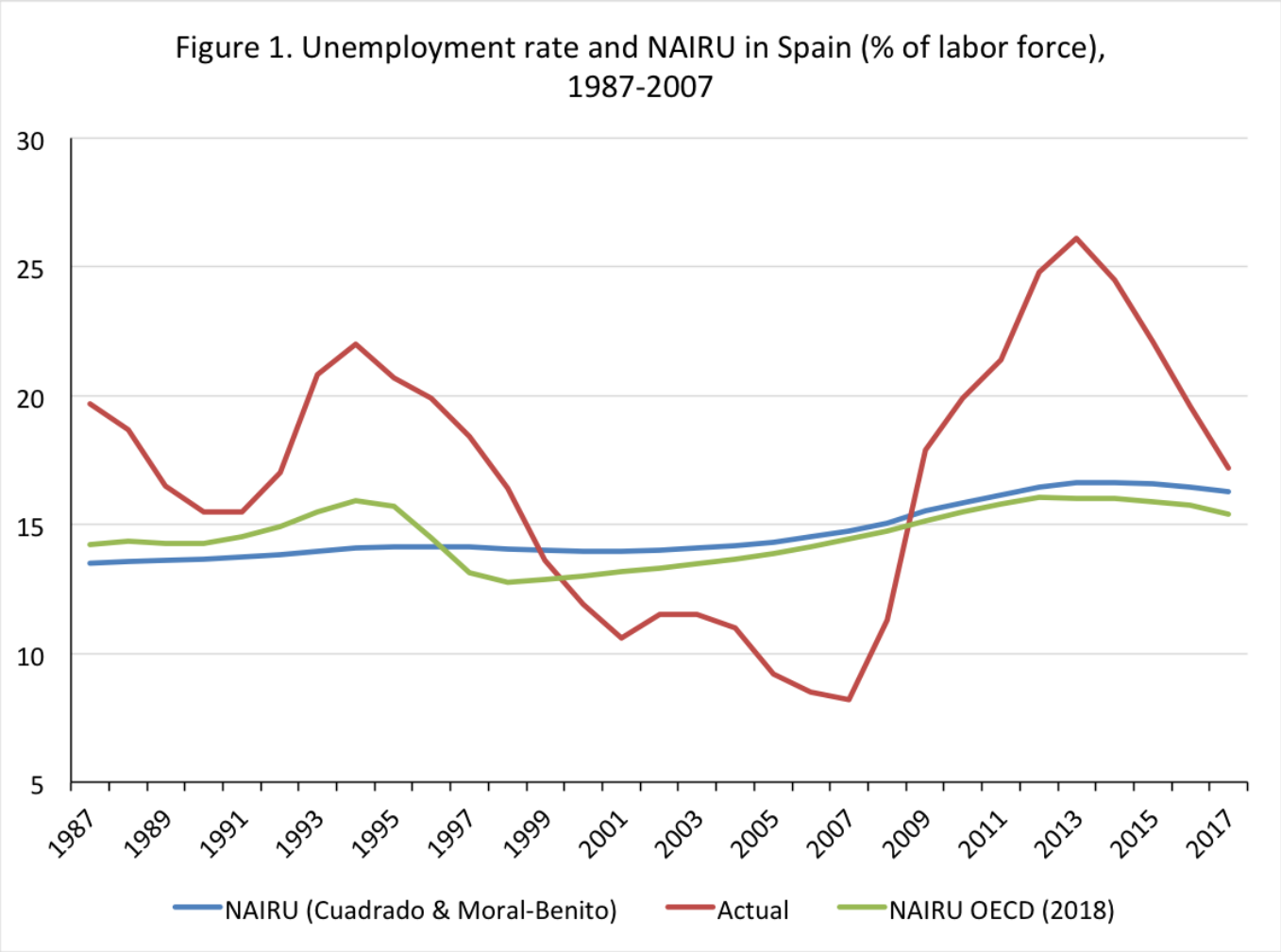
Source: *OECD.Stat*. * The temporary employment rate corresponds to the European Union.

The Spanish structural unemployment rate

- Figure 1 shows the unemployment rate and two estimates of the structural rate in 1987-2017: (a) Cuadrado and Moral-Benito (2016), based on wage inflation, and (b) OECD.*Stat*, based on price inflation
- Range: 13%-16%. Average: 14-15% (the Euro area average is 9%)
- They are based on versions of the Phillips curve, they rely on the idea of the natural rate, which is being questioned (Blanchard, 2018), and they provide no information on its underlying determinants

  $\rightarrow$ I do not find them to be very useful

Actual and structural unemployment in Spain



Do we understand the *average* unemployment rate?

- Shocks and labor market institutions (reduced-form) approach (Blanchard and Wolfers (BW), 2000; Bassanini and Duval, 2006)
- BW for early 1970s-late 1990s: "Had Spain had labor institutions like the average country in the sample, its unemployment rate would have risen by 6.7 pp (...) rather than the 13.9 points predicted by the model" (Bentolila and Jimeno, 2006)
- The current account (globalization) is a new determinant, but there is still a role (depending on whether time shifts are allowed) for employment protection (x labor demand shocks) (–), unemployment benefits (+), tax wedges (+) (Bertola, 2017)

  $\rightarrow$ *Could* help understand Spanish unemployment as resulting from poor institutions. But not causal: need micro studies + macro models

The 2012 labor market reform: main contents

- Employment protection:
  - Lowered severance pay for unfair dismissal by 27% (& capped seniority)
  - Supressed fast-track dismissal and interim wages
  - Defined objective criteria for economic dismissals
  - Supressed administrative approval of collective dismissals
- Collective bargaining:
  - Gave priority to firm-level agreements over industry agreements
  - Limited the extension of expired agreements to one year
  - Eased temporary opt-outs from higher-level agreements
- Internal flexibility: Eased reorganization and temporary layoffs

The 2012 labor market reform: main effects

- Low impact on *estimated* structural unemployment. Reduction over 2012-2017: 0.2-0.7 pp (Euro area average falls by 0.4 pp)
- Employment protection:
  - More out-of-court settlements, little effect on court rulings in dismissals (Jimeno *et al.*, 2018)
  - Over 2012-14 vs. 2006-2011, (a) higher flow from unemployment to permanent jobs: 1.7%→2.6% (first year), (b) lower monthly flow from temporary jobs to unemployment: 10%→8.9% (García-Pérez, 2016)
- Wage setting:
  - Decrease in coverage of firm-level agreements (to 7.1%) and in industry dispersion of wage settlements, small use of opt outs, 3.4% (Izquierdo and Jimeno, 2015)
  - Small increase in real wage flexibility: -0.13 to -0.26 (within Great Recession) (Font *et al.*, 2015)

Back to labor market institutions

I now focus on the interaction between the two labor market institutions meant to be the most affected by the 2012 labor market reform: employment protection and collective bargaining

Issues:

1. Excess labor market volatility
2. The paradox of real wage rigidity

1. Volatility in the labor market: World champions

Table 2. Relative volatility of Spanish labor market variables*

	Relative GDP volatility in Spain	Relative volatility in Spain, rescaled by relative GDP volatility			
		Total employment	Total hours worked by employees	Employees	Unemployment rate (harmonized)
France	1.39	1.37	1.24	1.28	1.93
U. Kingdom	1.10	1.63	1.59	2.01	2.72
U. States	1.05	1.84	1.80	2.02	2.17

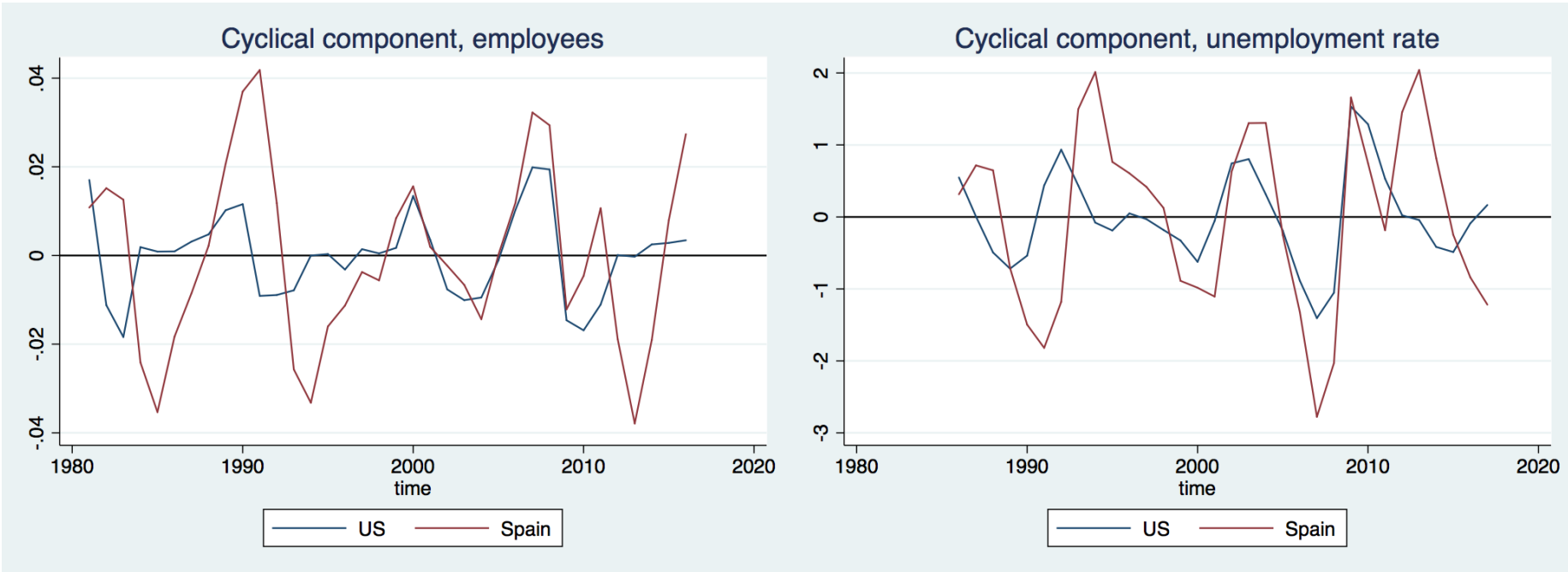
Note. Computed as: $[\sigma(x,sp)/\sigma(x,i)]/[\sigma(y,sp)/\sigma(y,i)]$, where x,y are Hodrick-Prescott detrended log series (except unemployment rate, not logged).
Annual data. Period: 1981-2016, except unemployment rate, 1986-2017.
Source: OECD, except GDP, World Bank.

(*) Update of Bentolila and Jimeno (2006).

$\rightarrow$ This suggests that adjustment takes place via quantities rather than prices

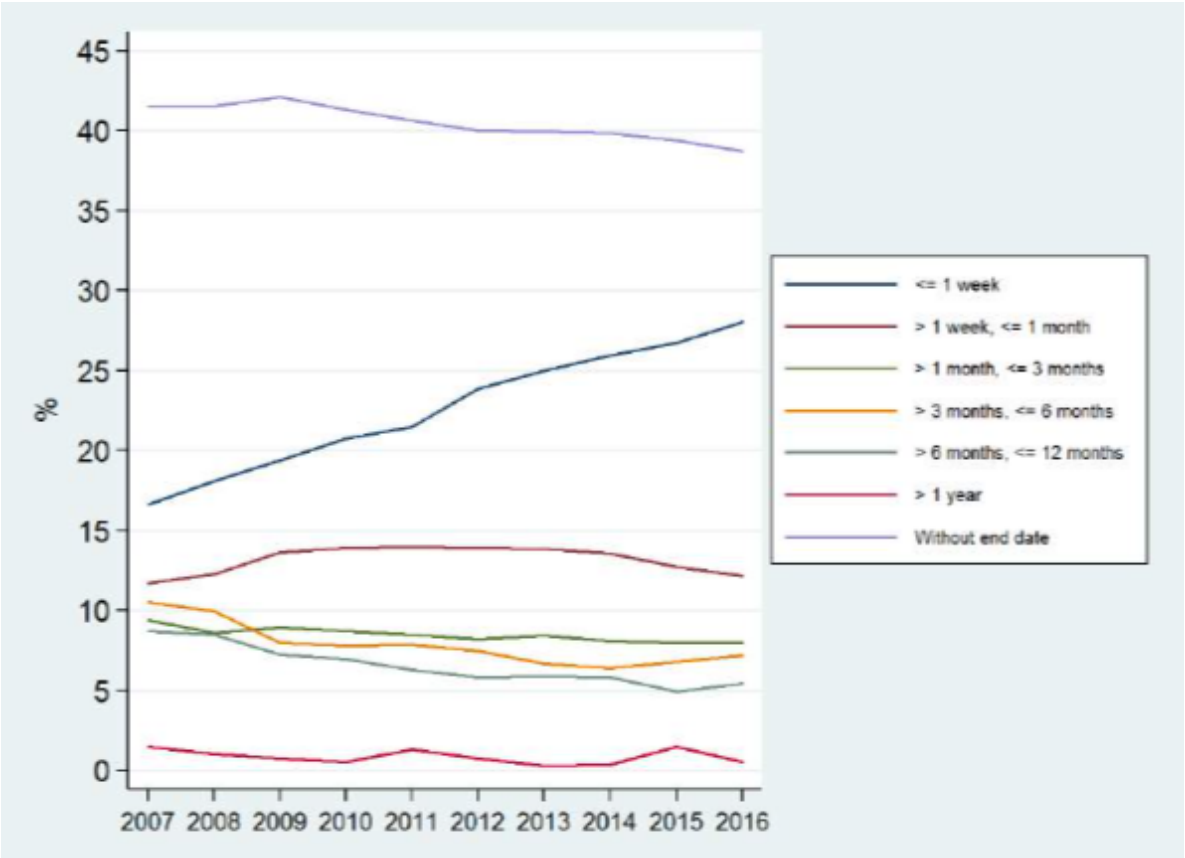
Volatility of employment and unemployment

Figure 2. Cyclical components of the (log) number of employees and the harmonized unemployment rate, Spain v. US



The churn

Figure 3. Distribution of temporary contracts by duration, contract data (%)



Source: Felgueroso *et al.* (2018).

Other negative effects of duality

- Very slow insertion of youth: 8 years to first permanent contract on average in 2008-2016 (Felgueroso *et al.*, 2018)
- Lower productivity (Dolado *et al.*, 2016) and skill acquisition (Cabrales *et al.*, 2017)
- Higher unemployment (Blanchard and Landier, 2002; Bentolila *et al.*, 2012; García-Pérez and Osuna, 2014)

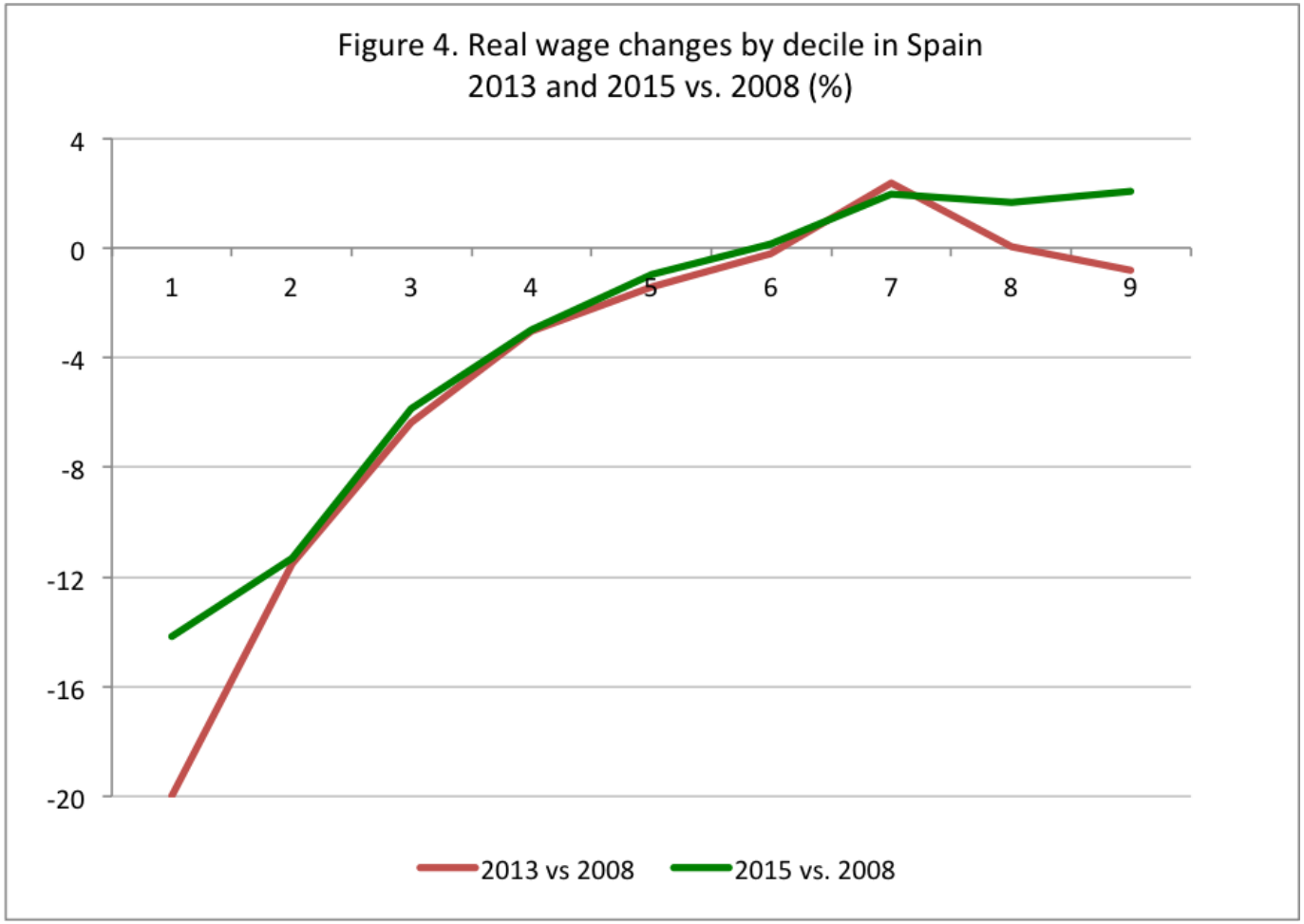
2. The paradox of real wage rigidity (I)

Table 3. Estimated elasticity of wages to unemployment

Country	Elasticity	Source
Spain	-0.2 / -0.5	Font *et al.* (2015)
U. States	-0.7 / -1.7	Solon *et al.* (1994)
U. Kingdom	-1.7 / -2.0	Devereux and Hart (2006)
Germany	-0.7 / -1.7	Anger (2011)
France	-1.5	Verdugo (2013)
Portugal	-1.6 / -2.5	Carneiro *et al.* (2012)
Italy	-1.4 / -3.0	Peng and Siebert (2008)

Source: Bank of Spain, Research Department.

2. The paradox of real wage rigidity (II)



Source: INE, Encuesta de Población Activa.

Duality and wage setting

- There have been significant reductions in real wages during the crisis, but the upper 40% of the wage distribution has been hardly affected
- The fall in the lowest deciles has been very large, causing an increase in inequality
- Caveats: these are monthly wages, hours may have fallen in the lower tail and there could be changes in composition
- Potential causes:
  - Globalization, especially international trade
  - Technological progress, inducing polarization (Anghel *et al.*, 2014)
  - Sectoral composition (Bonhomme and Hospido, 2017)
  - The 2012 labor market reform

Duality and wage setting

How can we square large real wage drops in the crisis with low responsiveness of real wages to unemployment?

1. It took a long time for wages to react: temporary workers provide a buffer for permanent employees, who enjoy insider power from collective bargaining regulation, i.e. industry-wide with automatic extension (Bentolila and Dolado, 1994)
2. Most wage adjustments happen at the margin:

- In 2008-2012 job movers had a cumulated average real wage loss of 4.8%, job stayers an average gain of 2%. *Initial* real wage changes by the end of 2013: (a) Adults: Men, 13%, Women, 17%; (b) Young: Men, 16%, Women, 23% (García-Pérez and Jansen, 2015)
- Wage elasticities (abs. value): New hires > Job-to-job > Stayers, falling with tenure (Font *et al.*, 2015)

What to do?

Hipothesis: Duality forces some workers to provide most of the employment and wage adjustment $\rightarrow$ Larger than needed if it was shared. Thus:

- Fight duality with
  - Experience rating: higher social security contribution for firms with excess turnover (regardless of contract type)
  - "Austrian fund": employer flow severance-pay contributions to a fund, which the worker can withdraw from upon dismissal or retirement
  - Single contract with severance pay that increases with seniority
- Increase real wage flexibility by:
  - Fighting duality
  - Requiring higher representativeness for automatic extension of wage agreements or easier opt outs (Jimeno and Thomas, 2013)

Other issues for research and policy

- Wage inequality (see above)
- Long-term unemployment: While the unemployment rate has fallen from 27% to 16.6%, the share of workers who have been unemployed for more than 1 year has fallen only from 64% to 50% (36% unemployed for more than 2 years) (Bentolila *et al.*, 2017)
- Total Factor Productivity: Same level as in 1985! (duality, education –cfr. PISA/PIAAC–, investment, competition, labor regulation, etc.)

References

- Anghel, B., S. de la Rica and A. Lacuesta (2014), "The Impact of the Great Recession on Employment Polarization in Spain", *SERIEs - Journal of the Spanish Economic Association* 5.
- Bassanini, A. and R. Duval (2006), "The Determinants of Unemployment Across OECD Countries: Reassessing The Role of Policies and Institutions", *OECD Economic Studies* 42.
- Bentolila, S., P. Cahuc, J.J. Dolado and T. Le Barbanchon (2012), "Two-Tier Labour Markets in the Great Recession: France Versus Spain", *Economic Journal* 122.
- Bentolila, S. and J.J. Dolado (1994), "Labour Flexibility and Wages: Lessons from Spain", *Economic Policy* 18.
- Bentolila, S., J.I. García-Pérez and M. Jansen (2017), "Are the Spanish long-term unemployed unemployable?", *SERIEs - Journal of the Spanish Economic Association* 8.
- Bertola, G. (2017), "European unemployment revisited: Shocks, institutions, integration", *Research in Economics* 71.
- Blanchard, O.J. (2018), "Should We Reject the Natural Rate Hypothesis?", *Journal of Economic Perspectives* 32.
- Blanchard, O.J. and A. Landier (2002), "The Perverse Effects of Partial Labour Market Reform: Fixed-Term Contracts In France", *Economic Journal* 112.
- Blanchard, O.J. and J. Wolfers (2000), "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", *Economic Journal* 110.

References

- Cuadrado, P. and E. Moral-Benito (2016), "Potential Growth of the Spanish Economy, Banco de España, Documentos Ocasionales 1603.Cabrales, A., J.J. Dolado and R. Mora (2017), "Dual Labour Markets and (Lack of) On-The-Job Training: PIAAC Evidence from Spain and other EU Countries", *SERIEs - Journal of the Spanish Economic Association* 8.
- Costain, J., J.F. Jimeno and C. Thomas (2010), "Employment Fluctuations in a Dual Labour Market", Banco de España, Working Paper 1013.Dolado, J., S. Ortigueira, and R. Stucchi (2016), "Does Dual Employment Protection Affect TFP?: Evidence from Spanish Manufacturing Firms", *SERIEs - Journal of the Spanish Economic Association* 7.
- Felgueroso, F., J.I. García-Pérez, M. Jansen and D. Troncoso-Ponce (2018), "The Surge in Short-duration Contracts in Spain", *De Economist* (forthcoming).
- García-Pérez, J.I. (2016), "El Efecto de la Reforma Laboral de 2012 sobre la Dualidad y el Empleo: Cambios en la Contratación y el Despido por Tipo de Contrato", Fedea Policy Papers 2016/06.
- García-Pérez, J.I. and M. Jansen (2015), "Assessing the Impact of Spain's Latest Labour Market Reform, *Spanish Economic and Financial Outlook* 4.
- García-Pérez, J.I. and V. Osuna (2014), "Dual Labour Markets and the Tenure Distribution: Reducing Severance Pay or Introducing a Single Contract", *Labour Economics* 29.

References

- Bonhomme, S. and L. Hospido (2017), ""The Cycle of Earnings Inequality: Evidence from Spanish Social Security Data", *Economic Journal* 127.
- Izquierdo, M. and J.F. Jimeno (2015), "Employment, Wage and Price Reactions to the Crisis in Spain: Firm-level Evidence from the WDN Survey", *Banco* de España, Occasional Paper 1503.
- Jimeno, J.F., M. Martinez-Matute and J. Mora (2018), "Employment Protection Legislation, Labor Courts and Effective Firing Costs", CEPR Discussion Paper 12554.
- Jimeno, J.F. and C. Thomas (2013), "Collective Bargaining, Firm Heterogeneity and Unemployment, *European Economic Review* 59.